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The Skills of Female Immigrants to Australia, Canada, and the United States

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Abstract

Census data for 1990/91 indicate that Australian and Canadian female immigrants appear to have higher levels of English fluency, education, and income (relative to natives) than do U.S. female immigrants. This skill deficit for U.S. female immigrants arises in large part because the United States receives a much larger share of immigrants from Latin America than do the other two countries. However, even among women originating outside Latin America, the proportion of foreign-born women in the United States who are fluent in English is much lower than among foreign-born women in Australia. Furthermore, immigrant/native education gaps are reduced but not eliminated by the exclusion of Latin American women from the analysis. In contrast, other evidence for men suggests that the gap in observed skills among male immigrants to the United States is completely eliminated when Latin American immigrants are excluded from the estimation sample (Borjas, 1993; Antecol, *et al.*, 2001). The importance of national origin and the general consistency in the results for men (who are routinely subjected to the selection criteria of various immigration programs) and women (who are not) suggests that many factors other than immigration policy *per se* are at work in producing skill variation among these three immigration streams.

I. Introduction

The international migration of women is an important demographic phenomenon worldwide. The United Nations reports for example, that of the 77 million people who were enumerated in various national censuses between 1970-1986 living outside their country of birth, 48 percent were women (UN, 1995). While immigration streams in many corners of the world (most notably Africa and parts of Asia) are male-dominated, in the major immigrant receiving nations such as Australia, Canada, and the United States, women have figured prominently in the immigration flow for many decades. Female immigrants to the United States have actually outnumbered their male counterparts in every period since 1930 (Houstoun, *et al.*, 1984; UN, 1995: Table 2)¹, while since 1960 in Australia and Canada the proportion of all immigrants who are women has exceeded 45 percent (Madden and Young, 1993; UN, 1995: Table 2). Despite the fact that worldwide immigrants are as likely to be women as men, much of the immigration literature has tended to focus exclusively on men.²

Our objective is to contribute to a slowly growing literature on the experiences of female immigrants by comparing the observable skills—language fluency, education, and income—of female immigrants to Australia, Canada, and the United States. While we (Antecol, *et al.*, 2001) and others (Borjas, 1993) have examined these issues for men, little is known about how the skills of female immigrants vary across destination countries.³

This exercise is important for a number of reasons. First, much of the current debate about legal immigration centers around how best to craft the policies which will be used to select

¹ The single exception appears to be 1980-1984, although the sex composition of immigrants for fiscal year 1980-1981 cannot be determined (UN, 1995).

² This has lead the United Nations to conclude that "...it is unconscionable to continue to ignore women as actors in the immigration process." (UN, 1995: p. 62.)

³ There is a growing literature that examines the labor market assimilation of female immigrants, see for example,

immigrants. In general, there has been a movement towards more skill-based selection criteria. In the United States, for example, concerns about declining skill level among the immigrant population (Borjas 1995) have prompted calls for an increased emphasis on skills in the immigrant selection process. In light of this debate, it is important to understand how immigration policy influences immigrant skill levels. Second, there appear to be substantial differences in the extent to which policy is used to select immigrant men and women for their labor market skills. There are important gender differences in the distribution of immigrants across visa categories. In addition, women disproportionately migrate as dependents of principal applicants and as such are not subject to any specific selection criteria. Thus, it is important to consider women explicitly.

A comparative analysis of Australia, Canada, and the United States provides a productive way of addressing these issues. While their economies are similar in many fundamental respects and they share a common history as major immigrant receiving countries⁴, labor market policies and institutions differ markedly across these countries. Most importantly, while U.S. immigration policy is primarily one of family reunification, Australia and Canada have made a number of attempts to screen workers on the basis of special skills or high education levels (Boyd, 1976; Price, 1979; Green and Green, 1995). This institutional variation provides a means of assessing the effects of policy on the skills of immigrants.

Our results indicate that women choosing to migrate to Australia and Canada appear to be more skilled in many respects than women choosing to migrate to the United States. They are more likely to be fluent in the destination country language, are relatively highly educated, and have higher

Funkhouser and Trejo (1998), Schoeni (1998), and Antecol, McDonald, and Worswick (2001).

⁴ During the period 1975-80, for example, nearly two-thirds of all immigrants chose one of these three countries as their destination (Borjas 1991). More recently, other countries have emerged as important immigrant destinations, but Australia, Canada, and the United States remain dominant receiving countries.

income (relative to native-born women) than their U.S. counterparts. To a large degree, however, the skill deficit among U.S. immigrants is driven by the relatively high proportion of Central- and South American-born women migrating to the United States. The relative gap in observable skills such as language ability and education among foreign-born women in the United States is reduced (though not eliminated) when we consider only those women originating outside Central and South America. In contrast, controlling the national origin mix of the immigrant flow almost completely eliminates the skill gap of foreign-born men in the United States (Borjas, 1993; Antecol, *et al.*, 2001).

In the following section of the paper we provide institutional detail about the immigration programs of Australia, Canada, and the United States and consider how these programs are expected to influence the skills of women choosing to immigrate. A detailed overview of each or our data sources and estimation samples is provided in Section III. In Sections IV, V, and VI we assess how the language fluency, education levels, and income of female immigrants varies across destination countries. Finally, our conclusions are presented in Section VII.

II. Immigration Policy and the Skills of Female

In Australia and Canada, "independent" migrants without immediate relatives are selected on the basis of a "points test" that takes into account factors such as the applicant's age, education, language ability, and occupation. Immigrants are also selected because they have special talents or because they meet certain investment requirements and intend to establish a business in Australia or Canada. Immigrants entering Australia or Canada through any of the avenues are typically categorized as "skilled" immigrants because the human capital and potential labor market success of

⁵ Some applicants with relatives in the destination country are also evaluated by a points test, with the number of points required for admission lowered when the family relationship is sufficiently close.

these applicants play a key role in their admission. In contrast, "family" immigrants consist of those applicants admitted solely on the basis of having an immediate relative in the destination country, while "refugees" are admitted on humanitarian grounds.

In the United States, immediate family members of U.S. citizens are "numerically unlimited" and can enter without counting against the overall cap set for annual immigrant admissions. "Numerically limited" family immigrants include more distant relatives of U.S. citizens and the immediate relatives of U.S. permanent residents. In 1990, these individuals entered the United States under one of four family-related preference categories (first, second, fourth, or fifth). U.S. immigrants entering under the third or sixth preference categories are considered to be "skilled" because their occupation or labor market skills played a role in their admission. ^{6,7}

Skills play a much larger role in immigrant selection in Australia and Canada than in the United States (Boyd 1976; Price 1979; Green and Green 1995). In 1990-1991, 52, 39, and 8 percent of Australian, Canadian, and American immigrants, respectively, were selected because of their labor market skills while 25, 37, and 68 percent of Australian, Canadian, and U.S. immigrants, respectively, were admitted on the basis of their family relationships (Antecol, *et al.*, 2001). Furthermore, although the share of immigrants admitted under a point system has varied over time—particularly for Canada—since the 1960s the percentage of immigrants admitted on the basis of labor market criteria has been higher in Australia and Canada than in the United States (Wright and Maxim, 1993; Reitz, 1998).⁸

⁶ Rather than ranking family- and skill-based immigrants under a single preference system, the 1990 Immigration Act, established a three-track preference system for family-sponsored, employment-based, and diversity immigrants (Vialet and Eig, 1990). Our data pre-date this change in policy, however.

⁷ For detailed discussions of immigration policy in these three countries, see Boyd (1976), Briggs (1984), Chiswick (1987), Borjas (1988), Vialet (1989), Cobb-Clark (1990), Reimers and Troper (1992), Green (1995), Green and Green (1995), Lack and Templeton (1995), and Reitz (1998).

⁸ See Antecol, et al., (2001), for more details.

There are, however, important gender differences in the distribution of immigrants across visa categories. In fiscal year 1990-91, men immigrating to Australia were equally likely to have entered in the skill as opposed to family migration categories. Women immigrating to Australia, on the other hand, were much more likely to have entered in a family as opposed to skill category (Madden and Young, 1993; UN, 1995). Women also tend to be over-represented in family classes and under-represented in skill classes in Canada and the United States (Houstoun, *et al.*, 1984; UN, 1995). Thus, in general, women tend to gain immigrant status though their family ties to other immigrants or to receiving-country citizens and residents.

Which country then should attract the most skilled immigrant flow? On the one hand, Australia and Canada's skills-based immigration policies suggests that these countries should receive a more skilled immigrant flow than the United States. On the other hand, models of selective migration (Borjas 1991) predict that Australia and Canada's relatively generous income redistribution policies and more egalitarian wage distribution work in the opposite direction by attracting less skilled immigrants who find themselves in the bottom half of the income distribution. Given this, it is difficult to predict how immigration policies and government institutions combine to influence the skill level of the immigration flow. In terms of easily observable characteristics, such as age, education, language, and occupation, immigrants to Australia and Canada should be relatively more endowed than those individuals migrating to the United States. Our tests of this hypothesis will reveal how successful immigration point systems are, in practice, at selecting immigrants with favorable labor market skills, and whether this screening process raises the labor market productivity of immigrant workers.¹⁰

⁹ Houstoun, *et al.* (1984) conclude that more than 90 percent of the overall sex differential in immigrant admissions to the United States can be accounted for by the preponderance of women among immediate family members.

¹⁰ For several reasons, it is not a foregone conclusion that the Australian and Canadian systems lead to an immigrant flow

In terms of difficult-to-observe attributes, such as ability and ambition, it is unclear whether immigrants to Australia and Canada will be more productive than immigrants migrating to the United States. If immigrants to the United States are found to be more productive than Australian and Canadian immigrants, this would suggest that immigrants' choice of destination may be based in part on their unobservable characteristics which undoes the selectivity intended by point systems. Alternatively, a finding that Australian and Canadian immigrants are superior to U.S. immigrants in terms of unobservable as well as observable determinants of earnings would suggest that the "personal assessment" portion of a point system successfully screens for some of the difficult-to-observe attributes related to labor market productivity.

III. Data

Individual-level data from the 1991 Australian and Canadian censuses and the 1990 U.S. census are used throughout the analysis. These censuses provide comparable data on the demographic characteristics, labor force behavior, country of birth, and year of arrival for immigrants in each of the three countries. These data, which consist of large sample sizes in each destination country, are ideal for our purposes because immigrants typically constitute a small fraction of the

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that is highly selective in terms of characteristics associated with labor market success. First, both systems admit many immigrants who are not screened by a points test, including applicants with immediate family who are citizens of the destination country, refugees, and the family members who accompany those admitted by a points test. Second, both systems award a significant number of points based on a "personal assessment" of the applicant by the immigration official conducting the face-to-face interview. Finally, Reitz (1998) argues that the Australian and Canadian point systems can be passed by applicants with quite modest skill levels, and therefore these systems may provide only very weak filters for immigrant labor market skills.

¹¹ In this paper, we use the term "immigrant" as synonymous with foreign-born individuals, in contrast to the official terminology used by the U.S. Immigration and Naturalization Service in which immigrants are legal permanent residents, and other foreigners such as tourists, business travelers, and recent refugee arrivals are "nonimmigrant aliens." The census data analyzed here cannot make such distinctions among foreign-born individuals.

¹² The Australian data constitute a one-percent sample of the population, while the Canadian data form a three-percent sample and the U.S. data represent a five-percent sample. Thus, the U.S. sample is much larger than the other two samples. To lighten the computational burden, we employ a .1 percent (or 1 in a 1000) sample of U.S. natives, but we use the full 5 percent sample of U.S. immigrants, and we use the full samples of natives and immigrants available in the Australian and Canadian data. The Australian and Canadian census data are self-weighting, whereas the 1990 U.S. census provides sampling weights that we use in all of

overall population and it is important to disaggregate the immigrant population into year-of-arrival/country-of-origin groups.

Our analysis is restricted to women between the ages of 25 and 59 who are not institutional residents. This allows us to concentrate on women who have completed their formal schooling and who are in working ages. To control for cross-country differences in social or economic conditions or in how the census data were collected, outcomes for immigrants will be compared to outcomes for otherwise similar native-born women. To increase comparability of the native samples and improve their usefulness as a comparison group, non-whites are excluded from the native (but not the immigrant) samples. Finally, residents of the Atlantic Provinces and the Territories are excluded from the Canadian samples, because for these individuals the information about country of birth and year of immigration is not reported in sufficient detail.

These restrictions produce final samples of immigrant women totaling 10,948 for Australia, 39,016 for Canada, and 309,903 for the United States. Table 1 displays the region of birth distribution of those recent, female immigrants arriving in the ten years prior to the census. In some cases the proportion of the total immigrant flow arriving from a particular region of birth is very much the same across destination countries. In particular, despite considerable variation in the geographic distance between source and destination countries, the Philippines sends female migrants to all three countries with 7.6 percent of Australian, 7.1 percent of Canadian, and 6.9 percent of U.S. immigrants originating there. In other cases, the variation in the national origin representation of female immigrants across destinations is quite dramatic. Almost half of women immigrating to the United States after 1980 hail from Central or South America (including Mexico and the Caribbean),

the calculations reported in the paper.

¹³ In particular, we exclude blacks, Asians, Hispanics, and aboriginals from the native sample for each destination country.

whereas the same is true of only 16.1 percent of Canadian immigrants and 2.5 percent of Australian immigrants. Relatively fewer immigrants from the United Kingdom and Europe arrive in the United States than in Australia and Canada where more than a quarter of the overall immigrant flow can be attributed to this region. Finally, female immigrants to Australia are relatively more likely to have been born in Asia or New Zealand.

Although in general these patterns for female immigrants closely resemble those observed for men, the Philippines is an important exception (Antecol, *et al.*, 2001). While 2.4 percent of post-1980 male immigrants enumerated in the Australian census were born in the Philippines, this was true of 7.6 percent of female immigrants. Similar disparities are seen in the proportion of male (4.0 and 4.1 percent) and female (7.1 and 6.9 percent) Filipino immigrants in Canada and the United States, respectively. These differences imply that relative to other sending countries, immigration to Australia, Canada, and the United States from the Philippines is heavily dominated by women. Fully 76.1 percent of post-1980 Filipino immigrants in Australia were women, while the same was true of 65.0 percent of recent Filipino immigrants in Canada and 61.2 percent of recent Filipino immigrants in the United States.¹⁵

IV. Fluency in the Destination Country Language

Measures of English language ability are very similar in both the Australian and U.S. censuses. In each case, respondents were first asked whether they speak a language other than English at home. Individuals responding affirmatively were then asked whether they spoke English "very well," "well," "not well," or "not at all." In the Australian and U.S. data individuals are

¹⁴ In Table 3, Europe is defined to include the former USSR.

¹⁵ Among post-1980 arrivals women represented 50.1 percent of the immigrant population in Australia, 51.3 percent in Canada, and 48.3 percent in the United States.

defined as "fluent in the destination country language" if they speak English at home or if they report speaking English "very well" or "well." Unfortunately, the measures of language ability in the Canadian census are not directly comparable. When using the Canadian data, individuals are defined as fluent in the destination country language if they report being able to conduct a conversation in either English or French.¹⁶

The proportion of immigrant women in each destination country who are fluent in the native language, are reported in Table 2 by five-year arrival cohorts.¹⁷ Not surprisingly, immigrant women's language ability improves over time in all three destination countries, which is likely an artifact of adaptation to their new home. It is important to point out, however, that given the cross-sectional nature of our data these differences in the language ability of specific arrival cohorts observed may reflect permanent differences (cohort effects) as well as the changes that occur over time (aging effects).¹⁸

Irrespective of arrival cohort fluency rates are lower for U.S. immigrants than for Australian and Canadian immigrants, and the gap is particularly large for cohorts arriving after 1970. Only 56.2 percent of women arriving in the United States within five years of the census report being fluent in English compared to 79.1 and 86.2 percent of similar women in Australia and Canada, respectively. This gap does not appear to be completely eliminated over time. Even among women who arrived 15-20 years ago (1971-75 arrivals), the language ability of U.S. immigrants (77.3 percent) is well

¹⁶ In their study of immigrants to Canada and the United States, Duleep and Regets (1992) use these same definitions in an attempt to create roughly comparable measures of language fluency from the 1981 Canadian census and the 1980 U.S. census.

¹⁷ The intervals listed in Table 4 (and in subsequent tables) for the immigrant arrival cohorts are those that pertain to the Australian and Canadian data; the slightly different immigrant cohorts that pertain to the U.S. data are as follows: pre-1970, 1970-74, 1975-79, 1980-84, and 1985-90. For ease of exposition, henceforth we will refer to particular immigrant cohorts using the year intervals that pertain to the Australian and Canadian data, with the implied understanding that in the U.S. data the actual cohort intervals begin and end one year earlier.

¹⁸ By tracking cohorts of U.S. immigrants between the 1980 and 1990 censuses, Carliner (1995, 1996) and Funkhouser (1996) show that English proficiency does indeed improve markedly with duration of U.S. residence and that this improvement plays an important role in immigrant wage growth.

below that of Australian (90.7) and Canadian immigrants (95.9 percent). 19

What explains the fluency deficit of U.S. immigrants? Is it solely an artifact of Australia and Canada's success in screening immigrants on language ability? Previous results for men (Antecol, 2001; Borjas, 1993) suggest that to a large degree differences in immigrant skills across immigrant receiving countries is driven by the national origin mix of the immigrant flow. To explore this for women, Table 3 reports fluency rates separately by immigrant region of birth for female immigrants who have been in the destination country for ten years or less. ²⁰ The comparison between Australia and the United States is particularly informative given the similarities in the way in which fluency is measured in these censuses.²¹ Immigrant women from a particular source country report similar levels of English language ability in both Australia and the United States. In spite of this, the overall fluency rate for U.S. immigrants (59.0 percent) falls well short of the Australian rate (76.8 percent). This relative language deficiency of female immigrants in the United States is due in large part to the large proportion of Latin Americans in the U.S. immigration flow. Once Latin American immigrants are excluded, 70.8 percent of female immigrants in the United States report being fluent in English, while the same is true of 77.8 percent of women in Australia. Interestingly, while the exclusion of Latin American immigrants reduces the language gap amongst men to less than 2.5 percentage points (Antecol, et al., 2001), a sizable gap (7.0 percentage points) remains among women. Therefore, although a large percentage of the fluency deficit of U.S. immigrants can be explained by national origin mix, national origin mix appears to explain more of the relative U.S. language deficiency for men than for women.

¹⁹ Note that the relative fluency of Canadian immigrants is probably overstated because of the particular wording of the language questions asked in the Canadian census. The U.S. and Australian language measures are much more comparable.

²⁰ In Table 3, we exclude immigrants from the four source regions listed in Table 1 that cannot be defined for all three destination countries. The excluded regions are the following: United States, Other North America, Oceania/Antarctica, and Other.

²¹ The high fluency rates for Canadian immigrants are most likely an artifact of the way that fluency is measured in the

V. Education

We turn now to education. Table 4 reports the results of least squares regressions in which the dependent variable is years of schooling and the independent variables include dummies identifying arrival cohorts.²² Natives as well as immigrants are included in the analysis. Model 1 (see column 1) includes only the arrival cohort dummies and as a result the intercepts represent the average education level of natives in each destination country, while the coefficients on the arrival cohort dummies reflect the education differentials between immigrants in each arrival cohort and natives. U.S. native-born women have the highest mean education level, (13.2 years), followed by Canadian-born women (12.6), and Australian-born women (11.3).²³ Irrespective of when they arrived, female immigrants in the United States have between one and two fewer years of education than do native-born U.S. women. Female immigrants in Canada also have less education than their native-born counterparts although the gap is much smaller in magnitude (ranging from approximately one month to nine months depending on the arrival cohort) and the difference is not always significant. Women migrating to Australia, however, are relatively more educated than Australian-born women.

Model 2 (see column 2) includes dummy variables identifying five-year age groups. In these regressions, the intercepts now represent the average education level of 25-29 year-old natives (the omitted age group), the arrival cohort coefficients reflect immigrant-native differentials conditioning on age, and the coefficients on the age dummies reflect education differentials between each age group and 25-29 year-olds. Controlling for age, which captures the secular rise in schooling levels

Canadian data.

²² Robust standard errors are reported throughout the paper.

²³ This pattern of education differences for the native born in each of the three countries is similar to what Evans, Kelley, and Wanner (1998) and Reitz (1998) report.

that took place over this period, has little effect on the estimated immigrant-native schooling differentials or on the conclusion that the United States and Canada have been less successful than Australia in attracting well-educated female immigrants.

Interestingly, the relative education disadvantage of immigrant women in the United States and the relative education advantage of immigrant women in Australia are similar to what we observe for men (Antecol, et al., 2001). Relative to their native-born counterparts, male immigrants in the United States also have one to two fewer years of education, while both male and female immigrants in Australia have slightly more education. In Canada, however, the patterns observed for male and female immigrants are very different. While foreign-born Canadian men have relatively more education, foreign-born Canadian women have relatively less. Given the similarities in the underlying education levels of native-born Canadian men and women, these patterns suggest that Canada's immigration program has been more successful in selecting relatively educated male immigrants than in selecting relatively educated female immigrants. This is not necessarily surprising if women are often migrating to Canada as dependent family members for whom no selection criteria apply.

The educational attainment of women arriving after 1980/81 is presented in Table 5 by region of birth. Average years of schooling for women in each destination country are reported in the first three columns. Controlling for region of origin, the education level of female immigrants to the United States is generally as high or higher than that of female immigrants to Australia and Canada. Still, overall women migrating to the United States have on average approximately one to one and a half years less schooling than women migrating to the other two destination countries. As was the case with language fluency, the explanation for this pattern is the large share of female immigrants from Latin America in the overall U.S. immigration flow. Women migrating to the United States

from Central and South American have on average only 9.7 years of education. This is much lower than the average education level of U.S. native-born women and Central and South American immigrants to either Australia or Canada. Excluding this group of women from the calculations causes the mean education level of U.S. immigrants to increase from 11.3 years to 12.8 years. When we consider only those women who originate from outside of Latin America, female immigrants to the United States have slightly more education than women migrating to Australia and Canada.

The difficulty with considering educational levels, however, is that differences across countries in educational practices and in the census questions used to elicit information about educational attainment may lead our years of schooling variable to be incomparable across destination countries. Within destination country, however, we would expect such factors to largely affect the measured education level of immigrants and natives in the same way. Therefore, we examine a relative education measure (See the last three columns of Table 5), which is defined as the difference in average years of schooling between a particular immigrant group and natives in the same destination country. When we consider only recent immigrants who were not born in Latin America (the bottom row of Table 5) we find that female immigrants in Australia have 1.3 years more education than do native-born Australian women. Women migrating to Canada have somewhat less education although the difference is not statistically significant. At the same time, there remains a statistically significant gap of approximately four months in the average education levels of recent immigrants and native-born women in the United States. Thus, for women, excluding immigrants from Central and South America reduces--but does not eliminate--the gap in the education levels of immigrant and native-born women in the United States and leaves constant the educational gap in Australia and Canada. In contrast, excluding Central and South American men from similar calculations does result in the immigrant/native education gap completely being

eliminated in the United States. Specifically, men who were born outside of Latin American and who migrated to the United States have on average approximately five months more education than native-born men (Antecol, *et al.*, 2001.).

Thus, overall the conclusion appears to be that regardless of whether immigrant education levels are measured in absolute terms or relative to natives, the educational gap between U.S. immigrants and immigrants in the other two destination countries arises in large part because the United States receives a large flow of poorly-educated immigrants from Latin America. At the same time, this appears to be more true for men than for women.

VI. Income

We turn now to a consideration of personal income. An analysis of personal income—holding constant observable productivity-related characteristics—sheds light on how the immigration programs in each of our three countries of interest affect the unobserved skills of immigrants. Ideally, we would of course prefer to assess earnings rather than income, but unfortunately the Australian data do not distinguish earnings from other income sources.²⁴ To increase the correspondence between income and earnings, in this section we will restrict our estimation samples to employed women.^{25,26} The income and employment measures in the Australian data refer to the usual week and the census survey week, respectively, whereas in the Canadian and U.S. data these

²⁴ Earnings information is available in the Canadian and U.S. censuses, however, and for these two countries we have replicated the analyses reported below using earnings rather than income as the dependent variable. The income and earnings regressions produce similar results.

²⁵ In the Canadian sample, we also exclude immigrants who arrived during the census year (1991), because income data are not available for these recent arrivals.

²⁶ An additional concern with these results is sample selection bias: our income regressions only include women who are employed. Typically, the selection problem that researchers are most concerned about is only the most "able" women participate in the labor market. Although the Heckman (1980) selection correction can be employed to take into account the selectivity bias, this approach has increasingly been criticized for its lack of robustness (Manski, 1989). Therefore, we do not employ this approach here.

measures refer to the calendar year preceding the census. As a result, the Canadian and U.S. income measures have been converted to a weekly basis so as to match the Australian data.²⁷

OLS estimates of the determinants of weekly income estimated over the sample of employed immigrant and native-born women are given in Tables 6 and 7. Two specifications are reported for each destination country. In Model 1, the independent variables include immigrant arrival cohort dummies, age dummies, controls for geographic location, and indicators for hours worked during the census survey week. The coefficients of the geographic location and weekly hours of work variables are restricted to be the same for immigrants and natives, whereas the coefficients of the age dummies are allowed to vary by nativity. Model 2 also includes a measure of years of schooling—which is allowed to vary by nativity—and indicators for fluency in the language of the destination country.

The estimated cohort effects from these regressions are presented in Table 6, while Table 7 reports the coefficients of the age, education, and language fluency variables. In Model 1, the cohort coefficients have been normalized to represent immigrant-native income differentials for women who are aged 25-29, while in model 2 the cohort coefficients represent the same differential for women aged 25-29 with 12 years of education.²⁹ To facilitate interpretation, the immigrant-native income differentials implied by these regressions are also depicted in Figure 1. Model 1 is shown in the top panel, while model 2 is shown in the bottom panel of Figure 1.³⁰ Each line in Figure 1

²⁷ Another difference between the income measures available for each country is that the Australian census reports income in fourteen intervals, whereas the Canadian and U.S. censuses provide continuous measures of income. For Australia, we use the midpoints of the reported income intervals to construct the income variable employed in our regressions. For Canada and the United States, the results reported here employ a continuous income variable, but we obtain similar results when we instead group these data into intervals and assign midpoints so as to mimic the Australian data.

²⁸ The dependent variable is the natural logarithm of weekly personal income.

²⁹ Note that the interactions between nativity and age in these regressions imply that the immigrant-native income gaps presented in Table 7 for ages 25-29 will differ at older ages.

³⁰ To control for age differences, both across countries and between immigrants and natives within a country, these calculations assign the same age distribution to all groups. In particular, we use the age distribution observed for our sample of U.S. immigrants: 18.0 percent are in the 25-29 age range, 18.9 percent are 30-34, 17.4 percent are 35-39, 16.1 percent are 40-44, 12.5 percent are 45-49, 10.0 percent are 50-54, and 7.1 percent are 55-59. Because the immigrant-native income differentials estimated for

corresponds to a different destination country with immigrant arrival cohorts being captured by the years since arrival, which is measured along the horizontal axis.

These graphs are only intended to illustrate the income differences between immigrants of various arrival cohorts and natives at a given point in time. The plots are not meant to portray the life-cycle trajectories of immigrants as they gain experience in the destination country labor market since analyses of immigrant outcomes using a single cross section of data cannot distinguish assimilation and cohort effects.

When we do not controlling for education and language ability, we find that the income gap between immigrants and their native-born counterparts is largest in the United States and smallest in Australia, with Canada falling in between (see the top panel of Figure 1). Once we condition on observed human capital, i.e., education and language fluency, however, the gap shrinks dramatically in the United States, leaving the relative income disadvantage of women migrating to the United States smaller than that of women migrating to Canada (see the bottom panel of Figure 1). In fact, for immigrants arriving more than six years the relative income differential is smaller in the United States than in Australia. These comparisons suggest that the smaller income deficits (relative to natives) initially observed for immigrant women in Australia and Canada are largely explained by the their higher levels of education and language ability. Once we condition on these observable skill measures, the relative incomes of female immigrants in the United States are higher than those of Canadian immigrants irrespective of when they arrived and are higher than those of Australian immigrants who arrived more than six years ago.

Tables 8 and 9 along with Figure 3 replicate the preceding analysis of immigrant-native

each country are allowed to vary by age group, the overall differentials shown in Figure 1 depend on the particular age distribution used. However, similar patterns emerge from using the age distributions observed for any of the immigrant or native samples in our three destination countries. Note that the calculations displayed in the bottom panel of Figure 1 pertain to individuals with 12 years of

American immigrants from the estimation sample has little effect on these income gaps in either Australia or Canada. This is not at all surprising given that immigration from Central and South America represents only a small share of the overall immigration flow in these countries. In the United States, however, excluding women born in Central and South American serves to substantially reduce the income disadvantage that immigrant women are predicted to face. (To see this compare the top panels of Figures 1 and 2.) In fact, the region-of-birth restriction has essentially the same effect on the income gap as controlling for human capital did in the wider sample. (Compare the bottom panel of Figure 1 with the top panel of Figure 2.) Once we both control for observed human capital and exclude women born in Central and South America, we find that relative incomes are higher for female immigrants to the United States than for women migrating to Australia and Canada in all but the most recent arrival cohort. These results for women mirror our previous results for men (Antecol, et al., 2001) except that it appears to be the case that income disadvantage of immigrant men in the United States is somewhat larger than it is for women.

VII. Conclusion

Women choosing to migrate to Australia and Canada appear to have larger endowments of productivity-related skills than women choosing to migrate to the United States. They are more likely to be fluent in the destination country language, are relatively highly educated, and have higher income (relative to native-born women) than their U.S. counterparts.

Much of the deficit in language ability and education among foreign-born women in the United States can be explained by the relatively high proportion of Central- and South American-

education.

born women migrating to the United States. Skill gaps are much larger among the entire immigrant population than among the portion of the population originating outside Central and South America. Even in the restricted sample, however, the proportion of foreign-born women in the United States who are fluent in English (70.8 percent) is much lower than among foreign-born women in Australia (77.8 percent). Furthermore, immigrant/native education gaps are reduced but not eliminated by the exclusion of Central and South American women from the analysis. In contrast, other evidence for men suggests that observed skill gaps among male immigrants to the United States are completely eliminated when Central and South American immigrants are excluded from the estimation sample (Borjas, 1993; Antecol, *et al.*, 2001).

These differences in observed productivity-related characteristics have implications for immigrant/native income differentials in each country. In particular, the smaller income gaps (relative to natives) initially observed for immigrant women in Australia and Canada are largely explained by higher education and language ability. The relative incomes of female immigrants in the United States are not substantially lower than the incomes of immigrants in Canada and Australia once language ability and education are controlled. Excluding women born in Central and South America and controlling for observed skills, we find that relative incomes are in fact higher for female immigrants to the United States than for women migrating to Australia and Canada in all but the most recent arrival cohort. These results for women mirror our previous results for men (Antecol, et al., 2001) although it appears that the income disadvantage of immigrant men in the United States is somewhat larger than it is for women.

Many factors including structural and institutional differences in labor markets and immigration policy contribute to producing variation in immigrant skill levels in Australia, Canada, and the United States. Australia and Canada's skill-based immigration programs are designed to

increase the skill level of immigrants. At the same time, these countries' relatively egalitarian wage distributions and generous income redistribution policies may work in the opposite direction by attracting individuals who find themselves toward the bottom of the income distribution. It is difficult to predict how immigration policies and labor market institutions might intersect to influence the overall skill level of immigrants. The importance of national origin and the general consistency in the results for men (who are routinely subjected to the selection criteria of various immigration programs) and women (who are not) suggests that many factors other than immigration policy *per se* are at work in producing skill variation among these three immigration streams.

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Table 1
Region of Birth Distributions of Post-1980/81 Female Immigrant Arrivals
By Destination Country

| | | Destination Country | / | |
|-----------------------|-----------|---------------------|---------------|--|
| Region of Birth | Australia | Canada | United States | |
| | | | | |
| United Kingdom | 18.3 | 5.3 | 2.0 | |
| Europe | 12.5 | 19.3 | 8.9 | |
| Middle East | 4.7 | 6.5 | 3.2 | |
| Africa | 3.6 | 5.4 | 2.3 | |
| China | 4.2 | 5.9 | 3.7 | |
| Hong Kong | 3.2 | 8.3 | 0.7 | |
| Philippines | 7.6 | 7.1 | 6.9 | |
| Southern Asia | 4.8 | 8.7 | 3.9 | |
| Other Asia | 19.9 | 11.8 | 16.4 | |
| Central/South America | 2.5 | 16.1 | 45.6 | |
| United States | 2.0 | 4.5 | n.a. | |
| Other North America | 1.0 | n.a. | 1.7 | |
| Oceania/Antarctica | 15.7 | n.a. | 0.6 | |
| Other | n.a. | 1.1 | 4.0 | |
| All Regions | 100.0% | 100.0% | 100.0% | |
| Sample Size | 3,329 | 10,677 | 109,994 | |

Note: Data are from the 1991 Australian and Canadian censuses and the 1990 U.S. census. The samples include foreign-born women ages 25-59 who immigrated during 1981-91 in the Australian and Canadian data or during 1980-90 in the U.S. data. Entries of "n.a." indicate regions of birth that cannot be defined for a particular destination country. Columns may not sum to 100 percent because of rounding error. Sampling weights were used in the U.S. calculations.

Table 2
Percent of Female Immigrants Fluent in Destination Country Language
by Arrival Cohort and Destination Country

| | Destination Country | | | | | | |
|------------------------|---------------------|----------|---------------|--|--|--|--|
| Immigrant Cohort | Australia | Canada | United States | | | | |
| Pre-1971 Arrivals | 92.5 | 97.5 | 89.3 | | | | |
| 110 19/17 / 1111 / 413 | (0.4) | (0.1) | (0.1) | | | | |
| | [5,291] | [17,177] | [111,652] | | | | |
| 1971-75 Arrivals | 90.7 | 95.9 | 77.3 | | | | |
| | (0.8) | (0.2) | (0.2) | | | | |
| | [1,320] | [6,427] | [41,656] | | | | |
| 1976-80 Arrivals | 87.8 | 94.9 | 72.1 | | | | |
| | (1.0) | (0.3) | (0.2) | | | | |
| | [1021] | [4,772] | [46,600] | | | | |
| 1981-85 Arrivals | 83.5 | 92.6 | 64.0 | | | | |
| | (1.1) | (0.4) | (0.2) | | | | |
| | [1,212] | [3,903] | [54,748] | | | | |
| 1986-91 Arrivals | 79.1 | 86.2 | 56.2 | | | | |
| | (0.9) | (0.4) | (0.2) | | | | |
| | [2,104] | [6,787] | [55,247] | | | | |

Note: Standard errors are in parentheses, and sample sizes are in brackets. Data are from the 1991 Australian and Canadian censuses and the 1990 U.S. census. The samples include foreign-born women ages 25-59. In the Australian and U.S. data, immigrants are designated as "fluent in the destination country language" if they speak only English or else report speaking English "very well" or "well." In the Canadian data, the corresponding measure of fluency identifies immigrants who can conduct a conversation in either English or French. The intervals listed above for the immigrant arrival cohorts are those defined in the Australian and Canadian data; the slightly different immigrant cohorts defined in the U.S. data are as follows: pre-1970, 1970-74, 1975-79, 1980-84, and 1985-90. Sampling weights were used in the U.S. calculations.

Table 3
Percent of Post-1980/81 Female Immigrant Arrivals Fluent in Destination Country Language
by Birthplace and Destination Country

| | | Destination Country | <i>!</i> |
|--------------------------|-----------|---------------------|---------------|
| Region of Birth | Australia | Canada | United States |
| United Kingdom | 99.5 | 100.0 | 99.6 |
| United Kingdom | | | |
| Europe | (0.3) | (.) | (0.1) |
| Europe | 72.7 | 88.7 | 76.2 |
| M: 141- E4 | (2.2) | (0.7) | (0.5) |
| Middle East | 59.2 | 89.3 | 75.3 |
| | (3.9) | (1.2) | (0.8) |
| Africa | 97.5 | 95.6 | 89.7 |
| · | (1.4) | (0.9) | (0.7) |
| China | 41.4 | 55.6 | 43.4 |
| | (4.2) | (2.0) | (0.8) |
| Hong Kong | 81.0 | 92.5 | 74.2 |
| | (3.8) | (0.9) | (1.6) |
| Philippines | 98.0 | 99.5 | 94.1 |
| | (0.8) | (0.3) | (0.3) |
| Southern Asia | 95.0 | 85.6 | 83.0 |
| | (1.7) | (1.2) | (0.6) |
| Other Asia | 56.9 | 78.7 | 54.0 |
| | (1.9) | (1.2) | (0.4) |
| Central/South America | 46.3 | 92.1 | 46.6 |
| | (5.5) | (0.7) | (0.2) |
| All Regions Listed Above | 76.8 | 87.9 | 59.0 |
| - | (0.7) | (0.3) | (0.2) |
| All Regions, Excluding | 77.8 | 87.0 | 70.8 |
| Central/South America | (0.7) | (0.3) | (0.2) |

Note: Standard errors are in parentheses. Data are from the 1991 Australian and Canadian censuses and the 1990 U.S. census. The samples include foreign-born women ages 25-59 who immigrated during 1981-91 in the Australian and Canadian data or during 1980-90 in the U.S. data. In the Australian and U.S. data, immigrants are designated as "fluent in the destination country language" if they speak only English or else report speaking English "very well" or "well." In the Canadian data, the corresponding measure of fluency identifies immigrants who can conduct a conversation in either English or French. Sampling weights were used in the U.S. calculations.

Table 4
The Determinants of Years of Education for Female Immigrants by Destination Country
(OLS Coefficients and Robust Standard Errors)

| | | | Destination | on Country | | |
|---------------------|--------|--------|-------------|------------|--------|----------|
| | Aust | tralia | Cai | nada | United | d States |
| Regressor | (1) | (2) | (1) | (2) | (1) | (2) |
| | | | | | | |
| Intercept (Natives) | 11.32 | 11.51 | 12.57 | 13.25 | 13.15 | 13.38 |
| | (0.02) | (0.03) | (0.01) | (0.01) | (0.01) | (0.02) |
| Immigrant Cohort: | | | | | | |
| Pre-1971 Arrivals | -0.12 | 0.01 | -0.73 | -0.20 | -1.15 | -0.98 |
| | (0.04) | (0.04) | (0.03) | (0.03) | (0.02) | (0.02) |
| 1971-75 Arrivals | 0.31 | 0.35 | -0.21 | -0.17 | -1.93 | -1.98 |
| | (0.07) | (0.07) | (0.05) | (0.04) | (0.03) | (0.03) |
| 1976-80 Arrivals | 0.71 | 0.67 | -0.10 | -0.19 | -2.04 | -2.16 |
| | (0.08) | (0.08) | (0.05) | (0.05) | (0.03) | (0.03) |
| 1981-85 Arrivals | 0.86 | 0.80 | -0.11 | -0.27 | -2.09 | -2.22 |
| | (0.07) | (0.07) | (0.06) | (0.05) | (0.02) | (0.02) |
| 1986-91 Arrivals | 1.34 | 1.25 | -0.03 | -0.25 | -1.58 | -1.71 |
| | (0.06) | (0.06) | (0.04) | (0.04) | (0.02) | (0.02) |
| Age Group: | , | | , , | | , , | , , |
| 30-34 | | 0.09 | | -0.20 | | 0.04 |
| | | (0.04) | | (0.02) | | (0.03) |
| 35-39 | | -0.03 | | -0.25 | | 0.10 |
| | | (0.04) | | (0.02) | | (0.04) |
| 40-44 | | -0.26 | | -0.55 | | 0.04 |
| | | (0.04) | | (0.02) | | (0.04) |
| 45-49 | | -0.47 | | -1.11 | | -0.39 |
| | | (0.05) | | (0.02) | | (0.04) |
| 50-54 | | -0.71 | | -1.85 | | -0.88 |
| | | (0.05) | | (0.03) | | (0.04) |
| 55-59 | | -0.86 | | -2.53 | | -1.22 |
| 33 37 | | | | | | |
| | | (0.06) | | (0.03) | | (0.04) |

Note: Data are from the 1991 Australian and Canadian censuses and the 1990 U.S. census. The samples include women ages 25-59, with non-whites excluded from the native but not the foreign-born samples. The sample sizes for these regressions are 31,291 for Australia, 181,277 for Canada, and 354,426 for the United States. The intervals listed above for the immigrant arrival cohorts are those defined in the Australian and Canadian data; the slightly different immigrant cohorts defined in the U.S. data are as follows: pre-1970, 1970-74, 1975-79, 1980-84, and 1985-90. The reference group for the age dummies is 25-29 year-olds. Sampling weights were used in the U.S. calculations.

Table 5
Average and Relative Education of Post-1980/81 Female Immigrant Arrivals by Birthplace and Destination Country

| | Averag | e Years of Scl | hooling | Schooling Relative to Natives | | |
|--------------------------|-----------|----------------|---------|-------------------------------|--------|--------|
| Region of Birth | Australia | Canada | U.S. | Australia | Canada | U.S. |
| United Kingdom | 11.95 | 13.59 | 13.69 | 0.63 | 1.03 | 0.54 |
| | (0.10) | (0.08) | (0.05) | (0.10) | (0.08) | (0.05) |
| Europe | 12.65 | 12.89 | 13.22 | 1.34 | 0.33 | 0.07 |
| | (0.13) | (0.08) | (0.04) | (0.13) | (0.08) | (0.04) |
| Middle East | 12.72 | 12.61 | 12.67 | 1.41 | 0.05 | -0.48 |
| | (0.22) | (0.14) | (0.07) | (0.22) | (0.14) | (0.07) |
| Africa | 12.63 | 12.89 | 13.50 | 1.31 | 0.33 | 0.35 |
| | (0.21) | (0.13) | (0.07) | (0.21) | (0.13) | (0.07) |
| China | 12.81 | 11.04 | 11.70 | 1.50 | -1.52 | -1.45 |
| | (0.20) | (0.17) | (0.08) | (0.20) | (0.17) | (0.08) |
| Hong Kong | 13.24 | 13.28 | 12.86 | 1.93 | 0.72 | -0.29 |
| - | (0.18) | (0.08) | (0.13) | (0.18) | (0.08) | (0.13) |
| Philippines | 13.35 | 13.80 | 14.04 | 2.03 | 1.24 | 0.90 |
| | (0.15) | (0.10) | (0.04) | (0.15) | (0.10) | (0.04) |
| Southern Asia | 13.44 | 11.97 | 14.17 | 2.12 | -0.59 | 1.03 |
| | (0.21) | (0.13) | (0.07) | (0.21) | (0.13) | (0.07) |
| Other Asia | 12.71 | 10.94 | 11.75 | 1.39 | -1.62 | -1.40 |
| | (0.08) | (0.12) | (0.04) | (0.08) | (0.12) | (0.04) |
| Central/South America | 13.10 | 12.01 | 9.67 | 1.78 | -0.55 | -3.48 |
| | (0.23) | (0.08) | (0.02) | (0.23) | (0.08) | (0.02) |
| All Regions Listed Above | 12.63 | 12.42 | 11.27 | 1.32 | -0.14 | -1.88 |
| | (0.05) | (0.03) | (0.01) | (0.05) | (0.03) | (0.01) |
| All Regions, Excluding | 12.62 | 12.50 | 12.79 | 1.31 | -0.06 | -0.36 |
| Central/South America | (0.05) | (0.04) | (0.02) | (0.05) | (0.04) | (0.02) |

Note: Robust standard errors are in parentheses. Data are from the 1991 Australian and Canadian censuses and the 1990 U.S. census. The samples include women ages 25-59, with non-whites excluded from the native but not the foreign-born samples. The foreign-born samples are limited to women who immigrated during 1981-91 in the Australian and Canadian data or during 1980-90 in the U.S. data. Sampling weights were used in the U.S. calculations.

Table 6
The Effect of Immigrant Cohort on Female Immigrant Income, by Destination Country
(OLS Coefficients and Robust Standard Errors)

| | | | Destination | on Country | | | |
|--------------------|-----------|--------|-------------|------------|---------|---------------|--|
| | Australia | | Car | Canada | | United States | |
| Regressor | (1) | (2) | (1) | (2) | (1) | (2) | |
| Immigrant Cohort: | | | | | | | |
| Pre-1971 Arrivals | 027 | .004 | .122 | .068 | .064 | .169 | |
| | (.024) | (.025) | (.016) | (.016) | (.014) | (.017) | |
| 1971-75 Arrivals | .021 | .031 | .047 | .008 | 036 | .153 | |
| | (.029) | (.029) | (.018) | (.018) | (.015) | (.020) | |
| 1976-80 Arrivals | .002 | .016 | 004 | 036 | 109 | .105 | |
| | (.033) | (.034) | (.020) | (.019) | (.015) | (.020) | |
| 1981-85 Arrivals | 055 | 035 | 113 | 127 | 236 | 001 | |
| | (.027) | (.028) | (.020) | (.020) | (.015) | (.020) | |
| 1986-91 Arrivals | 074 | 057 | 342 | 352 | 413 | 197 | |
| | (.026) | (.026) | (.019) | (.019) | (.016) | (.021) | |
| R^2 | .321 | .373 | .137 | .186 | .278 | .328 | |
| Sample Size | 20,612 | 18,396 | 139,342 | 139,333 | 240,423 | 240,423 | |
| Control Variables: | | | | | | | |
| Age Dummies | Yes | Yes | Yes | Yes | Yes | Yes | |
| Education | No | Yes | No | Yes | No | Yes | |
| Fluency Dummies | No | Yes | No | Yes | No | Yes | |

Note: The dependent variable is the natural logarithm of weekly personal income. Data are from the 1991 Australian and Canadian censuses and the 1990 U.S. census. The samples include women ages 25-59, with non-whites excluded from the native but not the foreign-born samples. Only employed women are included in the samples. The income and employment measures in the Australian data refer to the usual week and the census survey week, respectively, whereas in the Canadian and U.S. data these measures refer to the calendar year preceding the census. In addition to the control variables listed above, all regressions include indicators for geographic location and hours worked during the census survey week. The coefficients of the controls for geographic location, weekly hours of work, and fluency are restricted to be the same for immigrants and natives, whereas the coefficients of the age and education variables are allowed to vary by nativity. The intervals listed above for the immigrant arrival cohorts are those defined in the Australian and Canadian data; the slightly different immigrant cohorts defined in the U.S. data are as follows: pre-1970, 1970-74, 1975-79, 1980-84, and 1985-90. The immigrant cohort coefficients reported in this table have been normalized to represent immigrant-native income differentials for women who are aged 25-29 (in both specifications) and who have 12 years of education (in specification (2)). Sampling weights were used in the U.S. calculations.

Table 7

The Effect of Age, Education, and Language Fluency on Female Immigrant Income, by Destination Country (OLS Coefficients and Robust Standard Errors)

| | <u> </u> | | Destination | on Country | | |
|--------------------------|----------|--------|-------------|------------|---------------|--------|
| | Aus | tralia | | nada | United States | |
| Regressor | (1) | (2) | (1) | (2) | (1) | (2) |
| Age Group: | | | | | | |
| 30-34 | .056 | .051 | .103 | .092 | .091 | .091 |
| | (.016) | (.016) | (.008) | (800.) | (.018) | (.017) |
| 35-39 | .044 | .051 | .149 | .143 | .138 | .131 |
| | (.016) | (.016) | (.009) | (.009) | (.018) | (.017) |
| 40-44 | .009 | .049 | .208 | .228 | .163 | .160 |
| | (.016) | (.016) | (.009) | (.009) | (.018) | (.017) |
| 45-49 | 010 | .044 | .188 | .247 | .167 | .196 |
| | (.018) | (.018) | (.010) | (.010) | (.019) | (.018) |
| 50-54 | 008 | .067 | .141 | .244 | .137 | .207 |
| | (.020) | (.021) | (.011) | (.011) | (.021) | (.021) |
| 55-59 | 056 | .052 | .145 | .288 | .175 | .263 |
| | (.028) | (.030) | (.013) | (.013) | (.023) | (.023) |
| Immigrant×Age Group: | | | | | | |
| 30-34 | 035 | 006 | 123 | .042 | 025 | 011 |
| | (.031) | (.032) | (.020) | (.020) | (.019) | (.019) |
| 35-39 | 014 | .001 | 131 | .024 | 044 | 006 |
| | (.031) | (.031) | (.020) | (.020) | (.019) | (.019) |
| 40-44 | 033 | 024 | 167 | 031 | 074 | 022 |
| | (.031) | (.031) | (.020) | (.020) | (.020) | (.019) |
| 45-49 | 025 | 005 | 153 | 034 | 092 | 037 |
| | (.033) | (.035) | (.021) | (.021) | (.021) | (.020) |
| 50-54 | 076 | 071 | 140 | 022 | 084 | 043 |
| | (.038) | (.040) | (.023) | (.023) | (.023) | (.022) |
| 55-59 | .028 | 011 | 160 | 052 | 140 | 084 |
| | (.050) | (.054) | (.025) | (.025) | (.025) | (.025) |
| Education | | .066 | | .093 | | .104 |
| | | (.002) | | (.001) | | (.002) |
| Immigrant×Education | | 012 | | 038 | | 047 |
| - | | (.004) | | (.001) | | (.003) |
| Ability to Speak English | | | | | | |
| (or French in Canada): | | | | | | |
| Well or Very Well | | 107 | | 073 | | 035 |
| - | | (.015) | | (.011) | | (.018) |
| Not at All or Not Well | | 326 | | 041 | | 182 |
| | | (.039) | | (.030) | | (.023) |

Note: These coefficients are from the same income regressions as Table 6; see the note to that table for more information. The reference group for the age dummies is 25-29 year-olds. The reference group for the fluency dummies is women who speak only English in the Australian and U.S. data, and women who speak only English and/or French in the Canadian data.

Table 8
The Effect of Immigrant Cohort on Female Immigrant Income
Excluding Immigrants from Central/South America, by Destination Country
(OLS Coefficients and Robust Standard Errors)

| | Destination Country | | | | | | |
|--------------------|---------------------|-----------|---------|---------|---------|---------------|--|
| | Aust | Australia | | Canada | | United States | |
| Regressor | (1) | (2) | (1) | (2) | (1) | (2) | |
| | | | | | | | |
| Immigrant Cohort: | | | | | | | |
| Pre-1971 Arrivals | 026 | .008 | .115 | .071 | .123 | .178 | |
| | (.024) | (.025) | (.017) | (.017) | (.015) | (.017) | |
| 1971-75 Arrivals | .027 | .036 | .052 | .024 | .091 | .177 | |
| | (.029) | (.029) | (.020) | (.019) | (.017) | (.021) | |
| 1976-80 Arrivals | .000 | .015 | .007 | 017 | .028 | .131 | |
| | (.033) | (.034) | (.021) | (.021) | (.016) | (.022) | |
| 1981-85 Arrivals | 054 | 033 | 101 | 109 | 090 | .026 | |
| | (.027) | (.028) | (.022) | (.022) | (.016) | (.023) | |
| 1986-91 Arrivals | 069 | 053 | 338 | 341 | 293 | 191 | |
| | (.026) | (.027) | (.021) | (.021) | (.017) | (.024) | |
| R^2 | .321 | .373 | .137 | .187 | .282 | .330 | |
| Sample Size | 20,512 | 18,319 | 135,370 | 135,361 | 154,769 | 154,769 | |
| Control Variables: | | | | | | | |
| Age Dummies | Yes | Yes | Yes | Yes | Yes | Yes | |
| Education | No | Yes | No | Yes | No | Yes | |
| Fluency Dummies | No | Yes | No | Yes | No | Yes | |

Note: The dependent variable is the natural logarithm of weekly personal income. Data are from the 1991 Australian and Canadian censuses and the 1990 U.S. census. The samples include women ages 25-59, with non-whites excluded from the native but not the foreign-born samples. Only employed women are included in the samples. These particular regressions exclude immigrants born in Central and South America. The income and employment measures in the Australian data refer to the usual week and the census survey week, respectively, whereas in the Canadian and U.S. data these measures refer to the calendar year preceding the census. In addition to the control variables listed above, all regressions include indicators for geographic location and hours worked during the census survey week. The coefficients of the controls for geographic location, weekly hours of work, and fluency are restricted to be the same for immigrants and natives, whereas the coefficients of the age and education variables are allowed to vary by nativity. The intervals listed above for the immigrant arrival cohorts are those defined in the Australian and Canadian data; the slightly different immigrant cohorts defined in the U.S. data are as follows: pre-1970, 1970-74, 1975-79, 1980-84, and 1985-90. The immigrant cohort coefficients reported in this table have been normalized to represent immigrant-native income differentials for women who are aged 25-29 (in both specifications) and who have 12 years of education (in specification (2)). Sampling weights were used in the U.S. calculations.

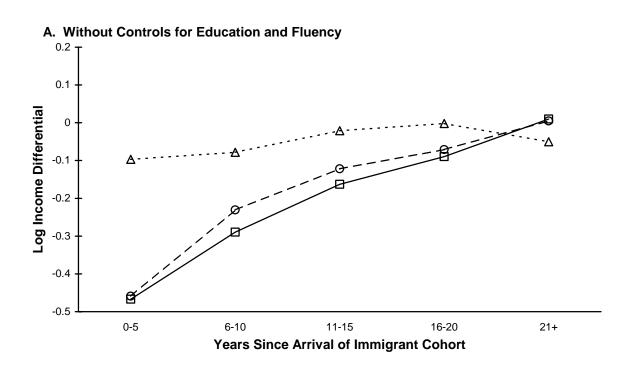
Table 9

The Effect of Age, Education, and Language Fluency Female Immigrant Income,
Excluding Immigrants from Central/South America, by Destination Country
(OLS Coefficients and Robust Standard Errors)

| | \ | | Destination Description | on Country | | |
|-----------------------------|--------|--------|-------------------------|------------|----------------------|--------|
| | Aus | tralia | | nada | United States | |
| Regressor | (1) | (2) | (1) | (2) | (1) | (2) |
| Age Group: | | | | | | |
| 30-34 | .057 | .051 | .099 | .093 | .091 | .091 |
| | (.016) | (.016) | (800.) | (800.) | (.018) | (.017) |
| 35-39 | .044 | .051 | .144 | .143 | .137 | .131 |
| | (.016) | (.016) | (.009) | (.009) | (.018) | (.017) |
| 40-44 | .009 | .050 | .204 | .228 | .162 | .159 |
| | (.016) | (.016) | (.009) | (.009) | (.018) | (.017) |
| 45-49 | 009 | .045 | .184 | .247 | .167 | .195 |
| | (.018) | (.018) | (.010) | (.010) | (.019) | (.018) |
| 50-54 | 008 | .068 | .137 | .244 | .137 | .206 |
| | (.020) | (.021) | (.011) | (.011) | (.021) | (.021) |
| 55-59 | 056 | .053 | .141 | .290 | .175 | .263 |
| | (.028) | (.030) | (.013) | (.013) | (.023) | (.023) |
| Immigrant×Age Group: | | | | | | |
| 30-34 | 038 | 012 | 118 | .041 | 016 | 010 |
| | (.031) | (.032) | (.021) | (.022) | (.020) | (.020) |
| 35-39 | 016 | 005 | 136 | .015 | 049 | 019 |
| | (.031) | (.031) | (.021) | (.021) | (.020) | (.020) |
| 40-44 | 034 | 026 | 158 | 028 | 087 | 040 |
| | (.031) | (.031) | (.021) | (.021) | (.021) | (.020) |
| 45-49 | 023 | 007 | 143 | 029 | 092 | 048 |
| | (.033) | (.035) | (.022) | (.022) | (.022) | (.021) |
| 50-54 | 078 | 074 | 137 | 020 | 097 | 058 |
| | (.038) | (.040) | (.025) | (.024) | (.024) | (.024) |
| 55-59 | .028 | 013 | 160 | 054 | 155 | 096 |
| | (.049) | (.054) | (.027) | (.027) | (.026) | (.026) |
| Education | | .066 | | .093 | | .103 |
| | | (.002) | | (.001) | | (.002) |
| Immigrant ×Education | | 012 | | 038 | | 044 |
| | | (.004) | | (.002) | | (.003) |
| Ability to Speak English | | | | | | |
| (or French in Canada): | | | | a | | |
| Well or Very Well | | 107 | | 078 | | 015 |
| | | (.016) | | (.012) | | (.022) |
| Not at All or Not Well | | 327 | | 042 | | 118 |
| | | (.041) | | (.031) | | (.038) |

Note: These coefficients are from the same income regressions reported in Table 8; see the note to that table for more information. The reference group for the age dummies is 25-29 year-olds. The reference group for the fluency dummies is women who speak only English in the Australian and U.S. data, and women who speak only English and/or French in the Canadian data.

Figure 1
Predicted Immigrant-Native Income Differentials



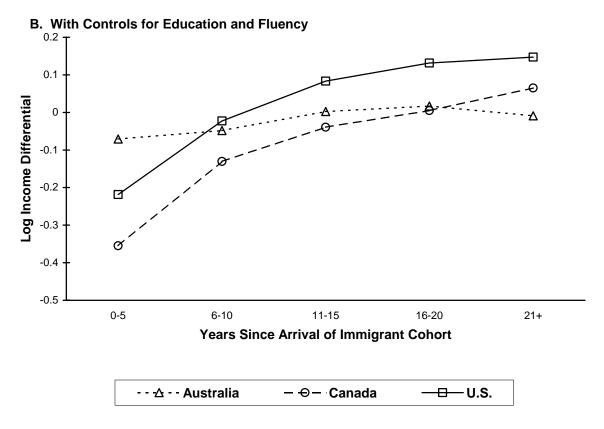


Figure 2
Predicted Immigrant-Native Income Differentials
Excluding Latin American Immigrants

