Social Security Eligibility and the Labor Supply of Elderly Immigrants

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I. Introduction

There has been a historic increase in the number of both legal and illegal immigrants in the United States in recent decades. Between 1970 and 2000, the share of immigrants in the workforce rose from 4.9 to 15.3 percent. Inevitably, the number of elderly immigrants also grew rapidly. In 1980, 6.8 percent of the elderly workforce (aged 50-74) was foreign-born. By 2005, the immigrant share in this population had risen to 12.3 percent. Although much of this increase is due to the aging of foreign-born persons who migrated at a younger age, many elderly persons also migrate into the country. In 2005, for example, nearly 17 percent of elderly immigrants have been in the United States fewer than 10 years.

This paper examines the labor supply behavior of elderly immigrant men, and documents how immigrant labor supply differs from native labor supply as the two groups near retirement age.[1] There are two crucial differences between the age-employment profiles of elderly immigrant and native men. First, native employment rates decline at a much faster rate as they near retirement. Second, there is a crossover point in the two age-employment profiles in the late 50s or early 60s. Before that crossover age, natives tend to have larger employment rates. After the crossover age, natives have lower employment rates. The two age-employment profiles then converge around the age of 70.

The analysis argues that the greater reluctance of immigrants to exit the labor market as they near retirement age results partly from the incentives introduced by the eligibility requirements for Social Security benefits. Even after meeting the age requirements, a person needs to have been employed in the United States for at least 10 years to qualify for retirement benefits. The 10-year work rule will typically have no impact on the labor supply decisions of elderly native men. Many elderly immigrants, however, have only recently arrived in the United States (and even earlier immigrants may not have yet accumulated the requisite employment credits). The 10-year work rule can then have a substantial impact on labor supply as immigrants optimize their time

[1] Although some early studies examined how both earnings and labor supply adjust over the immigrant's life cycle (Carliner, 1980), almost all of the subsequent literature focuses on the evolution of wages. The literature on immigrant labor supply includes Duleep and Sanders (1993), Baker and Benjamin (1997), and Borjas (2003). None of the existing studies, however, specifically examine the labor supply of elderly immigrants.

allocation to ensure that they eventually qualify for the substantial increase in lifetime wealth provided by the Social Security benefits.[2]

The data, in fact, show that the 10-year work rule has a substantial impact on immigrant labor supply behavior. Immigrants in their 50s who have not yet accumulated the required employment credits have much greater employment rates than otherwise comparable persons. Once the 10-year work rule is satisfied, the probability that an elderly immigrant receives retirement benefits rises significantly and his probability of employment drops by 7 to 11 percentage points.

II. Data and Basic Trends

The empirical analysis uses data drawn from the 1960-2000 Integrated Public Use Microdata Series (IPUMS) of the U.S. Census. The 1960 and 1970 data files provide a 1 percent random sample of the population, while the post-1970 files provide a 5 percent sample. Persons who are not citizens or who are naturalized citizens are classified as immigrants; all other persons are classified as natives. Unless otherwise noted, the sample consists of men aged 50-74 who do not reside in group quarters.

Panel A of Figure 1 illustrates the trend in the immigrant share of the elderly population—that is, the fraction of immigrants in the population of men aged 50-74. The "bold" lines use the 1960-2000 Census data. The immigrant share fell from 14.9 percent to 7.0 percent between 1960 and 1980, but rose to 10.8 by 2000. The "dashed" lines in the figure use data from the March Current Population Surveys (CPS) to illustrate the post-2000 trend. It is evident that the immigrant share in the elderly population has continued to rise at a fast pace. By 2005, 11.7 percent of elderly men were foreign-born.

As noted above, part of the increase in the immigrant share cannot be attributed to the aging of immigrants who arrived in the United States at younger ages. To illustrate, define a "recent" immigrant as someone who migrated in the 10-year period prior to the survey. I then computed the "recent immigrant share" as the ratio of the number of recent

[2] An additional set of Social Security-related incentives is not explored in this paper. The benefit payoff per additional year worked will differ between immigrants and natives even after the 10-year work rule is satisfied because elderly immigrants, on average, have worked fewer years in the United States than elderly natives.

immigrants to the total population.[3] As Panel B of Figure 1 shows, the recent immigrant share has been rising rapidly, from 0.9 percent in 1980 to 1.8 percent in 2000. The CPS data show that this rise continued after 2000. In fact, the shares reported in Figure 1 suggest that roughly 15 to 20 percent of the elderly immigrant workforce in recent years is composed of men who have been in the United States fewer than 10 years.[4] Because of the eligibility requirements for receiving Social Security benefits, these statistics have important implications for the labor supply behavior of elderly immigrants.

The economic consequences of the immigrant influx depend not only on the relative size of the immigrant population, but also on its skill composition. There are substantial differences in the skills of elderly immigrants and natives. Similar to their younger counterparts, elderly immigrants tend to be significantly less educated than comparably aged natives. Panel B of Figure 1 illustrates the secular trends in the immigrant share for four education groups: high school dropouts, high school graduates, persons with some college, and college graduates. The rise in the immigrant share was steepest in the sample of elderly high school dropouts. In 1980, 7.8 percent of elderly workers with less than a high school education were foreign-born. By 2000, this statistic had risen to 19.3 percent. In contrast, the rise in the immigrant share among elderly college graduates was modest, from 7.7 percent in 1980 to 11.0 percent in 2000.

I document the labor supply differences between elderly immigrants and natives by focusing on two alternative measures: (1) the probability that a person worked during the Census week; and (2) the fraction of weeks worked in the calendar year prior to the Census (including all persons who work zero weeks). It is instructive to begin the descriptive analysis by comparing the employment propensities of immigrants and natives in the 2000 cross-section. Figure 2 illustrates the age-employment profiles for immigrants and natives using each of the two employment variables. To isolate a unique feature of immigrant labor supply behavior as the groups near retirement age, the figure

[3] The recent immigrant share cannot be calculated in the 1960 Census because that Census does not report detailed information on the year of immigration for foreign-born persons..

[4] Moreover, some immigrants will not have accumulated the requisite work credits even after living in the United States for 10 years. In 2000, 14.6 percent of immigrant men (aged 61 or less) who arrived prior to 1990 did not work in 1999. Hence the number of immigrants who have been in the country more than 10 years overstates the number that will qualify for retirement benefits at age 62.

presents the age-employment profile from ages 40 to 79 (instead of the 50-74 age range that is used in the remainder of the analysis).

Regardless of how employment is defined, natives in their 40s have higher employment rates than comparably aged immigrants. At age 45, for example, the typical native man worked 85.9 percent of the year, while the typical immigrant worked only 81.5 percent. The figure also reveals, however, a much faster decline in the employment rate of natives as the groups near retirement age. By age 63, the native employment advantage has been reversed: the typical immigrant now works 60.5 percent of the year, while the typical native only works 56.4 percent. In other words, there has been an 8.5 percentage point shift in the fraction of time worked by immigrants relative to natives between the ages of 45 and 63 (from –4.4 percent to +4.1 percent).

Of course, these empirical regularities are difficult to interpret because the cross-section age-employment profiles in Figure 2 contaminate aging and cohort effects (Borjas, 1985). The aging effect arises because immigrants acquire relatively more human capital than native workers as they accumulate experience in the U.S. labor market, and their labor supply behavior may adjust accordingly. Cohort effects arise because there may be permanent differences in skills among immigrant waves, and these permanent skill differentials might lead to permanent differences in labor supply.

It turns out, however, that relatively flat age-employment profiles and crossover points are a feature of the data for newly arrived elderly immigrants even after adjusting for the existence of aging and cohort effects. Panel A of Figure 3 uses the 1970-2000 Censuses to construct the age-employment profile of a particular cohort of immigrants, where a cohort is defined in terms of both age at arrival and calendar year of arrival. To simplify the exposition, the figure considers immigrants who arrived in the United States between the ages of 50 and 54. In addition, I consider three year-of-arrival cohorts: those arriving in 1965-69, 1975-79, or 1985-89. By using the repeated cross-sections, one can then "track" the specific immigrant cohorts across Censuses and compare their labor supply behavior to that of comparably aged natives.

To more easily understand the figure, let's track the employment rate of a specific cohort of elderly immigrants across Censuses. In particular, consider the group of immigrants who immigrated between 1965 and 1969 and were 50-54 years old at the time

of arrival. At the time of entry in 1970, this immigrant group worked 80.4 percent of the year, while a comparably aged group of native persons worked 87.4 percent of the time available (the native profile is given by the corresponding dashed line in the figure).

Let's now move forward 10 years. By 1980, the original immigrant cohort and the comparison group of natives are 60-64 years old. Figure 3 shows that a crossover has occurred, and that immigrants now work a larger fraction of the year than natives: 69.3 versus 60.3 percent. Finally, we can move forward to the 2000 Census when both groups are 70-74 years old. By 2000, the fraction of weeks worked by the two groups is roughly similar; both immigrants and natives work roughly 20 percent of the time.

Figure 3 shows that the age-employment profile for this particular cohort is flatter than for natives, crosses that of natives at some point before retirement age, and that the two profiles tend to converge after retirement age. In fact, the figure shows that this pattern characterizes the experience of other newly arrived immigrant cohorts as well.

In contrast, Panel B illustrates the age-employment profiles of earlier immigrant arrivals. Although these profiles also show a relative increase in employment as immigrants age, the increase is relatively small when compared to the employment increase experienced by newer arrivals. Consider the immigrants who arrived in 1950-1959 and were 50-54 years old at the time of the 1980 Census. This cohort of immigrants entered the country when they were in the 20s or early 30s. The employment rate of this group in 1980 is essentially equal to that of natives: both groups work about 85 percent of the time. By 1990, when both groups are 60-64 years old, the fraction of time worked is about 10 percentage points larger for immigrants, and the two profiles again converge by 2000. However, the 10 percentage point increase in relative employment is far smaller than the 20 to 30 percentage point shift in relative employment experienced by the newly arrived immigrant cohorts illustrated in Panel A of the figure.

Figure 3 also documents the presence of sizable cohort effects. The cohort effect can be visualized as the vertical gap in employment rates between immigrants and natives at the time of entry in Panel A. For example, recently arrived immigrants in 1970 worked 80.4 percent of the year, as compared to 87.4 percent for natives, for a gap of -7.0 percentage points. In 1980, recently arrived immigrants worked 67.6 percent of the year, as compared to 84.0 percent for comparably aged natives, for a gap of -16.4 percentage

points. Finally, in 1990, recently arrived immigrants worked 64.0 percent of the year, as compared to 83.4 percent for natives, for a gap of -19.6 percentage points. Therefore, there was a systematic decline in the relative employment propensity of immigrants across successive waves. This decline, of course, mirrors the well-documented decline in the relative earnings of successive immigrant waves over the same period.

I introduce a simple hypothesis to explain the empirical regularity that immigrants (particularly those who have recently arrived in the country) experience a labor supply "bump" as they near retirement age. In particular, the "excess" labor supply of elderly immigrants (relative to their employment propensities earlier in the life cycle) partly results from the incentives introduced by the eligibility requirements for Social Security benefits. A worker needs to work for at least 10 years in order to qualify for retirement benefits.[5] This "10-year work rule" will not influence the labor supply behavior of native-born men, as they will likely have accumulated far more than 10 years of employment long before they turn 50. However, the 10-year work rule could easily influence the labor supply decisions of many elderly immigrants. As shown earlier, a significant number of these immigrants have been in the United States for a relatively short time.

For example, consider an immigrant arriving in the United States at age 55. As with a comparably aged native worker, the labor supply decision of this immigrant will depend on a comparison of the costs and benefits of employment. The immigrant, however, brings an additional consideration into the calculation. He has much to gain by accumulating 10 years of work experience. By meeting the 10-year work rule, the immigrant will qualify for retirement benefits when he turns 65, and the payoff per dollar contributed into the Social Security system will greatly exceed the payoff per dollar contributed by the typical native worker. The 10-year work rule, therefore, introduces a significant incentive for the immigrant to work and accumulate the requisite employment credits. This incentive will flatten the age-employment of immigrants relative to natives, and may even reverse the direction of the employment gap between immigrants and natives in their late 50s and early 60s.

[5] Eligibility for retirement benefits requires that a worker accumulate 40 "credits" over his working life. In 2007, a worker earned 1 credit (up to a total of 4 per year) for every $1,000 of covered earnings. Because of data constraints, I ignore the distinction between legal and illegal immigrants.

Of course, if the growth in the elderly immigrant population only represented the aging of persons who arrived in the United States in their youth, the 10-year work rule would play no role in their labor supply decision. In fact, the number of immigrants who cannot satisfy the 10-year work rule unless they provide "excess" labor supply as they near retirement age is substantial and growing. To illustrate, I calculated the fraction of men who will not (or did not) satisfy the 10-year work rule at age 62. Put differently, I used information on the age at migration to determine if a worker aged 62 or less will be potentially eligible for retirement benefits at age 62, or to determine if a worker aged 63 or more was eligible for retirement benefits at the time he turned 62.

Figure 4 shows the age-profile in this ineligibility rate. In 2000, the typical immigrant aged 60 had a 15.2 percent probability of not qualifying for retirement benefits when he reached age 62. Similarly, 31.2 percent of immigrants aged 70 were not eligible for retirement benefits when *they* turned 62. In fact, around 20 to 30 percent of immigrants past the age of 62 were not eligible for retirement benefits at the age of 62. Figure 4 also shows that the ineligibility rate has risen over time. In 1980, only about 15 percent of persons aged 63-67 did not satisfy the 10-year work rule. By 2000, nearly 20 percent did not satisfy the 10-year work rule.

III. The Impact of Social Security Eligibility

I now use the 1980-2000 Census data to conduct a more formal analysis of the determinants of the labor supply of elderly immigrants, with a specific focus on the impact of social security eligibility.[6] The simplest version of the regression model is:

$$(1) \qquad p_{ij} = \delta A_j + \alpha y_j + \beta C_j + \gamma_i^0 \pi_j^0 + \gamma_i^1 \pi_j^1 + \lambda_i E_j + \varepsilon_{ij}$$

$$(2) \qquad p_{n\ell} = X_\ell \phi_n + \delta A_\ell + \gamma_n^0 \pi_\ell^0 + \gamma_n^1 \pi_\ell^1 + \lambda_n E_\ell + \varepsilon_{n\ell},$$

where p_{ij} gives the probability of employment for immigrant j; $p_{n\ell}$ gives the employment probability for native ℓ; A gives the worker's age as of the time of the Census; y_j gives the

[6] I do not use the data from the 1960 and 1970 Censuses because the number of elderly immigrants surveyed (particularly within age and year of arrival groups) tends to be relatively small.

number of years since migration; *C* is a vector of dummy variables indicating the calendar year in which the migration occurred; π^0 is a dummy variable indicating if the observation was drawn from the 1980 Census; π^1 indicates if the observation was drawn from the 1990 Census.; and *E* is a vector of variables (described below) indicating if the immigrant or native is eligible for the retirement benefits provided by the Social Security system. The regressions are estimated using the linear probability model.

The coefficient vectors γ_i and γ_n give the period effects for immigrants and natives, respectively. The coefficient δ gives the aging effect for natives; the rate at which native employment changes as the person ages. The respective aging effect for immigrants is given by the sum of coefficients $(\delta + \alpha)$.[7] The vector *C* contains fixed effects indicating the (calendar year) cohort of arrival. The vector β thus measure the cohort effects, the differences in (time-of-entry) employment probabilities across cohorts.

It is well known that the parameters of the model in equations (1) and (2) are not identified (Borjas, 1985). In order to separately identify the two period effects, the aging effects, and the cohort effects, a restriction must be imposed on the model. The typical restriction is that the period effects are the same for immigrants and natives:

$$(3) \qquad \gamma_n^0 = \gamma_i^0, \quad \text{and} \quad \gamma_n^1 = \gamma_i^1.$$

so that changes in macroeconomic conditions have the same impact on the labor supply of immigrants and natives.

Table 1 summarizes the regression results. The specification reported in the table is somewhat more general than the generic model in equations (1) and (2). In particular, the regressions include fourth-order polynomials in both age and years-since-migration. Column 1 of the table reports the estimated coefficients *after* imposing the restriction in equation (3).[8] The regressions reported in this column exclude the variables in the eligibility vector *E*.

[7] The vector δ was restricted to be equal in the two samples to reduce the amount of collinearity among the variables.

[8] To simplify the presentation, I do not report the estimates of the period effects.

The estimated cohort effects give the predicted difference in employment rates between an immigrant cohort and natives at the time of entry.[9] As implied by the descriptive analysis, there exist cohort differences in labor supply, particularly in the "worked during the Census week" measure of labor supply—with the immigrant disadvantage rising over time. In the first column, the predicted employment rate for immigrants who arrived in the late 1990s is -15.6 percentage points below that of natives, while the predicted fraction of time worked for immigrants who arrived in the late 1960s is -2.8 percentage points below that of natives. The cohort effects, however, are much weaker in the regression that uses the fraction of time worked as the dependent variable. The cohort effect for immigrants arriving in the late 1990s is -21.9 percent, while the respective statistic for the 1965-69 cohort is -18.5 percent.

Because both age and years-since-migration are introduced as quartics, it is difficult to "read" the implications of the regression directly from the regression coefficients. Instead, it is easier to summarize the results by calculating the aging effect (i.e., the rate of change of employment as a person ages one year) at particular points of the life cycle. I estimate the aging effect for two alternative scenarios. First, I evaluate the aging effect at age 60 for both natives and immigrants, and assume that the immigrants arrived in the United States at age 55 (so they are recent arrivals). Second, I evaluate the aging effect at age 60 for both natives and immigrants, but assume that the immigrants arrived in the United States at age 45.

Table 1 reports that the predicted aging effect for natives and for immigrants who have been in the country for some time is quite similar, but that the aging effect is much smaller for recently arrived immigrants. The rate of change in the fraction of weeks worked for a native at age 60 is -0.043 percent (with a standard error of 0.0001). The comparable rate of change for a recent immigrant is -0.021 (0.001) and for an earlier immigrant is -0.042 (0.0002).

The second column of Table 1 introduces the eligibility vector *E*. It is well known that there is a discreet drop in native labor supply at ages 62 and 65, as many natives take

[9] For simplicity, I only report selected coefficients from the vector of cohort effects. The full vector contains indicators for arriving in the following periods: 1995-99, 1990-94, 1985-89, 1980-84, 1975-79, 1970-74, 1965-69, 1960-64, 1950-59, and before 1950.

advantage of the eligibility rules for retirement benefits. The vector *E* in the native equation, therefore, includes two dummy variables indicating if the native person is aged 62-64 and 65 or above. The coefficients of these dummy variables measure "steps" in the age-employment profile of natives. In the immigrant equation, the specification of *E* is slightly more complex because eligibility depends not only on age, but also on satisfying the 10-year work rule. In addition to introducing the dummy variables to capture the discreet steps at ages 62 and 65, I also introduce interactions that describe whether immigrants in each of the three relevant age groups (<62, 62-64, and 65 or above) have satisfied the 10-year work rule. The Census data do not provide information on how many years a person has worked, so that my measure of the 10-year work rule is obtained from the number of years that the immigrant has resided in the United States.

The results reported in the second column of Table 1 support the hypothesis that the 10-year work rule influences the labor supply decision of elderly immigrants. In particular, the age-employment profile drops by only -0.9 percentage points when an immigrant reaches age 62 (as compared to a drop of -7.1 percentage points for natives), but this drop increases by an additional -6.7 percentage points if the immigrant has also satisfied the 10-year work rule. Similarly, the age-employment profile of immigrants drops by a further -7.4 percentage points when he reaches age 65 (as compared to a -14.9 percentage point drop for natives), but this drop increases by -13.2 percentage points if the immigrant has satisfied the 10-year work rule.

It is worth emphasizing that even the labor supply of immigrants aged 50-61 is affected by the 10-year work rule. The level of the age-employment profile for these immigrants drops by -7.3 percentage points if they have already met the 10-year work rule. In short, the 10-year work rule provides a strong incentive for elderly immigrants to accumulate work credits prior to their reaching retirement age, and there is a significant drop in employment once these credits are accumulated.

It is instructive to summarize the regression results by tracing out the implications of the coefficients for the age-employment profiles of immigrants and natives. Figure 5 illustrates these predicted profiles assuming that the immigrant arrives at age 57. The predicted profile shows that immigrant labor supply is flatter than that of natives and that the two profiles cross at age 61. At the point where the immigrant satisfies the 10-year

work rule (or age 67 in this example), there is a significant drop in labor supply, and the two age-employment profiles tend to converge thereafter. It is notable that the age-employment profiles implied by the regression closely mirror the actual age-employment profiles illustrated in the previous section.

The figure also illustrates the age-employment profile resulting from the removal of the 10-year work rule as a prerequisite for retirement benefits. The predicted profile now tends to resemble that of native workers. For instance, the immigrant profile is now about as steep as that of natives before the age of 62. There is still, however, a "bump" in immigrant labor supply in the early 60s—perhaps immigrants nearing retirement age use their remaining work years to accumulate work credits that increase retirement benefits.

Table 2 shows that the estimated "eligibility effect" is robust to changes in the basic specification of the model. The first column of the table reports the eligibility coefficient from the "baseline" estimates first reported in column 2 of Table 1. Column 2 adds a measure of the individual's potential wage as a regressor. The potential wage is defined as the cell mean of the log weekly earnings of a group of workers defined by country of birth, educational attainment, and age (calculated in the sample of persons who report positive weekly earnings).[10] The inclusion of the potential wage does not alter any of the results of the analysis. The coefficient of the predicted wage is positive and significant, and it implies that the labor supply elasticity is around 0.25.

Finally, the last two columns of Table 2 report the eligibility coefficients from regression models where the dependent variable is a dummy variable indicating if the person receives Social Security benefits. As expected, the fraction of immigrants receiving retirement benefits jumps significantly once they satisfy the 10-year work rule.

IV. Summary

The number of elderly immigrants in the United States is growing rapidly. Using data drawn from the 1960-2000 decennial Censuses, this paper documents two empirical regularities that characterize the age-employment profiles of elderly immigrants. In particular, the employment rate of natives declines much faster as they near retirement.

[10] I use the four education groups defined earlier to define the cells, as well as five age groups: ages 50-54, 55-59, 60-64, 65-69, and 70-74.

Second, there is a crossover point in the age-employment profiles typically occurring in the late 50s or early 60s. Before that crossover age, natives typically have larger employment rates. After the crossover age, immigrants have larger employment rates.

The paper argues that the greater reluctance of immigrants to exit the labor market as they near retirement age partly results from the incentives introduced by the eligibility rules for Social Security benefits. In particular, a worker needs to be employed for at least 10 years in order to be eligible for retirement benefits. Although the 10-year work rule will typically not influence the labor supply behavior of elderly natives, it may be a significant constraint for immigrants. After all, a significant number of elderly immigrants have been in the United States for a relatively short period of time.

The data reveal that the 10-year work rule indeed "encourages" recently arrived immigrants to accumulate work credits at a rapid pace. Once the 10-year work rule is satisfied, immigrants quickly begin to receive Social Security benefits and there is a sizable decline in their employment propensities. This finding may have important implications for the costs of the Social Security program, as well as on any assessment of the net benefits from immigration. After all, a substantial number of immigrants may be receiving a very large rate of return on their Social Security contributions.

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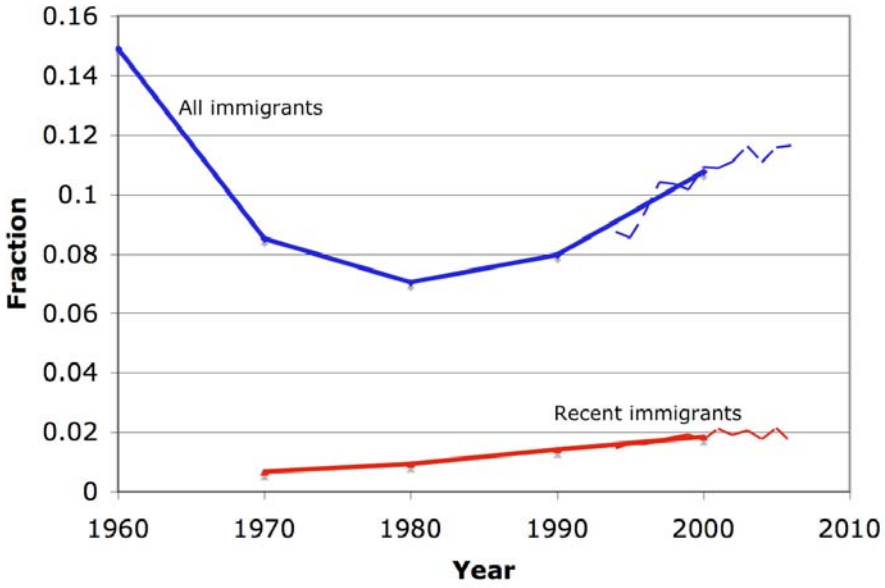
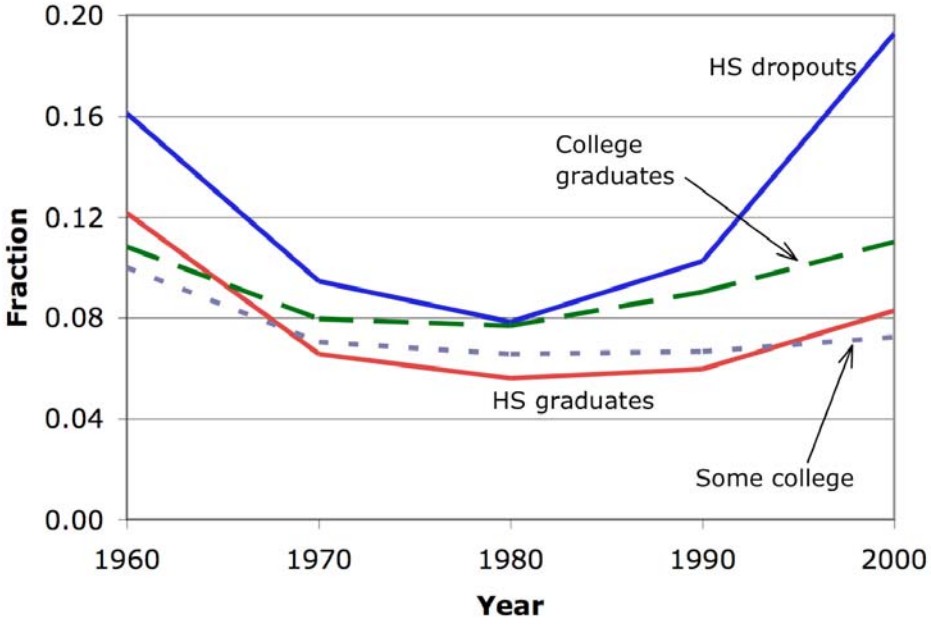
Figure 1. Elderly male immigrants, as share of elderly population

A. All persons



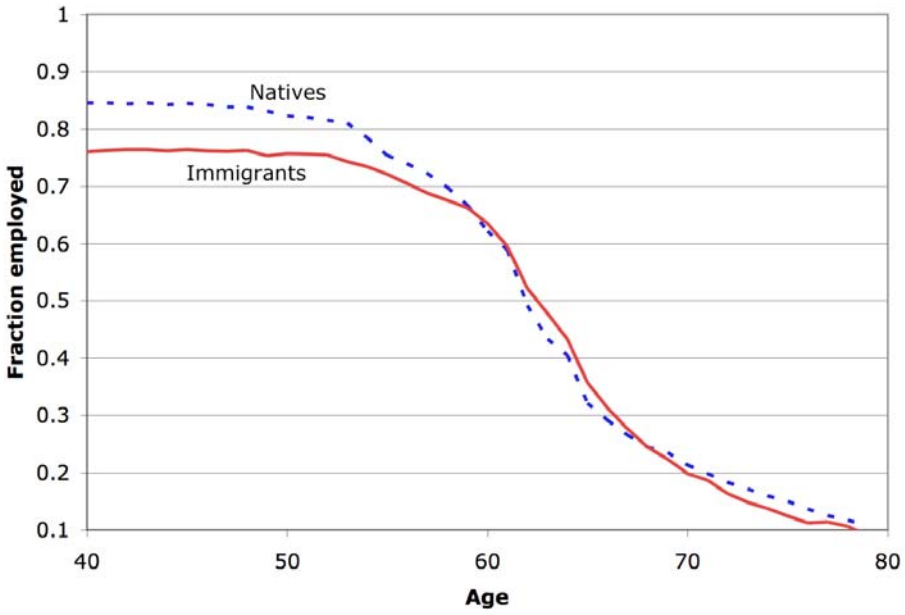
B. By education



Note: The elderly population consists of persons aged 50-74.

Figure 2. Age-employment profiles in the cross-section

A. Employment rate



B. Fraction of weeks worked

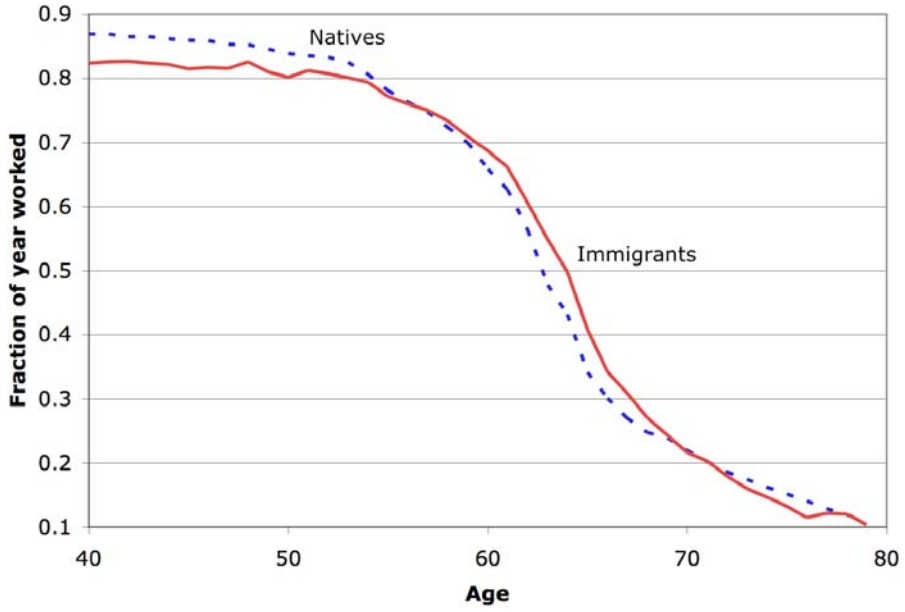
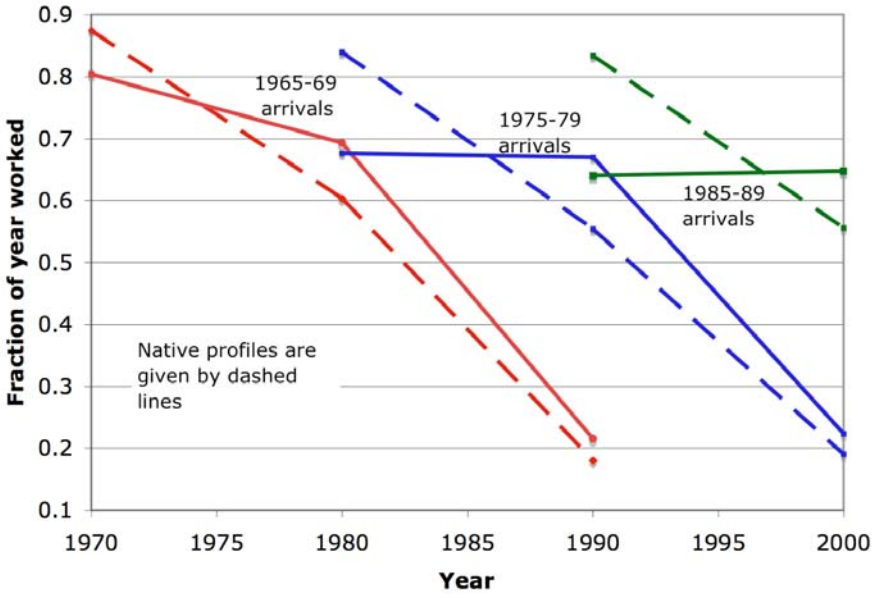


Figure 3. Longitudinal age-employment profiles, using fraction of time worked

Panel A. Age-employment profiles of newly arrived immigrants (aged 50-54 at arrival)



Panel B. Age-employment profiles of earlier immigrant arrivals

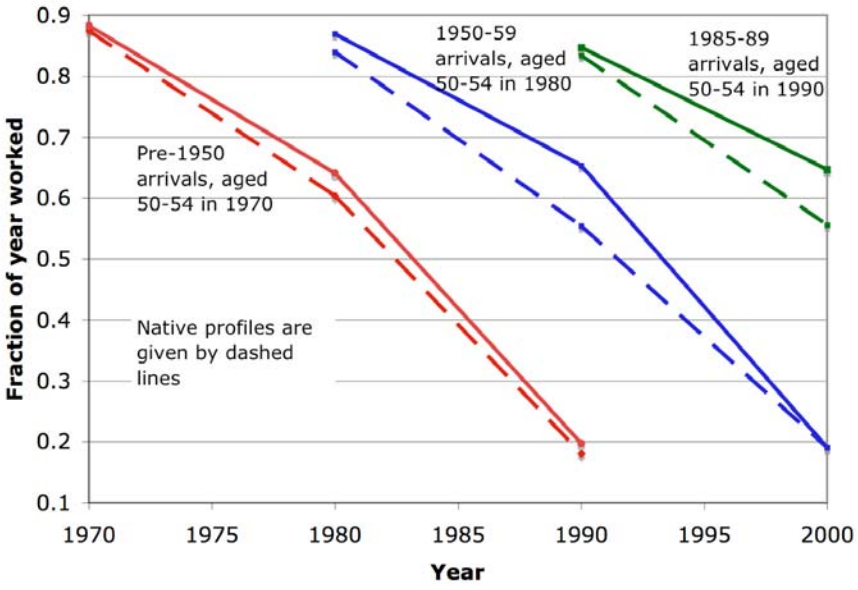
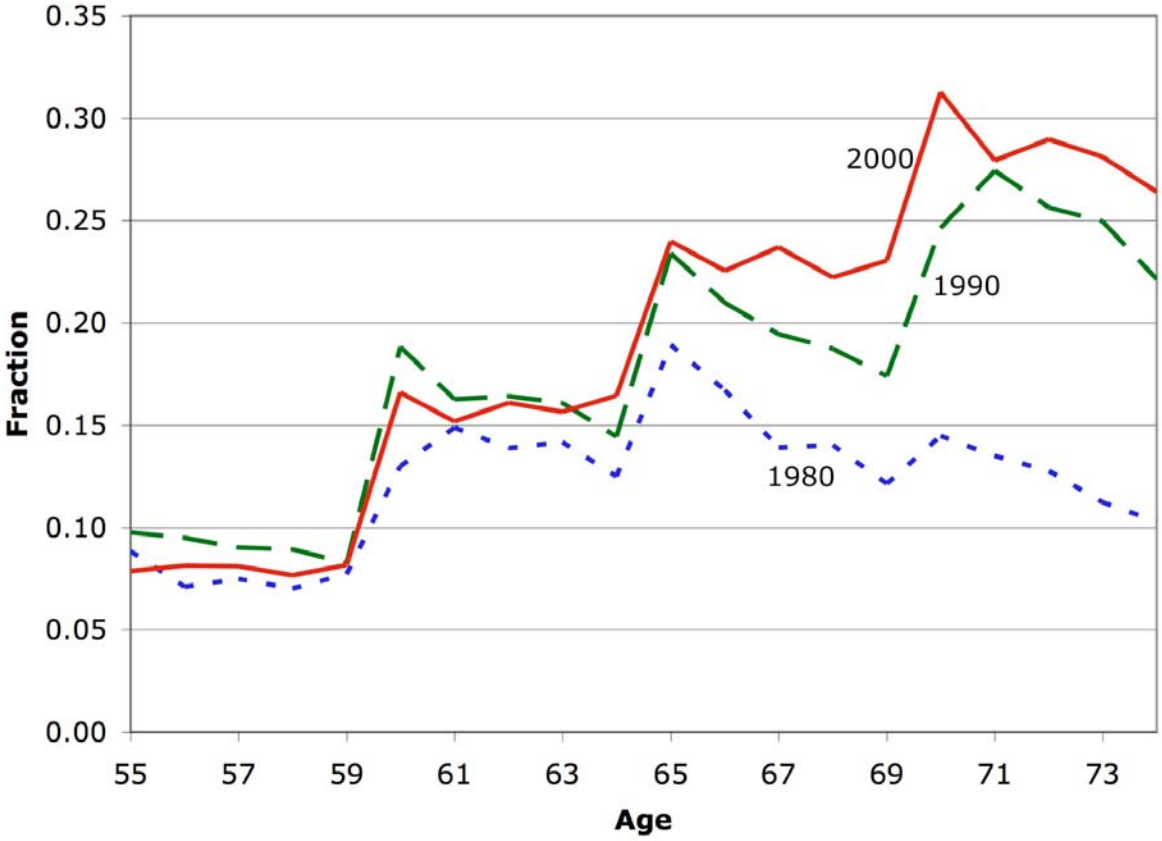


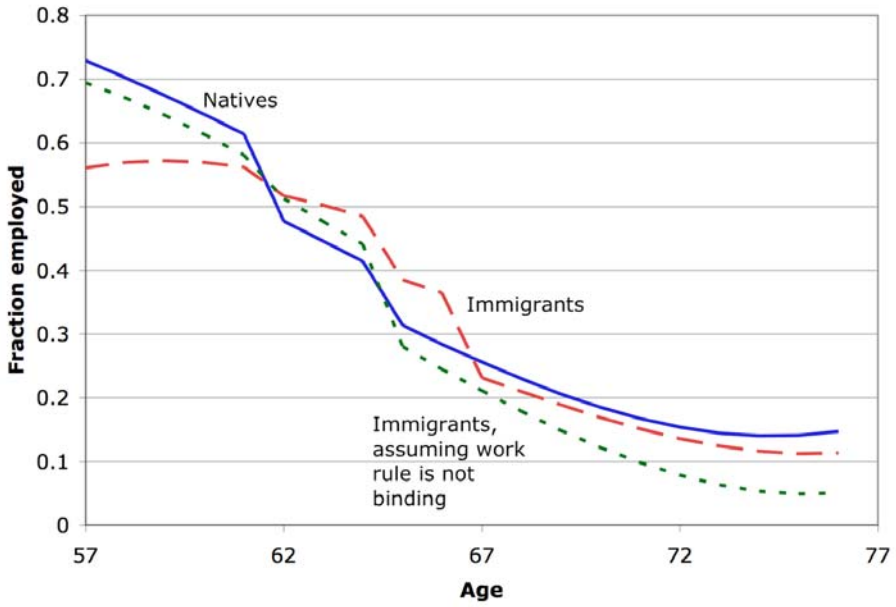
Figure 4. Fraction of immigrants ineligible for Social Security at age 62



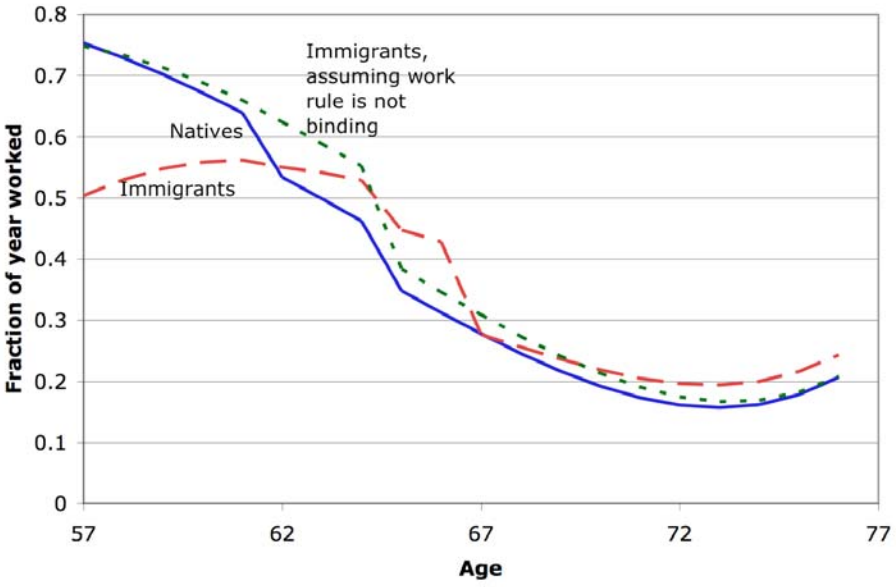
Note: A person is ineligible to receive Social Security retirement benefits at age 62 if: (a) he is younger than 62 but will not have been in the United States for 10 years when he turns 62; (b) he is older than 62 and was not in the United States for 10 years at the time he turned 62.

Figure 5. Predicted age-employment profiles
(assuming immigrant belongs to 1985-89 cohort and migrated at age 57)

A. Employment rate



B. Fraction of weeks worked



Note: The predicted age-employment profiles use the regressions reported in column 2 of Table 1. The "assuming work rule is not binding" counterfactual profile is derived by assuming that immigrants satisfy the 10-year work rule regardless of how long they have resided in the United States.

Table 1. Basic regression results

	Employment rate		Fraction of time worked	
	(1)	(2)	(1)	(2)
Selected cohort effects:				
1995-99 arrivals	-0.156	-0.214	-0.215	-0.281
	(0.005)	(0.006)	(0.004)	(0.006)
1985-89 arrivals	-0.145	-0.208	-0.236	-0.307
	(0.006)	(0.007)	(0.005)	(0.007)
1975-79 arrivals	-0.093	-0.167	-0.215	-0.298
	(0.006)	(0.008)	(0.006)	(0.008)
1965-69 arrivals	-0.028	-0.107	-0.185	-0.274
	(0.007)	(0.009)	(0.006)	(0.008)
Aging effects:				
Natives at age 60	-0.045	-0.030	-0.043	-0.031
	(0.0001)	(0.0002)	(0.0001)	(0.0002)
Imm. at age 60 and 5 years in U.S.	-0.034	-0.009	-0.021	0.002
	(0.001)	(0.001)	(0.001)	(0.001)
Imm. at age 60 and 15 years in U.S.	-0.049	-0.031	-0.042	-0.027
	(0.0002)	(0.0004)	(0.0002)	(0.0004)
Eligibility effects:				
Natives aged 62-64	---	-0.104	---	-0.071
		(0.001)		(0.001)
Natives aged 65+	---	-0.174	---	-0.149
		(0.002)		(0.002)
Imm. aged 62-64	---	-0.034	---	-0.009
		(0.006)		(0.006)
Imm. aged 65+	---	-0.114	---	-0.074
		(0.005)		(0.004)
Imm. aged 50-61 and satisfy work rule	---	-0.066	---	-0.073
		(0.008)		(0.008)
Imm. aged 62-64 and satisfy work rule	---	-0.066	---	-0.067
		(0.010)		(0.009)
Imm. aged 65+ and satisfy work rule	---	-0.111	---	-0.132
		(0.009)		(0.008)

Notes: Standard errors are reported in parentheses. The regression specification is given by equations (2) and (3) in the text, but both age and years since migration are introduced as fourth-order polynomials.

Table 2. Estimated eligibility effects in additional regression specifications

	Fraction of time worked		Social Security receipt	
	(1)	(2)	(1)	(2)
Eligibility effects:				
Natives aged 62-64	-0.104	-0.111	0.256	0.259
	(0.001)	(0.001)	(0.001)	(0.001)
Natives aged 65+	-0.174	-0.095	0.462	0.426
	(0.002)	(0.002)	(0.001)	(0.001)
Imm. aged 62-64	-0.034	-0.046	-0.071	-0.066
	(0.006)	(0.006)	(0.005)	(0.005)
Imm. aged 65+	-0.114	-0.112	-0.117	-0.118
	(0.005)	(0.005)	(0.004)	(0.004)
Imm. aged 50-61 and satisfy work rule	-0.066	-0.071	-0.070	-0.067
	(0.008)	(0.008)	(0.006)	(0.006)
Imm. aged 62-64 and satisfy work rule	-0.066	-0.080	0.121	0.127
	(0.010)	(0.010)	(0.008)	(0.008)
Imm. aged 65+ and satisfy work rule	-0.111	-0.091	0.411	0.402
	(0.009)	(0.009)	(0.007)	(0.007)
Log predicted weekly wage	---	0.253	---	-0.112
		(0.001)		(0.001)

Notes: Standard errors are reported in parentheses. The regression specification is given by equations (2) and (3) in the text, but both age and years since migration are introduced as fourth-order polynomials. The log predicted weekly wage for a person equals the mean cell of log weekly earnings in the sample of workers with valid weekly earnings, where the cell is defined by country of birth, education, and age.