SELF-SELECTION AND EARNINGS ASSIMILATION: IMMIGRANTS FROM THE FORMER SOVIET UNION IN ISRAEL AND THE UNITED STATES*

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Drawing on U.S. decennial census data and on Israeli census and longitudinal data, we compare the educational levels and earnings assimilation of Jewish immigrants from the former Soviet Union (FSU) in the United States and Israel during 1968–2000. Because the doors to both countries were practically open to FSU immigrants between 1968 and 1989, when FSU immigrants were entitled to refugee visas in the United States, the comparison can be viewed as a natural experiment in immigrants' destination choices. The results suggest that FSU immigrants to the United States are of significantly higher educational level and experience significantly faster rates of earnings assimilation in their new destination than their counterparts who immigrated to Israel. We present evidence that patterns of self-selection in immigration to Israel and the United States—on both measured and unmeasured productivity-related traits—is the main reason for these results. When the immigration regulations in the United States changed in 1989, and FSU Jewish immigrants to the United States had to rely on family reunification for obtaining immigrant visas, the adverse effects of the policy change on the type of FSU immigrants coming to the United States were minor and short-lived. As early as 1992, the gaps in the educational levels between FSU immigrants coming to Israel and to the United States returned to their pre-1989 levels, and the differences in earnings assimilation of post-1989 immigrants in the United States and Israel are similar to the differences detected in the 1980s.

Patterns of self-selection are central for understanding the labor market assimilation of immigrants (Jasso and Rosenzweig 1990a; Smith and Edmonston 1997). The ongoing debate on the declining skills of U.S. immigrants (Card 2005), for example, is in large part a debate about whether *all* immigrant groups are positively self-selected from their countries of origin (Chiswick 1978, 1986), or whether positive selectivity depends on the relative returns to skills in the countries of origin and destination (Borjas 1987, 1990).

There is little doubt that some immigrant groups are positively self-selected on their observed characteristics, as evidenced by the high educational levels of U.S. immigrants from India, Egypt, and other low-education countries in Asia and Africa (Portes and Rumbaut 1996). The selectivity argument, however, is not limited to observed characteristics such as educational levels, but also applies to unobserved traits such as motivation, ability (however defined), unmeasured cultural capital, and social networks. Positive selectivity on such unmeasured—rather than measured—traits is supposed to explain the "better than perfect" earnings assimilation of some immigrant groups whose earnings not only converge with those of natives but surpass the earnings of natives of the same schooling levels and other measured characteristics (Chiswick 1978). Likewise, when immigrants fail to significantly narrow the earnings gap with natives, it is generally attributed not only to their low educational levels but also to their poor unobserved skills, which are the result of their negative self-selection from the population in their source countries (Borjas 1987, 1990, 1994).

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Despite the importance of patterns of self-selection to assimilation theory, there is little convincing evidence for the effects of selectivity on immigrants' labor market assimilation (Duleep and Regets 1994). This is in part due to lack of data on the distribution of measured characteristics in countries of origin, let alone the distribution of unmeasured skills, which are, by definition, unobservable.

This study is aimed at underscoring the importance of self-selection patterns for understanding earnings assimilation of immigrants by focusing on immigrants from the Former Soviet Union (FSU) who moved to Israel or to the United States since the late 1960s. In the absence of direct information on unmeasured skills of immigrants, other types of evidence are necessary for assessing the effects of selectivity on economic assimilation. One type of evidence is the economic progress of emigrants from one country who chose, during the same period, to immigrate to different destination countries with different returns to skills—in this case, Jewish immigrants from the FSU who immigrated to Israel and the United States between 1968 and 2000.

Until 1989, Jewish Soviet immigrants were given practically a free choice between these two destination countries: Israel's law of return has been providing free entry to Jewish immigrants and their family members since the establishment of the state in 1948, and the United States granted refugee status to FSU immigrants during the cold war. However, following the breakdown of the Soviet Union in the late 1980s, Israel's law of return has remained intact, while the United States no longer views FSU immigrants as refugees, and since late 1989, FSU immigrants to the United States have had to rely on family reunification to obtain visas. Thus, immigration from the FSU to Israel and the United States during the past three decades provides a natural experiment that enables us not only to test the selectivity argument but also to test whether a major change in visa requirements in one country results in an appreciable change in the type of immigrants coming to each country. Because pre-1990 Jewish immigrants had an option rarely available to other immigrants—immediate admission to either country—analyzing their earnings assimilation in both countries will tell us much about the patterns of self-selection on both observed and unobserved productivity-related characteristics. Comparing these patterns before and after the U.S. policy change in 1989 will tell us much about the role of immigration policies in changing selection patterns.

Self-selection patterns of Jewish FSU emigrants to the United States and Israel are not likely to have been random with respect to observed and unobserved productivity-related traits. There is some evidence that FSU immigrants (Jews and non-Jews alike) arriving in the United States during the 1970s had higher educational levels than those arriving in Israel (Klinov 1991; Simon 1985). This is consistent with the prevailing theory of immigrants' self-selection (Borjas 1987, 1994). Given a choice, skilled immigrants tend to go to countries where the returns to skills are higher, while less-skilled immigrants prefer countries where they will be protected by a safety net of social services. Because returns to skills have been greater in the United States than in Israel, skilled immigrants are expected to have preferred the United States over Israel. To the extent that such self-selection on both observed and unobserved traits among FSU immigrants indeed occurred (namely, the less skilled arrived in Israel, and the highly skilled chose the United States), there is no reason to expect rapid rates of earnings assimilation among FSU immigrants in Israel (relative to their counterparts in the United States), especially not among those arriving in Israel before 1989, while the doors to the United States were relatively open.

By observing the earnings growth of FSU immigrants in both countries relative to demographically comparable natives (i.e., natives of the same measured characteristics), we can detect patterns of immigrants' self-selection to Israel and the United States. Faster (or slower) earnings assimilation in the United States than in Israel indicates that FSU immigrants in the United States have higher (or lower) levels of unmeasured skills than those coming to Israel. The comparison between the economic fortunes of FSU immigrants in

Israel and the United States rests on two reasonable assumptions. The first is that the skills of FSU immigrants are about equally transferable (or nontransferable) to the American and Israeli labor markets—the native language of FSU immigrants is neither Hebrew nor English, and the Israeli and U.S. economies are more similar to each other than to the communist or post-communist FSU economy. The second assumption, which we discuss later, is that FSU immigrants are treated equally by the United States and the Israeli labor markets (relative to natives in each country). Thus, we compare FSU immigrants who moved to Israel with those who moved to the United States in order to test the selectivity argument at the center of this study.

FSU IMMIGRANTS IN ISRAEL AND THE UNITED STATES

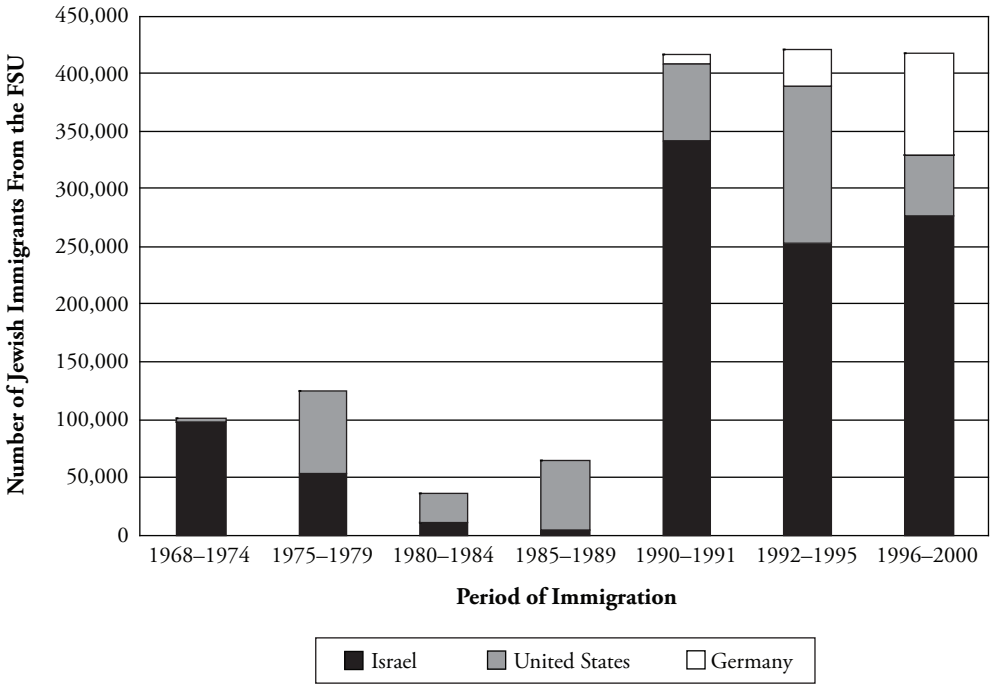
Following cold war politics from the 1960s through the 1980s and the disintegration of the Soviet Union in the late 1980s, over 1.8 million Jews (including some non-Jewish family members) emigrated from the FSU. Emigrants left in two main waves. The first wave, between 1968 and the early 1980s, included about 350,000 emigrants. The second wave started in the late 1980s and included, until 2000, about 1.5 million emigrants. The major destination countries for FSU Jewish immigrants between 1968 and 2000 were Israel (about 1.1 million), the United States (over 400,000), Germany (about 130,000), and Canada (about 30,000).

Jews who left the Soviet Union during the 1970s and 1980s were able to do so after they had received an exit visa following a request for family reunification made by relatives in Israel. The journey to Israel required a stopover in transit centers in Europe, where the emigrants were entitled to apply for a refugee visa for the United States. This option was not available for FSU immigrants who decided in transit centers to go to Israel. Once they landed in Israel, they obtained Israeli citizenship, and as Israeli citizens, they were no longer entitled to refugee status in the United States.

As shown in Figure 1, between 1968 and 1989, approximately 160,000 Soviet-born refugees (80% of them Jews) were admitted to the United States, and about 170,000 immigrated to Israel. The share of Jewish immigrants from the FSU who chose the United States as their destination rose until 1989. The share who chose the United States was negligible until 1974, rose to over one half in 1975–1979, and reached a peak of over 90% of immigrants in the late 1980s (Dominitz 1997). The share going to the United States declined sharply to 16% after October 1989, when U.S. authorities stopped granting refugee visas to FSU emigrants and limited FSU immigration to 50,000 per year (Chiswick 1993). However, many FSU Jewish emigrants were quick to find alternative methods to enter the United States, and during 1992–1995, the United States received about one-third of FSU Jewish emigrants. Starting in 1996, however, the share of immigrants going to the United States declined again, while Germany, which offered FSU Jews refugee status, admitted more immigrants than the United States each year (Cohen and Kogan 2005).

Previous research on Jewish immigrants who left the FSU during the cold war centered on their economic assimilation in Israel rather than on their self-selection. The general consensus has been that these early immigrants from the FSU successfully completed their economic assimilation in the Israeli labor market in a relatively short period. Previous studies reported that FSU immigrants in Israel attained occupations in accordance with their human capital levels (Raijman and Semyonov 1998; Semyonov and Lerenthal 1991; Weinberg 2001), were more successful in the Israeli labor market than their counterparts who went to the United States (Klinov 1991), and if they obtained their schooling in Israel, were expected to reach earnings parity with native Israelis of similar measured characteristics (Friedberg 2000). These studies relied on the 1972 and 1983 Israeli censuses and the 1980 U.S. census. In the 1990s, public and scholarly attention was diverted to the most recent immigrant cohorts. Perhaps this explains the lack of studies using the 1995 Israeli

Figure 1. Number of Jewish Immigrants (and Their Non-Jewish Family Members) From the Former Soviet Union Arriving in Israel, the United States, and Germany, by Period of Immigration



Sources: Chiswick (1997), Cohen and Kogan (2005), and Dominitz (1997).

census to test whether the optimistic estimates regarding the earnings assimilation of the early immigrants in Israel actually occurred.

Chiswick (1993, 1997) used the 1990 U.S. census to estimate earnings assimilation of FSU immigrants to the United States. However, he did not compare assimilation rates in the United States to those in Israel, and because the U.S. census does not collect information about religion, he was unable to distinguish between Jewish and non-Jewish immigrants from the FSU. He found that the initial earnings of FSU immigrants in the United States were low, but their earnings progress was steeper than that of other immigrant groups. This pattern of earnings, Chiswick maintained, is typical of refugees who immigrated to the United States before the 1970s (Chiswick 1978).

Research on post-1989 immigrants from the FSU focused on both self-selection on observed characteristics and economic assimilation and integration. Most studies mentioned the high levels of human capital with which these immigrants arrived in Israel relative to both the Soviet and Israeli populations (Beenstock and Ben Menahem 1997; Eckstein and Weiss 2002; Konstantinov 1995). With respect to economic assimilation in Israel, most studies focused on labor force participation, documenting impressive employment levels of immigrants in their first two to four years in the country. These employment levels were achieved in part at the price of occupational downgrading compared

with the occupations immigrants held in the FSU (Eckstein and Weiss 2002; Raijman and Semyonov 1997, 1998; Weinberg 2001). With respect to earnings assimilation of post-1989 immigrants, early research advanced the notion that these immigrants were well on their way to full economic assimilation in the Israeli labor market (e.g. Beenstock and Ben Menahem 1997; Leshem 1997). However, a recent study based on updated data casts doubt on the likelihood of FSU immigrants reaching earnings convergence with natives (Eckstein and Weiss 2002).

In sum, the available literature is far from conclusive regarding the selectivity and earnings assimilation of the early and recent immigrant waves from the FSU in the Israeli labor market. No studies examined whether pre-1984 immigrants in Israel have actually achieved earnings parity with natives or with natives of similar measured characteristics. Likewise, whether post-1989 immigrants in Israel will eventually reach earnings parity with natives is no longer clear. More importantly, the comparison of the labor market success of FSU immigrants who arrived in Israel and the United States during the same period, which is essential for detecting patterns of self-selection on unobserved characteristics, has not yet been undertaken.

This paper addresses these issues. It analyzes the selection patterns and earnings assimilation of cohorts of FSU immigrants in Israel and in the United States. The paper is organized as follows: the next section presents the various data sources we use. We then present the results in three subsections: the first presents selectivity analyses by comparing the educational levels of successive cohorts of FSU immigrants in Israel, at the time of their arrival, to their counterparts who reached the United States. The second focuses on earnings assimilation of FSU immigrants who came to Israel and the United States when the doors to both countries were open. The last subsection focuses on the earnings assimilation of recent immigrants—those arriving in Israel and the United States after 1989, when refugee visas to the United States were no longer available to FSU immigrants. The final section of the paper discusses the results and their implications.

DATA

To analyze FSU immigrants who came to the United States, we use the 5% 1980, 1990, and 2000 Public Use Microdata files (PUMS) of the U.S. census. Because the census does not collect information about religion, we use the language and ancestry questions to identify Jews among those stating their country of birth as one of the republics of the FSU. Evidence from the 1970 Soviet census (Altshuler 1987) suggests that Jews in the FSU tended to speak mostly Russian (a minority of older Jews spoke Yiddish) rather than the languages of the various republics. Likewise, they tended to view their ancestry ("nationality" in the Soviet census) as Jewish or Russian rather than as related to their republic of residence in the FSU. Thus, we define FSU Jewish immigrants in the PUMS as those who were born in the FSU; who speak English, Yiddish, Hebrew, or Russian at home; and who stated a Russian, Israeli, or Jewish first ancestry (because "Jewish" is not an accepted ancestry in the U.S. census, such persons are coded as "998," which is the code given to those stating a religion in the PUMS[1]; a minority who viewed themselves as Jews may have stated an Israeli ancestry.) FSU immigrants who speak other languages at home or state other ancestries (e.g., Armenian, Ukrainian) are less likely to be Jewish (Schvartz-Shavit 1995). While admittedly crude, this identification algorithm, which relies heavily on speaking Russian and stating a Russian or "Jewish" ancestry, results in a sample that includes the vast majority of FSU

1. There is evidence that a higher proportion of Jewish than non-Jewish immigrants in the United States state a Jewish ancestry in the PUMS. For example, Israeli-born immigrants in the United States who speak Hebrew are virtually all Jews; 9.6% of them received "998" as their ancestry code in the 1990 PUMS. By contrast, Israelis born in the United States who speak Arabic at home are virtually all Muslims or Christians; less than 0.5% of them received "998" as their first ancestry (Cohen and Haberfeld 1997).

Jewish immigrants in the United States, and a smaller proportion of non-Jews than a sample that includes all those born in the FSU.[2]

We use the 1980 and 1990 PUMS to track the earnings growth of the 1975–1979 cohort in its first 10–15 years in the United States, relative to a benchmark of native-born Americans. For this cohort, we have earnings observations in both 1979 and 1989. For those arriving after the policy change in the United States in late 1989, we have only one earnings observation in 1999. Therefore, we estimate the earnings assimilation of 1990–2000 arrivals by using the 2000 PUMS.

For analyzing FSU immigrants who immigrated to Israel, we rely on several data sources. First, we use data drawn from the 20% demographic samples of the 1983 and 1995 Israeli censuses of population. These data sets contain detailed demographic, labor market, and immigration information for a large sample of foreign-born and native-born Israelis. The two census files contain precise year of immigration, and the 1995 census also contains the republic of birth (within the FSU).[3] We use the two census samples to track the earnings growth of the 1978–1983 cohort in its first 12–17 years in Israel, relative to native-born Israelis. For this cohort, we have earnings observations in Israel in both 1983 and 1995. Hence, we can compare this cohort's earnings assimilation in Israel to the earnings assimilation of the 1975–1979 cohort in the United States during approximately the same period. The second data source we use is the matched 1983–1995 census file, created by the Israeli Central Bureau of Statistics, which includes data for individuals who were included in both the 1983 and 1995 demographic samples of the census. This special data set is a representative sample of approximately 4% of the Israeli population at both census dates (i.e., 4% is the probability of being included in both the 20% 1983 census sample and the 20% 1995 census sample), and it enables us to estimate the earnings assimilation of pre-1984 arrivals more accurately than if we had used only cross-sectional data because it includes earnings and other data for the *same persons* (both immigrants and natives) in both years—1983 and 1995. Finally, we use the 2001 Israeli income survey, which contains basic demographic and labor market information for a representative sample of about 30,000 households. The 2001 Israeli survey and the U.S. 2000 PUMS enable us to compare earnings assimilation of post-1989 arrivals in the United States and Israel.

We compare FSU immigrants in the United States to white, non-Hispanic, native-born Americans. For Israel, we compare the FSU-born to two groups of native-born Jews. The first group includes Jews born in Israel to immigrant fathers from European countries. This group of second-generation European-origin Jews was found to be the most successful in the Israeli labor market. The second group contains Jews born in Israel to immigrant fathers from Asian and African countries. This group was found to be the least successful among Israel-born Jews (Haberfeld and Cohen 1998).[4] Comparing immigrants from the FSU to these two groups, which are located at different places in the earnings distribution

2. About 80% of FSU immigrants identified as Jews stated a Russian ancestry, 20% received the code "998" for their first ancestry, and less than 1% stated an Israeli ancestry. Likewise, about 97% of FSU Jews speak Russian at home, and the remaining 3% speak Yiddish, Hebrew, or English. The proportion of Jews, according to the identification algorithm, is 73%, 65%, and 53% among all FSU-born adult immigrants arriving in the United States in 1975–1979, 1980–1984, and 1990–2000, respectively. These figures are consistent with actual migration patterns. In the 1970s, most FSU-born immigrants were Jews; the proportion of FSU immigrants who were Jewish declined with time, especially after the late 1980s, when the FSU relaxed its exit requirements.

3. Within each migration cohort, immigrants from the Asian Republics of the FSU—some 35% of immigrants in the 1968–1973 cohort and about 20% of the remaining cohorts—have slightly lower levels of human capital than their European counterparts. There are no appreciable differences in human capital levels between men and women within Asian and European republics.

4. Arabs are excluded from the comparison groups because they suffer from discrimination in the Israeli labor market (Haberfeld and Cohen 1998).

(Haberfeld and Cohen 2007), enables us to evaluate immigrants' selectivity and assimilation more accurately.

Analyses in both countries exclude immigrants arriving in Israel or the United States when they were younger than 22 years of age. This is done in order to increase the likelihood that (1) the destinations—Israel or the United States—were chosen by adult persons and not by immigrants' parents; and (2) that the education and hence the skills of the immigrants were obtained in the FSU and not in Israel or the United States.

RESULTS

Immigrants' Selectivity on Education

Human capital levels that immigrants bring with them to the destination country tell us much about the nature of selectivity that takes place during the migration process. Figure 2 presents immigrants' educational levels—the main measured indicator for immigrants' skills—in Israel and the United States at the time they arrived in their new destinations separately for men and women.[5]

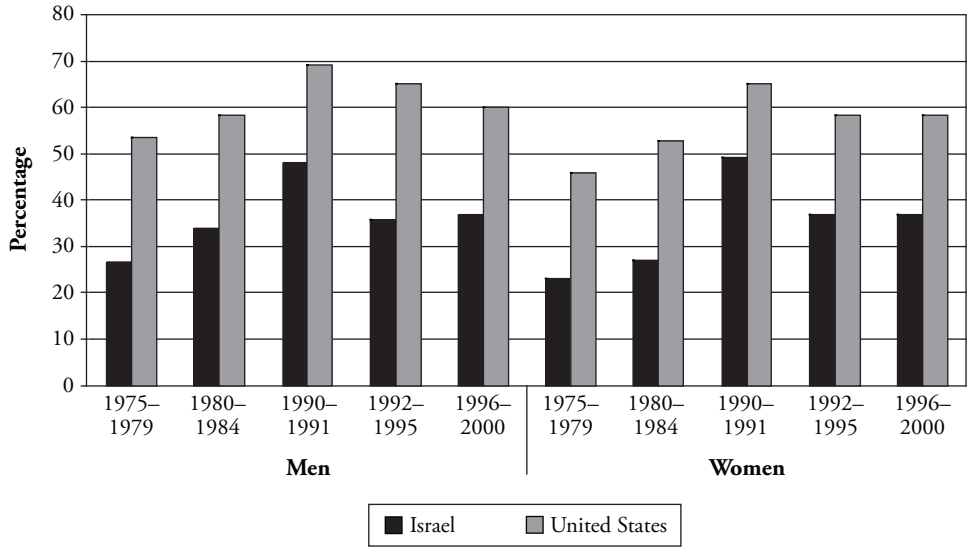
Educational levels of immigrants from the FSU vary more between destination countries than across cohorts. The schooling levels of immigrants who chose the United States during 1975–1979 and 1980–1984 were much higher than the levels of those who chose Israel during those periods. For men, over half who reached the United States between 1975 and 1984 had a college degree, compared with less than 35% of those who reached Israel. The differences among women are similar: over 45% who reached the United States during 1975–1984 had a college degree, compared with less than 30% of those who reached Israel. Because both Israel and the United States were open at that time to virtually all FSU Jewish emigrants, this difference in the educational levels provides evidence for the positive self-selection of FSU immigrants who arrived in the United States compared with those who chose to settle in Israel. However, the FSU immigrants of the 1975–1984 cohorts to Israel still came with higher levels of human capital than native-born Israelis.[6]

Not many Jews were allowed to leave the FSU in the late 1980s, and only a few of those who were able to leave arrived in Israel (Lazin 2005). After December 1989, emigration from the FSU increased again, albeit under new immigration rules in the United States. We have already shown (in Figure 1) that the policy change in the United States had a radical yet expected effect on the proportion of FSU immigrants coming to each country. The immediate effect of the policy change on educational selectivity of immigrants was less radical. In fact, it is hardly noticeable among men, but is more substantial and statistically significant among women (Figure 2). The educational level of the 1990–1991 cohort was higher than the level of their predecessors leaving the FSU during 1975–1984. Israel benefited from this rise more than the United States. For men in 1990–1991, 48% of FSU arrivals in Israel were college graduates, compared with 34% in the early 1980s; the change in the United States was smaller: from 58% college graduates in the early 1980s to 69% in the early 1990s. Consequently, the Israel-U.S. gap in the proportion of immigrant men with bachelor's degrees, which was 27 and 24 percentage points among the 1975–1979 and 1980–1984 cohorts, respectively, declined to 21 percentage points among immigrant men arriving in both countries in the huge cohort of 1990–1991. Among women, the decline in the gap was more pronounced, from 23–26 percentage points in the earlier cohorts to 15 percentage points in 1990–1991.

5. Because very few FSU immigrants came to the United States during 1968–1974, and very few came to Israel during 1985–1988, Figure 2 does not present the educational level of immigrants arriving during these years.

6. The percentages of Israeli-born immigrants of Asian/African and European origin with at least a bachelor's degree in 1983 were 5% and 26%, respectively. In 1995, the respective figures were 10% and 32%.

Figure 2. Percentage of Jewish FSU Immigrants With a Least a Bachelor's Degree, by Period of Immigration and Sex



Note: Data refer to immigrants aged 25–64 in the observation year who arrived in Israel or the United States when they were aged 22 or older.

Source: Authors calculations of the 1980, 1990, and 2000 U.S. 5% PUMS, the Israeli censuses of 1983, 1995, and the Israeli Labor Force Survey of 2001.

During 1992–1995 and 1996–2000, the educational levels of successive cohorts of immigrants from the FSU to both countries declined,[7] but more so among those arriving in Israel than in the United States. Consequently, the Israel-U.S. gaps in the proportion of FSU immigrants with a college degree among the 1992–2000 cohorts returned to their 1975–1984 levels. As in the late 1970s and early 1980s, Israel did not view the decline in the educational level of immigrants arriving in 1992–2000 as problematic, since immigrants' educational levels were still higher than the levels of native Israelis of European or Asian/African origin.

In sum, Figure 2 suggests that the effect of the change in the immigration regulations in the United States on educational selectivity of Jewish FSU immigrants was rather modest and short-lived. In the immediate aftermath of the 1989 policy change in the United States, FSU immigration was somewhat constrained by visa availability, especially among women; the observed patterns are consistent with the idea that some highly educated immigrant women (but fewer such immigrant men) who would have preferred the United States were not able to obtain entry visas to the United States and therefore arrived in Israel, a country that was happy to accept a huge cohort of highly educated Jewish immigrants. But it seems that as early as 1992, educational selectivity returned to its pre-1989 patterns: the highly

7. It is possible that in the 1990s, increasing proportions of highly educated immigrants went to other countries. However, available evidence from Germany—the largest receiving country apart from Israel during this period—suggests that Jewish immigrants from the FSU were of similar educational levels as their counterparts immigrating to Israel (Cohen and Kogan 2007).

educated somehow found their way to the United States, where they could expect higher returns to their schooling than in Israel.

Economic Assimilation

Early cohorts (1968–1983 arrivals). *Earnings assimilation* refers to the earnings growth of immigrants above and beyond the growth experienced by natives or by natives who are similar on measured characteristics. In the absence of discrimination, earnings are a function of productivity, which is, in turn, a function of skills. Thus, earnings is considered to be the best single indicator for both measured and unmeasured skills.

The previous section suggested that immigrants' self-selection to Israel and the United States during 1975–1984 was far from random. Rather, highly educated immigrants flocked to the United States, while the less educated immigrated to Israel. We hypothesize that the same pattern of selectivity operated regarding the unobserved, productivity-related characteristics of the immigrants—namely, that relatively more FSU Jewish emigrants with high levels of unmeasured skills reached the United States, whereas less-skilled migrants went to Israel.

To test this hypothesis, we use U.S. and Israeli census data and compare the earnings growth in the first 10–15 years after FSU Jewish immigrants arrived in the United States during 1975–1979 to the earnings growth in the first 12–17 years of their counterparts who arrived in Israel during 1978–1983. For both sets, we include immigrants who were aged 25–50 in the first observation (1980 in the United States and 1983 in Israel) and who were aged 35–60 and 37–62 in the second observation (1990 in the United States and 1995 in Israel).

Theoretically, immigrants' earnings growth (relative to natives) should be the greatest during their first years in the host country, when they make the greatest progress in knowledge of the local labor market, language, and other country-specific characteristics (Chiswick 1978). Indeed, the results for the United States (Table 1, top panel) suggest that this was the experience of FSU immigrants to the United States. When they arrived, immigrant men from the FSU earned only 69.4% of the income of natives, but after 10–15 years, they earned more than natives (111.9%), implying a fast rate of earnings assimilation. But the picture is entirely different among those who immigrated to Israel (Table 1, lower panel). Immigrant men experienced almost no earnings progress in the first 12–17 years relative to either comparison group (women immigrants were the exception as they progressed relative to the less-educated Asian/African group).

Of particular interest are comparisons between immigrants of the same educational levels. Upon arrival, highly educated Jewish immigrant men in the United States earned 62.6% of what highly educated, white, non-Hispanic natives earned (Table 1, top panel). Ten years later, in 1989, male FSU immigrants narrowed substantially the gap with natives (earning 93% of highly educated natives). Less-educated FSU Jewish immigrants narrowed earnings gaps with comparable natives from 62.6% in 1979 to 89.1% in 1989.[8] By contrast, in Israel, the earnings growth of highly educated FSU immigrant men was about the same as the growth among similar natives. Upon arrival, highly educated FSU immigrant men earned 73.8% of what highly educated European men earned; 12 years later, immigrants failed to narrow the gap with natives—they still earned only 74.6% of what highly educated natives earned. Similarly, less-educated FSU immigrants in Israel earned upon arrival only 58% of what their native counterparts earned, and the proportion was the same (57.9%)

8. We also estimated regression equations of the 1989 earnings of FSU Jewish and non-Jewish immigrants who arrived in the United States in 1975–1979 relative to the earnings of white, non-Hispanic natives, controlling for education, age, hours of work, and marital status. The results suggest that in 1989, FSU Jewish immigrants in the United States earned as much as comparable natives, while non-Jewish FSU immigrants lagged behind natives and FSU Jewish immigrants by about 19%. Our results show a faster assimilation rate than reported by Chiswick (1993, 1997), mainly because we distinguished between Jewish and non-Jewish FSU immigrants.

Table 1. Ratios of Mean Earnings of Jewish Immigrants From the FSU to Mean Earnings of Natives, by Country of Destination

	Men		Women	
Destination Country and Native Comparison Group	1979	1989	1979	1989
United States (1975–1979 arrivals)				
All Non-Hispanic whites	0.694	1.119	0.883	1.276
Non-Hispanic whites with at least a bachelor's degree	0.626	0.930	0.774	1.102
Non-Hispanic whites with less than a bachelor's degree	0.626	0.891	0.841	1.044
Israel (1978–1983 arrivals)				
Asian/African origin	1.050	1.050	1.069	1.232
European origin	0.654	0.659	0.831	0.899
European origin with at least a bachelor's degree	0.738	0.746	0.883	0.957
European origin with less than a bachelor's degree	0.580	0.579	0.756	0.798

Notes: Data are for wage and salary workers who were aged 25–50 in 1979 for the United States or in 1983 for Israel. Data for Israel (monthly earnings) are based on analyses of the Israeli censuses for 1983 and 1995. In 1995 immigrants were aged 37–62. Data for the United States (annual earnings) are based on the 5% PUMS of the U.S. censuses of 1980 and 1990. Each cell is based on at least 100 immigrants.

after 12 years in Israel. This implies that in Israel, immigrant men did not experience any earnings assimilation between 1983 and 1995.

Immigrant women in both countries fared better relative to native-born women than immigrant men did relative to native-born men, but as with men, immigrant women in the United States experienced substantially greater growth than those in Israel. Upon arrival, highly educated immigrant women in the United States earned 77.4% of what highly educated native women earned, but after 10 years, immigrant women surpassed native women and earned 110.2% of what highly educated native women earned. By contrast, the earnings growth of immigrant women in Israel was more modest: from 88.3% upon arrival to 95.7% 12 years after immigration.

One explanation for the relatively poor performance of FSU immigrants in Israel may be that they were refugees fleeing the repressive regime of the FSU before its collapse. Some previous research attributed the poor performance of pre-1968 Asian and African immigrants in the Israeli labor markets to the fact that most of them were refugees rather than economic migrants (Chiswick 1978). This explanation, however, is not consistent with the markedly different assimilation rates in Israel and the United States presented in Table 1. If the economic performance of FSU emigrants in Israel resembles that of refugees, similar performance should be observed among those who arrived in the United States. Whatever label one attaches to FSU Jewish emigrants—refugees or economic immigrants—the fact remains that FSU immigrants successfully assimilated in the U.S. labor market and failed to assimilate in the Israeli market. This finding is consistent with our main hypothesis—namely, that immigrants to Israel were not as positively selected on their unobserved characteristics as those choosing the United States and therefore failed to assimilate into the Israeli labor market. However, before accepting this hypothesis, we need to consider several alternative explanations that are also consistent with our finding of no appreciable earnings assimilation among FSU immigrants to Israel.

First, it is possible that the figures presented in Table 1 for Israel are biased to some extent by selective return migration, mortality, and other factors affecting the representations of immigrants and/or natives in both the 1983 and 1995 censuses. If, for example, successful immigrants leave Israel, exit the labor market, or move into self-employment

more than successful natives do, the earnings of salaried immigrants in 1995 will be biased downward and will not represent their true earnings mobility during 1983–1995 (Duleep and Dowhan 2002; Jasso et al. 2000). To mitigate these potential biases, we used the matched 1983–1995 census file—which contains data on the same individuals in both 1983 and 1995—to replicate the Israeli results presented in Table 1.[9] The pattern of results (not shown) is appreciably the same as that presented in Table 1.

A second objection may be that although immigrants' average earnings fail to converge with natives' earnings or with the earnings of natives of the same educational level, they may reach parity with natives of other similar measured characteristics. Also, it is possible that earlier cohorts, unlike the 1978–1983 cohort, experienced some earnings assimilation. The data, however, do not lend support to these hypotheses. The failure of immigrants to reach parity with natives is not because immigrants and natives have different measured characteristics, nor because the 1978–1983 cohort is exceptional. Table 2 presents regression estimates based on the matched 1983–1995 data, where the dependent variable is the (ln) monthly earnings growth between 1983 and 1995 for natives and immigrants aged 25–50 in 1983. The independent variables include schooling and schooling change between 1983 and 1995, age, (ln) monthly hours of work, marital status, an indicator for Hebrew knowledge (available only in 1983), and six dummy variables for the six combinations of cohort of arrival and republic of birth (the two omitted comparison groups are natives of European origin in columns 1 and 3 and natives of Asian/African origin in columns 2 and 4). The results suggest that among all cohorts, the earnings growth rates of immigrants are equal to or lower than those of natives.[10] Once again, the immigrants of most interest are those who arrived in Israel between 1978 and 1983 and who are thus expected to show the steepest growth rates during the 12-year period. Yet the results suggest that the earnings growth of FSU immigrant men of this cohort were about 16%–24% lower than that of natives with the same characteristics.

In most cases, the earnings growth of immigrants born in Asian republics of the FSU is lower than the growth experienced by their European counterparts. However, the general pattern of results—namely, that immigrants lag behind natives of similar measured characteristics—is similar when the comparison group is natives of Asian/African or European origin. Likewise, the pattern among women is similar to that found among men. We therefore conclude that the widely discussed process of earnings convergence did not occur among FSU immigrants in Israel during 1983–1995. In fact, between 1983 and 1995, earnings growth rates among most FSU immigrant cohorts in Israel lagged behind the growth rates of demographically comparable natives of either European or Asian/African origin.

Finally, recall our assumption that the U.S. and Israeli labor markets treat FSU immigrants equally (relative to natives in each country). If this assumption is violated, then the success of immigrants who chose the United States rather than Israel may be due to institutional differences between the Israeli and U.S. economies and labor markets. Specifically, if the Israeli labor market, for whatever reasons, included greater barriers to immigrants' economic progress than the U.S. labor market did, then the differential

9. Comparing the matched census file and the 1983 20% census file, we found no appreciable differences in the educational levels and earnings of FSU immigrants in 1983. Because 1983 data for immigrants are available only if they are also included in 1995, this suggests that there was no appreciable nonrandom attrition between 1983 and 1995 among FSU immigrants.

10. Although differential returns to experience were not the key element in Friedberg's (2000) model, we tested for the effect of Israeli versus foreign experience in the 20% sample of the 1995 Israeli census. Our results (not shown) suggest that there are no returns or even negative returns to foreign experience (similar to Friedberg's results using the 1983 census). However, we also found that the (positive) returns for immigrants' Israeli experience are not large enough to eliminate the initial wide earnings gap between FSU immigrants and natives of European origin. See footnote 13 for more comparisons between our and Friedberg's (2000) results regarding Israel.

Table 2. Regression Estimates of (ln) Monthly Earnings Growth Among Natives and Immigrants Aged 25–50 in 1983 and 37–62 in 1995

	Men, Immigrants and Natives of		Women, Immigrants and Natives of	
Variable	European Origin	Asian/African Origin	European Origin	Asian/African Origin
Hebrew Knowledge, 1983	0.025	0.025	0.065	0.063
	(0.052)	(0.510)	(0.063)	(0.061)
(ln) Monthly Hours of Work, 1995	0.260***	0.160***	0.522***	0.355***
	(0.040)	(0.036)	(0.035)	(0.036)
Married, 1995	0.092*	0.115*	0.059	–0.019
	(0.046)	(0.053)	(0.039)	(0.037)
Age, 1995	–0.011***	–0.001	–0.001	0.011***
	(0.002)	(0.002)	(0.002)	(0.003)
Years of Schooling, 1983	0.026***	0.050***	0.030***	0.055***
	(0.006)	(0.006)	(0.008)	(0.008)
Change in Years of Schooling Between 1983 and 1985	0.023†	0.027*	0.010	0.037*
	(0.012)	(0.011)	(0.013)	(0.015)
Bachelor's Degree or Higher, 1983	0.214***	0.155*	0.221***	0.259***
	(0.043)	(0.057)	(0.046)	(0.061)
Change in Attainment of Bachelor's Degree or Higher Between 1983 and 1995	0.084	0.076	0.075	0.082
	(0.057)	(0.074)	(0.059)	(0.077)
(ln) Earnings, 1983	–0.527***	–0.591***	–0.692***	–0.590***
	(0.028)	(0.032)	(0.026)	(0.029)
Immigrants Born in European Republics				
1968–1973 cohort	–0.086	–0.053	–0.104†	–0.210*
	(0.063)	(0.064)	(0.061)	(0.065)
1974–1977 cohort	–0.160*	–0.144*	–0.121	–0.175*
	(0.063)	(0.065)	(0.078)	(0.080)
1978–1983 cohort	–0.203***	–0.159*	–0.149†	–0.193*
	(0.062)	(0.063)	(0.077)	(0.078)
Immigrants Born in Asian Republics				
1968–1973 cohort	–0.117	–0.118	–0.229*	–0.218†
	(0.099)	(0.097)	(0.115)	(0.111)
1974–1977 cohort	–0.232*	–0.203†	–0.218	–0.272
	(0.111)	(0.106)	(0.237)	(0.229)
1978–1983 cohort	–0.236†	–0.178	–0.472***	–0.379*
	(0.122)	(0.116)	(0.169)	(0.161)
Constant	3.897	3.97	3.62	2.57
F	36.8	27.6	60.0	36.0
R^2 (adjusted)	0.250	0.236	0.442	0.338
Number of Cases	1,610	1,294	1,117	1,032

Notes: Standard errors are shown in parentheses. Data are based on analyses of the matched census file including information about the *same persons* in 1983 and 1995. Immigrants arriving in Israel when they were younger than age 22 are excluded. Included in the equations are salaried workers who worked at least four weeks per year and earned at least 1,000 NIS a month (in 1995 prices).

†$p < .10$; *$p < .05$; ***$p < .001$

Table 3. Ratios of Mean Earnings of Israeli Immigrants to Mean Earnings of Israeli-born Jews of European Origin

	Men		Women	
Source Country and Native Comparison Group	1983	1995	1983	1995
FSU				
All	0.654	0.659	0.831	0.899
Those with at least a bachelor's degree	0.738	0.746	0.883	0.957
Those with less than a bachelor's degree	0.580	0.579	0.756	0.798
Romania				
All	0.725	0.833	1.033	1.208
Those with at least a bachelor's degree	0.687	0.772	0.889	1.080
Those with less than a bachelor's degree	0.555	0.629	1.001	1.005
United States[a]				
All	0.757	0.908	0.875	0.866
Those with at least a bachelor's degree	0.627	0.776	0.748	0.720

Notes: Data are for wage and salary workers aged 25–50 in 1983, who arrived in Israel between 1978 and 1983. Data for the FSU are taken from Table 2. Each cell is based on at least 100 immigrants, with the exception of the cells for Romanian women, which are based on at least 37 observations.

[a]The number of cases with less than a bachelor's degree is too small to include in the analysis.

assimilation of FSU immigrants in Israel and the United States may reflect, at least in part, such institutional barriers.

Some evidence exists that institutional differences between Israel and Canada (Lewin-Epstein et al. 2003) or Germany (Cohen and Kogan 2007) are partly responsible for differences in immigrant assimilation rates in these countries. It is unlikely, however, that institutional differences are responsible for the entire difference between the economic progress of FSU immigrants in Israel and the United States. If that were the case, immigrant groups other than FSU immigrants arriving in Israel would have also experienced negative or no earnings assimilation during 1983–1995. But as shown in Table 3, Israeli immigrants from Romania and the United States—the two largest sending countries to Israel during 1978–1983 apart from the FSU—narrowed the gap with native Israelis during that period, although not as much as FSU immigrants in the United States.

Because Jewish migration from the United States to Israel is characterized by ideological and religious motivations and a very high rate of return migration (Cohen 2002), their earnings assimilation may be less relevant for our purpose. The experience of Romanian immigrants, however, is relevant because they came from a country similar to the FSU but did not enjoy the same U.S. visa offer that was available to FSU emigrants. As shown in Table 3, Romanian Jewish men who immigrated to Israel between 1978 and 1983—whose skills were equally transferable to the Israeli labor market as the skills of FSU immigrants—significantly narrowed the earnings gap with natives of European origin during 1983–1995, and immigrant women even surpassed natives of similar educational levels. However, because earnings growth rates of Romanian (and U.S.) immigrant men in Israel are appreciably smaller than those enjoyed by FSU immigrants in the United States, we cannot reject the possibility that institutional characteristics of the Israeli labor market and society, in addition to selectivity, played a role in depressing the earnings growth of FSU immigrants in Israel.

One method of testing the relative role of negative selectivity versus institutional factors in depressing the earnings assimilation of FSU immigrants in Israel is to analyze

the earnings of the 1.5 generation immigrants in Israel—that is, those who arrived as children but who received much of their schooling in Israel. If the main force driving the difference in earnings growth between FSU immigrants in Israel and the United States is institutional barriers in the Israeli labor market, then such barriers, assuming that they are not targeted specifically against FSU immigrants, should affect all members of the 1.5 generation alike. If, however, negative self-selection is the main factor responsible for the poor performance of FSU immigrants in the Israeli labor market, then the effects of such negative selectivity should be transmitted, at least in part, to their offspring (Carliner 1980; Coleman 1988; Wilson 1986), but not to other immigrants of the 1.5 generation whose parents were not negatively selected.

To test this hypothesis, we use the 1995 Israeli census to estimate the earnings of immigrants who were aged 25–45 in 1995, who came to Israel when they were aged 6–14, and who came from one of the five largest sending countries—the FSU, the United States, Romania, Argentina, or Morocco—between 1968 and 1983. The dependent variable is (ln) monthly earnings, and the independent variables are years of schooling; age; (ln) monthly hours of work; and dummy variables coded 1 if respondent was married, had at least a bachelor's degree, or was born in the FSU, in the United States, in Romania, in Argentina, or in Morocco (the omitted categories are composed of natives of European or Asian/African origin). The results, presented in Table 4, lend support to the selectivity hypothesis. FSU (and U.S.) immigrants of the 1.5 generation whose parents were negatively selected on their observed and unobserved characteristics earned less than demographically comparable natives of European origin. Other members of the 1.5 generation—Romanians and Argentineans, and even Moroccans, whose coethnics arriving in Israel during the pre-1968 period suffered from institutional discrimination (Peres 1971)—reached earnings parity with natives of European origin. Differences in patterns of self-selection of FSU immigrants to Israel and the United States may be enduring and partially explain the different earnings growth of FSU immigrants in the two countries.

Recent cohorts (1990–2000 arrivals). Unfortunately, we are unable to track the earnings growth of post-1989 immigrants in the United States because we have only one earnings observation—in 1999—for this cohort (unlike the 1975–1979 cohort, for which we have two earnings observations, in 1979 and 1989). In order to compare the earnings assimilation of post-1989 FSU immigrants in the two countries, we use the 2001 Israeli income survey and the 5% PUMS of the U.S. 2000 census to estimate in each country earnings assimilation among immigrants 25–50 years old. The dependent variable is (ln) monthly earnings for Israel and (ln) annual earnings for the United States; the independent variables are years of schooling, age, years since migration,[11] (ln) monthly hours of work, and three dummy variables each coded 1 if respondent was an immigrant, was married, or had at least a bachelor's degree.

The results of this earnings model are presented in Table 5. In Israel, immigrant men earned, upon arrival, approximately 45% of what demographically comparable natives of European origin earned, and each year in Israel, immigrants' earnings increased 3.8% more than natives' earnings did. Consequently, immigrants are expected to reach parity with comparable natives of European origin in about 33 years[12] (25 years with demographically comparable natives of Asian/African origin). The results among women are appreciably the same. Since the average age of immigrants in this sample is over 37 years, the estimated convergence time is outside the range of our estimates, which means that post-1989 immigrants in Israel are unlikely to achieve earnings parity with natives of either origin.

11. The 2001 income survey does not include precise year of immigration. Rather, immigrants are grouped into four cohorts (1990–1991, 1992–1994, 1995–1997, and 1998–2001). We assigned the cohorts years-since-migration values of 10, 7, 5, and 2, respectively.

12. Years for convergence are calculated by dividing the initial percentage earnings gap by the coefficient for years since migration: 124 / 3.8 = 32.6 years.

Table 4. Regression Estimates of (ln) Monthly Earnings of Natives and Immigrants of the 1.5 Generation Who Arrived Between 1968 and 1983 When They Were Aged 6–14

	Men, Immigrants and Natives of		Women, Immigrants and Natives of	
Variable	European Origin	Asian/African Origin	European Origin	Asian/African Origin
Age	0.031***	0.022***	0.020***	0.018***
	(0.001)	(0.001)	(0.001)	(0.001)
(ln) Monthly Hours of Work	0.504***	0.297***	0.611***	0.510***
	(0.014)	(0.009)	(0.011)	(0.007)
Years of Schooling	0.055***	0.071***	0.065***	0.100***
	(0.003)	(0.002)	(0.003)	(0.014)
Bachelor's Degree or Higher	0.140***	0.074***	0.101***	0.032*
	(0.018)	(0.015)	(0.015)	(0.014)
Married	0.236***	0.235***	0.069***	0.027*
	(0.015)	(0.009)	(0.013)	(0.009)
Country of Birth				
FSU	–0.114***	–0.027	–0.069***	–0.028
	(0.022)	(0.019)	(0.021)	(0.019)
United States	–0.236***	–0.195***	–0.088	–0.097
	(0.062)	(0.056)	(0.061)	(0.059)
Romania	–0.012	0.060	0.042	0.059
	(0.071)	(0.065)	(0.060)	(0.058)
Argentina	0.003	0.080	–0.075	–0.054
	(0.057)	(0.052)	(0.055)	(0.053)
Morocco	–0.036	0.074	–0.003	0.064
	(0.043)	(0.039)	(0.420)	(0.040)
Constant	3.870	4.983	3.361	3.477
F	564	635	518	916
R^2 (adjusted)	0.328	0.224	0.294	0.281
Number of Cases	11,539	22,001	12,407	23,382

Notes: Standard errors are shown in parentheses. Data are for salaried workers who were aged 25–45 in 1995, worked at least four weeks per year, and earned at least 1,000 NIS per month. Data are drawn from the 1995 Israeli census.

$^{*}p < .05$; $^{***}p < .001$

In the United States, the results are different. Upon arrival, immigrant men and women arriving between 1990 and 1999 earned 59% and 54%, respectively, of comparative natives. However, because of a faster assimilation rate, immigrant men and women are expected to close the earnings gap with comparable white, non-Hispanic natives in less than 16 and 13 years, respectively.

Evidently, the 1989 policy change in the United States did not affect the rate of earnings assimilation among FSU Jews arriving in Israel and the United States. Those who immigrated to Israel failed to assimilate fully regardless of whether they came before or after the 1989 U.S. policy change, and those who immigrated to the United States have been reaching earnings parity with comparable natives regardless of whether they arrived as refugees in the 1970s and 1980s or relied on family reunification for immigration to the United States in the 1990s. Apparently, the policy change did not appreciably affect the

Table 5. Regression Estimates of (ln) Monthly Earnings of Natives and Immigrants Who Arrived in Israel and the United States Between 1990 and 2000

	Men			Women		
	Israel, Immigrants and Natives of		United States, Immigrants and Natives	Israel, Immigrants and Natives of		United States, Immigrants and Natives
Variable	European Origin	Asian/ African Origin	Non-Hispanic Whites	European Origin	Asian/ African Origin	Non-Hispanic Whites
Age	0.006*	0.009***	0.016***	0.007***	0.006***	0.011***
	(0.002)	(0.002)	(0.0001)	(0.002)	(0.001)	(0.0001)
(ln) Monthly Hours of Work	0.906***	0.897***	0.815***	0.754***	0.746***	1.019***
	(0.041)	(0.035)	(0.004)	(0.030)	(0.025)	(0.003)
Years of Schooling	0.044***	0.069***	0.073***	0.056***	0.064***	0.086***
	(0.007)	(0.006)	(0.001)	(0.007)	(0.006)	(0.001)
Bachelor's Degree or Higher	0.232***	0.142***	0.182***	0.111***	0.148***	0.152***
	(0.039)	(0.034)	(0.004)	(0.034)	(0.031)	(0.004)
Married	0.232***	0.235***	0.241***	0.144***	0.125***	0.004***
	(0.039)	(0.028)	(0.002)	(0.027)	(0.023)	(0.002)
Immigrant	–0.808***	–0.637***	–0.533***	–0.669***	–0.576***	–0.609***
	(0.044)	(0.038)	(0.031)	(0.041)	(0.037)	(0.034)
Years Since Migration × Immigrant	0.038***	0.035***	0.047***	0.030***	0.029***	0.064***
	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)
Constant	3.29	2.75	5.52	3.66	3.53	4.619
F	213	230	19,581	204	239	22,889
R^2 (adjusted)	0.520	0.451	0.293	0.498	0.451	0.340
Number of Cases	1,385	1,971	331,359	1,442	2,047	310,651

Notes: Standard errors are shown in parentheses. Data for Israel are drawn from the 2001 Income Survey and for the United States from the 5% 2000 PUMS. Immigrants arriving Israel or the United States when they were younger than age 22 are excluded. Included in the equations are salaried workers aged 25–50 who worked at least four weeks per year and earned at least 1,000 NIS per month in Israel or $3,000 per year in the United States.

*$p < .05$; ***$p < .001$

more positive selectivity (on unobserved productivity-related traits) of FSU immigrants to the United States relative to Israel.

DISCUSSION

Our results with respect to the differences between the educational levels and earnings assimilation of FSU immigrants in Israel and the United States are unequivocal: Jewish immigrants from the FSU to the United States are of significantly higher educational level and experience faster rates of earnings assimilation in their new destination than their counterparts who immigrated to Israel. The evidence we provided suggests that a major reason is the pattern of self-selection of FSU immigrants to Israel and the United States.

Much discussion in the last two decades has focused on the declining skills of immigrants arriving in the United States (Borjas 1987; Card 2005; Chiswick 1986; Jasso and Rosenzweig 1990b) and how the United States loses the most skilled immigrants to other countries (Borjas 1990:22). The migration flow from the FSU to Israel and the United

States is a counterexample to this assertion. Our results regarding the educational levels and earnings growth of FSU Jewish immigrants in Israel and the United States demonstrate that the United States has performed rather well in the immigration market, and throughout the entire period attracted more skilled FSU immigrants than Israel did. These patterns of immigrants' self-selection are consistent with theories expecting more skilled immigrants to choose destinations where they can anticipate high returns for their skills, while the less skilled are expected to go to countries where earnings are distributed more equally and the penalty for low skills is rather small.

From the Israeli perspective, the results cast doubt on popular and scholarly views that FSU immigrants of both the 1970s and the 1990s have fully assimilated, or are well on their way to full assimilation in the Israeli society, economy, and labor market (Beenstock and Ben Menahem 1997; Friedberg 2000; Leshem 1997).[13] Although the integration of FSU immigrants in Israel has been impressive in other dimensions (labor force participation, political participation, home ownership, and language acquisition), they have failed, despite their high level of education, to reach the earnings levels of the leading group in the Israeli society—the native-born of European origin—and there is no reason to believe that they will ever achieve it. Moreover, the failure of FSU immigrants to assimilate fully in the Israeli labor market extends to members of the 1.5 generation. While most immigrants arriving as children in the 1970s reached earnings convergence with the most advantageous group of Israeli natives before they were 45 years old, FSU immigrant children failed to do so.

Although the immigration regulations in the United States changed in 1989, and FSU Jewish immigrants to the United States now must rely on family reunification to obtain immigrant visas, the adverse effects of the policy change on the type of FSU immigrants to the United States seems to have been minor and short-lived. As early as 1992, the gap in observed characteristics between FSU immigrants to Israel and the United States returned to its pre-1989 levels: the proportion of FSU immigrants who were highly educated was much higher in the United States than in Israel. Similarly, the differences in earnings assimilation of post-1989 immigrants in the United States and Israel are similar to the differences detected among pre-1983 immigrants. Specifically, in the United States, but not in Israel, FSU immigrants achieved substantial earnings assimilation relative to demographically comparable natives.

Evidently, the nonrandom sorting of immigrants to Israel and the United States was not limited to educational level but also occurred among immigrants of the same educational levels. Indeed, selectivity on unobserved characteristics is likely an important explanation for the different experiences of persons of similar educational level and other measured characteristics in the Israeli and the U.S. labor markets. Identifying such unobserved earnings-enhancing characteristics is not an easy task. Although it is possible that future research may identify some of these traits, it will not be possible to identify all unmeasured

13. Our results regarding adult immigrants in Israel are consistent with Friedberg's (2000). She included in her analyses all foreign-born persons in Israel (including those who obtained their primary and high school education in Israel), and found, similar to us, that those with foreign education fail to reach earnings convergence in Israel and that only those arriving at a relatively young age, who obtain their schooling in Israel (and who are not included in the analyses presented in our Tables 1, 2, and 3), reach earnings convergence in Israel. However, our results for the 1.5 generation in 1995 (Table 4) differ from Friedberg's findings for 1983. We found that FSU immigrants arriving as children (6–14 years old) during 1968–1983, who obtained their schooling and experience in Israel, earned less in 1995 than demographically comparable natives of European origin, while Friedberg's findings suggest that young immigrants (arriving in the 1960s and 1970s) reached earnings convergence with natives in 1983. This difference can be explained by, among other things, the different native comparison groups in the two studies (ours and Friedberg's): we included two native groups and found earnings convergence with one of them (Jews of Asian/African origin) but not with the other (Jews of European origin), whereas Friedberg's analysis used all native-born Jews as the comparison (regardless of ethnic origin of natives). If we had used the same native group as Friedberg's, the 1995 results of the 1.5 generation would show earnings convergence for FSU immigrants of the 1.5 generation, similar to Friedberg's findings based on the 1983 data.

characteristics that affect labor market assimilation of immigrants. Here we can only speculate on some possible factors. For example, it is likely that those who choose Israel place greater importance on Zionism, broadly defined, than on economic success, while the reverse is true among those who choose the United States. In a survey of FSU Jewish immigrants in the United States and Israel (Gitelman 1985), immigrants were asked for their motivations for leaving the FSU during the late 1970s. Their answers revealed that immigrants in the United States placed greater importance on educational, vocational, and economic factors than immigrants in Israel. By contrast, those arriving in Israel placed greater importance on their desire to live with fellow Jews and in close proximity to relatives than their U.S. counterparts. Thus, motivation for achieving high income is likely to be one such unmeasured characteristic.

Notwithstanding the importance of patterns of self-selection, we cannot reject the possibility that the Israeli labor market, unlike the U.S. market, includes some institutional features that are also responsible for the lack of earnings assimilation of FSU immigrants (and their children) in Israel. While Jewish immigrants from Romania, whose selectivity was not negative, performed much better in the Israeli labor markets than their FSU counterparts, they, too, failed to achieve earnings convergence with native Israelis of European origin. Some characteristics of the Israeli labor market and society, in addition to patterns of negative self-selection, may also contribute to the less-than-perfect economic progress of immigrants. Israel's supportive absorption policy on the one hand, and relatively rigid, regulated, and structured labor market on the other hand, might play a role in explaining patterns of earnings assimilation of immigrants in Israel. The state-run absorption policy enhances immigrants' employment ratios and earnings upon arrival, whereas the rigidity of the labor market may depress immigrants' earnings progress (relative to natives) in subsequent years. Identifying such immigrant-specific institutional barriers in the Israeli labor market and society relative to the United States requires research that is beyond the scope of this study.[14] Yet this factor may be important for understanding the earnings growth of FSU and other immigrant groups in Israel and possibly in other countries. Thus, immigrant earnings growth above and beyond the growth among natives or among demographically comparable natives is not a universal phenomenon, but rather depends on the immigrants' self-selection patterns, as well as on the institutional arrangements prevailing in the labor market of the receiving country.

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14. One possibility is social capital. If social networks and weak ties (Granovetter 1994[1974])—which in Israel are constructed largely in high school and the military—are more important for economic progress in the Israeli than in the U.S. labor market, then the lack of such ties among immigrants may be responsible for some of the disadvantages of FSU (and other) immigrants in Israel versus the United States.

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