THE PINHAS SAPIR CENTER FOR DEVELOPMENT
TEL-AVIV UNIVERSITY

The Effect of Geo-Cultural Origin of Recent Immigrants from the former Soviet Union on Economic Assimilation in the Israeli Labor Market

Yitchak Haberfeld Moshe Semyonov
Ronit Virtzer

Discussion Paper No. 8-97
November 1997

Address: Y. Haberfeld
Department of Labor Studies
The Gershon H. Gordon Faculty
of Social Sciences
Tel-Aviv University
Tel-Aviv 69978
Israel

e-mail: yhaber@spirit.tau.ac.il
Phone: 972-3-6409737
Fax: 972-3-6407300

The Effect of Geo-Cultural Origin of Recent Immigrants from the Former Soviet Union on Economic Assimilation in the Israeli Labor Market

Abstract

The study is designed to examine the effect of geo-cultural origin on economic assimilation of immigrants from the former Soviet Union in the Israeli labor market, as measured by (1) labor force participation; (2) occupational mobility; and (3) earnings. We distinguish between immigrants arriving during the same time period from Asian and from European republics of the former Soviet Union. Data were obtained from a longitudinal special survey among immigrants from the former Soviet Union that arrived in Israel during the last quarter of 1990. The sample included 738 women from European republics, 196 women from Asian republics, 626 men from European republics, and 179 men from Asian republics.

The results show that the major handicaps in the Israeli labor market are (a) being an immigrant, and (b) being a woman. The effect of geo-cultural origin is apparent with regard to Asian women only.

Introduction

When immigrant groups arrive at their new places, they are not familiar with the new labor markets, face language difficulties, their skills are not always transferable to the local jobs, and they lack personal ties. As a result, they are likely to take the least desirable low-paying jobs (Chiswick, 1979). With the passage of time, however, members of most immigrant groups experience upward mobility. They acquire the language and cultural skills, gain better knowledge of the labor market and better access to information, networks, and opportunities. Consequently, after a certain period of time in the host country, many immigrant groups obtain labor market outcomes similar to those received by native-born workers of similar characteristics. Furthermore, it was argued that with the passage of more time in their new places, their market rewards tend to be even higher than those received by their native-born counterparts (e.g., Borjas and Tienda, 1993; Chiswick and Miller, 1988; Raijman and Semyonov, 1995) due to their above-average qualifications and motivation (Chiswick, 1978; Carliner, 1980).

Whereas tenure in the host country influences the economic assimilation of immigrants, the literature suggests that geo-cultural origin also affects immigrants economic standing (Borjas, 1994; Niedret and Farely, 1985). In societies like the United States, Canada , Australia, or Israel, national, ethnic, or geo-cultural origin exerts a significant effect on socioeconomic achievement. For example, while immigrants of European descent fare well in the United States, Mexican immigrants do not exhibit favorable labor market outcomes (Borjas, 1982; Borjas and Tienda, 1993; Portes and Rumbaut, 1990). In Australia, immigrants from the Mediterranean countries are at economic disadvantage in comparison to other immigrants (Jones, 1992; Evans and Kelly, 1991). In Canada, immigrants of Southern European origin are characterized by the lowest levels of socioeconomic outcomes (Boyd,

Featherman and Matras, 1980; Chiswick and Miller, 1988). And in Israel, immigrants of European or American origin are found to be more successful than immigrants of Asian or North African origin in the attainment of labor market outcomes (e.g., Boyd et al., 1980; Haberfeld, 1993; Raijman and Semyonov, 1995; Semyonov and Lerenthal, 1991). Thus, such considerations seem to be highly relevant to differences that geo-cultural origin of immigrants from the former Soviet Union (i.e., Asians vs. Europeans) would exert on modes of incorporation in the Israeli labor market.

However, trying to understand the assimilation process of immigrants can be complicated since it is very difficult to separate the various determinants of their economic success. First, in order to fully understand improvements in the economic situation of immigrants, it is necessary to control for four possible different effects: the length of time which immigrants spent in their new place ("years since migration" effect), the time period in which they arrived to their place of destination ("cohort" effect), the time period in which the data used to estimate empirically immigrants' assimilation were collected ("period" effect), and the geo-cultural origin of the immigrants (Borjas, 1990; 1992). Estimating all these effects in one model, however, poses a problem of over-identification because some effects are exact functions of the others. As a result, researchers have to give up many times the idea of deriving unbiased estimates of the various effects involved in the economic success of immigrants. Second, it is impossible, many times, to separate the ethnic origin and cohort effects because immigrants from the same country of origin tend to come to the countries of destination in waves. As a result, we do not observe much variation in the time of arrival among immigrants of the same origin (Haberfeld, 1993). Third, all immigrants coming from the same country of origin are assumed to have similar skills and cultural background. This assumption, however does not hold true in all situations. For example, large variations in skills were found between Arab and Jewish immigrants from Israel to the United States

(Cohen, 1997; Cohen and Tyree, 1994). Thus, we have to make a clear distinction between geo-cultural origin and country of origin because the two are not necessarily the same.

One way to shed some light on these unsolved problems is to "control" for the cohort effect by examining two groups coming to a host country in the same time, but from two different geo-cultural backgrounds. The recent wave of Jewish immigrants from the former Soviet Union to Israel provides us with such a unique opportunity. This wave contains two different geo-cultural groups. One is that of immigrants coming from the European republics, and the other is composed of immigrants coming from the Asian republics of the former Soviet Union. Not only that, both *geo-cultural* groups came from the same *country of origin.* These unique circumstances allow us, on the one hand, to test for a geo-cultural effect and, on the other hand, to control in an "experiment-like" situation for country of origin and cohort effects.

Geo-Cultural Differences in the Former Soviet Union

The former Soviet Union was divided into eight Asian republics, six European republics, and one republic (Russia) which had territories both in Asia and Europe. The European republics are more developed than those located in Asia in terms of industrialization, urbanization, and economic development. As a result, residents of the European republics enjoy a higher standard of living than their Asian counterparts (Smith, 1996). Slow urbanization processes combined with economies that are based on agriculture helped to maintain traditional ways of life in the Asian republics. In addition, most Jewish communities in the Asian republics avoided the destruction during World War II experienced by the European communities. This fact helped even more in preserving the traditional

aspects of the Asian Jewish communities. In addition, Asian Jews have lived in smaller communities than those of the European Jews, their education level has been, on average, lower, and their age has been younger than that of the European Jews (Altschuler, 1980).

Jewish Migration to Israel

Israeli Jewish society is characterized by a geo-cultural cleavage between Jews who immigrated to Israel from Europe and America (known as "Westerners"), and those from Asia and Africa (known as "Easterners"). In 1948, there were 600,000 Jews in the newly established state of Israel, mostly foreign born of Western origin. During the next three and a half years this population doubled itself by actively attracting survivors of the Jewish Holocaust in Europe, and Jewish residents of Arab countries in Asia and North Africa. During the next 35 years, additional 1,100,000 Jews immigrated to Israel, half of them of Western origin, and the other half of Eastern origin (Israel, 1995). There are persisting socioeconomic gaps between Western immigrants, who achieved high levels of education and income, and their Eastern counterparts who never caught up with them (Boyd, Featherman and Matras, 1980). Moreover, these gaps seem to be as persistent among the Western and Eastern immigrants' offspring (Cohen and Haberfeld, 1996).

The winter of 1989 had been a turning point in the immigration flow to Israel. Following the downfall of the former Soviet Union, a mass of immigrants have arrived from the Soviet republics to Israel. Specifically, between 1989 and 1991 more than 400,000 immigrants from those republics have settled in Israel, hence raising the size of the Israeli population by, approximately, 10 percent. Several studies have been conducted on the patterns of assimilation among these immigrants in Israel (for a review of

these studies, see Sikron, 1996). Although researchers have underscored considerable variations in labor market assimilation among immigrants from the former Soviet Union, no one has yet examined the effect of the geo-cultural origin on performance in the labor market. Such an examination is particularly important because it avoids interrelations that are usually present in other studies of immigrants' assimilation, namely interrelations between geo-cultural and country of origin effects, and between geo-cultural and cohort effects.

The purpose of this study is to examine exactly that, namely whether geo-cultural origin, net of country of origin and cohort effects, influences modes of labor market behaviors. More specifically, we examine the geo-cultural effect of immigrants from the former Soviet Union on three outcomes: (1) labor force participation; (2) occupational mobility; and (3) earnings.

These geo-cultural effects will be examined separately for men and women. It has been well documented that women immigrants behave in the labor market differently than men immigrants. Evidence from the United States (Sullivan, 1984), Canada (Boyd, 1984), and Israel (Raijman and Semyonov, 1997) clearly show that women immigrants face greater difficulties than men during the assimilation process in the new labor market.

A key assumption in our study is that the migration from the former Soviet Union is, mostly, economic. In other words, we assume that the motivation of the immigrants to leave their place and migrate to Israel was, primarily, in order to improve their economic well being.

Methods

1. Data and Sample

Data used in this study were obtained from a longitudinal special survey conducted by the Israeli Central Bureau of Statistics among recent immigrants from the former Soviet Union. This survey was designed to examine labor market assimilation of these immigrants. A sample of, approximately 3,300 respondents was selected from the population of immigrants arriving from the republics of the former Soviet Union to Israel during the last quarter of 1990. Immigrants were asked detailed information about demographic and social characteristics, as well as labor market characteristics both in the republic they came from and in Israel.

The participants in the survey were interviewed by experienced interviewers three times: in 1992, 1993, and 1994. We chose to use data collected from those immigrants who were 24-65 years old in the first wave, and that provided full information on the relevant variables both in 1992 (t_1) and in 1994 (t_2). The sample was then divided into European and Asian immigrants on the basis of respondents' republic of origin. Europeans were defined as those born in one of the following republics: Belarus, Estonia, Latvia, Lithuania, Moldova, Russia, and Ukraine. Asians were defined as those immigrants from the former Soviet Union who were born in one of the following republics: Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenstan, and Uzbekistan. All these selection procedures and divisions yield four sub-samples of 738 European women, 196 Asian women, 626 European men, and 179 Asian men.

2. Variables

Four dependent variables were used in the analyses:

(1) Labor force participation (LFP) - a dummy variable coded as 1 if the respondent is in the labor force (employed or unemployed); 0 if not in the labor force.

(2) Pattern of labor force participation - a 4-category variable as follows:

* "active"- those who participate in the labor force continuously (both in 1992 and 1994).

* "Joiners"- those who joined the labor force in 1994 but were not there in 1992.

* "quitters"- Those who quit the labor force in 1994 but were there in 1992.

* "inactive"- Those who were out of the labor force continuously (both in 1992 and 1994).

(3) Occupational socio-economic status (OCC) - Tyree's 100-point socio-economic scale for occupations in Israel (Tyree, 1981).

(4) Earnings (EARNINGS) - the natural logarithm of the monthly earnings in Israeli Shekels.

The independent variables included in the analyses were:

(1) Geo-cultural origin (EUROPE) - a dummy variable coded as 1 if origin is European; 0 if origin is Asian.

(2) Schooling (SCHOOL) - years of schooling.

(3) Age (AGE) - in years.

(4) Time in Israel (TIME) - in months.

(5) Marital status (MARRIED) - a dummy variable coded as 1 if respondent is married; 0 otherwise.

(6) Speaking Hebrew (SPKHEB) - a dummy variable coded as 1 if speaks Hebrew; 0 if does not.

(7) Professional, technical, or managerial occupation (PTM) - a dummy variable if respondent has a professional, technical, or managerial occupation; 0 otherwise.

(8) Clerical or sales occupation (CS) - a dummy variable coded as 1 if respondent has a clerical or sales occupation; 0 otherwise.

(The omitted category of the two occupational variables is the blue-collar and services categories).

(9) Working hours (HOURS) - number of working hours per week.

3. Models

3.1 Labor force participation:

The purpose of this analysis was to examine the effect of the independent variables on the decision to join the labor force. The model used was an individual-level (ungrouped) logit. For each observation i, the probability that Y=1 (that is, i participates in the labor force) is

(a) $$P_i = 1/1+ e^{-x_i\beta}$$

where x_i denotes a vector of explanatory variables and β is a vector of coefficients, including a constant term. P ranges from 0 to 1. The vector of explanatory variables includes schooling, age, time in Israel, married, speaks Hebrew, and Europe. The model was first estimated for the entire sample (with gender-origin indicators), and then separately for men and for women. For each of those, equations were estimated twice - in t_1 (1992) and in t_2 (1994).

3.2 Pattern of labor force participation:

The purpose of this analysis was to learn about the determinants of the four possible patterns of labor force participation at two time points - t_1 and t_2. The model used was a multi-nomial logit. For each individual i, the probability that Y = j (that is, i behaves as in pattern j, where j = 1,2,... k) is

(b) $$P_{ij} = e^{\beta_j x_i} / (e^{\beta_1 x_i} + e^{\beta_2 x_i} + \ldots e^{\beta_k x_i})$$

where x_i denotes a vector of individual determinants and β_j is a vector of coefficients of pattern j. The number of possible patterns (k) is four. Since the probabilities of behaving as in each one of the four patterns of labor force participation sum into 1.0, it is possible to estimate the probabilities of being in k-1 patterns only. We chose to compare the k-1 categories to the omitted pattern of continuously out of the labor force.

3.3 Occupational socio-economic status:

Three different models were estimated in order to examine the various dimensions of occupational status. First, we estimated an OLS model in which occupational status in Israel is a function of schooling, age, time in Israel, married, speaks Hebrew and Europe. This model was estimated first for the entire sample, and then separately for men and women. For each of those populations it was estimated twice - at t_1 and t_2.

Second, we examined the relative cost paid by the immigrants in terms of loss of occupational socio-economic status as a result of their migration to Israel. The dependent variable in this case was

(c) $$Cost_i = (OCC_{it0} - OCC_{it1})/OCC_{it0}$$

where OCC_{it0} is the occupational status of immigrant i in the former Soviet Union prior to his/her migration, and OCC_{it1} is the immigrant's occupational status in Israel, approximately 14 months after arrival.

Finally, we examined the relative improvement of the immigrants' occupational status in Israel between t_1 and t_2. The dependent variable was calculated in a similar way to that presented in (c). In this case, t_1 and t_2 substituted t_0 and t_1 respectively.

3.4 Earnings:

The final analysis used a conventional OLS earnings model. We conducted the analysis for salaried workers only based on 1994 (t_2) data. Again, we estimated this model three times: for the entire sample (with gender-origin indicators), and separately for men and women. The vector of determinants included schooling, age, time in Israel, married, speaks Hebrew, hours of work, a set of two dummy variables indicating occupational groups (PTM and CS), and Europe.

Results

1. Asian Versus European Immigrants - Descriptive Statistics

There are differences between immigrants arriving from the Asian republics and immigrants arriving from the European republics of the former Soviet Union. Table 1 presents two sets of descriptive statistics for the four origin-gender groups - one for 1992 (t_1) and the other for 1994 (t_2).

Insert Table 1 about here

Among men, labor force participation rate is very similar across ethnic groups in t_1 (approximately 82 percent), and slightly higher among Asian men than among Europeans in t_2 (90 and 86.5 percent respectively). Among women, however, Europeans have higher rates of labor force participation in both years - 51 versus 44.5 percent in t_1 , and 71.5 versus 66.5 in t_2 .

The European immigrants of both gender groups are older and more educated than their Asian counterparts. In 1992, Asian men averaged 38.5 years of age (as compared with 43 years among Europeans), and 13.3 years of schooling (as compared with 14.3 for Europeans). Similarly, Asian women averaged 40.5 years of age and 13.6 years of schooling, as compared with 43.5 and 13.9 respectively among the European women. The higher age of Europeans is manifested also in their higher rate of marriage. No differences are observed across groups in the length of stay in Israel because all interviewees arrived during the last quarter of 1990. Despite this similarity, Asian men have slightly better command of Hebrew than European men, while among women the picture is reversed.

European women have somewhat better command of the Hebrew language.

Table 2 shows descriptive statistics for salaried immigrants only. This sub-sample is more selective than the entire immigrant population because it contains only those who chose to join the labor market as salaried workers. As expected, levels of earnings-enhancing variables are higher, and differences observed among the four groups of immigrants are narrowed when salaried immigrants only are examined.

Insert Table 2 about here

This is true for age (and marital status) and for speaking Hebrew in all four groups, and for schooling among women. The last variable is particularly interesting because in t_1 Asian salaried women have, on average, a higher schooling level than European women, and in t_2 they have a higher schooling level than that of all the other groups, including European men. This result is, probably, a reflection of a more intensive process of positive self-selection into the labor market among Asian women who are coming from a traditional setting than among other groups of immigrants from the former Soviet Union.

When labor market outcomes are examined, the expected patterns emerge. Men earn, on average more than do women, and within gender groups, Europeans earn slightly more than Asians. The picture becomes somewhat different when the occupational status is involved. Here, the main difference is

based on origin rather than gender where Europeans have, on average, higher status than Asians. The main reason for that is the higher rate of Europeans employed in professional, technical and managerial (PTM) occupations. In 1994, more than one quarter of all European immigrants held PTM jobs as compared with 17 percent only of Asians. Within origin groups and as expected, men have, on average, higher status than do women. Finally, labor supply of Asians, as measured by hours of work per week, is found to be higher than that of Europeans.

2. Determinants of Labor Force Participation

Table 3 presents the estimates of a model predicting participation in the labor force as a logistic function of schooling, age, time in Israel, marital status, speaking Hebrew, gender, and geo-cultural origin (equation a). Two findings deserve special attention.

Insert Table 3 about here

First, the likelihood of women immigrants from the former Soviet Union to join the labor force is much lower than that of men immigrants of equal qualifications. Second, geo-cultural origin plays a role only among women. More specifically, women of European origin tend to join the labor force more than their Asian counterparts. These results were found to be consistent both in t_1 and t_2. In addition, younger and married immigrants were found to join the labor force more than older and unmarried immigrants among both men and women. Speaking Hebrew affected labor force participation of men

and women at t_2 only. Adding the immigrants' occupation in t_0 (i.e., their occupation in the Soviet Union) to the model did not change much the patterns presented in Table 3.

Table 4 presents the results of a multi-nomial model (equation b) comparing the determinants of three patterns of labor force participation: continuously in the labor force (i.e., both in t_1 and t_2), joining the labor force in t_2 , and continuously out of the labor force. The fourth pattern - that of leaving the labor force in t_2 - was not included in the analysis due to a very small number of cases.

Insert Table 4 about here

The likelihood of women of both geo-cultural origin to be continuously in the labor force as compared to being continuously out of the labor force was found to be smaller than that of European men of equal qualifications. In addition, Asian women were less likely to join the labor force as compared to being continuously out of it than European men of equal qualifications. No significant differences in employment patterns were detected between European and Asian men. Being young, married, and speaking Hebrew raised the probability of being continuously in and of joining the labor force (as compared with being continuously out of it) after controlling for gender and geo-cultural origin. (Unfortunately, indicators of number and age of children were not included in the analyses due to poor quality. Such an omission might bias the above results, especially for women).

3. Determinants of Occupational Socio-Economic Status

Two types of models were estimated in order to examine the geo-cultural effect on occupational status. First, we estimated two cross-sectional models - one for t_1 and the other for t_2. For each one of these two time points, an OLS model in which occupational status served as the dependent variable was estimated. The list of independent variables contained schooling, age, marital status, time in Israel, speaking Hebrew, gender, and geo-cultural origin. The estimates of these models are presented in Table 5.

Insert Table 5 about here

Again, the findings reveal that women of both origins have low-status occupations as compared with European men of equal qualifications. Asian men, however, were found to be located in similar-status occupations to that of their European counterparts. When separate analyses were performed for men and women we found that European women held higher status occupations than similar Asian women. All these results were found to be consistent both in t_1 and in t_2. However, it should be emphasized that the coefficient of determination was larger in t_2 (1994) than in t_1 (1992). This implies that with the passage of time the impact of human capital variables on occupational success had increased. For example, more schooling and speaking Hebrew added significantly to the occupational socio-economic status of the immigrants both in 1992 and 1994, but their effects were larger in 1994. In addition, younger age was found to affect occupational status significantly both in t_1 and t_2.

The second type model focused on the occupational loss suffered by the recent immigrants from the former Soviet Union. Table 6 describes the mean changes in the immigrants' occupational status over time. Two measures were used - absolute and relative change.

Insert Table 6 about here

The highest cost in terms of socio-economic loss was paid by women. Asian women suffered an average of 38.4 points decline in their occupational status, and European women suffered an average of 31.7 points decline upon migrating to Israel. These figures are translated into 59 percent and 47 percent *relative* reduction (see equation c) in the occupational status of Asian and European women respectively. The decline in men's occupational status was somewhat smaller but still substantial. European men lost, on average, 25.3 points and Asian men lost 21.3 when they moved from the former Soviet Union (t_0) to Israel (t_1). These absolute losses compose, approximately, one third reduction in the relative occupational status of both men groups.

While in Israel, the immigrants experienced some improvements in their occupational status over time. European men showed the smallest relative improvement between 1992 (t_1) and 1994 (t_2). It averaged 5 percent. The other three groups experienced an average improvement of more than 10 percent between the two time periods in Israel. Yet, the occupational status of all immigrants in t_2 was much lower than their status before migrating to Israel. The smallest relative cost between t_0 and t_2 was

suffered by the group of Asian men (16 percent), and the highest cost by the group of Asian women (41 percent).

Next, we examined the determinants of the relative cost in occupational status between t_0 (while still in the Soviet Union) and in t_1 (1992).

Insert Table 7 about here

Table 7 indicates that Asian women suffered a loss in their occupational status that was significantly larger than that suffered by both European men and women. In addition, it was found that the relative cost in occupational status tends to rise with age and among those holding high-status occupations (PTM and CS). On the other hand, schooling and speaking the local language tend to lower this relative cost.

An additional analysis was performed in order to examine the determinants of the improvement in occupational status between t_1 and t_2. None of the equations (i.e., that for the entire sample and those for men and women) was found to be significant. These results indicate, probably, that the entire improvement in the occupational status of the immigrants between 1992 and 1994 was, probably, time dependent and the result of their longer experience in the local labor market.

3. Determinants of Earnings

Finally, a model in which the natural logarithm of the immigrants' monthly earnings in 1994 serves as the dependent variable was estimated. The vector of determinants included schooling, age, marital status, time in Israel, speaking Hebrew, number of hours worked, occupation indicators, gender, and geo-cultural origin.

Insert Table 8 about here

Table 8 indicates that women earned significantly less than men. Asian women earned, on average, 33 percent less and European women earned, on average, 29 percent less than European men of equal qualifications. No significant difference was found between Asian and European men nor between Asian and European women. In other words, the entire earnings gap is based on gender not on geo-cultural origin. Other variables that were found to determine earnings were hours of work and PTM occupations. Schooling, young age, and being married affected men's earnings only, while Hebrew affected women's earnings only.

It can be argued that incorporating occupational indicators into an earnings model might bias the results because women are not faced with the same occupational opportunities in the labor market faced by men. When an earnings model excluding occupation indicators was re-estimated, we obtained similar results. The main differences were that the human capital variables (SCHOOL and AGE) affected women's earnings significantly, and SPKHEB was found to affect men's earnings.

Discussion

In this study, an attempt was made to estimate the effect of geo-cultural origin of immigrants on assimilation in the labor market, while controlling for the country of origin and cohort effects. This was done by examining the economic assimilation of immigrants from European and from Asian republics of the former Soviet Union in the Israeli labor market.

The results show that geo-cultural origin affects women's assimilation but not men's. Men arriving from Asian republics are faced with similar probabilities to join and stay in the labor force, attain the same occupational status, and are paid similarly to male immigrants of equal qualifications arriving from the European republics of the former Soviet Union. However, women arriving from Asian republics make worse than their European counterparts on most dimensions of economic assimilation. This result, combined with the finding that women immigrants from the former Soviet Union pay higher costs than do men immigrants of similar characteristics in terms of employment, occupational status, and earnings, point at a process that can be described as "triple disadvantage" (Boyd, 1984; Raijman and Semyonov, 1997). Female immigrants from the Asian republics suffer from three different liabilities when they try to integrate into the Israeli labor market. First, they are penalized for being immigrants. This type of liability is shared by all immigrants from the former Soviet Union whether men or women, Europeans or Asians. Second they pay a high cost for being women. This cost is paid by female immigrants from the European republics as well. Finally, they suffer economic losses because of their geo-cultural origin. This loss is suffered only by the Asian women immigrants.

Two possible explanations might help us in understanding the extra cost paid by Asian women. First, female Asian immigrants participating in the Israeli labor force were found to be the most selective of

the four gender-origin groups. The massive influx of immigrants within a short period of time into the relatively small Israeli labor market prevented these highly skilled and motivated immigrants to capitalize on their advantages and to translate them into labor market outcomes. As a result, Asian women suffered the heaviest losses due to their very high starting point in terms of human capital levels and occupational status prior to their migration to Israel.

A second possible explanation to the "triple penalty" of Asian female immigrants might be cultural differences between Asians and Europeans. Asians tend to arrive from smaller, more traditional communities. It is quite plausible that different sets of values held by Asians and by Europeans dictate to them different behaviors as well. For example, if caring for the family children has a priority over market work among Asian and not among European immigrants, then Asian women would be willing to suffer higher losses in the labor market than their European counterparts. Such losses are higher in Israel than in their former place of residence because child-care arrangements in Israel are more expensive, and help in child care by relatives is limited in Israel as compared to their place of origin.

Similar to findings from other countries, women immigrants from the former Soviet Union were found to be in inferior positions compared to men on every dimension of the labor market. They were less likely to join the labor force, and their occupational status and earnings were lower than those of men of similar qualifications. Considering all these results together, in becomes clear that the major liabilities in the Israeli labor market are being an immigrant and a woman. Geo-cultural origin is not the major market liability. This conclusion is in line with pervious studies on the Israeli labor market. Haberfeld (1993) found that those with the heaviest liability were immigrants, and that being a female also constituted a major handicap in the Israeli market.

The relatively short time which the studied individuals spent in Israel did not allow us to examine the more complicated interactions of "years since migration" with gender and geo-cultural origin. These issues should be studied next, and the beginning of the next decade would be an appropriate time to try and do it.

References

Altschuler, M. 1980. *The Jewish Community in the Soviet Union Today.* Jerusalem: The Magnes Press, The Hebrew University (Hebrew).

Borjas, G. 1994. "Long-Run Convergence of Ethnic Skills Differentials: The Children and Grandchildren of the Great Migration." *Industrial and Labor Relations Review*, 47: 554-573.

Borjas, G. 1992. "Immigration Research in the 1980s: A Turbulent Decade." In Lewin, D., Mitchell, O.S., and Sherer, P.D. (eds.), *Research Frontiers in Industrial Relations and Human Resources.* Madison, WI: Industrial Relations Research Association, pp. 417-446.

Borjas, G. 1990. *Friends or Strangers: The Impact of Immigrants on the U.S. Economy.* New York: Basic Books.

Borjas, G. 1987. "Self-Selection and the Earnings of immigrants." *American Economic Review,* 77: 531-553.

Borjas G. 1982. "The Earnings of Male Hispanic Immigrants in the United States." *Industrial and Labor Relations Review*, 35: 343-353.

Borjas, G. and Tienda, M. 1993. "The Employment and Wages of Legalized Immigrants." *International Migration Review,* 27: 712-748.

Boyd, M. 1984. "At a Disadvantage: The Occupational Attainment of Foreign-Born Women in Canada." *International Migration Review,* 18: 1091-1120.

Boyd, M., D.L. Featherman, and J. Matras. 1980. "Status Attainment of Immigrants and Immigrant Origin Categories in the U.S., Canada, and Israel." *Comparative Social Research*, 3: 199-228.

Carliner, G. 1980. "Wages, Earnings and Hours of First, Second, and Third Generation American Males." *Economic Inquiry,* 18(1): 87-102.

Chiswick, B.R. 1979. "The Economic Progress of Immigrants: Some Apparently Universal Patterns." In Fellner, W. (ed.), *Contemporary Economic Problems.* Washington, D.C.: American Enterprise Institute, pp. 359-399.

Chiswick, B.R. 1978. "The Effects of Americanization on the Earnings of Foreign-Born Men." *Journal of Political Economy,* 86: 897-921.

Chiswick, B.R. and P. Miller. 1988. "Earnings in Canada: The Roles of Immigrant Generation, French Ethnicity and Language." *Research in Population Economics,* 6: 183-224.

Cohen, Y. 1997. "Economic Assimilation in the United States of Arab and Jewish Immigrants from Israel and the Territories." *Israel Studies,* 1(2): 75-97.

Cohen, Y. and Y. Haberfeld. 1996. "Schooling and Earnings Gaps Between Western and Eastern Jews in Israel, 1975-1992." *Ethnic and Racial Studies,* forthcoming.

Cohen, Y. and A. Tyree. 1994. "Palestinian and Jewish Israeli-Born Immigrants in the U.S." *International Migration Review,* 28: 243-255.

Evans, M.D. and J. Kelly. 1991. "Prejudice, Discrimination, and the Labor Market: Attainment of Immigrants in Australia." *American Journal of Sociology,* 97: 721-759.

Haberfeld, Y. 1993. "Immigration and Ethnic Origin: The Effect of Demographic Attributes on Earnings of Israeli Men and Women." *International Migration Review,* 27(2): 286-305).

Israel. 1995. *Statistical Abstracts of Israel.* Jerusalem: Central Bureau of Statistics.

Jones, F.L. 1992. *Sex and Ethnicity in the Australian Labour Market: The Immigrant Experience.* Canberra: Australian Government Printer.

Niedret, L.J. and R. Farely. 1985. "Assimilation in the United States: An Analysis of Ethnic and Generation Differences in Status and Achievement." *American Sociological Review,* 50: 840-850.

Portes, A. and R. Rumbaut. 1990. *Immigrant America: A Portrait.* Berkeley, CA: University of California Press.

Raijman, R. and M. Semyonov. 1997. "Gender, Ethnicity and Immigration: Double Disadvantage and Triple Disadvantage Among Recent Immigrant Women in the Israeli Labor Market." *Gender and Society,* 11(1): 108-125.

Raijman, R. and M. Semyonov. 1995. "Modes of Labor Market Incorporation and Occupational Cost Among Immigrants to Israel." *International Migration Review,* 29: 375-393.

Semyonov, M. and T. Lerenthal. 1991. "Country of Origin, Gender, and the Attainment of Socioeconomic Status: A Study of Stratification in the Jewish Population of Israel." *Research in Social Stratification and Mobility,* 10: 327-345.

Smith, G. (ed.) 1996. *The Nationalities Question in the Post-Soviet States.* New York: Longman.

Sullivan, T. 1984. "The Occupational Prestige of Women Immigrants: A Comparison of Cubans and Mexicans." *International Migration Review,* 18: 1021-1045.

Tyree, A. 1981. "Occupational Socioeconomic Status, Ethnicity and Sex: Considerations in Scale Construction." *Megamot,* 27: 7-21 (Hebrew).

Table 1

Means and (in Parentheses) Standard Deviations for the Entire Sample, 24-65 Years Old - by Geo-cultural Origin, Gender, and Sample Year

	1992				1994			
	Men		Women		Men		Women	
	Europe	Asia	Europe	Asia	Europe	Asia	Europe	Asia
LFP (%)	81.5	82.1	51.0	4 4.4	86.4	89.9	71.3	66.3
SCHOOL	14.3 (2.9)	13.3 (3.1)	13.9 (2.7)	13.6 (3.2)	14.5 (2.9)	13.6 (3.2)	14.2 (2.7)	13.7 (3.6)
AGE	43.1 (11.2)	38.4 (9.7)	43.6 (11.8)	40.5 (10.9)	45.1 (11.2)	40.4 (9.7)	45.6 (11.8)	42.5 (10.9)
MARRIED (%)	91.1	86.0	78.5	76.0	90.9	88.3	78.3	74.5
TIME	14.1 (1.1)	14.1 (1.2)	14.1 (1.1)	14.2 (1.1)	38.8 (1.2)	38.8 (1.3)	38.7 (1.2)	38.9 (1.2)
SPKHEB (%)	46.7	50.8	53.5	48.5	55.1	61.5	61.7	58.2
N	626	179	738	196	626	179	738	196

Table 2

Means and (in Parentheses) Standard Deviations for Salaried Workers, 24-65 Years Old - by Geo-cultural Origin, Gender, and Sample Year

	1992				1994			
	Men		Women		Men		Women	
	Europe	Asia	Europe	Asia	Europe	Asia	Europe	Asia
OCC	34.8 (19.3)	29.8 (16.9)	31.1 (19.7)	24.9 (17.5)	40.0 (21.4)	37.0 (20.2)	38.1 (21.0)	32.8 (20.0)
PTM (%)	14.9	9.9	29.9	11.8	25.0	17.0	27.4	17.3
CS (%)	4.0	3.8	11.0	6.6	4.8	5.2	17.9	16.0
EARNINGS	----	----	----	----	2756.6 (1236.8)	2660.7 (1000.4)	1875.8 (1042.9)	1799.1 (1075.4)
SCHOOL	14.3 (2.8)	13.2 (3.0)	14.1 (2.4)	14.2 (2.4)	14.5 (2.8)	13.4 (3.1)	14.3 (2.4)	14.7 (2.8)
AGE	41.3 (9.9)	37.9 (8.9)	38.8 (8.6)	37.1 (8.0)	43.3 (9.9)	39.9 (8.9)	40.8 (8.6)	39.1 (8.0)
MARRIED (%)	92.2	88.8	85.6	4.0	92.4	91.8	85.3	82.7
TIME	14.1 (1.2)	14.2 (1.2)	14.2 (1.2)	14.0 (1.3)	38.8 (1.2)	38.9 (1.3)	38.8 (1.1)	38.9 (1.2)
SPKHEB (%)	49.4	55.2	65.6	61.3	58.7	64.9	74.9	76.0
HOURS	48.5 (10.8)	49.9 (9.5)	36.2 (14.6)	38.8 (13.2)	50.9 (12.2)	53.9 (12.1)	39.8 (13.0)	42.5 (14.8)
N	460	134	334	75	460	134	334	75

Table 3

Coefficients of the Determinants of Joining the Labor Force: Results of a Logit Analysis (S.E. in parentheses)

	Entire Sample		Men		Women	
	1992	1994	1992	1994	1992	1994
SCHOOL	-0.004	0.046	-0.008	0.042	0.000	0.052
	(0.020)	(0.025)	(0.031)	(0.036)	(0.028)	(0.034)
AGE	-0.060*	-0.109*	-0.061*	-0.120*	-0.062*	-0.108*
	(0.006)	(0.008)	(0.010)	(0.015)	(0.008)	(0.010)
MARRIED	0.690*	0.942*	1.176*	2.031*	0.502*	0.712*
	(0.153)	(0.192)	(0.298)	(0.427)	(0.175)	(0.211)
TIME	0.052	0.091	0.109	-0.044	0.016	0.151
	(0.049)	(0.063)	(0.084)	(0.107)	(0.060)	(0.078)
SPKHEB	0.095	0.898*	0.042	1.228*	0.133	0.807*
	(0.135)	(0.177)	(0.229)	(0.342)	(0.168)	(0.214)
EUROPE	-----	-----	0.226	0.242	0.470*	0.742*
			(0.240)	(0.343)	(0.176)	(0.227)
Origin x Gender[a]:						
Asian Woman	-1.968*	-1.879*				
	(0.194)	(0.253)				
European Woman	-1.502*	-1.140*				
	(0.138)	(0.179)				
Asian Man	-0.247	-0.151				
	(0.234)	(0.329)				
Constant	2.878	2.024	1.542	6.606	1.560	-2.105
Pearson $\chi^{2(b)}$	383.9	610.8	56.8	178.4	129.4	362.7
d.f.	1715	1715	790	790	921	921

[a]The omitted category is a European man.

[b]The Pearson χ^2 statistic is not distributed as Chi Square because it is derived from individual (ungrouped) data. As a result, a test of goodness-of-fit cannot be performed.

*$p<0.05$

Table 4

Coefficients of the Determinants of Patterns of Labor Force Participation: Results of a Multi-Nomial Logit Analysis (S.E. in parentheses)[a]

	Continuously in the Labor Force		Joined the Labor Force	
	Logit	Exp	Logit	Exp
SCHOOL	0.040	1.04	0.152*	1.16
	(0.028)		(0.036)	
AGE	-0.134*	0.87	-0.130*	0.87
	(0.010)		(0.011)	
MARRIED	1.293*	3.64	0.759*	2.13
	(0.233)		(0.250)	
TIME	0.123	1.13	0.102	1.10
	(0.073)		(0.083)	
SPKHEB	0.682*	1.97	0.729*	2.07
	(0.363)		(0.231)	
Origin x Gender[b]:				
Asian Woman	-2.518*	0.08	-0.688*	0.50
	(0.292)		(0.328)	
European Woman	-1.576*	0.20	-0.036	0.96
	(0.205)		(0.248)	
Asian Man	-0.244	0.78	0.108	1.11
	(0.391)		(0.462)	
Constant	5.007		1.747	
N	1048		304	
χ^2		768.9		
d.f.		1334		

[a]The omitted category in this analysis is the continuously out of the labor force (both in 1992 and 1994). A fourth group - those who quit the labor force in 1994 after being there in 1992 - was not included in the analysis due to a very small number of cases.

[b]The omitted category is that of European man.

* $p<0.05$

Table 5

Coefficients of the Determinants of Occupational Status at t_1 and t_2: Results of an OLS Analysis (S.E. in parentheses)

	Entire Sample		Men		Women	
	1992	1994	1992	1994	1992	1994
SCHOOL	1.33*	1.82*	1.39*	2.07*	1.13*	1.52*
	(0.253)	(0.251)	(0.305)	(0.330)	(0.452)	(0.474)
AGE	-1.33*	-0.32*	-0.23*	-0.37*	-0.31*	-0.30*
	(0.063)	(0.065)	(0.079)	(0.088)	(0.108)	(0.098)
MARRIED	-1.07	-1.47	-2.13	1.68	-0.59	-3.36
	(1.679)	(1.646)	(2.564)	(2.772)	(2.307)	(2.098)
TIME	0.32	0.42	0.16	0.74	0.65	0.33
	(0.454)	(0.452)	(0.591)	(0.633)	(0.716)	(0.657)
SPKHEB	4.24*	7.40*	1.61	4.84*	8.30*	10.36*
	(1.236)	(1.331)	(1.561)	(1.759)	(2.028)	(2.082)
EUROPE	-----	-----	2.26	0.25	5.47*	4.90*
			(1.709)	(1.836)	(2.214)	(1.990)
Origin x Gender[a]:						
Asian Woman	-10.23*	-9.63*				
	(2.151)	(2.052)				
European Woman	-4.07*	-4.77*				
	(1.321)	(1.318)				
Asian Man	-2.33	-0.96				
	(1.718)	(1.802)				
Constant	14.16	6.76	13.25	-15.16	-4.47	5.02
N	1104	1348	642	693	462	655
R^2	0.143	0.252	0.163	0.269	0.134	0.241

[a]The omitted category is a European man.

*$p<0.05$

Table 6

Means and (in Parentheses) Standard Deviations of Changes in Occupational Status for Salaried Workers, 24-65 Years Old - by Gender and Geo-cultural Origin

	Men		Women	
	Asia	Europe	Asia	Europe
Absolute Cost $t_0 - t_1$	21.36 (23.99)	25.34 (24.05)	38.40 (23.28)	31.71 (23.54)
Relative Cost $t_0 - t_1 / t_0$	0.32 (0.398)	0.36 (0.333)	0.59 (0.274)	0.47 (0.322)
Absolute Cost $t_0 - t_2$	14.00 (24.86)	19.35 (24.09)	27.42 (22.40)	24.87 (23.42)
Relative Cost $t_0 - t_2 / t_0$	0.16 (0.470)	0.26 (0.382)	0.41 (0.319)	0.35 (0.348)
Absolute Improvement $t_2 - t_1$	7.73 (15.54)	5.79 (16.34)	8.18 (18.94)	7.70 (18.11)
Relative Improvement $t_2 - t_1 / t_2$	0.12 (0.410)	0.05 (0.509)	0.13 (0.559)	0.11 (0.461)

[a] t_0 = occupational status in the former Soviet Union
t_1 = occupational status in Israel, 1992
t_2 = occupational status in Israel, 1994

Table 7

Coefficients of the Determinants[a] of Relative Cost in Occupational Status Between t_0 and t_1 : Results of an OLS Analysis (S.E. in parentheses)

	Entire Sample	Men	Women
SCHOOL	-0.013*	-0.015*	-0.087*
	(0.005)	(0.006)	(0.007)
AGE	0.008*	0.008*	0.008*
	(0.001)	(0.002)	(0.002)
MARRIED	0.001	0.004	0.000
	(0.029)	(0.516)	(0.035)
TIME	-0.001	0.002	-0.004
	(0.008)	(0.012)	(0.011)
SPKHEB	-0.059*	-0.041	-0.085*
	(0.022)	(0.032)	(0.031)
Occupation at t_0[b]:			
PTM	0.382*	0.386*	0.384*
	(0.028)	(0.037)	(0.046)
CS	0.298*	0.274*	0.311*
	(0.041)	(0.072)	(0.095)
EUROPE	-----	0.007	-0.068*
		(0.034)	(0.034)
Origin x Gender[c]:			
Asian Woman	0.108*		
	(0.036)		
European Woman	0.038		
	(0.228)		
Asian Man	-0.006		
	(0.032)		

(Table 7 continued)

	Entire Sample	Men	Women
Constant	-0.103	-0.131	0.020
N	1281	680	601
R^2	0.205	0.206	0.159

[a]Variables measured at t_1 (1992)
[b]The omitted category of occupational group at the former Soviet Union is blue-collar and services.
[c]The omitted category is a European man.

*$p<0.05$

Table 8

Coefficients of the Determinants[a] of Monthly Earnings at t_2: Results of an OLS Analysis (S.E. in parentheses)

	Entire Sample	Men	Women
SCHOOL	0.007	0.013*	0.002
	(0.005)	(0.007)	(0.009)
AGE	-0.005*	-0.007*	-0.003
	(0.002)	(0.002)	(0.002)
MARRIED	0.056	0.194*	-0.017
	(0.039)	(0.062)	(0.049)
TIME	0.005	-0.007	0.018
	(0.011)	(0.014)	(0.016)
SPKHEB	0.102*	0.704	0.125*
	(0.031)	(0.387)	(0.052)
HOURS	0.020*	0.015*	0.024*
	(0.001)	(0.001)	(0.001)
Occupation at t_2[b]:			
PTM	0.346*	0.223*	0.476*
	(0.032)	(0.042)	(0.046)
CS	0.032	-0.064	0.091
	(0.046)	(0.075)	(0.059)
EUROPE	------	0.054	0.047
		(0.040)	(0.050)
Origin x Gender[c]:			
Asian Woman	-0.327*		
	(0.050)		
European Woman	-0.291*		
	(0.032)		

(Table 8 continued)

	Entire Sample	Men	Women
Asian Man	-0.076 (0.042)		
Constant	6.511	7.129	5.491
N	1111	583	528
R^2	0.515	0.289	0.541

[a]Variables measured at t_2 (1994)
[b]The omitted category of occupational group in Israel is blue-collar and services.
[c]The omitted category is a European man.

*$p<0.05$