Immigration

Economic Impact of Immigration

IV. THE ECONOMICS OF US IMMIGRATION POLICY[69]

Give me your tired, your poor, your huddled masses yearning to breathe free....

Introduction

113. So reads the famous inscription on the Statue of Liberty in the harbour of New York City. While not alone, the United States has long been the principal destination and the country of settlement for the world's emigrants. Migrants have arrived in waves, and their arrival has always brought mixed feelings right back to the days of original European settlement. But in time all these waves have been successfully integrated into US society, as the "melting pot" has worked its ways. Institutions of all kinds -- economic, political and social -- have been set up in such a way as to allow new arrivals all the opportunity to succeed or to fail according to their individual capabilities and efforts. Thus, if any country can "handle" immigration and can benefit from it, it is surely the United States.

114. Another wave of immigration has been underway now for some time without having shown clear signs of cresting, and it too has brought private and public-policy reactions arising out of many of the same concerns as its predecessors[70]: in particular, will these recent and expected immigrants manage to find their way, to assimilate and to make a positive contribution to their new homeland? Or will they cause social problems by working in sweat shops, displacing native-born workers and lowering their wages, thereby contributing to income inequality. Is the nation already or at risk of becoming overcrowded, placing an unsustainable burden on the environment? While many of the factors that will determine the answer to these questions are the same as they have been historically, others are arguably different and unique. This chapter will examine to what extent there have been changes in the nature of the flow of immigrants and the conditions in which they struggle to make a new life for themselves and their families.

115. A brief description of the policy environment under which immigration has been governed in the United States will be provided at the outset. Following that, the basic character of the current stock of the foreign-born will be described, and the situation will be contrasted with those in other OECD Member countries. The importance of the changing source country distribution of US immigration for the average "quality" of immigrants and for their labour market outcomes will be emphasised. A third section will present some simple theoretical expectations for the effects of immigration on the domestic economy and subsequently review the empirical evidence on the labour market and distributional impacts, assimilation effects, price effects and influences on the public finances. A brief discussion of the demographic impacts

69. This chapter has benefited in no small way from a background consultants' report (Greenwood *et al.*, 1997).

70. Simon (1995) cites, for example, an article by (later Senator) Paul A. Douglas of Cobb-Douglas production function fame in the June 1919 issue of the *Journal of the American Statistical Association* entitled "Is the New Immigration More Unskilled Than the Old?" (pp. 393-403).

of immigration follows. Thereafter some social aspects of immigration are covered, the possible relationship with crime in particular. The 1995-97 policy debate is then described, and the chapter finishes with the enumeration of some options for policy reform.

The current policy environment

116. The basic framework of US immigration policy remains the same today as it has been since the system became one based on family reunification in 1965 (Box 7). However, landmark legislation passed in 1986 (the Immigration Reform and Control Act or IRCA) provided for the legalisation of aliens in the country in an unlawful status since prior to 1982 as well as certain "Special Agricultural Workers" who had been in the labour force during the three years prior to application, ultimately 2.7 million people in all (much to the surprise of officials), mostly in 1989-91. It also authorised for the first time the use of employer sanctions for knowingly hiring, recruiting or referring illegal aliens for a fee[71]. At a time of expected future labour shortages in high-skilled occupations, the Immigration Act of 1990 modified the system to allow for more skills- or employment-based immigrants (a quota of 140 000 per year in five preference classes), more source-country diversity (*via* a special quota of "diversity immigrants" per year)[72] and, once family-sponsored immigrants are included, a flexible overall cap (in the sense that the number of immediate relatives, assumed to be 254 000 per year, remains unlimited) of 675 000 per year (excluding refugees and asylees) as from FY 1995[73] (Table 13). Under the terms of the Refugee Act of 1980 refugees are those who are unable or unwilling to remain in or return to their country of nationality because of persecution or the well-founded fear of persecution and apply for admission while still outside the United States (US Department of Justice, 1997). They enter as non-immigrants but may adjust their status after a year's continuous residence in the United States to lawful permanent resident. Their numbers are controlled at the global level by annual ceilings negotiated between the Administration and the Congress. The situation of asylees is essentially the same, except that they are already in the country; the number of their adjustments (legal acquisition of that status) is now limited to 10 000 per year, with a backlog of nearly half a million, and they no longer have immediate access to the labour market.

(Table 13. Immigration by category: quotas and outcomes for FY 1996)

71. But these penalties have not reduced the flow of illegal immigration (see below) because of increased use of fraudulent documents and lax enforcement associated with limited albeit increased Border Patrol resources (Bean *et al.*, 1990; Fix, 1991). A February 1996 Executive order preventing firms with IRCA convictions from obtaining government contracts has apparently still not been implemented (Passel, 1996).

72. These visas are allocated to natives of countries which have sent fewer than 50 000 legal immigrants to the United States over the latest five years. Applicants must have at least a high-school education and at least two years of training and experience during the last five years. Allocation is *via* a lottery, for which there were 6.5 million eligible applications and a further 1.1 million disqualifications for the FY 1997 draw in September 1996. Lotteries have also been used since the late-1980s to allocate "green cards" (work permits). Such lottery winners from 1988 to 1990 were more skilled than the average family-based immigrant (Barrett, 1996).

73. But the flexibility of the cap is limited, as family-based preferences other than immediate relatives are determined by 480 000 less the number of immediate relatives who entered in the previous year.

Box 7. A brief history of US immigration

The absolute number of immigrants to the United States began to rise appreciably as from the end of the Napoleonic wars in Europe and the war of 1812-15 in North America. Cheaper and surer transport, deteriorating economic conditions in several source countries and rising US real wages owing to the industrial revolution were the main factors drawing immigrants. A *laissez faire* attitude on the part of the authorities[74], given the nation's underpopulated condition, provided a sufficiently attractive environment for there to be no need for overt encouragement in the form of subsidies, in contrast with some other destination countries. This first wave reached a crescendo just after the turn of the century when nearly a million immigrants arrived every year, an annual rate of around 1 per cent of the population (Figure 19). The First and Second World Wars, as well as the Great Depression, limited the possibilities for such migratory flows to continue unabated, and policy had already turned increasingly restrictive[75]. Then Congress "closed the floodgates" by passing first the Quota Law of 1921 (the first comprehensive quantitative limits on immigration) and then the follow-up Immigration Act of 1924 which established the national origin quota system which operated for nearly half a century. It allocated visas in proportion to the national origins of the US population recorded in the 1890 Census, based on the view that certain races were superior and that the ethnic balance of the nation needed to be preserved. The result of the new system was that legal immigration levels dropped by nearly 40 per cent. But, in addition, its tightness led to a rise in illegal immigration, as Europeans migrated to Canada and Mexico, which were not subject to quotas, and then entered illegally. This led to the establishment and expansion of the Border Patrol. In 1940 the Immigration and Naturalization Service became part of the Justice Department, whereas previously immigration matters had been the responsibility of the Department of Labor[76].

(Figure 19. US immigration levels and rates)

In 1952 the Immigration and Nationality Act eliminated race as a bar to immigration, modified the quota formula and introduced for the first time a special category for the family of US citizens and legal permanent residents. This presaged the Immigration and Nationality Act Amendments of 1965 (passed in an era when the focus on civil rights and economic freedoms was acute) which abolished the national

74. Immigrants of almost all types were welcomed for much of the Nineteenth Century, with one noteworthy exception: those from China were barred as from 1882. Along with other destination countries such as Argentina, Australia, Brazil and Canada, the United States began to impose restrictions with increasing frequency thereafter, as the frontier closed and pressures on existing relative economic positions of different groups were felt (Timmer and Williamson, 1996). Late in the century the share of immigrants from northern and western Europe fell, replaced by those from eastern and southern Europe. The stage was set for the first official recognition of a potential problem with the establishment by the Congress of the Joint Commission on Immigration (the "Dillingham Commission") in 1907. It recommended the institution of a literacy requirement and the continuation of the ban on Asian immigrants.

75. Various pieces of legislation added to the list of inadmissible immigrants, introduced a head tax, codified the grounds for deportation and ultimately instituted a ban on all Asian immigrants and an immigrant literacy test in 1917. For more details on the history of US legislation dealing with immigration and naturalisation, see US Department of Justice (1997).

76. The Federation for American Immigration Reform (1992) is critical of this arrangement, arguing that oversight by Congressional Judiciary Committees composed almost exclusively of lawyers, has led to a lack of interest in the economic consequences of immigration.

origin quota system -- which had in any case been steadily abandoned by means of special exemptions -- and grounded the US system in family reunification. In a seven-category preference system for numerically restricted immigrants, "relative preferences" were given priority over "occupational preferences" and refugees, and immediate relatives of adult US citizens were exempted from quota limitations altogether. Since then, unforeseen by the policymakers of the time, immigration has steadily rebounded, averaging about double the level of 1821 to 1920 and more than triple that observed in the intervening national origin quota period, and culminating in more than a million immigrants a year thus far in the 1990s. But, given the much enlarged population base, recent immigration flows represent a significantly smaller share of the population -- about 0.3 per cent per year. Nevertheless, in stock terms, the foreign-born population reached 20 million in 1990, double the level it had been for most of the century up to 1970.

117. The actual inflow of recent legal immigrants by entry class is shown in Figure 20. The longer-term rise in immediate family admissions (which have risen steadily from 33 000 in 1965 to 302 000 in 1996) may be giving rise to a phenomenon of "chain migration" whereby admission of one immigrant leads to eligibility and admission of others. IRCA legalisations have caused the only major volatility since 1980, although worker preferences have grown thanks to the changes made in the 1990 legislation. Currently, however, most categories of family- and employment-based immigration quotas are undersubscribed[77]. Refugee and asylee adjustments have averaged just over 100 000 per year for the past two decades, slightly more in the early 1990s and then substantially less in 1995 and 1996. Their share of total immigrant inflows has fallen from an average of around one-quarter over the period 1945-90 to less than half that in the last two years; refugee approval rates have fallen from over 90 per cent in the early 1980s to 71 per cent in 1995, and asylee rates have been only around 20 per cent of late.

(Figure 20. Recent inflows of permanent settlers by entry class)

118. The United States also admits around 600 000 non-immigrants per year who have the right to remain and work in general for up to six years[78]. This category has grown rapidly since 1981 -- an average annual rate of around 11 per cent. While they may form only a small share of all non-immigrant entries into the country (including tourists, for example), they are about five times as numerous as those admitted as immigrants under employment preferences. They may have similar labour market impacts[79], especially as they often eventually become permanent residents and as over 80 per cent are skilled workers, a higher share than in other OECD countries (OECD, 1997a, Table I.1). Legal and illegal immigrants and non-

77. The waiting list in January 1995 was 3.7 million long, most of which were siblings of adult US citizens (4th preference), with a projected 25-year queue, and spouses and unmarried adult children of legal immigrants (2nd preference), with nearly a 10-year wait. Most employment-base queues have been eliminated, except for the least skilled workers from certain countries. Quotas are sometimes surpassed because of carry-over provisions from previous years or from other categories (when unused).

78. For 1995, these included: 197 000 temporary workers and trainees, along with 47 000 members of their families, mostly under the so-called "H-1" admission class; 112 000 intra-company transferees, together with 62 000 of their families; 31 000 NAFTA workers (including their families); and a variety of smaller categories; see US Department of Justice (1997, Table 39). It does not include students and their spouses, some of whom may also work.

79. The specific economic effects of temporary workers and trainees have never been assessed.

immigrants together comprise the foreign-born population, also referred to as the immigrant population in the context of labour market studies based on Census data and in the remainder of this chapter[80].

119. Illegal immigrants are those who either enter without inspection (estimated to be about 60 per cent of the total) or overstay the expiration date of the visa under which they legally entered (the remaining 40 per cent). Recent estimates by officials of the Immigration and Naturalization Service (Warren, 1997) put the estimated number of illegal aliens in October 1996 at around 5 million (over a fifth of the total foreign born), at least as many as before the 1986 legalisation was passed. An estimated 54 per cent of the total stock of illegal aliens are Mexicans, and a rising share are thought to be other Latin Americans who come through Mexico; almost all of these entered without inspection. About 40 per cent reside in California. Official estimates of the next flow vary from around 250 000 to 300 000 migrants per year, around one-third of total legal immigration, but gross inflows may be as high as 2 million per year (Espenshade, 1990), implying that most enter and leave again after working for a short period. Indeed, by some estimates one in five Mexican adults has worked in the United States at some time during their lives.

The magnitude and nature of recent US immigration

120. Critics of US immigration maintain that its scale is too large. Just how important is US immigration then in volume terms? In the last Census year (1990), 19.8 million or nearly 8 per cent of the US population was foreign born (including illegal aliens), up from a century low of 4.7 per cent in 1970, but well below the peak level of nearly 15 per cent of the total population in 1910. Estimates from the Current Population Survey point to a foreign-born share of 9.3 per cent in March 1996, the same as in both 1850 and 1940. With continued immigration at recent levels, the foreign-born population is projected to reach 10.2 per cent of the total population in 2000. It is difficult to make international comparisons of such stock figures, as it is customary in most other OECD Member countries to define the immigrant population as those of foreign nationality, rather than the foreign-born; thus naturalised citizens are not considered to be immigrants, whereas temporary workers are[81]. Where national definitions are comparable, it can be seen that despite the large increase in the US foreign-born share, it remains lower than in Australia (around 22 per cent) and Canada (near 16 per cent) (OECD, 1997a); and Borjas (1994) cites figures of 17 per cent for Switzerland, 11 per cent for France and 9 per cent for the United Kingdom, as well as United Nations data for 1989 showing a world foreign-born share of 1.2 per cent.

121. The flow of immigration is also difficult to compare across countries. Net immigration to the United States is composed of gross immigration (legal and illegal) of over a million per year less gross emigration for which data are scarce, but which best estimates put at about 300 000 per year[82] (Ahmed and

80. For the Immigration and Naturalization Service immigrants are aliens admitted as lawful permanent residents. Thus, illegal or "undocumented" aliens in the country, as well as non-immigrants (those not intending to become permanent residents) are generally included only in the broader Census definition.

81. An unweighted average of the foreign population share in 16 OECD Member countries in the early 1990s was nearly 7 per cent. For a full discussion of the issues involved in comparing international migration data across countries see the introduction to the statistical annex in OECD (1997a).

82. Official Census Bureau projections are made using the assumption that 30 per cent of immigrants re-emigrate, but there have been no statistics available on emigration of either the foreign- or native-born since 1957. It is believed that 35 to 45 per cent of immigrants eventually re-

Robinson, cited in Smith and Edmonston, 1997). US inflow data represent issuance of permanent residence permits, not physical entry into the country – in 1995, 47 per cent of all immigrants were already in the country and merely adjusted their status. Average annual net immigration into the United States has risen to over 0.3 per cent of the population since 1990. By that measure it ranks around ninth out of 26 OECD Member countries for which data are available (Table 14); most notably, it ranks behind even such traditional source countries for US immigrants as Germany, Austria and Greece. Immigration has been making a steadily increasing contribution to overall US population growth in recent decades and is now playing an even greater role than in the first decade of the century because of reduced native fertility (Table 15). The recent figure of nearly a third would, however, still place it only fifteenth out of 26 in this regard. A number of countries -- Greece, Italy and Luxembourg in particular -- have been virtually entirely reliant on immigration for population growth in recent years, but in general natural increase has been more important than net immigration in total population growth in most OECD countries (OECD, 1997a). International comparisons are also possible for the composition of immigration by type of admission: in 1991 the US share attributable to family reunification (at nearly 50 per cent) was one of the highest for 13 OECD Member countries, while the employment-related share was near the mean and the refugee/asylee share was rather low (Smith and Edmonston, Table 2.12).

(Table 14. The net immigration rate in OECD countries)
(Table 15. The contribution of net immigration to the change in total population in OECD countries)

122. Yet, aside from volume considerations, much of the debate about immigration policy reform revolves around whether the nature of immigrant flows is appropriate. In this section several basic descriptive characteristics of immigrant "quality" will be examined to evaluate the contention that "immigration is not what it used to be". Before that, however, it is useful to provide a brief overview of the foreign-born population and, in particular, what characteristics set them apart from their native counterparts. In demographic terms the foreign born are less likely to be children under the age of 18[83], equally likely to be senior citizens and women[84] and much more likely to be non-white or of Hispanic origin, especially if they have arrived since 1970 (Table 16). In addition, a slightly higher proportion of recent immigrant households are married-couple families, and over 70 per cent of them have children under 18, compared with 46 per cent in the aggregate (Smith and Edmonston, 1997, Table 2-8). A much

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emigrate, especially those from Europe (Jasso and Rosenzweig, 1990). Many illegal Mexican immigrants return to their home villages after one or more sojourns in the United States (Massey *et al.*, 1990). The US Social Security Administration assumes that one-third of all immigrants re-emigrate and that they all do so before they have enough work experience to have the right to a pension (Duleep, 1994).

83. Recent inflows have been overweighted in the 15-34 age group (relative to the native-born population) and underweighted elsewhere (Smith and Edmonston, 1997, Figure 2.10). But compared with the age distribution in 1907-10, the recent inflow is comprised to a greater degree of children and those over 40 and to a much lesser extent of those 15 to 29 (Smith and Edmonston, 1997, Figure 2-11).

84. Data for 1990 show that females comprised 54 per cent of the non-legalised inflows, about the average since World War I; prior to that point women were outnumbered by men by about two to one. The gender split may have implications for re-emigration probabilities and for labour market impacts.

larger proportion have less than a high-school education, although a marginally greater fraction has a college degree.

(Table 16. An overview of native and foreign-born populations, March 1994)

The changing source country distribution

123. Prior to 1970 the overwhelming majority of cumulative total immigration had been from other developed nations; nearly 79 per cent was from Europe. By 1990, census data show that the European share had dropped to 22 per cent (Table 17), although there has been some recent revival in migration from the former Soviet Union and Poland. Nonetheless, there has been a steady decline in the number of migrants from traditional US source countries like Germany, Italy, Canada and the United Kingdom. In their place have come migrants from Latin America, especially Mexico, and Asia, from which there may well have been some pent-up demand left over from the previous entry restrictions on Asians[85]. Indeed, the share of Mexicans in total immigration flows is still rising, and in March 1996 there were an estimated 6.7 million Mexican-born people in the United States, about 2½ per cent of the US population, nearly 7½ per cent of Mexico's population and more than the entire population of the seven smallest OECD Member countries. While the share of Asians in US total migratory inflows has begun to decline in the 1990s and its stock share seems to have reached a plateau, Mexico's share is still rising and may continue to do so, independent of illegal flows, given the very recent eligibility of the IRCA-legalised population to sponsor family members[86].

(Table 17. Immigrant population by place of birth, 1970-90)

124. Although cross-country comparisons are difficult, it would seem that the United States is somewhat unique in that its migratory flows still come to such a substantial degree from countries with low per capita incomes. In 1995, the weighted average GDP per capita of all source countries of migratory inflows (where data are available; they cover about 80 per cent of the total) was only $3 732, 14 per cent of the US figure (Table 18). In 1985, the ratio had been similar. Thus, it is highly likely that world output and income rise when immigrants relocate to the United States, probably because of its favourable institutional and economic environment as well as a greater capital endowment. Not all other countries have similar data, but the unweighted average across a dozen other OECD host countries in 1995 was more than triple the US 14 per cent outcome. The other major settlement countries, Canada and Australia, both had even higher figures, and both had boosted them substantially since 1985. Their points-based systems may have played an important role in this regard.

(Table 18. Per capita income in source countries, 1985 and 1995)

125. The importance of the longer-term shift from developed to developing countries as the primary source of US immigrants lies in the different amounts of skills and human capital and other characteristics

85. Many observers claim that the 1965 policy reform stimulated this ongoing evolution. Indeed, it would appear that an acceleration in the shift among source countries took place in the 1960s; however, part of that may well have had to do with economic conditions in traditional source countries, Europe in particular, which were rapidly improving at the time.

86. But Mexicans have had a low propensity to naturalise in the United States, and recent legislation has placed important constraints on sponsor income and support affidavits (see below).

valued by the labour market they possess[87]. It has been argued (Borjas, 1987) that the United States, with its open markets and dispersed income distribution, will attract relatively high-skilled candidates from wealthy source countries with narrow income distributions and, conversely, the low-skilled from among those in poor countries with wide distributions; this is termed the Roy model. Thus, independent of average skill levels in today's mix of source countries as compared with those of generations ago, skill levels may have declined more than might be apparent from source-country averages.

126. The regional distribution of settlement of the immigrant flows is largely determined by the sources of those flows because of the existence of ethnic and national enclaves and networks of job provision and social integration. Historically, most immigrants had entered the United States by crossing the Atlantic Ocean and then settled in the industrial north-east. The "new" immigrants, on the other hand, have come across the Pacific and the southern border and have tended to settle in California, Texas and Florida, in addition to New York and New Jersey. By 1990, California was home to one-third of the nation's foreign-born population, nearly double its 1970 share and nearly triple its overall population share. Nearly 22 per cent of its population was foreign born, compared with around 9 per cent in 1970. And 46 per cent of the increase in the nation's foreign-born population from 1970 to 1990 was located in California. Thus far in the 1990s immigration has continued at a robust pace into California, as well as Texas and Florida, but there has been something of a return to New York and New Jersey as the destination of choice for many immigrants (Table 19). While the foreign born have comprised about three-quarters of the population increase in California, their arrival has prevented a significant depopulation in the north-east in general and in New York (especially New York City) and Massachusetts in particular. Given that 93 per cent of the foreign born resided in metropolitan areas in 1990, compared with 73 per cent of the native-born, it is not surprising that they are highly concentrated; for example, the foreign-born share of Miami's population in 1990 was 46 per cent, Los Angeles' was 33 per cent and New York's reached 33 per cent in 1995 (up from 18 per cent in 1970).

(Table 19. Net immigration by state in the 1990s)

127. Despite the shift towards developing countries as the source of immigrants, the quality and skills of recent immigrants has almost certainly increased in recent decades but not sufficiently to prevent a decline relative to native-born Americans. Census data show clearly that male foreign-born workers have increasing numbers of years of schooling: the share of the foreign born with less than 12 years of education (the equivalent to a high-school diploma) fell from over half in 1970 to 40 per cent in 1980 and to 30 per cent in 1990[88], and the share with a college degree doubled to around one in four (Table 20). But the lower tail of the distribution of native-born workers was increasing its education level even faster over this period in response to generally high and rising returns to human capital. The number of native-born workers without a high-school diploma fell by nearly a third in the 1980s alone, while the increase in those with some post-secondary experience was more than half. Thus, foreign-born workers comprised 20 per cent of all workers with less than 12 years of schooling in 1990, up from only about 6 per cent in 1970; the corresponding figures for California are even more striking (Schoeni *et al.*, 1996).

(Table 20. Educational attainment among employed immigrants and natives, 1980 and 1990)

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87. Once source-country characteristics are added to be a cross-sectional wage equation the coefficients on the set of country dummy variables tend to be insignificant, implying that only observable characteristics are influencing migrant earnings (Jasso and Rosenzweig, 1990).

88. This share is believed to be up to 75 per cent for illegal aliens and 46 per cent for refugees and asylees (Lowell, 1995).

128. But there are significant differences in the levels of and trends in educational attainment among immigrants from different source countries and therefore, given regional differences in settlement patterns, among regions as well. Indeed virtually the entire increase in the wage gap between immigrants and natives from 1970 to 1990 is attributable to changing national origin (Smith and Edmonston, 1997). While, as stated above, the average number of years of schooling of the typical migrant has improved in recent decades, the improvement has not been uniform. Average attainment has moved up for those from some sources, especially Europe and Canada (Table 21), but a remarkably high proportion of migrants from some source countries still arrive with very little if any formal schooling. Mexico, the number one source country, stands out in this respect: more than one in four migrants from Mexico who arrived in the 1980s still had less than five years of schooling. With Mexicans overwhelmingly settling in the West and Southwest, the education gap is most apparent in these parts of the country. The labour market effects of immigration (discussed below) will therefore flow not only from varying immigrant concentrations but also from differences in immigrant characteristics which influence their ability to assimilate as well as the native and previous immigrant workers with whom they compete.

(Table 21. Education, English language skills and unemployment rates of US immigrants)

129. Another important skill is the ability to speak English fluently. In this respect immigrant quality clearly declined from the 1970s to the 1980s, as the proportion of those who speak another language at home and who speak English poorly jumped from 22 to 47 per cent. This deterioration was widespread across source countries and may well indicate a growing problem in transferring human capital acquired abroad to the US labour market. The problem of poor English language skills also seems particularly acute for those immigrants settling in the West (Greenwood *et al.*, 1997). In any case, there seems to be clear excess demand for courses in English as a second language: in New York City, for example, places are allocated by a lottery system.

130. This problem of transferability of skills, once superimposed on the education gap between the immigrant and native populations, gives rise to lower wages as well as an unemployment rate that is well above that of the native population (see below), especially for recent arrivals and especially for those from Latin America and Africa, and an occupational distribution that reflects a lower degree of skill requirements and an emerging structural gap with native workers[89] (Table 22). These differences are obviously accentuated for recent arrivals who have not yet had the time to assimilate into the US labour market. That process of integration is clearly evident in the shares of immigrants who are working in managerial and professional speciality occupations: figures in the table indicate a rise in the share of pre-1980 arrivals in this category high-skill from 1980 to 1990. A similar but opposite process of moving out of the category "operators, fabricators and labourers" is also visible. In general, immigrants dominate in a number of high- and low-skill occupations (teachers and scientists at the high end, service and crafts workers at the low end), whereas they are proportionately under-represented in intermediate-level jobs.

(Table 22. Occupational distribution of US workers, 1980 and 1990)

89. The data in the table show that the gain from 1980 to 1990 in the share of immigrants who had arrived more than 10 years previously and are classified as managerial and professional speciality workers was more than a third less than the corresponding gain for all workers. Similarly, the relative movements into low-pay occupations in services, farming, forestry and fishing, and operators, fabricators and labourers all reflect a declining skill orientation. While these Census-based data include illegal immigrants, INS data for 1977, 1982 and 1994 admissions of legal immigrants show similar tendencies (Smith and Edmonston, 1997).

131. Immigrants' labour market outcomes are consistent with their backgrounds. It is useful to limit analysis to prime-age males in order to abstract from different demographic structures. For example, while immigrants have a slightly lower labour force participation rate, this is attributable to women and youths[90]. For this group labour force participation is higher than for native-born men, as there has been no structural decline (Table 23). There is little noteworthy cross-country variation, except that those from Indochina/Vietnam have an especially low rate. Joblessness, however, is a much bigger problem, especially for recent arrivals: the unemployment rate is significantly higher among foreign-born men, and the gap widened in the 1980s. The biggest percentage point increases and the highest rates are among Hispanics. Nevertheless, employment-to-population ratios are generally higher for immigrants than natives, at least for men, but the reverse is true for recent arrivals. The deficit seems to shrink the longer an immigrant remains in the country, and the most recent immigrants have had particular difficulties in finding employment.

(Table 23. Labour market outcomes of 25 to 64 year-old immigrant men, 1970-90)

132. Aggregate immigrant earnings levels have deteriorated relative to natives since 1970. However, this worsening has been limited to immigrants from Mexico and Central America, as those from all other areas experienced improvements. It is also limited to those without any post-secondary education: the labour market penalty to those with at least 13 years of schooling has been stable in the range of 5 to 10 per cent relative to similarly-educated natives, while the relative earnings situation for the low-skilled has deteriorated significantly. These immigrants find themselves disproportionately in the bottom decile of the income distribution[91]. Higher shares are totally without income and live below the official poverty line; amongst those with income, median per capita income in 1993 was nearly one quarter below that received by natives, but the gap drops to about 7 per cent for those who have been resident for 15 years or more. Using more reliable Census data the hourly wage gap between immigrants and natives aged 25-64 was 7 per cent for men and about 1½ per cent for women in 1990 (Table 24); annual earnings diverged substantially more (15 and 5 per cent, respectively), indicating fewer hours worked, probably due to greater unemployment. These differences are magnified for those who arrived in the preceding decade, illegal aliens and refugees and asylees; indeed, the remainder had about the same annual earnings and higher hourly wages. But the variation across source countries is enormous, with male immigrants from Japan earning 54 per cent more than the average native man, while those from Mexico earn 37 per cent less; this variation is largely due to differences in underlying skill differentials and the inability to transfer skills from developing countries[92].

(Table 24. The wage and earnings gap between immigrants and natives, 1970-90)

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90. Supporting evidence comes from Funkhouser and Trejo (1996) who point out that female employment rates are fully 10 points lower than those of native women, especially among those with less than five years since arrival.

91. For example, immigrants comprised 23 per cent of those in the bottom decile in California; in Los Angeles the figure was nearly 30 per cent.

92. See the regression results reported in footnote 106 below.

The economic effects of immigration

133. International migration can be characterised as a flow of potential labour across a border. It changes both productive potential and factor prices and incomes in the source and destination countries in theoretically predictable ways (see Box 8). But in practice those effects are exceedingly difficult to quantify because of migrants' varying features and because different approaches are possible. The simplest static analysis points to a very small "immigration surplus", a gain to the United States of a few billion dollars per year. But there could be additional favourable effects, due for example, to agglomeration economies or immigrants' particular entrepreneurial skills, or costs associated with crowding, social strains or budgetary pressures.

Box 8. Some simple theoretical expectations on the economic effects of immigration

For the economist international migration is, at first glance, a fairly straight-forward labour supply shock that transfers labour resources from the source to the host country. In this static, partial-equilibrium sense it has certain similarities with these international capital flows that serve to finance investment: both raise the productive potential of the recipient country at the expense of the source country and boost world output, assuming factor productivity is higher in their new home because of institutional differences. This is supported by the assumption that the migration is motivated by a skill-adjusted wage differential[93]. Both also trigger internal redistributions in the two nations. In the simplest sense, production theory tells us that the prices and incomes of the migrating factor and of others with which it competes will rise in the source country and fall in the destination country, while the prices of complementary factors will move in the opposite direction as production adjusts to the new factor intensities. However, assessing the size and nature of these effects is complex, because they are a function of numerous features of the flows -- volumes, timing, settlement patterns, remittance behaviour, among others -- as well as of characteristics of the migrants themselves (sex[94], age[95], legal status, country of origin, skill level). Many of these socio-economic traits have already been described above. A further complexity is that the effects vary over time, as in the medium term immigrants acquire new skills and experience in the local labour market, and in the long term their progeny compete with the offspring of natives in subsequent generations. Last, the impact will be a function of the institutional and policy framework, as emphasised in the Introduction. Given all these parameters, drawing secure conclusions is difficult, especially as so much of the voluminous pertinent literature

93. This is likely either because the immigrant was under- or unemployed prior to migrating or that the wage differential truly reflects relative marginal products in spite of possible distortions.

94. The economic effects of female immigration are likely to differ from those of male immigration because female immigrants have lower participation rates and wage rates; they often compete in different sectors of the labour market; they have obviously different implications for the population in the long run; and they may draw more social services because of their longer life expectancy. See Funkhouser and Trejo (1996) for an examination of some evidence.

95. Age is another characteristic which has not been much investigated but which will have important implications for entrepreneurship, duration of labour market activity and indirect demand effects as a result of non-labour income. The share of prime-age immigrants (those in the age group of around 15 to 44) in total inflows declined fairly steadily from over 80 per cent in the early years of the Twentieth Century to some 60 per cent from 1940 to 1980; since then it has again risen to around 69 per cent. On the other hand, the share of those 45 and over has also risen somewhat through this century, reaching around 16 per cent most recently, although it was even higher in the period 1931-50. The implication is that the share of young children doubled from around 13 per cent in the first couple of decades of the century to over one-quarter from 1960 to 1980 before falling back to around 15 per cent of late. See Greenwood *et al.* (1997).

adopts a partial equilibrium approach which risks overlooking key interdependencies. Nevertheless, partial-equilibrium analysis does point to the strong probability that immigration produces small net gains for the native-born (Smith and Edmonston, 1997), the so-called immigration surplus.

A simple supply and demand analysis helps to demonstrate this result (Figure 21). Assume only one good and two kinds of labour, skilled and unskilled, and that all immigrants are unskilled. Let CF be the demand for unskilled labour, that is its marginal product. Before immigration there are S native unskilled workers who are paid W_0 and the wage bill is OBDG. The remainder of the output, BCD, is paid to other factors, skilled labour in this simple case without capital. With immigration of unskilled labour, I, supply shifts to S+I and the wage falls to W_1. Domestic unskilled labour loses ABDK, immigrant labour earns GKEH and native complementary factors gain ABDE. Thus, native factors make an overall gain equal to KDE -- the famous "Harberger triangle" in other contexts[96]. A series of recent estimates put its value at $1 to $10 billion for the United States (Borjas, 1995c; Smith and Edmonston, 1997; Borjas *et al.*, 1997). However, only if skilled labour compensates the unskilled losers will immigration be Pareto improving. It should be pointed out that, with linear demand, the native gain is one half the product of the number of immigrants and the reduction in the price of unskilled labour. Thus, as long as there is some substitution, the size of the gain is proportional to the price decline; if, on the other hand, all immigrants are complementary to domestic workers, the foregoing analysis would not be applicable and all native workers would gain. Also, unless returns to scale are not constant, immigration will only affect long-run economic growth if immigrants are and remain different from the native-born, that is if assimilation (see below) is never complete. One way immigrants may differ from natives is in their entrepreneurial abilities[97]. The media frequently mention that 12 per cent of the 500 fastest-growing companies listed by a popular business magazine in 1995 were started by immigrants and discuss the prevalence of small immigrant-run businesses in areas such as Los Angeles. But little hard evidence on the subject is available other than (Table 25) that in 1990 immigrants were only marginally more likely to be self-employed than natives, although much more likely when they are of European or Asian birth and have at least a high school education.

(Figure 21. Labour market effects of immigration)
(Table 25. Self-employment rates by region of birth and education level, 1990)

This simple model can be extended: to recognise that labour-market adjustment is not costless; to allow for the use of capital, in which case the owners of capital would share in the immigration-induced gains to other factors[98]; and to allow for multiple goods in which case the relative price of products which are intensive in the use of immigrant labour will fall and domestic consumers of these goods and services will gain. Thus, as with opening an autarkic economy to international trade, there exist gains associated with both specialisation in consumption and production[99]. Immigration and imports are alternative ways of obtaining output which uses the relatively scarce

96. The formula for its share of GDP is (Borjas, 1995c): $-\frac{1}{2}$ s e m^2, where s is labour's share of output (0.7), e is the own price elasticity of labour demand (-0.3) and m is the immigrant share of employment (0.1). Thus, in this simple model, the surplus is around 0.1 per cent of GDP.

97. See the supplementary chapter on entrepreneurship, distributed separately.

98. If immigrants are identical to natives, then native workers will all lose (and, in the extended model presented below, the Harberger triangle will represent a gain to domestic owners of capital), unless those immigrants bring with them sufficient capital to maintain the previous capital/labour ratio; in that case, output will be scaled up, but there is no gain (or loss) to domestic workers. However, if capital is internationally mobile, then this part of the national gain is dissipated. Borjas *et al.* (1997) estimate that this dissipation would amount to 62 per cent of the original aggregate gain.

99. But trade and immigration are different: the latter is a semi-permanent movement in the stock of a factor (like foreign investment), whereas trade is inherently a flow which can be stopped or reversed depending on economic and policy developments. Also, natives who work in non-

domestic factor (unskilled labour in the US case) more intensively. Thus, immigration is likely to have smaller effects if trade is already relatively free.

There are a number of other possible mechanisms by which immigration could in theory affect the domestic economy. A key general equilibrium effect which must be accounted for is that the immigrants not only contribute to increased aggregate supply but also boost aggregate and labour demand, even if some part of their earnings are repatriated to their families in the form of remittance transfers. This demand-boosting effect would be larger the greater is immigrant wealth and non-labour income. Another effect is attributable to agglomeration economies (Ciccone and Hall, 1996): increased population may well lower unit costs, leading to greater competitiveness and output if aggregate production is subject to scale economies. On the other hand, crowding effects may generate decreasing returns to scale because of higher congestion and pollution. In addition, theory implies that immigration will change the rates of return to skills and therefore bring about changes in the human capital investment decisions of the native population which, over time, will probably soften the short-run impacts on those who compete with immigrants in the labour market.

Evidence on labour market and distributional effects

134. Probably the foremost empirical question is whether immigrant workers reduce the wages of native workers and displace them from their jobs. This "displacement hypothesis" may not be correct if US labour markets are sufficiently segmented that native workers are not substitutes for immigrant workers; this may be true for illegal immigrants who are thought to take jobs for which native workers tend not to compete (Lowell, 1995). The real wage rates of native workers will rise, in general, only if they are outright complements in production, however. Nevertheless, other factors, capital in particular, are more likely to be complements and therefore to gain as a result of immigration. The sizes of wage and employment effects of immigration are a function of the relevant elasticities of labour demand and native labour supply: in general, the lower the elasticities, the larger the wage impact of any given amount of immigration, while displacement will be greater the more elastic is domestic labour supply and the less elastic is labour demand. A consensus estimate (Hamermesh, 1993) of the elasticity of labour demand is around -0.3; thus, a 10 per cent increase in labour supply due to immigration (corresponding to the foreign-born share of the population) would be expected to lead to, at first glance, a 33 per cent reduction in the market wage. This predicted decline derives from the assumption of unchanged incomes and output which is patently false: immigrants spend most of their earnings on domestic production, thereby boosting demand for labour and offsetting the original shift in supply.

135. The empirical literature generally also points, to only small wage and employment effects on native workers, although the consensus view is that there is some more substantial effect on other recent immigrants, especially in areas of high immigrant concentration. This does not exclude the possibility that certain specific types of native workers might not suffer measurable losses[100], as others may gain, dulling

traded goods sectors do not compete directly with imports, but they still compete with immigrants. Nevertheless, whether trade and migration (and capital flows) are substitutes or complements is a worthy if largely unresearched question. The theoretical as well as the limited empirical evidence is ambiguous (Collins *et al.*, 1997).

100. The case of farm workers is perhaps the most obvious: in that sector average wages have been falling in real terms for some 20 years, with the cumulative loss up to 20 per cent by some estimates. With weak union representation there has been a significant risk of labour laws and regulations not being respected. The Labor Department was hoping to add several hundred extra inspectors in 1997 to ensure that labour laws are properly enforced, especially in garment

the aggregate effects. Besides the aforementioned expansionary aggregate demand effects, regional arbitration through internal factor mobility might also smooth the effect of locally important shocks over the much larger national labour market (see below). Finally, the contribution of immigrants to labour force growth may not have been sufficiently significant in the 1970s and 1980s to have measurable effects, even if the share has grown more recently.

136. It is possible to distinguish a number of separate strands of the literature to date. In the first, a narrow production-theory approach was applied, with minimal input disaggregation (immigrants and natives were considered as homogeneous populations), but a number of potentially serious technical problems were not recognised[101]; the focus was on the short run, when native workers' wage rates can be assumed to be downwardly rigid, and results were in the range of a elasticity of native employment with respect to immigrant employment of -0.08 to -0.10 (Johnson, 1980; Grossman, 1982). Eventually, however, native wages would adjust to eliminate displacement, leaving them with a wage loss of about 1.0 per cent (0.8 per cent in the second generation) for each 10 per cent increase in immigration. Previous immigrants experience a 2.3 per cent wage cut, capital-owners a gain of 4.2 per cent. Later some distinction was drawn between low- and high-skilled immigrants and natives, but the conclusions were initially similar: while the segmentation hypothesis was refuted in its extreme form – immigration does cause a decline in the wages and employment of low-skilled natives -- the effects were thought to be small. It is previous low-skilled immigrants who suffer the greatest losses, even if there are signs of a sequential process from substitutability to complementarity[102]. Subsequent research has refined the prevailing view by demonstrating that the negative effects of low-skilled immigration are most pronounced for native youths who lack experience.

137. At the level of specific industries, occupations and regions or localities it may no longer be true that the aggregate supply of unskilled immigrant labour is inelastic or that aggregate demand for such labour is so elastic, and immigration effects may be larger. Of course, researchers have tended to look at the places they expected to find significant influences, and nothing is known regarding the ultimate impact on those displaced. The narrower the sector or region, the more likely it is that negative native outcomes can be uncovered. In agriculture, for instance, the effects of immigration have been shown to be large in areas of high immigrant concentration, such as the California citrus industry (Mines and Martin, 1984). In manufacturing, some research has shown that native wage reductions begin to occur only when immigrants exceed around 20 per cent of the sectoral labour force (DeFreitas and Marshall, 1984). In the footwear and apparel sectors, the continued viability of domestic manufacturing has probably been assured by the availability of low-skill immigrant labour (Waldinger, 1985), to the advantage of the owners of capital in those sectors[103], but consumers may not be any better off than if the relevant products were

manufacturing, janitorial services and agriculture in high-immigration states, but the Congress dropped the necessary funding (see below).

101. Greenwood *et al.* (1997) point out that the regularity conditions were rarely verified with the underlying non-flexible functional forms and that the authors confused Allen-Uzawa with Hicksian elasticities.

102. DeFreitas (1988) argues that some newcomers move out of competition with other immigrants and disperse from job enclaves to positions in competition with low-skilled natives. Gang and Rivera-Batiz (1994) maintain that the process goes further, with immigrants initially substitutes for native unskilled labour but complements eventually. See also OECD (1997a).

103. One of the recurrent themes in this literature is that immigrant hiring networks are cost-reducing for employers.

manufactured abroad, in the source country in particular. Indeed, low-wage natives will have to compete with the low-wage foreign born whether or not the latter produce abroad or immigrate and produce in the United States.

138. The expectation that immigration effects in particular markets with heavy immigration would be larger has found very little supporting evidence. The Californian labour market effects of Mexican immigration have been much studied. Different degrees of displacement have been found (Muller and Espenshade, 1985; McCarthy and Valdez, 1986). But perhaps the most famous studies of the impact of immigration have been of major one-off immigration shocks: the Mariel boatlift in the Miami area (Card, 1990) and the return of the *pieds noirs* from Algeria to France in 1962 (Hunt, 1992). The findings of these studies show that even major one-off migrations have had only the smallest of labour market effects, even in the short run, possibly due to changes in natives' internal migration patterns or accommodation of the influx by an expansion of the existing industrial structure. Another study looking at six metropolitan areas with high immigrant presence concludes that most of the impact of inflows is on the relative earnings of the immigrants themselves but that even these wage-depressing effects dissipate over time as they assimilate into the US market (LaLonde and Topel, 1991).

139. While more recent research has gained greater sophistication, it has not succeeded in making a persuasive case for large local effects. In a structural model going beyond production relationships to include demand shifts and local export increases, localities with higher immigrant population shares are found to have lower wage rates for less-skilled natives (Altonji and Card, 1991). When still other channels of influence (such as internal migration) are included in empirical work, the negative effects on native employment and wages are substantially mitigated and possibly even overturned (Greenwood and Hunt, 1995), leading to a positive correlation between immigration and native migratory flows, as was discovered by Butcher and Card (1991). Direct empirical evidence on this question points to lower in-migration and greater out-migration by low- and middle- income whites but opposite effects for highly educated white natives (Frey, 1994) who could benefit from complementarity effects, demand stimulus or capital accumulation offsets. Thus, it could be that local effects are being arbitraged away, but only if the speed of regional adjustment is very rapid, and direct evidence on inter-regional factor dynamics indicates that adjustment lags are on the order of five to ten years (Blanchard and Katz, 1992; Treyz *et al.*, 1993). However, given the persistence of immigrant settlement patterns, local effects would have been expected to be sizeable in any case.

140. The major alternative view of the impact of immigration derives from a different statistical approach: using time-series rather than cross-section data, various researchers have concluded that immigration has had a much more substantial impact on low-skill native workers, high-school dropouts in particular. The justification for this type of study is that it avoids the spreading of effects on native workers across the national market via factor mobility and goods trade. The research strategy has been to examine the wages of low-skill workers relative to those of their high-skill counterparts -- a good proxy for wage inequality -- over time and test for the effects of immigration as well as other commonly hypothesised factors such as international trade and technical change. Unfortunately, the number of observations is limited by the availability of information on place of birth in the Current Population Survey and the decennial censuses. The results of these studies tend not to be sufficiently consistent to be certain that inter-regional factor and goods mobility is the cause of the weakness of the effects found in the cross-section literature[104].

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104. Borjas *et al.* (1992) focus on the supply of high-school dropouts in the 1980s and find that it was some 13 per cent higher in 1980 than it would otherwise have been because of immigration, but that the figure had risen to 25 per cent by 1987-88; both figures were much higher than what

Immigrant assimilation

141. One of the key issues in analysing the progress of immigrants in the host economy is the extent to which they assimilate over time. Assimilation in this context describes the process by which immigrants acquire language and other skills and experience which are rewarded by the US labour market. Initially cross-section census earnings profiles were used to document an assimilation effect, with the result that immigrant earnings were believed to be lower upon arrival but to rise and surpass those of natives after an average lag of about 13 years (Chiswick, 1978): the explanation centred primarily on a lower market valuation of foreign work experience than domestic, at least for those from non-English-speaking source countries -- proficiency in English aids in the skills transfer process. The wage penalty imposed on those with weak English language skills is also a function of location; it is smaller in areas with higher immigrant concentrations where there exists a demand for minority-language skills.

142. But this approach risks confusing the hypothesised assimilation ("within-cohort") effects with changes in immigrant quality over time as manifest in vintage ("across-cohort") effects (Borjas, 1985). One must also separate out the number of years since arrival from the immigrant's cohort in order to ensure that assimilation effects are not over-estimated. The relevant literature on declining quality is long, and statistical problems abound. Furthermore, for a long time the question was not precisely defined, as the quality of immigrants may have fallen relative to the past or relative to the native born in the aggregate or of the same race and ethnicity[105]. The debate has also shown that the issue is not independent of age at arrival: those migrating at a young age experience earnings paths which are little different from natives', as their education and work experience are obtained in the United States, but those entering at older ages face more limited economic opportunities, both initially and throughout their careers. Correcting for age at arrival weakens the case for declining immigrant quality over time (Friedberg, 1993). Return migration

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was attributable to international trade. The authors conclude that immigration was responsible for around 20 to 50 per cent of the nearly 10 percentage point change in the wage gap between high-school graduates and dropouts over this period, depending on the price elasticity of labour demand assumed. Very recently the same authors (Borjas *et al.*, 1997) attribute nearly half of the 11 point decline in the relative wage of high school dropouts from 1980 to 1994 to the increased supply of less-skilled immigrants. In a similar vein, Topel (1994) explored the wage gap between the wage of a worker at the 50th percentile and one at the 16th percentile of the wage distribution from 1972 to 1990 across nine Census regions. He finds that the wage gap widened far more in the Pacific region than elsewhere and that this was primarily due to less favourable supply effects, especially due to unskilled Asians and Hispanics, whether native or foreign born. Last, Borjas and Ramey (1994) conduct co-integration tests for the period 1963-88 on various hypothesised explanatory factors for the college-high school dropout wage gap and the college-high school graduate wage gap and find an insignificant result in both cases for the immigrant share. Separately, it might be added that there is some evidence for Australia that immigration there has had favourable (i.e. negative) unemployment effects, especially in the short run (Pope and Withers, 1993). Finally, Williamson (1996) argues that both the late Nineteenth Century and more recent patterns of inequality developments around the world are consistent with the effects emanating from globalisation (mainly migratory flows) and unskilled-labour-saving technical change.

105. There is some evidence of a decline in quality for immigrants from Europe and non-Mexican Hispanics but none for other groups (Friedberg, 1993). Other research (LaLonde and Topel, 1992) finds no decline in within-group quality even if the mix of source countries has shifted toward those providing immigrants, on average, with less human capital.

is another problem, as little is known about the one in three who re-emigrate, whether they are more or less successful than those who remain. Finally, a strong case has recently been made that declining initial earnings should be interpreted as a sign of a fall in the transferability of skills from source countries rather than of declining quality, because of a systematic inverse relationship between initial earnings and subsequent earnings growth (Duleep and Regets, 1996).

143. But overall it would seem that there has indeed been a decline in relative immigrant quality in recent decades, both in the form of observable skills (based on educational attainment) (Borjas, 1990; LaLonde and Topel, 1991) and unobservable characteristics as reflected in a growing wage differential between recent immigrants and demographically comparable natives (Borjas, 1992). While the rate of decline may have slowed (Borjas, 1995a) or even stopped (Funkhouser and Trejo, 1995) in the 1980s, the average skill level of recent immigrants in 1990 was still low by historical standards. And the overwhelming reason for the visible decline is the changing source country mix toward poorer countries (Borjas, 1992; Smith and Edmonston, 1997), at least until the mid-1980s (see Table 18 above), and the implications for educational attainment[106]. Once this quality decline is recognised, assimilation effects account for a decline of around 10 percentage points in the wage gap during the first two decades after arrival for men. But the size of the initial gap is larger for recent cohorts, implying that fewer will converge to native wages over their working lifetimes[107]. Women start with a smaller wage gap and also tend to close it slowly, but come closer to catching up than men.

Effects on prices

144. As explained above, the additional labour supply made available by immigrants generates changes in relative prices: those goods and services which are intensive in the use of immigrant labour will fall in price and conversely. Input-output tables allow some inference about which products are in fact intensive in the use of immigrant labour: these are found to be led by household services, services to dwellings and laundry, cleaning and garment services. With this industry information in hand, examining the Consumer Expenditure Survey allows the possibility of discovering who consumes these products. The result of this exercise is that the share of consumption expenditures attributable to the cost of immigrant labour is fairly constant (at nearly five per cent) across the household distribution of income, although it does rise slightly at the top end (Smith and Edmonston, 1997). It also rises slightly with the

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106. The wage differential between immigrants and natives in the United States in 1990 across 42 source countries is a function of the average educational attainment of those immigrants plus an additional amount for those from developed countries. The regression results (using data from Borjas (1994, Table 8) are as follows (t ratios in parentheses):

$$\text{Percent wage gap} = \underset{(6.0)}{-11.6} + \underset{(9.3)}{6.3}*\text{education gap in years} + \underset{(10.4)}{32.1}*\text{developed country dummy}$$
$$\text{RBSQ} = 0.86 \quad \text{SEE} = 9.53$$

For pre-1980 arrivals the education gap coefficient rises to 7.7 and that on the dummy falls to 23.3. Thus, being from a developed country is equivalent to having five years of extra education for the all-immigrant sample and about three for those who have been in the United States for over 10 years.

107. In fact, male Mexican immigrants have tended to fall further behind in relative wage terms over time (Smith and Edmonston, 1997).

educational attainment and age of the head of household. But in general natives benefit fairly equally from the price effects resulting from the presence of immigrants.

Effects on the public finances

145. Increasing attention has been paid to the impact of immigration on the public finances. In some quarters this is seen as the only worthy question for public policy towards immigration; however, even if immigrants fail to "pay their way" in budgetary terms, their overall effect on the nation can still be positive if their impact on native-born consumers and producers is favourable. Any undesired negative influence on the public purse could then be offset by taxing some of the native gains to offset the budgetary losses.

146. The debate has been acrimonious, partly because of its incongruence. Participants have not defined the questions precisely and make quite different assumptions about what should be considered and what excluded, what public services are pure public goods[108], the technology of public service provision, what horizon and discount rates are appropriate, what is the optimal demographic unit of analysis, etc. Most serious early attempts to quantify immigration effects on government outlays focused on welfare spending. The foreign born have been generally found to be less likely to receive public assistance and to receive lower levels of such transfers than the native-born population with similar characteristics (Blau, 1984)[109]; similar results have been found for some other OECD host countries (OECD, 1997a). However, results are not so clear-cut if demographic controls are excluded. In that case, outcomes are a function of the sex of the head of household (with male-headed households more likely to participate in welfare programmes (Blau, 1984)), race/ethnicity (Hispanic immigrants are more frequent recipients than their native counterparts (Jensen, 1988), since many of them worked in agriculture and household services where social security rights are not earned), immigration status (refugees make many times the welfare use of any other group of natives or immigrants (Fix and Passel, 1994)) and the year of the analysis (Borjas and Trejo, 1991). In any case, even if the partial effect of being foreign born is zero, many recent immigrants are characterised by low levels of educational attainment, large families and poor English-language skills, all of which are associated with greater welfare use. The overall result is that the latest data (March 1995) show that the foreign born are some 35 per cent more likely to receive public assistance than natives.

147. More recently attention has focused on whether there is a distinct effect resulting from time since migration, whether propensities have changed over time and whether they are cohort-dependent. With time, assimilation should imply that immigrants improve their economic position and therefore require

108. The Smith and Edmonston (1997) study assumes that public goods accounted for 23.7 per cent of total federal spending in 1995, other (congestible) goods 7.0 per cent, interest payments 13.9 per cent and age-related outlays 55.4 per cent.

109. A relevant but largely unanswered question is whether immigration status plays any role: in particular, are illegal immigrants different in their pattern of welfare use, perhaps because of a fear of being discovered and deported? Little empirical evidence is available, but there is some that shows that they make less use of income-transfer programmes, if for no other reason than that they are generally young, healthy males who have been in the United States only a short time (North and Houstoun, 1976; Massey *et al.*, 1990). If this is the case, then it is possible that conferring legal status on illegal aliens, such as was done by IRCA, would boost such social spending.

less public assistance; however, immigrants might conceivably "assimilate into welfare" by becoming more aware of the availability of social transfers and progressively fulfilling eligibility requirements. Borjas (1994) and Borjas and Hilton (1996) provide data which shed some light on this question (Table 26). In the aggregate, immigrant households moved from a position of near parity with native households in 1970, both with respect to propensities to use welfare and amounts received, to one of greater reliance on both counts in 1980 and, even more emphatically, in 1990 -- by then, immigrant households received 64 per cent more than native households on a per-household basis[110], a "welfare gap". By separating cohort and assimilation (time since arrival) effects, it is evident that probabilities of welfare receipt rose between the late 1960s arrivals and the early 1980s arrivals, with some reversal thereafter[111], and that the proportion of immigrant households using welfare tends to rise with the duration of US residence. The mean amount received has also tended to rise more rapidly than for households headed by the native born, both overall and for most cohorts taken individually.

(Table 26. Rates of receipt and average amounts of public assistance, 1970-90)

148. But welfare provides an excessively narrow focus for the examination of fiscal effects. Very recently, there has been some more rigorous and broadly-focused analysis of both static annual and dynamic long-run budgetary effects (Smith and Edmonston, 1997). Using the former, more common approach on data for New Jersey and California, the authors show immigrants benefited from higher state and local spending, especially on primary and secondary education (because of larger family size) and transfers (because of lower incomes), although some pay more tax than do native households (those from Europe, Canada and Asia) and are actually net contributors to these budgets (Europe and Canada) (Table 27, panel A). The budgetary effects on the federal government are found to be small and positive, but the overall charge on the general government budget remains an estimated $15 to $20 billion for 1996.

(Table 27. Fiscal impacts of immigration: some highlights)

149. Yet even broad-based static analysis is of limited interest because it mixes together immigrants of different generations; it assumes that fiscal policy is unchanged; it ignores life-cycle effects on demands for public services and payment of taxes; and it may miss the effect of adult, native-born children who do not live in immigrant-headed households. Adding population to the nation will spread the cost of public goods and the burden of interest payments on the public debt, although it will also boost the need for public infrastructure and dilute the per capita value of non-reproducible public wealth. Because immigrants have different characteristics, however, they have different marginal fiscal impacts than additional natives: they may need bilingual education (see below); they make about 40 per cent less use of nursing homes for the elderly due to strong family values; and they have tended to congregate in states with larger public sectors[112]. Data from the Current Population Survey show that: immigrants draw less Social Security and Medicare than natives (by around $1 000 to $2 000 per year due to lower average

110. This is merely the product of the rate of receipt and the average amount of receipt per household for households with foreign-born heads compared with those with native-born heads.

111. The structural increase in welfare use is generally attributed to the changing source-country mix of immigrants (Borjas, 1995b).

112. Borjas (1997) claims that welfare is a magnet, with immigrants clustering in generous states due to an elasticity with respect to welfare generosity three times that of natives. But his results are largely attributable to California, and Zavodny (1997) argues that the correlation is not causal and disappears once the presence of earlier immigrants is accounted for in the location decision.

earnings and shorter contribution periods), saving some $11.5 billion; they receive higher Medicaid benefits, at least until around age 80 (but the gap is much smaller); they rely more on Supplementary Security Income (SSI) after the age of about 52 (to the tune of about $700 more per year for those in their 70s and 80s when immigrants are often ineligible for Social Security and Medicare); they cost about $1 500 more per year in education outlays for those aged about 6-16; and they receive more of other income-related transfers as from the age of around 26 (an average of around $200 per year more). Aggregating over all programmes, immigrants receive more benefits from the age of 6 until around 19 and fewer from their late 40s on; on average they receive around 7 per cent less (Table 27, panel B). But the biggest difference between natives and the foreign born is in the taxes they pay during their adult lifetimes -- the foreign born pay 32 per cent less. The net fiscal impact of immigrants is therefore more negative than that of natives during youth, less positive during working lifetimes and similar in retirement. On average the immigrants themselves have positive fiscal effects at all levels of government, but once their native-born dependent children are included, their net impact turns negative at the state and local level and overall.

150. With these cross-section figures in hand and some additional[113] assumptions and some other less important features, a baseline scenario can be developed for the net present value of the total fiscal impact per immigrant (Table 27, Panel C1). The result of the simulation that immigrants themselves have a very small negative net fiscal impact, but once their progeny are included, immigrant yields a sizeable surplus. Again, the federal government gains more than the other levels lose (because of the public goods nature of defence and interest outlays). The outcome is, however, clearly a function of education and age at arrival. Only those with at least a high-school education have a positive fiscal impact in present value terms. With the educational attainment characteristics of the current immigrant stock, all those arriving at age 40 or less have favourable fiscal effects. To maximise the positive impact immigrants should be admitted when they are 21 years old and have more than a high school education. The worst outcome occurs when they are 70 years old at arrival and have no more than a high school education, in which case there is a substantial net cost.

151. But, as mentioned above, the overall surplus is attributable to very long-run considerations: in the baseline it takes 40 years for the net present value to turn positive. Sensitivity analysis is clearly called for. A number of interesting outcomes then ensue (Table 27, Panel C2). First, if the debt-to-GDP ratio is allowed to rise indefinitely, the average impact turns negative. It also turns negative if all public goods spending is assumed to be congestible; and if there is no need for immigrants to help bear the cost of the ageing of the baby-boom generation and its attendant rise in health-care costs[114]. However, the direction of the outcome is not sensitive to any other assumptions. Interestingly, last year's welfare reform legislation, if fully implemented (see below), would improve the baseline outcome by around 10 per cent or $8 000 per immigrant.

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113. These assumptions are: a 300-year horizon, a 3 per cent real interest rate, budgetary adjustment to stabilise the federal debt-to-GDP ratio in 2016, half that adjustment to take place by tax increases and half by spending cuts; and immigrants' wages not to continue to catch up to natives' beyond 10 years after arrival. This last assumption is an unresolved point in the literature. Duleep and Regets (1996) have controversially argued that the bigger wage gaps found in recent cohorts of immigrants have been associated with faster wage growth.

114. Other possible assumptions which would help turn this figure around would be: less assimilation in the future than in the past; decreasing returns to scale in public service provision; and displacement effects of natives by immigrant workers.

152. What are these figures worth to the average native resident? If they are accurate, they are indeed small: each extra 1 000 immigrants costs a native resident about a $0.10 per year in extra state and local taxes in present value terms which is more than offset by a $0.40 dollar decline in the federal tax burden, leaving a net gain of around $0.30. But it remains the case that immigrants are costly in the early years (for many decades at the state and local level) and will "pay their way" on a general government basis only if federal fiscal policy is eventually tightened to stabilise the federal public debt in relation to GDP. It is also obvious that the US system of government provides distorted inter-governmental incentives: the federal government has jurisdiction over immigration policy and immigrants seem to have favourable effects on its finances, whereas states and localities bear a net burden, even if high-immigration states are not in any worse financial condition than others (Funkhouser, 1995). The 1986 IRCA legislation did, in fact, authorise $1 billion per year for four years in grants to states to offset the costs of those granted amnesty, but the money was not fully appropriated. Some states have even filed suit against the federal government seeking cost reimbursement (some reimbursement for the costs of their incarceration has been made since 1994 -- $300 million in FY 1996, a fraction of the costs claimed by states), but these suits have all been dismissed by the courts.

The demographic effects of immigration

153. Demographers have also been important observers of immigration trends. Their models show that if there had been no immigration since 1950 the US population would have been only 225 million in 1995, rather than the actual figure of 263 million, a difference of nearly 15 per cent; that reduction would have been most keenly felt among those aged 10 to 39 and over 80 (Smith and Edmonston, 1997, Table 3.5). A smaller population would possibly have had favourable effects on the environment, but depending on one's view of scale effects, it might have generated less growth in per capita output and incomes (Ciccone and Hall, 1996). The alternative age structure would have meant a slightly higher dependency ratio[115], implying an increased fiscal burden, but it would most likely have led to a higher household saving ratio, given life-cycle considerations.

154. Future immigration levels will have important effects on the population (Smith and Edmonston, 1997): if net immigration were constant at 820 000 per year[116], population might rise by 124 million to 387 million in the year 2050, a compound rate of increase of 0.7 per cent per year, a rate not much more than half of what has been observed on average since 1950 (Table 28). Without any immigration, the population increase would be only 80 million, with growth of about a quarter of recent historical averages. Even if immigration were to double, population growth would still average only about what it has been over the past 30 years. The number of foreign born would rise unless immigration is cut back to around half current levels. There are also important effects on the ethnic composition of the population, although ethnic and racial distinctions will become increasingly blurred: under any immigration scenario, the shares of those of Asian and Hispanic ancestry will rise. Even with zero immigration, the sum of their

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115. Using data provided in Smith and Edmonston (1997, Table 3.5), it is possible to show that if the overall dependency ratio is defined as under 20 plus those over 64 divided by those 20-64, it would have been 45.9 per cent, as opposed to the actual share of 45.4 per cent.

116. When this work was undertaken, official estimates for illegal immigration were 225 000 per year; they have since been boosted by 50 000 per year. Thus, the 820 000 figure for net immigration (815 000 gross legal immigration plus 225 000 net illegal immigration less 220 000 gross emigration) is somewhat below the average recorded in the first half of the 1990s.

shares would reach 22 per cent in 2050, up from 14 per cent in 1995, because of higher assumed fertility rates. Under constant immigration assumptions, it would jump to a third.

(Table 28. The prospects for US population under different immigration assumptions, 1995-2050)

155. Immigration also affects the median age of the population. Higher immigration reduces average age because immigrants' median age is relatively low -- 28 in 1995, for example. The youth dependency ratio (those under 15 as a share of those 20 to 64) is projected to remain fairly flat over the next half-century; different immigration assumptions would allow this to vary by around 2 percentage points, with higher immigration meaning a higher ratio. But immigration could induce important changes in the elderly dependency ratio which has been around 20 per cent of late and would finish the period at over 32 per cent with zero immigration and about 27 per cent with a doubling of immigration. Thus, overall dependency could be lowered from over 62 per cent with no immigration to below 60 per cent with a doubling[117]. Thus, the Twenty-First Century pension problem, as well as the coincident health care cost explosion, could conceivably be alleviated by varying immigration levels, even if they cannot by any means be avoided altogether, and this would entail substantially greater population growth (Espenshade, 1994).

Some social aspects of immigration

156. Besides economic, fiscal and demographic effects, immigration also has social aspects which are important to the evaluation of its full impact. Foremost among these is the success with which immigrants are integrated into US society by means of the famous so-called "melting pot". There has been much research into the fate of earlier waves of immigrants and their offspring but, of necessity, little dealing with the most recent cohorts which have the important difference of being to a much greater extent of different race than the majority of the native population. The latest readings, however, are that most are progressing satisfactorily[118], even if convergence is seen as slow by some (Borjas, 1995d). First, other than Mexicans, most Americans seem to live in neighbourhoods which are not especially segregated by ethnicity[119]; furthermore, segregation measures decline from first- to second- generation immigrants and then fall by half again in the third generation, also with the exception of those of Mexican origin. Second, inter-marriage rates are high for those of Hispanic and Asian origins and have been growing since 1960 for all groups (Smith and Edmonston, 1997). Third, immigrants' scholastic outcomes are generally equal or superior to those of their native-born counterparts. Fourth, the language barrier ceases to play any meaningful role beyond the first generation. Fifth, immigrant contributions in a number of fields are well

117. The gap between the ratios of these two extreme scenarios would be even larger in 2035 at around 4 percentage points. Also, it should be noted that the fiscal burden of supporting an elderly dependent is about 2.5 times that of a child dependent (Espenshade, 1994).

118. However, some unpublished work by Jorge Chapa at the University of Texas at Austin shows that for Hispanic immigrants convergence stops after the second generation. In other words, the situation stagnates for the grandchildren of immigrants.

119. Possibly the best data in this domain are now rather dated: Borjas (1995d) shows that those aged 14-22 in 1979 shared zip (postal) codes with 30.4 per cent of others from the same ethnic group, indicating much more residential segregation than portrayed by Census data which take larger geographic areas. The figure ranged from 63 per cent for blacks and 50 per cent for Mexicans down to 4 per cent for Chinese.

documented: more than a quarter of all US Nobel laureates have been foreign born (Smith and Edmonston, 1997, Table 8.5), as were 17 per cent of all members of the prestigious National Academies of Sciences and Engineering in July 1996 and 22 per cent of the cumulative recipients of Kennedy Center honours in the performing arts. However, naturalisation rates (the share of the foreign born who are citizens) -- a marker for assimilation -- fell sharply from 1970 until fairly recently[120], even though much of this is attributable to the low propensity of Mexican immigrants to seek US citizenship in combination with the rising immigration share from Mexico (Jasso and Rosenzweig, 1990).

157. Perhaps the non-economic domain in which there has been the most recent concern has been the inter-relationship between immigration and crime. That immigrants or at least foreigners contribute disproportionately to crime has been a long-standing public perception, as witnessed by the attention paid to immigration matters in the 1996 anti-terrorism bill. The statistical problems surrounding this issue are, however, daunting. For foreign- *versus* native-born, only data for those institutionalised (for whatever reason) are available (rather than those incarcerated); otherwise available data sources identify only citizenship status. For males aged 18 to 54 (the preponderant demographic group engaging in criminal activity) overall incarceration rates for non-citizens in 1991 were about 20 per cent below those for citizens (Smith and Edmonston, 1997, Table 8.6). For some purposes it may be better to correct for socio-demographic characteristics in which case the differential widens to one-third (Butcher and Piehl, 1996a). It narrows the longer the time since arrival and for 1990 as compared to 1980 -- this is consistent with figures showing that non-citizens' share of the federal prison population rose significantly from 1984 to 1994. The only type of offence where non-citizens had higher incarceration rates were those related to drugs (and many of those imprisoned for such crimes may well not even be residents, much less immigrants). Moreover, non-citizens may well serve longer sentences for a given crime, in part because they are released to INS custody until a deportation decision is taken. Other evidence on the question shows that changes in local crime rates are independent of changes in immigrant shares in the community, even if there is some positive correlation in the levels (Butcher and Piehl, 1996b).

The recent policy debate

158. After the immigration reform was legislated in 1990, the Congress decided to set up the Commission on Immigration Reform. It issued an initial report in 1995 (US Commission on Immigration Reform, 1995) which called for an immediate reduction in legal immigration of nearly one-quarter and an eventual cut of 40 per cent (once the backlog in certain categories are eliminated), including a reduction in employment-based quota of 40 000 per year, and the establishment of substantial fees (up to $10 000, used to fund private-sector initiatives to boost the competitiveness of US workers) payable by employers who wish to hire certain skilled foreign workers[121]. The result was a lengthy debate which culminated in

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120. About half of all those classified as legal permanent resident aliens eventually become US citizens (US Department of Justice, 1997, Chapter V). Total naturalisations were not much more than 100 000 per year in the years immediately following the 1965 reform but then began to climb, doubling by the late 1980s and then again by 1995. In FY 1996 there was a naturalisation boom, with some 1.2 million people receiving US citizenship under the threat that they would otherwise become ineligible for some forms of public transfers (see below). However, the naturalisation rate fell from over 70 per cent in 1970 to around 40 per cent in 1990, the lowest level in a century (Smith and Edmonston, 1997).

121. Specifically, it would have eliminated the diversity programme, cut refugee numbers and limited family-based immigration to immediate relatives who themselves would be subject to a fixed

legislation (the Illegal Immigration Reform and Immigrant Responsibility Act) signed into law on 30 September 1996 and implemented in the spring of 1997. The main provisions of the law in the legal immigration domain were to create an income test of 125 per cent of the official poverty level (currently around $10 600 for a childless couple and $16 000 per year for a family of four) for sponsors of legal immigrants[122], increase the time that sponsors would be financially responsible for immigrants to five years (the so-called "deeming requirement"[123]) and make affidavits of support legally enforceable. It also threatens legal immigrants with deportation if they illegally use public benefit programmes and denies citizenship to anyone who is deportable or whose sponsor has unpaid sponsorship-related bills.

159. But it was in order to clamp down on illegal immigration that ultimately the most significant changes were made, as some immigration critics charge that control of the borders has been lost[124]. The size of the Border Patrol is to be doubled over a five-year period to 10 000 agents, and 1 200 other additional INS agents will be hired[125]. The fence between California and Mexico is to be extended. Sentences for document fraud and cross-border smuggling of aliens were lengthened[126]. The deportation process has been expedited, in part by greatly reducing judges' discretion to grant waivers. Several pilot programmes to verify eligibility to work are being set up, but document verification procedures for both public benefits as well as the right to work otherwise remain largely non-existent. And asylum seekers will have to apply within one year of arrival. But several controversial provisions were dropped at the final stage, including allowing states to refuse free public education to the children of illegal immigrants (similar to a 1994 California referendum proposition which has not been implemented due to a court challenge), making the income test twice the poverty level and hiring several hundred extra inspectors to ensure that employers are not abusing their positions *vis- -vis* immigrant labour. Earlier the legislation had been purged of a provision that would have cut down on the level of legal immigration by eliminating preferences for siblings and most adult children of US citizens as well as another that would have imposed a long-term care insurance requirement.

160. Yet possibly the most significant debate and legislation concerning immigrants has been over possible restrictions on their eligibility for public transfers and benefits[127]. Such restrictions formed a

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quota. It would also have eliminated all unskilled employment-based immigration and subjected most others to a labour-market test.

122. This could be quite inhibiting for potential sponsors: about half of all Mexicans and Salvadorans who did in fact sponsor immigrants in 1994 had incomes below that figure.

123. Sponsors' incomes are "deemed" to be part of immigrants' resources. This was first instituted for some SSI applicants in 1987 and applied to other programmes in the 1990s.

124. But Passel (1996) points out that net inflows of undocumented migrants of 300 000 per year represents only 0.1 per cent of total alien entries of 300 million per year, and visa overstayers represent some 0.7 per cent of total non-immigrant admissions.

125. However, the Administration requested only 500 additional agents in its FY 1998 Budget.

126. The number of aliens located by the Border Patrol who were smuggled into the United States more than doubled from 1989 to 1995, reaching 103 000. Document fraud is rife, especially in certain visa categories such as the L-1A category for intra-company transfers of managers.

127. The number of aged immigrant recipients of SSI rose by 580 per cent from 1982 to 1994. Fear of such restrictions helped drive the number of immigrants eligible for naturalisation who sought

substantial part of the recent welfare reform bill, the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. That legislation bars most new and already admitted "qualified aliens" (lawful permanent residents, refugees and asylees, and some others) from receiving food stamps and SSI and most new qualified aliens from most means-tested federal programmes during their first five years in the United States[128]. In addition, state governments were given the right to deny them Temporary Assistance to Needy Families ("welfare"), Medicaid and various federally funded state programmes such as child care and services for the elderly. States were also required to legislate specifically if they wished to provide benefits to illegal immigrants. Immigrants were the source of 40 per cent of the overall spending cuts contained in the bill, nearly $4 billion per year. Official estimates are that half a million immigrants would be cut from the rolls of SSI recipients and a million from the list of food stamp beneficiaries. Even though the President signed the bill, he vowed to revisit the question in 1997 before most provisions are effective in August. The Administration budget for 1998 sought to restore $13 billion in spending over five years, well over half the legislated cut, by eliminating the removal of immigrants' right to Medicaid and SSI benefits. The May budget agreement with Congress entailed a slightly smaller restoration -- about $10 billion -- and grandfathered the right to SSI benefits for immigrants already in the country prior to the 1996 legislation who might eventually become disabled but did not protect elderly immigrants on SSI without disabilities. In June, however, the Congress moved to modify this by drafting legislation which would cover immigrants already receiving SSI, unless their sponsors earn more than 150 per cent of the poverty level income, and disallow those already in the country who become disabled in the future; arriving immigrants would also have to make a written pledge promising not to go on welfare. This has drawn a hostile reaction from the Administration.

Options for reform

Policies toward legal immigration

161. Neither polar option with respect to immigration policy -- barring it altogether or allowing it to proceed largely unfettered -- would seem to be economically optimal or politically viable. Thus, some sort of quota system would seem inevitable. In theory, economic efficiency would point to allocating these quotas by auction, but again equity and humanitarian concerns would seem to rule out that possibility. Critics of the *status quo* have most often called for a shift in the focus of immigration preferences towards skills-based admission rather than family reunification, although a few years ago the Administration was proposing to reduce overall employment-based limits from 140 000 to 100 000. However, as mentioned above, it is possible that family-based immigrants overcome their initial skills disadvantage and catch up more quickly to native average outcomes than employment-based immigrants, and according to the Urban Institute, the differences between the two kinds of immigrants from a given source country seem small[129].

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it to over 1 million in fiscal years 1995 and 1996. This was controversial in an election year, as it was revealed that many were granted citizenship without any check on their criminal records. A further 1.8 million applications are expected in FY 1997.

128. The 1996 reforms did not change the waiting period for SSI for those willing to naturalise, as it had already been extended from three to five years in 1994.

129. It is possible, however, that shifting away from family-based quotas would break into the circle of immigrant networks and chain migration and would shift the source country mix away from its current structure.

162. Many have pointed with admiration to the points-based systems in use in Canada and Australia, similar immigrant destination countries, as an appropriate guide for US policy (for example, Papademetriou and Yale-Lohr, 1996). Such a system has allowed Canada to vary its inflow according to its needs, rather than according to an infrequently changed flexible cap; the result is that Canadian immigration rates have followed a trend decline since the 1950s, even though they remain above US rates. But the Canadian system may ultimately not have made that much difference in the kind of immigrants being admitted (Duleep and Regets, 1992)[130]: in 1993 around 64 per cent of immigrants entering the United States did so based on family relationships, only 1½ points higher than those entering Canada (Greenwood *et al.*, 1997). And while Canada did attract more high-skilled workers (as proxied by the share who are either professional, technical or kindred workers or managers and proprietors) for some years in the 1980s, the reverse has been the case in the 1990s (Figure 22, panel A). However, Canada has succeeded in attracting a different age mix of immigrants than the United States since the mid-1980s. In particular, it has avoided the shift from prime-age (those in their 20s and 30s) to older immigrants that has occurred in the United States[131] (Figure 22, panel B). And there is some early evidence that those arriving at or after age 55 do make much heavier use of SSI benefits. The average increase in educational attainment from the early 1960s to the late 1970s was also greater in Canada, and the mix of source countries remained more firmly grounded in Europe in the 1980s (a 27 per cent share) than in the United States (10 per cent) (Borjas, 1994). Nonetheless, US immigrants have increased their relative wages more than twice as fast as their Canadian counterparts (Baker and Benjamin, 1994). Thus, to sum up, it is unclear whether moving to a points-based system would have a strong effect on US immigrants' most important characteristics of US immigrants.

(Figure 22. Composition of US and Canadian immigration)

163. But more modest reforms are conceivable. The Administration has become convinced that the H-1 programme for admitting foreign non-immigrant (temporary) workers and trainees (see footnote 78 above) is in need of overhaul to make it still more restrictive than the 1990 reform had already done[132]. Although its existence is often justified by claiming that through it pass the "best and the brightest" candidates for entry into the US labour market, in fact half the positions in the largest (H-1B) sub-class are for physical therapists, and therefore, not surprisingly, most pay less than $50 000 per year. The Administration recently called for reducing the maximum duration of such visas from six to three years to make them truly temporary. Also, as a small number of employers have abused the programme by hiring foreigners to replace laid-off native workers, it also advocated a no-layoff provision (six months prior to and three months following an employer application), a provision preventing employers from replacing striking or locked-out workers, and the extension of government enforcement powers to ensure that

130. While Canadian immigrants tend to be younger and more language-proficient than their US counterparts from the same source countries, there is no difference in education nor in earnings profiles (Duleep and Regets, 1992).

131. The share of US immigrants in their 20s and 30s fell from 50.1 per cent in 1985 to 42.3 per cent in 1995, while the share 50 and over climbed from 11.8 to 14.4 per cent.

132. The Family Unity and Employment Opportunity Immigration Act of September 1990 was the first in history to define precisely temporary non-immigrant entrants. It restricted their role, instituted a publicly-funded training requirement and transformed the Labor Department's responsibility from merely processing applications to investigating and adjudicating labour attestations (Leibowitz, 1994). It has probably had a restrictive effect on non-immigrant unskilled labour.

bona fide attempts to recruit and retain US workers have already been made. Employer attempts to transform these non-immigrant visas into permanent workers are by no means automatically approved, as about half of such certification applications are denied. Nevertheless, many immigrants are probably family members of US citizens who are queuing for family-based slots and have entered before their turn.

Policies toward illegal immigration

164. The dilemma facing policymakers in the domain of illegal immigration is especially daunting. The United States cannot avoid its lengthy land border with Mexico, and, short of building a fence along its entire distance, it is impractical to police it completely. However, better co-operation among the different law enforcement agencies would be helpful. Furthermore, a surprisingly high proportion of illegal immigrants have entered the United States legally, only to overstay their visas. In this situation, immigration enforcement is difficult unless society is prepared to go some way in implementing verification schemes which might invade privacy and/or infringe on individual liberties (Passel, 1996). Some argue against a national identity card system because of the potential for error and fraud. Monitoring more closely employers that might be expected to rely on illegal migrant workers and stricter enforcement of employment standards laws could have some modest restraining effect, but the process of illegal immigration is apparently so network-driven that it is difficult to overcome existing trends in the context of unregulated labour markets. The INS hopes to counter the visa-overstayer problem by automated tracking of inflows and outflows and better enforcement at the foreign embarkation point (denying repeat abusers entry immediately). Other countries have tried guestworker programmes (as has the United States with its Bracero Program from 1942 to 1964) in order to dissuade potential illegal migrants, but these have not solved the problems, merely changed the label attached to the remaining workers after the programmes are ended: they become "permanent non-citizen residents". The 1986 amnesty provided by IRCA does not seem to have made much long-run difference either, as the stock of illegal aliens has reached new highs, not surprising in light of moral hazard implications. The hope that barring illegal aliens from public transfers will help reduce their numbers is almost certainly forlorn as well, since what seems to attract them is more the prospect of employment -- no matter how low the wage relative to US standards, it is likely to be attractive in relation to Mexican conditions -- rather than the magnet of welfare benefits[133].

165. The only long-term solution must be improved economic prospects in source countries, especially Mexico. To this end the US government has been supportive of Mexican economic development through offering loans after the Mexican crisis of 1994-95 as well as preferential access to the US market as part of the North American Free Trade Agreement (NAFTA). The Administration favours its medium-term extension to the entire hemisphere under the Free Trade Area of the Americas, broadly agreed to in 1994. But while general equilibrium analysis points to slightly reduced migration from Mexico to the United States as a result of the formation of a free trade area and more so from successful Mexican growth (Hinojosa-Ojeda and Robinson, 1991), the short-run effects of increased competition from efficient US producers of some food products on the rural economy in Mexico could encourage even greater emigration (Martin, 1993; OECD, 1994b).

133. Greenwood and Hunt (1995) show that immigrant labour supply is not sensitive to real wages, whereas natives' supply is strongly positively associated with remuneration.

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much less satisfactory outcomes at age 14. Empirical evidence is mounting that the public school system, especially in the inner cities, suffers from important administrative and pedagogical inefficiencies, but not enough is being done to deal with them. Continued progress in implementing national tests and standards is welcome, as is expanded federal support for independently managed charter schools. However, in the constitutional framework of the United States, it is up to state governments to consider bolder steps to confront the endemic weaknesses in their systems.

Immigration is a contentious issue, with opposing ideologies involved

14. The United States remains easily the largest destination country for immigrants.. In recent years immigration -- the subject of this year's special chapter -- has become a controversial subject, not only among professionals who study it but among politicians and the public at large. Many base their views on ideology and prejudice: its strongest proponents think people should be free to locate where they choose, while its most ardent critics fear environmental degradation due to overpopulation, point to greater welfare use and believe that the assimilation process cannot prevent social pressures from nearing intolerable levels. Between these extremes there is fortunately plenty of room for agreement once the available evidence is carefully examined and assessed.

It results in higher global output and incomes but may not always be beneficial to host countries

15. At the global level it is clear that people migrate for economic reasons only if their prospects in the destination country are substantially better than if they remain in their homelands. The host country benefits from access to additional labour and the reduction in cost of the goods and services immigrants produce. Thus, there is a strong *prima facie* case that immigration leads to an increase in global output and incomes. But this does not imply that there will be no losers, and there may well be externalities and rigidities involved: the country of origin gives up and the host country receives a resident who may contribute more or less than he or she consumes, through the tax/benefit system, for example. Domestic market prices of competing and complementary factors will adjust to the change in relative supply, but structural unemployment may nevertheless prevail. Natives may be permanently displaced from "prized" jobs by immigrants. Thus, it is perfectly feasible for some kinds of immigration at some points in time to be beneficial to some host countries, while others at different historical moments may prove harmful.

Immigration results in a small gain for the United States overall but has negative effects on the incomes of the unskilled who should be provided with adjustment assistance

16. Immigrants provide a small surplus due to complementarities between immigrant labour and domestic factors of production. Perhaps somewhat surprisingly (although in a manner which parallels the effects of international trade), this surplus exists only if immigrants are not identical to US workers and is greater the more different are immigrants from native-born workers. The United States gains from the arrival of immigrant workers who have characteristics which are in relatively scarce supply in its domestic economy, thereby lowering the price of that kind of labour. That has traditionally been thought to be unskilled labour, but with strong evidence of skill-biased technical change and complementarities between skilled labour and capital, it is possible that national gains would be maximised with a more skilled-labour focus to immigration. But

whatever its nature, the distributional effects of immigration may swamp the favourable income effects. Much like the effects of international trade, recent US immigration is probably detrimental to the incomes of the least skilled in the US labour market. Many of those workers are earlier immigrants themselves, and a disproportionate share is probably black. These workers are also suffering from a variety of other structural changes, including a serious effort to move welfare recipients into the workplace, a progressive opening of domestic markets to imports from low-wage countries, a parallel trend to greater outsourcing of production to such areas and technological evolution which seems to favour workers who have high levels of human capital. There is therefore a strong case that if society decides that it will continue to allow these inflows of what is to a substantial extent unskilled labour, then it should compensate the losers through federal adjustment assistance, possibly in the form of training subsidies, as exists in the sphere of international trade.

Immigrants impact on the budget is probably negative in the short run but beneficial in the longer term

17. Much of the public debate regarding the costs and benefits of immigration as well as policymakers' attention have been fixed on the impact that immigrants have on the budget. This Survey has argued that such a focus is misplaced, for any losses to the government can, in principle, be made good out of the gains to the beneficiaries of immigration. Nonetheless, for what it is worth, the evidence reviewed shows that immigrant welfare use has risen over time in line with the reduced human capital possessed by the average immigrant, and static analysis of their broader fiscal impact indicates a clear net cost, at least for those migrating from developing countries. The emerging evidence from forward-looking, dynamic analysis, however, shows net budgetary gains in present value terms from the average immigrant -- despite a lengthy period of net costs -- as immigration attenuates the budgetary impact of the ageing of the baby-boom generation. Dynamic analysis also shows that the 1996 welfare reform may have made only a small impact in present-value terms on the budget. In that regard, it seems only fair that those immigrants who have entered under a certain set of rules regarding access to public transfers and are liable to taxes on the same basis as American citizens not be subject to targeted efforts to eliminate their eligibility after the fact.

Whether to retain the current system based on family reunification is a difficult question

18. Perhaps the key global issue is whether to maintain the current system, which is so heavily based on the principle of family reunification and which has led to a phenomenon of "chain migration" (immigrants who follow others in their families or circle of friends) with migrants increasingly coming from Asia and Latin America, especially Mexico. This is a difficult question, for it is to a large extent a social and not an economic choice. The institution of a minimum sponsoring income level is perhaps the manifestation of a move away from the policies of recent decades. But advocates of the introduction of some sort of points-based system have not yet made a convincing case that this would succeed in changing the fundamental nature of the immigrants the United States receives. Nevertheless, it can be said that there are obvious and substantial human-capital differences between immigrant groups, and Mexican immigrants in particular have a great deal of difficulty making headway in

the US labour market. Their situation is intimately tied up with the problem of illegal immigration because of the porosity of the land border between the two nations and the enormous difference in standards of living. The labour-market assimilation of many recent immigrants looks set to continue to be difficult, and greater public efforts to offer English language training would probably prove well spent.

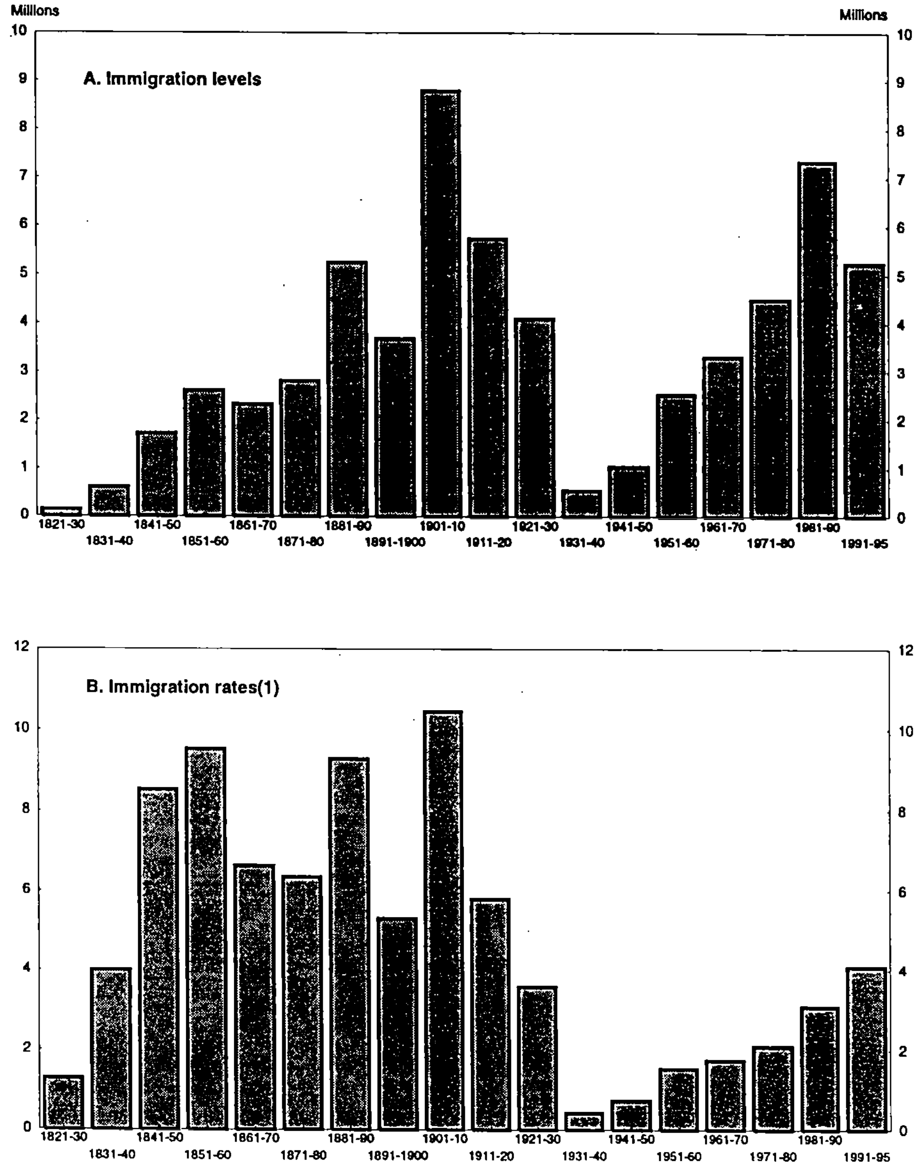
It is hard to enforce the immigration laws, but illegal immigration will be curtailed only by better economic prospects in source countries

19. The authorities have focused their other immigration-related concerns on some of the non-immigrant, temporary worker programmes and on illegal immigration. The former are indeed subject to abuse, and access to them could efficiently be limited to those who would use them in the way they were intended by the lawmakers. In particular, the maximum duration of visas (six years) is remarkably long. Enforcing the labour and immigration laws is proving to be a very difficult undertaking, especially with a notable lack of willingness to institute any verification scheme that might infringe on individual privacy or liberty. Some expansion of the number of wage and hour inspectors would be desirable to ensure that legal immigrants are not exploited and that employers conscious that they are hiring illegal immigrants pay an appropriate penalty. But there is no easy way of policing the nation's borders or preventing foreigners from overstaying their visas, and it will fall to other policies -- freer trade in particular -- to offer desperate foreigners some hope that they and their families can prosper in their native lands.

A wrap-up

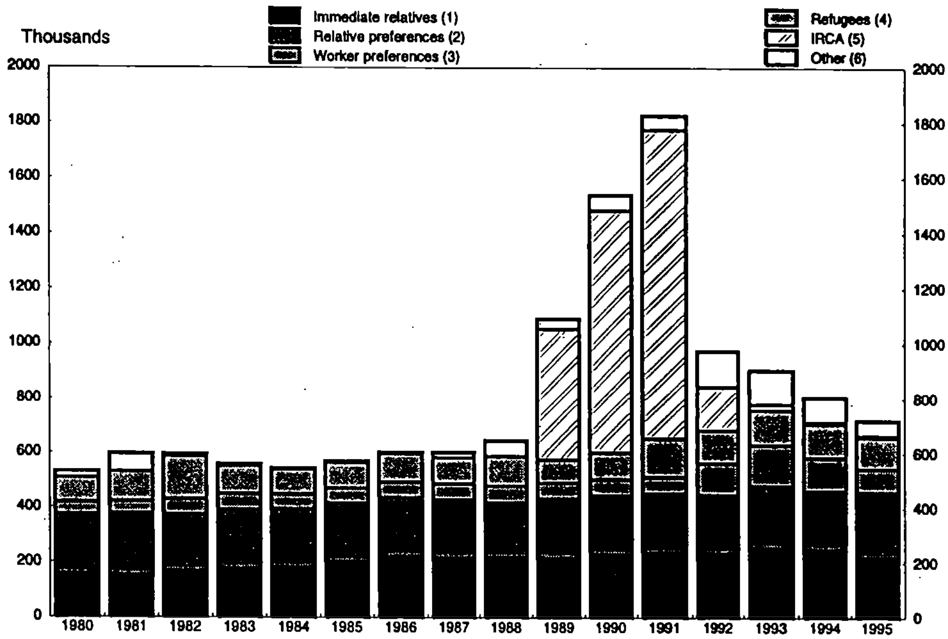
20. To sum up, US macroeconomic outcomes continue to be extraordinary. Output growth has reached a new high for this cycle, the unemployment rate has fallen to a level not seen in a generation, and yet inflation shows no signs thus far of reacting to capacity pressures. Whether this is attributable to temporary favourable factors or it reflects more permanent changes is still unclear, but it would be unwise to embrace wholeheartedly the "new era" hypothesis until more evidence is available. Agreeing to balance the budget in 2002 is a worthy, if not very ambitious, step forward, but it is far more important that entitlements be reformed in a thoroughgoing fashion and tax cuts be limited in both the short- and long-terms so that the budget will stay as close to balance as possible thereafter. The structural policy agenda has been crowded, and much of value has been accomplished; what remains at the head of the list is to take a hard look at the basic services available to the poorer parts of the population -- compulsory education and health care in particular -- and to ensure that they are up to the high standards the nation has set for itself in so many other domains.

Figure 19. US IMMIGRATION LEVELS AND RATES



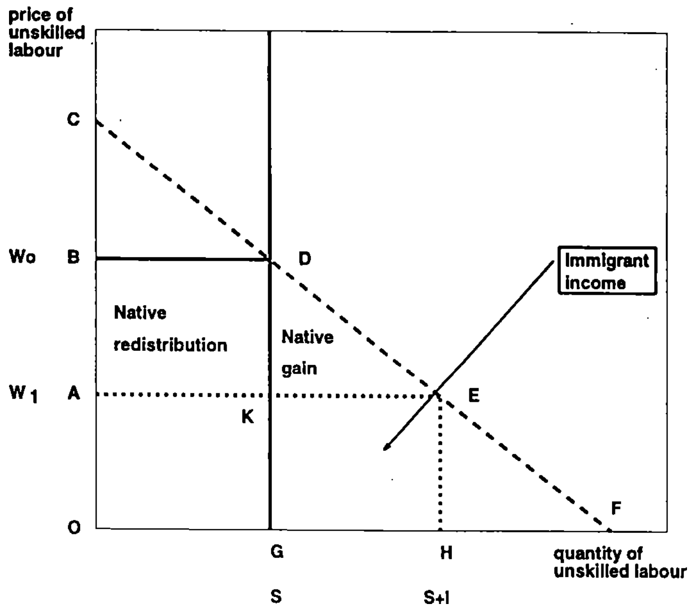
1. Annual rate per 1000 U.S. population.
Source: US Department of Justice (1997).

Figure 20. RECENT INFLOWS OF PERMANENT SETTLERS BY ENTRY CLASS



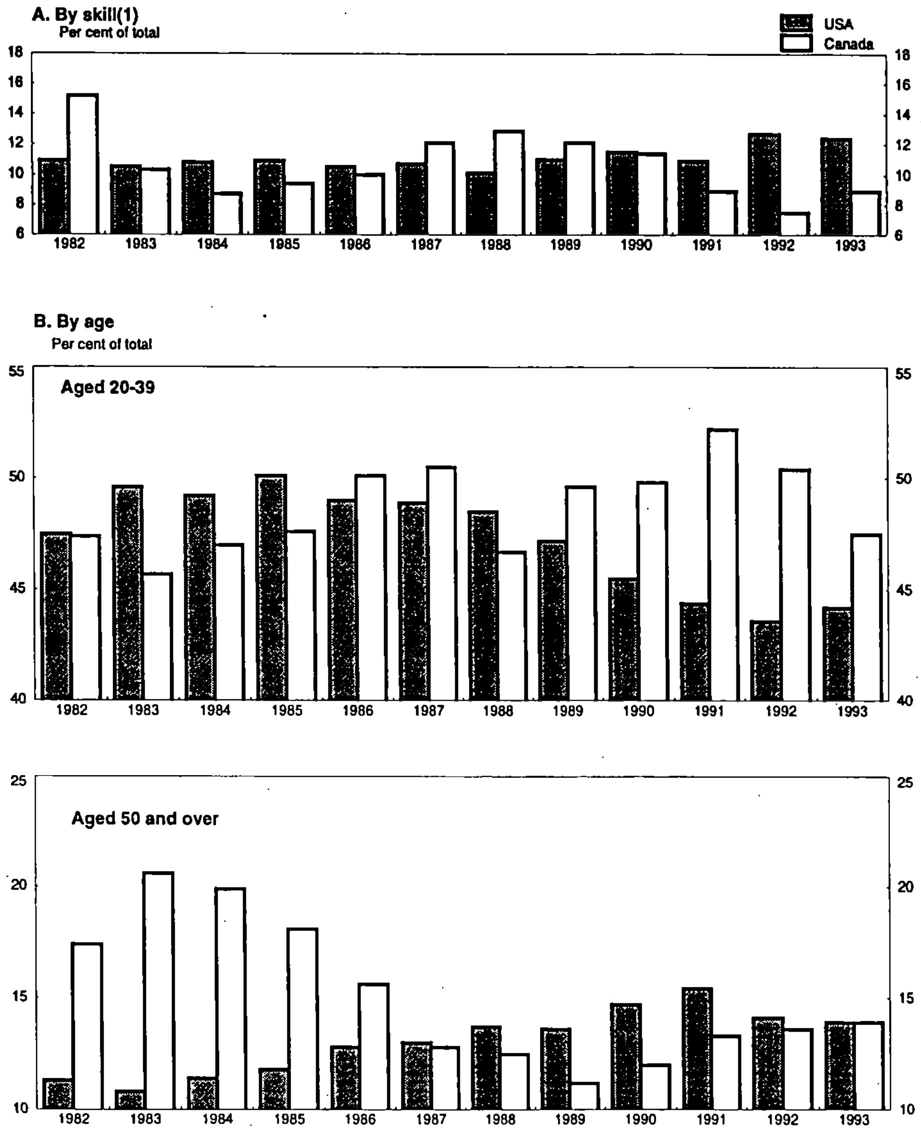
1. Numerically unrestricted immigrants comprising spouses, unmarried minor children, and orphans adopted by US citizens citizens as well as parents of adult US citizens.
2. Numerically restricted relatives comprising: unmarried adult children of US citizens; spouses and unmarried children of permanent resident aliens; married children of US citizens; brothers and sisters of adult US citizens.
3. Prior to 1992, data include members of professions or persons of exceptional ability in the sciences and arts, skilled and unskilled workers in short supply, and special immigrant visas. Data include immigrants issued employment-based preference visas from 1992 on.
4. The Refugee Act of 1980 now governs all admissions.
5. Under the 1986 Immigration Reform and Control Act, foreigners who had been accorded temporary legal status could apply, between December 1988 and December 1990, for a permanent residence permit.
6. In recent years, these are primarily entrants under the Diversity category.
Source: OECD(1997).

Figure 21. LABOUR MARKET EFFECTS OF IMMIGRATION



Source: Smith and Edmonston (1997).

Figure 22. COMPOSITION OF US AND CANADIAN IMMIGRATION



1. Refers to professional, technical, and kindred workers and managers and proprietors. US data exclude legalisations under the Immigration Reform and Control Act.
Source: Greenwood et al (1997).

Table 13. **Immigration by category: quotas and outcomes for FY 1996**

	Categories	Quotas	FY 1996	Shares of legal immigration
Family based, total		Unlimited	596 000	69.4
of which:	Immediate relatives of US citizens	Unlimited	302 000	33.1
	1st preference: Unmarried adult children of US citizens	23 400	21 000	2.3
	2nd preference: Spouses and unmarried adult children of legal immigrants	114 200	183 000	20.1
	3rd preference: Married adult children of US citizens	23 400	25 000	2.7
	4th preference: Siblings of US citizens	65 000	65 000	7.1
Employment based, total		140 000	118 000	12.9
of which:	1st preference: Priority workers	40 040	28 000	3.1
	2nd preference: Professionally exceptional	40 040	18 000	2.0
	3rd preference: Skilled workers and professionals	40 040	63 000	6.9
	4th preference: Special immigrants	9 940	8 000	0.9
	5th preference: Investors	9 940	1 000	0.1
Lottery/Diversity		55 000	58 000	6.4
Refugees and asylees		100 000	140 000	15.4
Legal immigrants, total			912 000	100.0
Illegal alien settlers (estimate)			300 000	-
Total immigration, 1996			**1 212 000**	-

Source: The Federation for American Immigration Reform and the Center for Immigration Studies.

Table 14. **The net immigration rate in OECD countries**
Average annual net immigration as a share of population in per cent

	1961-70	1971-80	1981-90	1991-94
Luxembourg	0.47	0.76	0.41	1.05
Greece	-0.39	0.29	0.17	0.72
Germany	0.50	0.26	0.45	0.67
Austria	0.10	0.10	0.15	0.64
Switzerland	0.59	-0.14	0.38	0.64
Canada	0.44	0.51	0.47	0.60
Sweden	0.30	0.11	0.20	0.36
Australia	0.75	0.47	0.67	0.32
United States	0.20	0.20	0.21	0.32
Norway	0.31	0.12	-0.11	0.29[2]
New Zealand	0.00	0.11	0.13	0.24
Netherlands	0.11	0.25	0.18	0.27
Denmark	0.06	0.05	0.09	0.22
Italy	-0.22	0.00	0.13	0.22
Belgium	0.16	0.11	0.01	0.20
Finland	-0.39	-0.06	0.09	0.18
Turkey		-0.02	0.29	0.17
United Kingdom	-0.01	-0.04	0.05	0.17[2]
France	0.46	0.11	0.10	0.16[1]
Spain	-0.16	0.00	0.00	0.07
Czech Republic		-0.05	-0.03	0.02
Iceland	-0.23	-0.20	0.01	0.01
Japan	0.00	-0.01	-0.01	0.00
Portugal	-1.28	0.39	-0.30	-0.01
Poland		-0.06	-0.07	-0.04
Ireland	-0.51	0.33	-0.59	-0.14

1. 1991-92.
2. 1991-93.
Source: OECD, *Labour Force Statistics*.

Table 15. **The contribution of net immigration to the change in total population[1] in OECD countries**
Per cent

	1960-70	1970-80	1980-90	1990-94
Greece	-74.4	na	na	112.5
Italy	-31.3	n.a.	n.a.	107.7
Luxembourg	57.8	96.9	88.3	97.6
Switzerland	29.3	-85.7	61.1	73.9
Denmark	8.6	11.9	340.3	69.2
Austria	19.9	27.1	57.2	64.7
Sweden	43.6	34.8	71.2	57.2
Belgium	34.6	45.4	18.0	53.0
Canada	28.8	30.6	39.8	47.0
United Kingdom	-7.2	-38.4	27.4	46.0[4]
Spain	-15.0	-0.1	-5.9	44.3
Norway	n.a.	19.8	36.8	43.7[4]
Netherlands	9.0	30.9	34.0	37.7
Finland	-104.8	-19.2	21.0	35.0
United States	16.2	19.9	21.7	30.8
France	44.1	16.2	19.1	29.6[3]
Australia	40.7	32.1	44.6	29.0
New Zealand	15.3	7.5	n.a.	24.5
Germany	53.9	138.6	175.6	11.9
Turkey	n.a.	n.a.	12.6	9.0
Iceland	-15.7	-20.3	0.4	0.8
Japan	-0.2	-1.0	-2.7	-0.4
Portugal	250.7[2]	48.5	-621.4	-10.3
Poland	n.a.	-6.6	-9.9	-14.6
Ireland	-114.0	23.9	-225.5	-29.4
Czech Republic	n.a.	n.a.	-114.2	-29.6[2]

1. Negative figures imply net emigration unless otherwise indicated.
2. Net immigration was positive, but population declined in the Czech Republic in the 1990s; population also fell in Portugal in the 1960s, but there was net emigration as well.
3. 1990-92.
4. 1990-93.

Source: OECD, *Labour Force Statistics.*

Table 16. **An overview of native and foreign-born populations, March 1994**
Per cent, except as indicated

	Native	Foreign born					
			of which:	Arrived			
		Total	Mexican	before 1970	1970-79	1980-89	1990-94
Total (thousands)	237 184	22 568	6 264	4 974	4 781	8 311	4 502
Characteristic							
Demographics							
Share under 18 years old	28.4	11.0	15.2	-	1.8	14.8	26.1
Share 65 years old and over	11.9	11.7	4.6	37.5	6.1	3.9	3.4
Share female	51.2	50.7	45.7	56.5	51.5	47.3	49.6
Share non-white	15.8	31.6	7.5	13.3	36.0	37.6	36.3
Share of Hispanic origin	6.9	45.5	97.8	31.4	48.8	53.0	43.8
Educational attainment[1]							
Share without high school diploma	17.1	36.0	71.2	32.0	37.8	39.1	33.3
Share with college degree	22.1	23.1	4.5	19.7	22.1	22.8	32.4
Labour force status[2]							
Participation rate	65.8	62.7	66.3	49.9	70.8	69.5	55.3
Unemployment rate	6.8	9.1	11.1	5.6	8.4	7.0	12.2
Income in 1993[2]							
Share without income	6.0	13.6	20.4	4.2	10.6	15.6	26.9
Median per capita income[3] (dollars)	15 876	12 179	n.a.	14 473	15 121	11 580	8 393
Poverty status							
Share in poverty	14.4	23.0	36.0	10.8	16.3	26.4	37.3

1. For those 25 years old and over.
2. For those 16 years old and over.
3. For those with income.

Source: OECD calculations based on data from the Current Population Survey published in Table No. 55 of the *Statistical Abstract of the United States 1996.*

Table 17. **Immigrant population by place of birth, 1970-90**[1]
Per cent of total

	1970 Stock	1971-80 Flow[2]	1980 Stock	1981-90 Flow[2]	1990 Stock	1991-95 Flow[2]
Mexico	7.9	14.2	15.6	22.6	21.7	28.5
Caribbean	5.4	16.5	8.9	11.9	9.8	10.2
Cuba	4.6	5.9	4.3	2.0	3.7	1.2
Dominican Republic	..	3.3	1.2	3.4	1.8	4.2
Jamaica	..	3.1	1.4	0.3	1.7	1.7
Canada	8.4	3.8	6.0	2.1	3.8	2.0
Central America	0.6	3.0	2.5	6.4	5.7	5.7
South America	2.7	6.6	4.0	6.3	5.2	5.4
Colombia	..	1.7	1.0	1.7	1.4	1.3
Ecuador	..	1.1	0.6	0.8	0.5	0.7
Asia	8.6	35.3	18.0	37.3	25.2	30.1
China	1.8	2.8	2.0	4.7	2.7	4.0
India	0.5	3.7	1.5	3.4	2.3	3.5
Japan	1.3	1.1	1.6	0.6	1.5	0.7
Republic of Korea	0.9	6.0	2.1	4.5	2.9	1.8
Philippines	1.9	7.9	3.6	7.5	4.6	5.7
Vietnam	..	3.8	1.6	3.8	2.7	2.8
Others	2.2	10.1	5.7	12.7	8.5	11.6
Europe	59.4	17.8	36.6	10.4	22.0	14.6
Austria	2.2	0.2	1.0	0.2	0.4	0.2
France	1.1	0.6	0.9	0.4	0.6	0.4
Former CSFR	1.7	0.1	0.8	0.1	0.4	0.1
Germany	8.7	1.7	6.0	1.3	3.6	1.0
Greece	1.8	2.1	1.5	0.5	0.9	0.2
Hungary	2.0	0.1	1.0	0.1	0.6	0.1
Ireland	2.6	0.3	1.4	0.4	0.9	1.0
Italy	10.5	2.9	5.9	0.9	2.9	1.0
Netherlands	1.1	0.2	0.7	0.2	0.5	0.1
Norway	1.0	0.1	0.5	0.1	0.2	0.1
Poland	5.7	0.8	3.0	1.1	2.0	2.1
Portugal	0.9	2.3	1.5	0.6	1.1	0.3
Romania	0.7	0.3	0.5	0.4	0.5	0.5
Sweden	1.3	0.1	0.5	0.2	0.3	0.1
United Kingdom	7.4	3.1	4.8	0.2	3.2	1.7
Former USSR	4.8	0.9	2.9	0.8	2.0	4.7
Former Yugoslavia	1.7	0.7	1.1	0.3	0.7	0.4
Others	4.1	1.3	2.6	0.6	1.2	0.4
Other and not stated	7.0	2.7	8.3	3.0	6.5	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
In millions	9.7	4.5	14.1	7.3	19.8	5.2
% of total population	4.7		6.2		7.9	

1. Includes legalisation under the 1986 Immigration Reform and Control Act as from 1989.
2. Fiscal years.
Source: US Department of Justice (1997).

Table 18. **Per capita income in source countries, 1985 and 1995**[1]

	1985				1995				
	Per cent of immigrants counted	Weighted source country GDP per capita	Ratio to United States	Ratio source country GDP per capita to host country GDP per capita	Per cent of immigrants counted	Weighted source country GDP per capita	Weighted source country GDP per capita 1985 = 100	Ratio to United States	Ratio source country GDP per capita to host country GDP per capita
United States	77.9	2 155	1.00	0.13	79.3	3 732	173	1.00	0.14
Australia	70.6	4 392	2.04	0.41	74.2	9 630	219	2.58	0.50
Belgium	21.5	3 457	1.60	0.43	90.3	19 026	550	5.10	0.72
Canada	72.6	4 021	1.87	0.30	58.3	10 658	265	2.86	0.56
Denmark	-	-	-	-	54.6	17 959	-	4.81	0.54
France	48.4	1 278	0.59	0.13	75.4	7 480	585	2.00	0.28
Germany	31.9	3 534	1.64	0.35	59.7	6 373	180	1.71	0.22
Japan	76.7	4 997	2.32	0.45	73.4	9 098	182	2.44	0.22
Netherlands	62.8	5 594	2.60	0.63	29.5	16 054	287	4.30	0.63
Norway	64.7	8 840	4.10	0.58	56.1	18 001	204	4.82	0.54
Sweden	68.8	7 102	3.30	0.59	62.0	13 366	188	3.58	0.52
Switzerland	78.3	6 581	3.05	0.46	74.9	14 222	216	3.81	0.33
United Kingdom	88.7	4 820	2.24	0.60	83.8	7 588	157	2.03	0.40

1. Some caution is required in interpreting these data. They are based on inflows only for the two years and therefore omit variations in intervening years. They also suffer from substantial differences in definition as to what constitutes immigration; in particular, US data exclude temporary workers, especially intra-company transferees, most often included in the data for other countries. Finally, emigrants may not be typical of the residents of source countries.

Source: OECD.

Table 19. **Net immigration by state in the 1990s**
Annual averages, 1 April 1990 to 1 July 1995

	Contribution[1]	Rate[2]		Contribution[1]	Rate[2]
United States	**28.3**	**3.0**			
Northeast	**147.9**	**3.6**	**Midwest**	**20.3**	**1.4**
New England	**130.5**	**2.0**	**East North Central**	**24.8**	**1.6**
Maine	23.1	0.5	Ohio	11.6	0.6
New Hampshire	12.8	0.8	Indiana	5.4	0.5
Vermont	13.6	1.0	Illinois	57.9	3.8
Massachusetts	145.6	2.6	Michigan	23.6	1.2
Rhode Island[3]	-50.0	1.3	Wisconsin	7.8	0.7
Connecticut[3]	-308.3	2.1	**West North Central**	**10.8**	**0.8**
Middle Atlantic	**151.5**	**4.2**	Minnesota	10.3	1.0
New York	396.6	6.1	Iowa	12.3	0.5
New Jersey	90.2	4.7	Missouri	9.2	0.7
Pennsylvania	33.3	1.0	North Dakota	66.7	0.6
			South Dakota	6.1	0.5
South	**14.2**	**2.0**	Nebraska	10.2	0.7
South Atlantic	**14.2**	**2.0**	Kansas	13.6	0.9
Delaware	7.8	1.1			
Maryland	24.8	2.5	**West**	**34.2**	**5.7**
District of Columbia[3]	-30.2	5.2	**Mountain**	**6.9**	**1.8**
Virginia	16.6	2.1	Montana	2.8	0.5
West Virginia	5.7	0.2	Idaho	4.5	1.2
North Carolina	4.1	0.6	Wyoming	3.7	0.4
South Carolina	3.7	0.4	Colorado	6.4	1.6
Georgia	5.8	1.2	New Mexico	10.6	2.1
Florida	20.9	3.6	Arizona	9.0	2.4
East South Central	**3.6**	**0.4**	Utah	4.8	1.1
Kentucky	4.6	0.4	Nevada	5.8	2.6
Tennessee	3.7	0.5	**Pacific**	**53.4**	**7.1**
Alabama	3.3	0.3	Washington	11.3	2.4
Mississippi	2.5	0.2	Oregon	9.4	1.8
West South Central	**18.8**	**2.7**	California	75.4	8.6
Arkansas	3.0	0.3	Alaska	9.3	1.7
Louisiana	9.8	0.5	Hawaii	41.8	5.5
Oklahoma	8.3	0.7			
Texas	21.4	4.0			

1. Net migration from abroad as a percentage of the net change in population.
2. Net migration from abroad per thousand average population over the period.
3. In all cases net migration from abroad was positive but the population declined.

Source: Statistical Abstract of the United States, 1996.

Table 20. **Educational attainment among employed immigrants and natives, 1980 and 1990**[1]

	Employed labour force (levels in thousands and shares in %)								Change 1980 to 1990 (%)			Immigrant share of education level (%)	
	1980				1990								
Skill level	Immigrant		Native		Immigrant		Native		Immigrant	Native	Total	1980	1990
Men													
Dropouts	1 451	41.4	11 987	25.5	1 874	33.1	7 198	14.1	29.1	-40.0	-32.5	10.8	20.7
High school	800	22.8	17 007	36.2	1 373	24.3	18 156	35.6	71.7	6.8	9.7	4.5	7.0
Some college	486	13.9	8 633	18.4	1 033	18.2	13 306	26.1	112.7	54.1	57.2	5.3	7.2
College degree	769	21.9	9 387	20.0	1 381	24.4	12 401	24.3	79.6	32.1	35.7	7.6	10.0
Total	3 505	100.0	47 015	100.0	5 661	100.0	51 061	100.0	61.5	8.6	12.3	6.9	10.0
Women													
Dropouts	994	37.2	7 817	20.8	1 137	26.8	4 923	11.0	14.5	-37.0	-31.2	11.3	18.8
High school	835	31.3	16 549	44.0	1 250	29.5	17 429	38.8	49.7	5.3	7.4	4.8	6.7
Some college	432	16.2	7 307	19.4	936	22.1	13 094	29.2	116.7	79.2	81.3	5.6	6.7
College degree	410	15.4	5 930	15.8	912	21.5	9 442	21.0	122.4	59.2	63.3	6.5	8.8
Total	2 671	100.0	37 603	100.0	4 236	100.0	44 889	100.0	58.6	19.4	22.0	6.6	8.6
Total													
Dropouts	2 445	39.6	19 804	23.4	3 011	30.4	12 121	12.6	23.2	-38.8	-32.0	11.0	19.9
High school	1 635	26.5	33 556	39.7	2 624	26.5	35 585	37.1	60.5	6.0	8.6	4.6	6.9
Some college	918	14.9	15 941	18.8	1 969	19.9	26 401	27.5	114.6	65.6	68.3	5.4	6.9
College degree	1 179	19.1	15 317	18.1	2 293	23.2	21 843	22.8	94.5	42.6	46.3	7.1	9.5
Total	6 177	100.0	84 618	100.0	9 897	100.0	95 949	100.0	60.2	13.4	16.6	6.8	9.4

Source: Jaeger (1995) and OECD.

Table 21. **Education, English language skills and unemployment rates of US immigrants**
Per cent

	Four or more years of college[1]		Less than 5 years of elementary school[1]		Speak English poorly[2]		Unemployment rate	
	1970-80 arrivals in 1980	1980-90 arrivals in 1990	1970-80 arrivals in 1980	1980-90 arrivals in 1990	1970-80 arrivals in 1980	1980-90 arrivals in 1990	1970-80 arrivals in 1980	1980-90 arrivals in 1990
Immigrants from:								
Europe	20.4	34.0	11.7	4.3	23.7	33.8	6.7	5.8
Greece	10.6	29.1	10.0	6.5	34.5	44.2	7.6	7.1
Italy	8.3	26.7	17.7	5.7	36.8	45.8	9.1	6.6
United Kingdom	30.5	39.5	0.8	1.3	0.4	1.7	4.3	3.8
Asia	34.7	37.2	7.4	9.7	25.2	59.3	6.2	7.1
China	27.6	31.9	15.8	15.1	51.0	78.5	4.3	6.4
India	63.1	58.9	2.8	4.4	8.7	11.5	6.2	6.4
Korea	31.6	32.8	4.2	5.4	30.7	72.8	6.1	6.2
Philippines	47.9	45.6	5.8	4.6	8.8	38.0	4.7	5.7
Vietnam	11.9	10.0	10.4	16.6	41.4	75.1	8.2	10.4
North and Central America	6.9	7.6	21.7	19.9	47.7	68.2	9.7	11.8
Canada	30.0	39.6	0.9	0.6	1.4	3.9	4.4	3.9
Cuba	10.3	7.4	11.4	11.3	54.7	73.7	8.4	11.2
Dominican Republic	3.4	8.2	21.3	14.9	59.9	74.2	12.3	18.0
Haiti	9.5	6.8	10.9	14.0	29.3	63.1	13.3	15.3
Jamaica	9.7	10.1	4.0	4.2	0.6	2.0	8.8	10.4
Mexico	2.7	4.4	32.9	26.9	60.5	78.5	10.3	12.0
South America	18.3	20.0	4.5	5.3	29.9	55.5	8.0	8.8
Africa	43.3	44.1	2.7	3.2	8.6	28.2	8.0	8.1
Total	**22.7**	**23.7**	**12.8**	**12.6**	-	-	-	-
Per memorandum:								
All foreign born	15.8	20.4	11.6	11.4	21.5	47.0	6.9	7.8
Foreign born who arrived prior to 1970 or 1980	13.2	18.7	11.1	10.8	13.7	37.2	5.8	6.4
Natives	16.3	20.3	2.9	0.4	0.6	2.3	6.5	6.2

1. Refers to those 25 years old and over.
2. Per cent of persons 5 years old and over who spoke a language other than English at home who claimed to speak English "not well" or "not at all" in 1980 and 1990, respectively.

Source: Greenwood *et al.* (1977) based on data from the US Bureau of the Census.

Table 22. **Occupational distribution of US workers, 1980 and 1990**
Per cent

	All workers		Immigrants (16 and over)			
	in 1980	in 1990	Pre-1970 arrivals in 1980	1970-80 arrivals in 1980	Pre-1980 arrivals in 1990	1980-90 arrivals in 1990
Managerial and professional specialty	22.7	26.4	23.4	17.7	25.7	17.0
Technical, sales and administrative support	30.3	31.7	26.9	21.0	27.4	22.4
Service	12.9	13.2	14.8	18.0	15.2	22.3
Farming, forestry and fishing	2.9	2.5	2.6	4.1	3.0	4.9
Precision production, craft and repair	12.9	11.3	13.7	11.8	12.1	11.8
Operators, fabricators and labourers	18.3	14.9	18.7	27.3	16.5	21.6
All occupations	100.0	100.0	100.0	100.0	100.0	100.0
Total workers (thousands)	97 639	115 681	3 991	2 541	6 290	4 375

Source: US Bureau of the Census.

Table 23. **Labour market outcomes of 25 to 64 year-old immigrant men, 1970-90**

	Labour force participation (per cent)			Unemployment rate (per cent)			Relative earnings (native born = 100)		
	1970	1980	1990	1970	1980	1990	1970	1980	1990
A. By country/region of origin									
Native born	91	88	87	2.7	4.8	4.9	n.a.	n.a.	n.a.
Foreign born	89	87	90	3.2	5.3	6.1	99	93	89
of which those born in:									
United Kingdom and Canada	92	89	90	3.4	3.6	3.6	113	120	130
Continental Europe	92	91	88	3.0	4.7	5.3	110	107	115
Japan, Korea and China	86	88	87	2.4	2.7	3.1	88	99	110
Middle East, Other Asia	89	86	90	2.6	4.5	4.7	107	112	120
Philippines	92	94	93	2.7	3.2	3.9	76	94	93
Indochina, Vietnam	n.a.	75	77	n.a.	9.2	7.0	n.a.	66	73
Africa, Caribbean, South America, Oceania	93	90	89	3.5	5.3	6.6	80	85	86
Central America	93	91	92	3.6	6.5	7.1	79	72	62
Mexico	89	92	91	4.7	8.0	8.3	66	65	56
B. By years of schooling									
Foreign born							99	93	89
of which those with:									
0 to 4 years							120	92	93
5 to 8 years							112	93	89
9 years							109	98	94
10 years							106	94	100
11 years							109	99	96
12 years							102	93	95
13 to 15 years							95	94	95
16 years							89	90	90
17 years or more							91	102	91

Source: Schoeni *et.al.* (1996).

Table 24. **The wage and earnings gap between immigrants and natives, 1970-90**
Index, native born = 100

Nativity and years since arrival	Men						Women					
	1970		1980		1990		1970		1980		1990	
	Hourly wages	Annual earnings	Hourly wages	Annual earnings	Hourly wages	Annual earnings	Hourly wages	Annual earnings	Hourly wages	Annual earnings	Hourly wages	Annual earnings
All foreign-born	101.5	96.9	95.5	90.9	93.0	85.0	102.5	102.9	100.0	98.8	98.6	94.8
Recent arrivals	89.9	81.0	81.6	72.1	78.2	64.8	93.1	93.3	92.7	86.9	86.7	75.0
Europe and Canada	101.1	96.1	101.1	97.5	110.9	111.7	98.1	95.7	94.9	89.0	110.0	93.3
Asia	95.2	80.3	88.5	78.6	87.4	74.6	108.0	102.0	99.8	99.6	95.7	87.5
Africa and Oceania	100.2	73.7	91.1	78.2	102.8	67.8	78.7	86.4	109.3	94.1	95.5	83.5
Other America[1]	78.9	70.6	74.0	61.3	67.2	52.2	85.1	94.5	87.9	78.9	76.2	65.3
Mexico	61.8	54.2	61.1	50.3	50.0	38.0	79.6	59.2	75.0	59.9	60.2	43.3
Earlier arrivals	107.4	104.8	104.4	103.1	103.3	99.1	107.2	107.9	103.8	105.1	104.8	105.2
Europe and Canada	114.2	112.7	113.2	115.2	124.0	125.9	108.3	109.9	103.4	104.5	107.3	108.7
Asia	105.3	102.1	121.0	124.7	127.1	123.5	107.9	109.3	120.6	130.8	123.2	129.6
Africa and Oceania	93.5	90.0	122.3	124.6	98.1	97.9	115.9	109.1	109.3	116.5	108.3	108.1
Other America[1]	94.1	87.4	91.7	87.8	96.8	89.4	105.7	111.0	103.5	107.5	104.1	104.9
Mexico	71.4	65.8	80.5	69.6	67.9	58.2	86.4	79.0	88.0	74.1	73.7	63.4
Per memorandum:												
Native-born												
1995 dollars	19.00	37 212	19.83	37 591	19.41	37 551	12.70	14 899	12.63	16 805	13.42	20 196

1. Recent arrivals are defined as those foreign-born who arrived in the 10 years preceding the census year, and earlier arrivals include all other foreign-born in the sample. The sample comprises civilians aged 25-64 who were not self-employed.

Source: Smith and Edmonston (1997) and OECD.

Table 25. **Self-employment rates by region of birth and education level, 1990**
Per cent of employed aged 25-64 who are self-employed

	Men	Women
Natives	13.1	7.2
All foreign born	13.1	8.3
Foreign born, by region		
Europe	18.4	10.2
Asia	15.9	9.8
Mexico	7.2	5.7
Other America	11.1	6.5
Other	11.2	7.1
Foreign born, by education level		
Eighth grade or less	9.6	6.8
Grades nine to twelve, no diploma	11.8	8.5
High school diploma or certificate	13.4	8.8
Some post-secondary	14.1	8.4
Bachelor's degree or more	15.6	8.9

Source: Smith and Edmonston (1997).

Table 26. **Rates of receipt and average amounts of public assistance, 1970-90**

	Per cent of households			Mean amount received[1] (1989 prices)		
	1970	1980	1990	1970	1980	1990
Native head of household	6.0	7.9	7.4	3 837	4 248	4 017
Foreign-born head of household	5.9	8.7	9.1	3 806	4 662	5 363
Cohort: arrivals						
1985-89	-	-	8.3	-	-	6 385
1980-84	-	-	10.7	-	-	6 571
1975-79	-	8.3	10.0	-	5 228	5 652
1970-74	-	8.4	9.7	-	5 220	4 884
1965-69	5.5	10.1	9.8	3 830	5 044	4 796
1960-64	6.5	9.2	8.4	4 144	5 050	4 480
1950-59	4.9	7.1	6.7	4 402	4 680	4 514
Pre-1950	6.2	9.3	8.1	3 629	4 022	4 262

1. Conditional on receiving some public assistance.
Source: Borjas (1994).

Table 27. **Fiscal impacts of immigration: some highlights**
Dollars

	Assuming New Jersey fiscal rules	Assuming California fiscal rules
A. Static results		
1. **Net annual fiscal impact per native of current immigrant-headed households**		
On native households in the state	-229	-1 174
of which: Local	-144	-283
State	-88	-895
Federal	3	4
On all US native households	-166	-226
of which: Immigrants from Europe/Canada	46	167
Asia	208	111
Latin America	-579	-738
Other	314	339
2. **Total net annual fiscal impact of current immigrant-headed households (billions)**	-14.8	-20.2

B. Cross-section results	Immigrants	Immigrants plus their children native-born under 20	Others	Total
Average fiscal impact per immigrant				
Taxes	n.a.	5 650	8 300	8 170
Spending	na.	6 020	6 270	6 480
Net impact	1 800	-370	2 030	1 690
of which: State and local	490	550	1 680	1 400
Federal	1 310	920	360	290

C. Dynamic results	Immigrants	Their descendants	Total
1. Net present value of average fiscal impact per immigrant			
Overall	-3 000	83 000	**80 000**
of which: State and local	n.a.	n.a.	-25 000
Federal	n.a.	n.a.	105 000
of which: Less than a high-school education	-89 000	76 000	-13 000
High school education	-31 000	82 000	51 000
More than a high-school education	105 000	93 000	198 000
2. Sensitivity analysis: the overall figure of **80 000** would become the following with the alternative assumption:			
No budgetary adjustment to ensure constant/GDP as from 2016		-15 000	
Budgetary adjustment immediately rather than in 2016		77 000	
Budgetary adjustment in 2016 entirely by tax increases		95 000	
Budgetary adjustment in 2016 entirely by spending reductions		66 000	
Enactment of 1996 welfare reform legislation		89 000	
Real interest rate of 2 rather than 3 per cent		219 000	
Real interest rate of 4 rather than 3 per cent		39 000	
All public goods spending assumed to be on congestable goods		-5 000	
All congestable goods spending assumed to be public goods		160 000	
Interest payments assumed to be private		31 000	
No populating ageing and no increases in per capita health care costs		-15 000	
Immigrants have same education as natives		121 000	
Immigrants are the same age as natives		32 000	
Immigrants pay the same taxes by age as natives		152 000	
Immigrants receive the same benefits by age as natives		90 000	
Immigrants' wages continue to catch up after 10 years after arrival		124 000	

Source: Smith and Edmonston (1997) and OECD.

Table 28. **The prospects for US population under different immigration assumptions, 1995-2050**

	Zero	Low	Medium	High	Very high
Assumed net immigration per year (thousands)	0	410	820	1 230	1 640
Population (millions)					
1995	263	263	263	263	263
2000	272	275	277	279	281
2010	287	295	302	310	318
2020	298	313	327	341	354
2030	308	330	351	373	393
2040	310	341	370	400	429
2050	307	349	387	426	463
Average annual population growth, 1995-2050 (per cent)	0.3	0.5	0.7	0.9	1.0
Per memorandum:					
Average annual population growth, 1950-95 -- 1.2 per cent					

Source: Smith and Edmonston (1997) and OECD.

ANNEX II

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