

Canadian International Labour Network

# Labour Market Outcomes:

A Cross-National Study

CILN is a collaberative research venture between the Social Sciences and Humanities Research Council (SSHRC) and McMaster University. Additional funding is provided by the University of British Columbia, the University of Toronto, Queen's University, York University and Human Resources Development Canada (HRDC).

McMaster University

DEPARTMENT OF ECONOMICS

# An Examination of Cross-Country Differences in the Gender Gap in Labor Force Participation Rates

Heather Antecol Illinois State University

October 1999

Abstract: Using evidence on variation in the gender gap in labor force participation rates (LFPR) across home country groups in the United States, this paper attempts to assess the role of two factors, human capital and culture, in explaining why cross-country differences exist in these gaps. While human capital factors play a limited role, as controlling for these factors does not eliminate variation in the gender gap in LFPR across home country groups, cultural factors, such as tastes regarding family structure and women's role in market versus home work, appear to be important. In particular, for first generation immigrants, I find that over half of the overall variation in the gender gap in LFPR across home country groups within the United States can be attributed to home country LFPR. This finding suggests that there must be a permanent, portable factor, i.e., culture, that is not captured by observed human capital measures and not related to labor market institutions, that affects outcomes. As the overall variation in the unadjusted gender gap in LFPR and the role of home country LFPR are smaller for second-and-higher generation immigrants, there exists evidence of cultural assimilation as well.

Acknowledgements: I thank the Canadian International Labour Network (CILN) for financial support. CILN receives major funding from the Social Sciences and Humanities Research Council of Canada and McMaster University. Peter Kuhn, Lonnie Magee, Dan Rich, and anonymous referees provided helpful comments.

**Correspondence**: Department of Economics, Illinois State University, Campus Box 4200, Normal, IL 61790, USA. Telephone: (309) 438-2996, Fax: (309) 438-5228, and Email: hanteco@ilstu.edu.

#### **1. Introduction**

While a large majority of adult men work for pay in all countries, the same is not true of women. In fact, there is considerable variation in the gender gap in labor force participation rates (LFPR) across countries. For example, Column 1 of Table 1 demonstrates that the gender gap in LFPR, which is the male LFPR minus the female LFPR, ranges from 89.4 percentage points for Afghanistan, 50.6 for Greece, to 2.2 percentage points for Sweden. Perhaps surprisingly, there is little work among economists that attempts to explain cross-country variation in female labor force participation rates.<sup>1,2</sup> Therefore, the question remains: What can account for these large differences? Possible explanations include differences in human capital and labor market institutions across countries. Everyday conversations and casual empiricism, however, often invoke "cultural" factors, such as differences in preferences regarding family structure and women's roles in market versus home work.

Economists have become increasingly aware of the importance of studying cultural factors or "tastes" in explaining why there exist differences across home country groups in labor market outcome

<sup>&</sup>lt;sup>1</sup>A number of articles document cross-country differences, but are largely descriptive in nature. For example, Pfau-Effinger (1994) compares part-time participation rates of women in Finland and Germany. Pott-Buter (1993) compares LFPR of women in the Netherlands to Belgium, Denmark, France, Germany, Sweden, and the United Kingdom. Meulders, Plasman, and Vander Stricht (1993) examine the LFPR of women in the European community. David and Starzec (1992) compare part-time participation rates of women in France and Great Britain. Wolchik (1992) examines the LFPR of women in Central and Eastern Europe. Haavio-Mannila and Kauppinen (1992) examine female LFPR in the Nordic Countries. The OECD (1988) examines the LFPR of women in OECD countries. Finally, using empirical analysis, Dex and Shaw (1986) compare the work patterns of British and American women after childbirth in an attempt to assess the effect of equal opportunity policies.

<sup>&</sup>lt;sup>2</sup>There is, however, a large stream of literature examining the trends in female labor force participation rates within a single country (for example, see "Trends in Women's Work, Education, and Family Building," *Journal of Labor Economics*, Volume 3, Number 1, Part 2, January 1985).

variables.<sup>3</sup> In particular, Reimers (1985) examines variation in married women's LFPR across home country groups in the United States for both first generation, and second-and-higher generation immigrants. She argues that cultural factors may indirectly affect married women's LFPR by acting through other factors, such as women's education, experience, and fertility choices, while cultural factors play a direct role if differences in married women's LFPR across home country groups within the United States persist despite controls for observable characteristics. Although Reimers does find that cultural factors, both indirect and direct, play a role in explaining variation in married women's LFPR across first generation, and second-and-higher generation immigrants, it is unclear whether her results should be interpreted as "culture" unless the residual variation in married women's LFPR across home country.

More recent research on cultural factors explicitly investigates the role of home country variables.<sup>4</sup> For example, Blau (1992) examines the determinants of fertility among first generation immigrant women from different home country groups in the United States. In particular, Blau compares the fertility rates of immigrant groups in the United States to a number of home country variables, such as the total fertility rate (TFR), average per capita GNP, and annual number of deaths of infants under 1 year per 1,000 live births (MORT). Blau finds a positive and significant effect of TFR

<sup>&</sup>lt;sup>3</sup>The role of culture has been examined in other contexts. For example, Caroll, Rhee and Rhee (1994) examine the role cultural factors plays in explaining cross country variation in saving rates.

<sup>&</sup>lt;sup>4</sup>The role of home country variables, in different contexts, has been examined in several studies. For example, Borjas (1987) examines whether home country variables explain native/immigrant wage differentials, all else being equal; and Fairlie and Meyer (1996) examine whether home country variables explain the residual variation in male self-employment rates across home country groups within the United States. Antecol (1999) examines the role home country variables play in explaining variation in the gender wage gap across home country groups within the United States.

(when GNP and MORT are also controlled for) on the predicted fertility rates, which she argues provides evidence of a "pure taste effect", i.e., cultural factors using my terminology.

In this paper, I attempt to assess the effect of cultural factors on gender gaps in LFPR using evidence on variation in the gender gap in LFPR across home country groups within the United States.<sup>5</sup> I argue that these gaps are informative about culture for a number of reasons. First, in contrast to international differences, differences between home country groups in one country --the United States--cannot easily be attributed to institutional factors, since all United States residents operate under roughly the same overall labor market regime. Second, compared to cross-country studies, within-country studies offer better controls for human capital factors, such as education. Finally, one can determine whether the variation across immigrant groups within the United States is due to home country variables, i.e., home country male and female LFPR. If these home country variables are a contributing factor, it seems more likely that "culture" or "tastes" play a role in explaining cross-country variation in gender gaps in LFPR.<sup>6</sup>

I begin in Section 2 by describing the data used in the study. I then assess the role of two factors, human capital and culture, in explaining differences in the gender gap in LFPR across first generation immigrant groups in the United States, in Section 3. In order to determine whether cultural factors have a greater effect on first generation than on second-and-higher generation immigrants, in

<sup>&</sup>lt;sup>5</sup>Although there has been a large stream of literature examining differences in LFPR across home country groups among married female immigrants within a single country (Long (1980), Reimers (1985), Duleep and Saunders (1993), and Baker and Benjamin (1994)), to my knowledge, there has been no research on differences in gender gaps in LFPR across home country groups within a single country.

<sup>&</sup>lt;sup>6</sup>A similar methodology is used in my earlier work to examine why cross-country variation in the gender wage gap exists (Antecol, 1999).

Section 4, I examine the determinants of the gender gap in LFPR for second-and-higher generation immigrants.<sup>7</sup> Section 5 concludes.

#### 2. Data

The data set employed for the "host" country analysis is the 1990 U.S. Census 5% public use Microdata file. This data set is ideal because it includes detailed variables on labor market outcomes (e.g., employment status, wages, weeks worked), home country groups (e.g., ancestry, place of birth, race), and demographics (e.g., age, region, year of arrival, education, marital status) and the large sample size allows one to obtain reasonably precise results for a large number of different home country groups.

The sample includes individuals between the ages 25 and 54. Individuals who were currently enrolled in school, both full-time and part-time, were excluded from the sample. Further, the sample excludes first generation immigrants born abroad of U.S. born parents.

Because I am interested in the role home country variables play in explaining variation in the gender gap in LFPR across home country groups in the United States, I need to ensure that the home country groups in the United States are as closely aligned as possible with the country of origin. Two approaches were used to ensure this alignment. For first generation immigrants--individuals born outside of the United States--an individual's home country is based on place of birth. For second-and-higher generation immigrants--individuals born inside the United States--primary ancestry is used to determine an individual's "home" country. Second-and-higher generation immigrants who reported

<sup>&</sup>lt;sup>7</sup>Blau (1992) argues that, for a number of reasons–such as length of time away from the home country, length of time to adapt to economic conditions and opportunities in the home country–culture should have a greater effect on first generation than second-and-higher generation immigrants.

multiple ancestries (i.e., primary and secondary ancestry) were excluded from the sample.<sup>8</sup> Because the United States consists primarily of immigrants and their descendants, anyone who reported "American" as their primary ancestry was excluded from the sample.

Based on the above criteria, for first generation immigrants, I restrict the sample to 72 home country groups because these are the most detailed groups that I can make comparable across first generation immigrants and home countries, with large enough sample sizes. This leaves a first generation immigrant sample size of 201,447 males and 207,421 females. For a list of the home country groups see Table 1. For second-and-higher generation immigrants, I am only able to identify 29 of the 72 home country groups due to small cell sizes. This is likely a result of the fact that immigration to the United States for many immigrant groups is a very recent phenomenon. The second-and-higher generation immigrant sample is restricted to a 1% sample by randomly choosing 20% of the original sample. This leaves a second-and-higher generation immigrant sample size of 173,108 males and 158,595 females. For a list of the home country groups see Table 2.

Home country data on LFPR are from the ILO *Yearbook of Labour Statistics*, various years.<sup>9</sup> The home country LFPR, with some exceptions, are based on 1990 data for individuals between the ages 25 and 54.<sup>10</sup>

<sup>&</sup>lt;sup>8</sup>The exceptions are individuals who reported multiple UK (e.g., Welsh and Scottish) ancestries or multiple USSR ancestries (e.g., Estonian and Lithuanian).

<sup>&</sup>lt;sup>9</sup>Note the following exceptions: data for Belgium are from OECD *Labour Force Statistics* 1972-1992; and data for Syria and Lebanon are from UN *Arab Women in ESCWA Member States*, Economic and Social Commission for Western Asia.

<sup>&</sup>lt;sup>10</sup>Note the following exceptions: data for Afghanistan are from 1979; data for Belize are from 1994; data for Cuba, Grenada, and Poland are from 1988; data for Czechoslovakia, Ethiopia, Greece, Honduras, Jordan, Peru, South Africa, and Syria are from 1991; data for Guatemala, Indonesia, USSR, and Vietnam are from 1989; data for Guyana

There are differences across countries in the way home country LFPR are measured. In particular, there is cross-country variation in the definitions used, i.e., for the employed and the unemployed, and in the groups covered, such as the armed forces and members of religious orders. Further, there exist differences in the methods of collection, classification, and tabulation of data across countries, for example, how family workers, who work in family enterprises, are counted varies across countries.<sup>11</sup>

#### **3.** The Gender Gap in Labor Force Participation Rates (LFPR)

Column 1 of Table 1 shows the home country gender gap in LFPR.<sup>12</sup> It is clear that there is substantial variation in the gender gap in LFPR across home countries: the gap ranges from 2.2 for Sweden to 89.4 for Afghanistan. Second, this large variation is not restricted to differences between European countries and non-European countries. For example, gender gaps in LFPR in European countries range from 2.22 for Sweden to 55.2 in Ireland; gender gaps in LFPR in Middle Eastern countries range from 26.7 in Israel to 89.39 in Afghanistan; and gender gaps in LFPR in East and South Asian countries range from 9.0 in Vietnam to 47.2 in Malaysia. Therefore, lumping country-of-origin groups into broad regional categories can be very misleading. This substantial variation is the main stylized "fact" I analyze in this paper.

and Iraq are from 1987; data for India are from 1981; data for Iran and Nigeria are from 1986; data for Lebanon are from 1970; data for Belgium are for individuals aged 15 to 64; data for Brazil, Colombia, Costa Rica, India, Lebanon, Nicaragua, Syria, Thailand, and Uruguay are for individuals aged 25 to 59; data for Cuba and Honduras are for individuals aged 20 to 59; and data for Venezuela are for individuals aged 25 to 64.

<sup>&</sup>lt;sup>11</sup>For more information on the differences in measurement across home countries see the ILO *Yearbook of Labour Statistics*, various years.

<sup>&</sup>lt;sup>12</sup>The conventional definition is employed for the LFPR, i.e., (employment+unemployment)/population ratios. The home country gender gap in LFPR is calculated as the male LFPR minus the female LFPR.

Can this cross-country variation in the gender gap in LFPR be attributed to differences in personal characteristics across these home country groups? To answer this question, I examine differences in the gender gap in LFPR across first generation immigrant groups in the United States. In particular, I first predict an unadjusted gender gap in LFPR using estimates from the following linear probability regression pooled for men and women:<sup>13</sup>

$$L_{i} = a + bM_{i} + \sum_{j=1}^{J-1} c_{j}^{1}H_{ij} + \sum_{j=1}^{J-1} c_{j}^{2}H_{ij}M_{i} + e_{1i}$$
(1)

where  $L_i$  is the LFPR of person i,  $M_i$  is a "male" dummy variable,  $H_{ij}$  are home country dummy variables, and j indexes the home country. This specification is referred to as the "full dummy controls" specification.

I then predict X-adjusted and X,Z-adjusted gender gaps in LFPR by re-estimating equation (1), first adding controls (both in levels and interactions) for exogenous (X) personal characteristics, and then adding controls (both in levels and interactions) for exogenous (X) and potentially endogenous (Z) personal characteristics. The former are characteristics that influence LFPR but seem unlikely to be correlated with culture. They include a quartic in age, 8 year-of-arrival dummy variables, 9 regional dummy variables, and a dummy variable for metropolitan status. The latter are characteristics that influence LFPR and are likely to depend on culture. They include years of education, a dummy variable

<sup>&</sup>lt;sup>13</sup>Alternatively, I could have estimated a probit or logit model. Although the probit results are slightly different from the linear probability results, particularly once controls for personal characteristics are added, I find that the overall conclusions do not change. Therefore, for convenience the linear model is used because it allows for easier calculation of the weighted standard deviation measure discussed below. The probit results are available from the author upon request.

for English fluency, 3 marital status dummy variables, and number of children.<sup>14</sup>

Finally, I calculate the weighted standard deviation (WSD), which is a summary statistic of the total variation in the gender gap in LFPR, for the unadjusted, X-adjusted, and X,Z-adjusted gender gaps in LFPR across home country groups within the United States.<sup>15</sup> While variation in the gender gap in LFPR across home country groups can be attributed to personal characteristics if the WSDs for the adjusted gaps are substantially smaller than the WSD for the unadjusted gap, most of the variation in the gender gap in LFPR across home country groups remains unexplained if the WSDs remain similar in magnitude.

Columns 2 through 4 of Table 1 present the predicted unadjusted, X-adjusted, and X,Zadjusted gender gaps in LFPR for first generation immigrants, respectively. There are several key points to note. First, as was the case with the cross-country data, there exist large differences in the unadjusted gender gap in LFPR across home country groups. The unadjusted gap ranges from 3.37 for Jamaica to 49.82 for Jordan. Second, it is once again apparent that lumping home country groups into broad categories can be very misleading: the large variation in the predicted unadjusted gap is not restricted to differences between "traditional" source countries (i.e., Europe) and newer source countries. For example, the gap across European countries ranges from 19.50 for Portugal to 33.01 for Greece; the gap for Middle Eastern and Western Asia countries range from 31.71 for Iran to 49.82 for Jordan; the gap for Eastern and South Eastern Asian countries range from 9.56 for the Philippines

<sup>&</sup>lt;sup>14</sup>Number of children is only included as a direct term because it is only observable for women.

<sup>&</sup>lt;sup>15</sup>The WSD is the standard deviation of the gender gap in LFPR across home country groups which corrects for least squares sampling errors. For a detailed discussion of how the WSD is calculated see Krueger and Summers (1988) and Haisken-DeNew and Schmidt (1997).

to 46.84 for Japan. Finally, despite controls for personal characteristics, there continue to exist large differences in the predicted gender gap across home country groups. For example, the X-adjusted gap ranges from 2.76 for Jamaica to 49.24 for Jordan and the X,Z-adjusted gap ranges from 1.84 for Jamaica to 39.66 for Japan. Although I explore these relationships further in the WSD analysis below, I draw two main conclusions from the patterns here. First, home country effects matter since there exists variation in the unadjusted gender gap in LFPR across first generation immigrant groups in the United States. Second, the differences in the gender gap in LFPR across first generation immigrant groups are unlikely to be an artifact of differences in personal characteristics across these immigrant groups.

Column 1 in Panel 1 of Table 3 presents the WSD for the unadjusted, the X-adjusted, and the X,Z-adjusted gender gap in LFPR for first generation immigrants. I partition the unadjusted WSD into three components: explained by X, explained by adding Z, and unexplained. The unadjusted WSD is 8.98 of which -0.15 percentage points are explained by X, 0.93 percentage points are explained by adding Z, and 8.20 percentage points are unexplained.<sup>16,17</sup> These results illustrate that personal characteristics, both exogenous and potentially endogenous, play a limited role in explaining why there exists variation in the gender gap in LFPR across home country groups, i.e., the "adjusted" WSDs remain similar in magnitude to the "unadjusted" WSD.

<sup>&</sup>lt;sup>16</sup>The variables that cause these changes in the WSD measures are highly jointly significant (i.e., a p-value of 0.0000).

<sup>&</sup>lt;sup>17</sup>Although I am more concerned with the unexplained component of the inter-ethnic variation in the gender gap in LFPR, the order in which I introduce X and Z into the regression will of course influence how much of the inter-ethnic variation in the gender gap in LFPR can be attributed to X and Z. To see the effects of this I re-estimate the model adding Z first and then adding X. I find for first generation immigrants that 1.03 percentage points is now explained by Z and -0.25 is now explained by adding the X's.

I conclude from Column 1 in Panel 1 of Table 3 that personal characteristics do not account for the variation in the gender gap in LFPR across home country groups. Therefore, I examine an alternative explanation for this variation: differences in cultural factors across home country groups, such as tastes regarding family structure and women's roles in market versus home work. To examine this hypothesis, I first re-estimate equation (1), unadjusted and adjusted for personal characteristics, first dropping the home country dummy variables (both in levels and interactions), and then replacing them by home country LFPR of men and women (both in levels and interactions). Unlike the full dummy controls specification, which does not impose any restrictions on the home country effects, this specification, referred to as the "home country LFPR controls" specification, imposes the requirement that the home country effects are linear in the home country LFPR. I then use the results from the home country controls specification to predict unadjusted, X-adjusted, and X,Z-adjusted gender gaps in LFPR. Finally, I calculate the unadjusted, X-adjusted, and X,Z-adjusted WSDs from the home country LFPR controls specification. The closer in magnitude the WSDs from the home country LFPR controls specification are to the WSDs from the full dummy controls specification, the more home country effects are explained by culture or "tastes".

Does coming from a country with high female LFPR lead to high LFPR of women in the United States? In order to answer this question I examine the coefficients, both in levels and interactions, on the home country female LFPR from the unadjusted home country LFPR controls specification. I find that women who come from countries with high LFPR are likely to have smaller gender gaps in LFPR in the United States (i.e., the coefficient on the male/home country female LFPR interaction term is - 0.26 with a t-statistic of 38.87). Further, the home country female LFPR has the effect of decreasing

the gender gap in LFPR in the United States by increasing female LFPR in the United States (i.e., the coefficient on the home country female LFPR is 0.22 with a t-statistic of 38.60) more than it decreases the male LFPR in the United States (i.e., the sum of the coefficients on home country female LFPR and male/home country female LFPR interaction term is -0.04 with a t-statistic of 10.60).<sup>18</sup> These results suggest that there must be a permanent, portable factor, i.e., culture, that affects outcomes.

Columns 5 through 7 of Table 1 present the predicted unadjusted, X-adjusted, and X,Zadjusted gender gaps in LFPR for first generation immigrants from the home country LFPR controls specification, respectively. The following results are noteworthy. First, there continue to exist differences in the predicted unadjusted gender gap in LFPR across home country groups within the United States for the home country LFPR controls specification; however, they are not as large as those found for the full dummy controls specification. For example, the gender gap in LFPR in the home country LFPR controls specification ranges from 14.02 for Czechoslovakia to 36.32 for Iran. Second, as was the case for the full dummy controls specification, despite controls for personal characteristics, there continue to exist differences in the predicted gender gaps across home country groups. For example, the X-adjusted gap for the home country LFPR controls specification ranges from 13.67 for Czechoslovakia to 38.72 for Belgium and the X,Z-adjusted gap from the home country LFPR controls specification ranges from 7.67 for Barbados to 29.37 for Mexico. These results suggest that part of the home country effect can be attributed to cultural factors or "tastes".

Column 2 in Panel 1 of Table 3 presents the unadjusted WSD (Row 1), the X-adjusted WSD

<sup>&</sup>lt;sup>18</sup>The results for the adjusted home country LFPR controls specification are similar. The full set of regression results from the home country LFPR controls specification, both unadjusted and adjusted, are available from the author upon request.

(Row 2), and the X,Z-adjusted WSD (Row 3) for first generation immigrants for the home country LFPR controls specification. There are two key points to note. First, the unadjusted WSD for the home country LFPR controls specification is 5.67of which 0.25 percentage points are explained by X, 1.25 percentage points are explained by adding Z, and 4.17 percentage points remain unexplained.<sup>19</sup> Therefore, it is still the case that the amount of variation across home country groups within the United States is not much affected by the presence of personal characteristics. Second, a comparison of the WSDs from the home country LFPR controls specification to the WSDs from the full dummy controls specification illustrates that tastes explain over half of the home country effect, i.e., 5.67/8.98, 5.42/9.13 and 4.17/8.20 are a bit over half.<sup>20</sup> Although there exist differences in the measurement of LFPR across home countries, this comparison suggests that cultural factors or tastes play a large role in explaining variation in the gender gap in LFPR across home country groups in the United States.<sup>21,22</sup>

<sup>&</sup>lt;sup>19</sup>The variables that cause these changes in the WSD measures are highly jointly significant (i.e., a p-value of 0.0000).

<sup>&</sup>lt;sup>20</sup>Education systems vary across countries, with some being more similar to the education system in the United States than others. In order to control for this variation I re-estimate the models outlined above, however, I restrict the sample to first generation immigrants who emigrated before age 6. This sample restriction, which ensures that immigrants received their education in the United States, does not change the relative importance of personal characteristics, including education, and tastes in explaining the amount of variation in the gender gap in LFPR across home country groups within the United States. Results are available from the author upon request.

<sup>&</sup>lt;sup>21</sup>One limitation of the above analysis is that home country LFPR are based on 1990 data while the year of arrival of immigrants into the United States date as far back as pre-1950s. This may be important since female LFPR have changed dramatically over time. In an attempt to over-come this limitation, I predict the unadjusted gender gap in LFPR for the home country LFPR controls specification using home country LFPR data from the mean year of immigration, 1970 (or the closest year available). Although the effect of tastes is slightly smaller, they continue to explain over half of the total home country effect, i.e., (4.75/8.98)=0.53.

<sup>&</sup>lt;sup>22</sup>A possible explanation for why tastes, i.e., home country LFPR, do not completely explain the total home country effect is the selection of immigrants. Immigrants who emigrate to the United States may not be a random sample of individuals from the home country. For example, women who migrate may have higher labor force attachments than women who remain in the home country. Therefore, home country variables may not be totally accurate descriptions of immigrants. I view this as a useful topic for future research.

Is the home country LFPR controls specification preferred to the full dummy controls specification? To answer this question, I test the unadjusted home country LFPR controls specification, which has 138 fewer parameters, against the unadjusted full dummy controls specification which yields a LR test statistic of 8092.1 with a p-value of 0.00. Thus, the full dummy controls specification is preferred to the restricted specification which restricts the home country effects to be linear in the home country LFPRs. This is not all that surprising given the analysis of the WSDs which showed that cultural factors only explain part of the home country dummy controls (both in levels and interactions). I then compare the R-squared from this regression, which is 0.1048, to the R-squared from the full dummy controls and home country LFPR controls specifications, which are 0.1408 and 0.1236, respectively. This comparison shows the following: while home country effects increase the explanatory power, i.e., (.1408-.1048)=0.036, cultural factors or "tastes" account for more than half of this additional explanatory power, i.e., (.1236-.1048)/(.1408-.1048)=0.52.

#### 4. Second-and-Higher Generation Immigrants

Blau (1992) argues that culture should have a greater impact on first generation than secondand-higher generation immigrants for a number of reasons, including length of time away from the home country, length of time to adapt to economic conditions and opportunities in the host country, and length of time exposed to the tastes of the host country. Using the same methodology outlined above, in this section, I examine the role culture or tastes play in explaining variation in the gender gap in LFPR across home country groups within the United States for second-higher-generation immigrants.

Portable cultural factors appear to play less of a role for second-and-higher generation

immigrants than for first generation immigrants. The magnitude of the effect of the home country female LFPR, both in levels and interactions, from the unadjusted home country LFPR controls specification is substantially smaller for second-and-higher generation immigrants than for first generation immigrants. In particular, for second-and-higher generation immigrants, the coefficient on the male/home country female LFPR interaction term is -0.03 with a t-statistic of 3.27, the coefficient on the home country female LFPR is 0.08 with a t-statistic of 11.13 and the sum of the coefficients on home country female LFPR and male/home country female LFPR interaction term is -0.05 with a t-statistic of 12.44.<sup>23</sup>

Table 2 presents the unadjusted, the X-adjusted, the X,Z-adjusted gender gaps in LFPR for second-and-higher generation immigrants, for both the full dummy controls and the home country LFPR controls specifications. The following observations are noteworthy. First, there exists variation in the unadjusted gender gap in LFPR for second-and-higher generation immigrants for the full dummy controls specification, however, it is substantially smaller than that found for first generation immigrants. Second, as was the case for first generation immigrants, despite controls for personal characteristics, there continue to exist differences in the predicted gender gaps across home country groups. Finally, as was the case for first generation immigrants, there continue to exist differences in the predicted gaps for the home country LFPR controls specification, however, they are not as large as those found for the full dummy controls specification.

<sup>&</sup>lt;sup>23</sup>Although the results for the X-adjusted home country LFPR controls specification are similar, the X,Zadjusted results suggest that high female LFPR in the home country do not lead to high female LFPR in the United States, i.e., the coefficient on the home country female LFPR is 0.00 with a t-statistic of 0.04. This result further suggests the decreasing importance of cultural factors for second-and-higher generation immigrants. The full set of regression results from the home country LFPR controls specification, both unadjusted and adjusted, are available from the author upon request.

Columns 1 and 2 in Panel 2 of Table 3 present the unadjusted WSD (Row 1), the X-adjusted WSD (Row 2), and the X,Z-adjusted WSD (Row 3) for second-and-higher generation immigrants for the full dummy controls specification and the home country LFPR controls specification, respectively. There are three key points to note. First, the unadjusted WSD for the full dummy controls specification is much smaller for second-and-higher generation immigrants than for first generation immigrants (See Row 1, Column 1 in Panels 1 and 2).<sup>24</sup> This suggests that home country effects are more important for first generation immigrants than second-and-higher generation immigrants. Second, the amount of variation across home country groups within the United States is not much affected by the presence of personal characteristics because the adjusted WSDs are similar in magnitude to the unadjusted WSDs from both the full dummy controls and home country LFPR controls specifications.<sup>25</sup> Finally, cultural factors or tastes explain less than half of the home country effect, i.e., 1.20/3.26, 1.22/3.13 and 1.15/2.70 are less than half. These results are consistent with Blau's (1992) argument that cultural factors should be more apparent among first generation immigrants, because second-and-higher generation immigrants have had time to adapt to the prevailing tastes and economic conditions of the host country.

#### **5.** Conclusions

Evidence on variation in the gender gap in labor force participation rates (LFPR) across home

<sup>&</sup>lt;sup>24</sup>This is even true if I restrict the sample of first generation immigrants to the 29 home country groups I can identify for second-and-higher generation immigrants, i.e., the unadjusted WSD is 7.12 for the restricted sample of first generation immigrants for the full dummy controls specification.

<sup>&</sup>lt;sup>25</sup>The variables that cause these changes in the WSD measures, for both the full dummy controls and home country LFPR controls specifications, are highly jointly significant (i.e., a p-value of 0.0000).

country groups in the United States is employed to determine the role of two factors, human capital and culture, in explaining cross country differences in the gender gap in LFPR. I argue that these gaps are informative for a number of reasons. First, in contrast to international differences, differences across home country groups within one country—the United States--cannot be easily attributed to differences in institutional factors, since all United States residents operate under roughly the same labor market regime. Second, compared to cross-country studies, within-country studies offer better controls for human capital factors, such as education. Finally, one can determine whether the variation across immigrant groups within the United States is due to home country variables, i.e., home country male and female LFPRs. If these home country variables are a contributing factor, there must be a permanent, portable factor that is not captured by observed human capital measures and not related to labor market institutions, that affects outcomes. A plausible candidate is "culture", or group specific "tastes" toward family and work.

I find evidence of variation in the unadjusted gender gap in labor force participation across home country groups in the United States. This variation cannot be attributed to human capital factors, as controlling for these factors does not eliminate the variation in the gender gap in LFPR across home country groups. For first generation immigrants, I find that over half of the overall variation in the gender gap across home country groups within the United States can be attributed to home country LFPRs. This finding suggests the importance of cultural factors, such as tastes regarding family structure and women's role in market versus home work. As the overall variation in the unadjusted gender gap in LFPR and the role of home country LFPR are smaller for second-and-higher generation immigrants, there exists evidence of cultural assimilation as well.

#### **References**

- Amemiya, Takeshi. "A Note on a Random Coefficients Model." *International Economic Review*, Vol. 19 (October 1978): 793-796.
- Antecol, Heather. "Why is there Inter-Ethnic Variation in the Gender Wage Gap? The Role of Cultural Factors." Canadian International Labour Network (CILN) Working Paper # 25, 1999.
- Baker, Michael and Dwayne Benjamin. "The Role of The Family in Immigrants' Labor Market Activity: An Evaluation of Alternative Explanations." *American Economic Review*, Vol. 87, No. 4 (September 1997): 705-727.
- Ben-Porath, Yoram and Reuben Gronau. "Jewish Mother Goes to Work: Trends in the Labor Force Participation of Women in Israel, 1955-1980." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S310-S327.
- Blau, Francine D. "The Fertility of Immigrant Women: Evidence from High Fertility Source Countries." in George J. Borjas and Richard Freeman, eds., *Immigration and the Workforce: Economic Consequences for the United States and Source Areas*. Chicago: The University of Chicago Press, 1992.
- Borjas, George J. "Self-Selection and the Earnings of Immigrants." *American Economic Review*, Vol. 77 (September 1987): 531-553.
- Borjas, George J. and Glenn T. Sueyoshi. "A Two-Stage Estimator for Probit Models with Structural Group effects." *Journal of Econometrics*, Vol. 64 (1994): 165-182.
- Caroll, Christopher D., Byung-Kun Rhee, and Changyong Rhee. "Are there Cultural Effects on Saving? Some Cross-Sectional Evidence." *Quarterly Journal of Economics*, Vol. (CIX) (August 1994): 685-699.
- Colombino, Ugo and Bianca De Stavola. "A Model of Female Labor Supply in Italy Using Cohort Data." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S275-S292.
- David, Marie-Gabrielle and Christophe Starzec. "Women and Part-Time Work: France and Great Britain Compared." in Nancy Folbre, Barbara Bergmann, Bina Agarwal and Maria Floro, eds., *Issues in Contemporary Economics*, Volume 4 Women's Work in the World Economy. New York: New York University Press (1992).
- Dex, Shirley and Lois B. Shaw. *British and American Women at Work*. London: The Macmillan Press Ltd. (1986).

- Fairlie, Robert W. and Bruce D. Meyer. "Ethnic and Racial Self-Employment Differences and Possible Explanations." *Journal of Human Resources*, Vol. 31 (Fall 1996): 757-793.
- Franz, Wolfgang. "An Economic Analysis of Female Work Participation, Education, and Fertility: Theory and Empirical Evidence for the Federal Republic of Germany." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S218-S234.
- Gregory, R.G., P. McMahon, and B. Whittingham. "Women in the Australian Labor Force: Trends, Causes, and Consequences." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S293-S309.
- Gustafsson, Siv and Roger Jacobsson. "Trends in Female Labor Force Participation in Sweden." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S256-S274.
- Haavio-Mannila, Elina and Kaisa Kauppinen. "Women and the Welfare State in the Nordic Countries." in Hilda Kahn and Janet Z. Giele, eds., Women's Work and Women's Lives: The Continuing Struggle Worldwide. Colorado: Westview Press, Inc (1992).
- Haisken-DeNew, John P. and Christoph M. Schmidt. "Interindustry and Interregion Differentials: Mechanics and Interpretation" *The Review of Economics and Statistics*, Vol. 79, No. 3 (August 1997): 516-521.
- Hartog, Joop and Jules Theeuwes. "The Emergence of the Working Wife in Holland." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S235-S255.
- Iglesias, Feliciano Hernandez and Michelle Riboud. "Trends in Labor Force Participation of Spanish Women: An Interpretive Essay." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S201-S217.
- ILO. Yearbook of Labour Statistics, various years.
- Joshi, Heather E., Richard Layard, and Susan J. Owen. "Why are More Women Working in Britain?" Journal of Labor Economics, Vol. 3, No. 1 (January 1985): S147-S176.
- Krueger, Alan B. and Lawrence H. Summers. "Efficiency Wages and the Inter-Industry Wage Structure" *Econometrica*, Vol. 56, No. 2 (March 1988): 259-293.
- Long, John. "The Effect of Americanization on Earnings: Some Evidence for Women." *Journal of Political Economy*, Vol. 88, No. 3 (1980): 620-29.

- Meulders, Daniele, Robert Plasman, and Valerie Vander Stricht. *Position of Women on the Labour Market in the European Community*. Vermont: Dartmouth Publishing Company, 1993.
- Michael, Robert T. "Consequences of the Rise in Female Labor Force Participation Rates: Questions and Probes." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S117-S146.
- Mincer, Jacob. "Intercountry Comparisons of Labor Force Trends and of Related Developments: An Overview." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S1-S32.
- OECD. Employment Outlook, 1988.
- Ofer, Gur and Aaron Vinokur. "Work and Family Roles in Soviet Women: Historical Trends and Cross-Section Analysis." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S328-S354.
- O'Neill, June. "The Trend in the Male-Female Wage Gap in the United States." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S91-S116.
- Pfau-Effinger, B. "The Gender Contract and Part-time Work by Women–Finland and Germany Compared." Environment and Planning A, Vol. 26, No. 9 (September 1994): 1355-76.
- Pott-Buter, Hettie A. Facts and Fairy Tales about Female Labor, Family and Fertility: A Seven-Country Comparison 1850-1990. Amsterdam: Amsterdam University Press, 1993.
- Reimers, Cordelia W. "Cultural Differences in Labor Force Participation Among Married Women." American Economic Association Papers and Proceedings (May 1985): 251-255.
- Riboud, Michelle. "An Analysis of Women's Labor Force Participation in France: Cross-Section Estimates and Time Series Evidence." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S177-S200.
- Shimada, Haruo and Yoshio Higuchi. "An Analysis of Trends in Female Labor Force Participation in Japan." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S355-S376.
- Smith, James P. and Michael P. Ward. "Time-Series Growth in the Female Labor Force." *Journal of Labor Economics*, Vol. 3, No. 1 (January 1985): S59-S90.
- Wolchik, Sharon L. "Women and Work in Communist and Post-Communist Central and Eastern Europe." in Hilda Kahn and Janet Z. Giele, eds., Women's Work and Women's Lives: The Continuing Struggle Worldwide. Colorado: Westview Press, Inc (1992).

	Home Country	First Generation Immigrants					
	unadjusted (1)	unadjusted (2)	Full-Dummy X-adjusted (3)	Controls X,Z-adjusted (4)	Hom unadjusted (5)	ne Country LFPF X-adjusted (6)	R Controls X,Z-adjusted (7)
Afghanistan	89.39	40.49	36.82	26.07	36.30	35.80	24.38
Argentina	59.19	28.23	28.69	24.52	28.58	26.62	18.07
Australia	26.49	28.93	28.73	26.91	22.06	23.79	15.01
Austria	30.39	23.69	27.89	24.83	22.33	19.42	12.01
Barbados	12.48	5.79	6.30	6.18	17.03	15.36	7.67
Belgium	20.22	31.57	33.06	29.37	34.65	38.72	27.17
Belize	54.1	17.14	17.09	12.73	27.67	26.24	16.58
Bolivia	69.73	24.33	22.43	16.82	30.56	28.66	20.31
Brazil	44.1	27.47	25.75	22.56	26.42	27.57	19.97
Canada	17.69	23.24	26.23	22.55	19.81	18.95	12.88
Chile	53.7	27.85	27.23	23.70	27.59	26.26	17.25
China	11.8	20.37	18.95	10.69	15.19	16.57	15.70
Colombia	37.39	20.86	19.97	15.26	26.21	26.13	19.18
Costa Rica	58.12	32.70	33.89	27.41	29.25	26.71	18.77
Cuba	35.83	17.86	19.63	14.59	26.49	23.98	17.77
Czechoslovakia	4.27	20.30	22.12	19.84	14.02	13.67	8.10
Denmark	6.76	29.48	31.87	28.52	16.18	16.80	11.32
Ecuador	60.49	23.37	23.80	16.91	30.28	28.13	21.09
Egypt	66.84	30.34	30.13	25.58	29.84	28.13	17.58
El Salvador	30.39	21.40	19.66	9.99	21.54	23.19	19.17
Ethiopia	39.25	16.02	13.63	11.64	23.39	24.45	13.69
Finland	6.58	31.03	32.49	31.37	17.31	18.14	11.88
France	23.17	26.25	27.92	25.39	20.57	20.67	13.17
Germany	27.62	23.73	26.31	22.18	21.64	20.35	13.75
Greece	50.62	33.01	35.50	27.20	28.07	24.94	19.36
Grenada	15.45	10.88	9.84	8.08	21.31	22.18	13.71
Guatemala	66.43	26.26	25.29	16.32	29.06	28.45	21.28
Guyana	56.28	12.77	10.84	6.43	27.75	26.33	17.52
Haiti	40.36	10.96	9.89	5.26	25.36	23.86	15.58
Honduras	56.03	24.73	22.74	15.38	28.47	29.22	21.24
Hong Kong	40.34	16.01	16.49	12.20	22.38	20.69	14.11
Hungary	13.08	26.38	28.91	25.32	20.24	20.56	14.45
India	61.35	29.41	27.42	21.26	28.34	27.95	19.71
Indonesia	37.3	26.71	26.22	21.32	22.46	22.53	15.31
Iran	85.22	31.71	29.78	26.29	36.32	34.89	20.48
Iraq	78.39	40.26	39.81	31.78	35.67	35.16	22.81
Ireland	55.2	26.75	28.58	24.89	28.40	26.61	17.53
Israel	26.69	34.84	34.79	27.98	27.35	29.12	21.96
Italy	40.53	32.30	35.98	26.80	25.10	21.50	17.89
Jamaica	10.75	3.37	2.76	1.84	16.45	15.97	9.34
Japan	35.93	46.81	45.38	39.66	21.36	23.29	9.34 17.86
Jordan	78.41	40.01	45.38 49.24	39.00 37.14	36.02	23.29 35.14	25.16
Korea (Republic)	40.26	49.82 29.69			36.02 24.74		25.16 20.57
Notea (Republic)	40.20	29.09	28.44	21.31	24.14	26.02	20.57

 Table 1

 Gender Gaps in Labor Force Participation Rates

	Home Country	First Generation Immigrants					
			Full-Dummy Controls		Home Country LFPR Controls		
	unadjusted (1)	unadjusted (2)	X-adjusted (3)	X,Z-adjusted (4)	unadjusted (5)	X-adjusted (6)	X,Z-adjusted (7)
Lebanon	81.25	43.52	42.07	34.65	34.36	32.90	21.74
Malaysia	47.21	23.48	19.50	17.41	25.35	27.63	18.36
Mexico	65.96	37.49	36.86	22.48	34.31	35.39	29.37
Netherlands	34.93	27.52	30.48	25.63	24.15	23.00	15.60
New Zealand	23.36	28.57	28.65	24.82	21.60	23.97	15.82
Nicaragua	50.92	19.91	17.13	8.87	23.88	24.23	18.50
Nigeria	52.04	19.48	15.09	9.97	26.01	26.87	15.83
Norway	13.11	27.68	30.32	26.11	19.30	19.35	13.42
Pakistan	82.37	46.45	43.56	36.31	33.54	32.74	22.60
Panama	34.19	13.30	13.80	10.74	24.15	23.26	14.63
Peru	39.3	23.79	21.95	17.62	25.58	26.20	18.71
Philippines	42.76	9.56	8.81	6.19	23.37	23.20	14.56
Poland	15.03	21.00	20.16	15.96	19.37	21.91	17.37
Portugal	25.92	19.50	23.85	12.23	21.45	17.57	17.94
Puerto Rico	38.72	27.76	30.28	24.30	32.03	30.95	21.10
Romania	12.62	22.17	20.42	16.23	18.69	21.49	16.07
South Africa	30.67	32.07	30.07	27.16	24.81	27.67	18.05
Spain	46.34	29.02	29.21	23.23	27.17	26.15	18.89
Sweden	2.22	28.91	30.70	28.72	18.12	20.37	13.55
Switzerland	32.23	27.19	28.19	25.86	20.74	20.47	12.38
Syria	78.38	42.78	41.74	32.91	32.16	30.68	21.24
Thailand	13.09	20.08	20.79	14.88	15.90	15.91	11.21
Trinidad & Tobago	43.77	9.45	8.89	7.60	27.29	26.02	15.25
Turkey	56.74	36.91	36.42	31.76	28.95	27.98	19.53
UK	20.78	25.55	26.90	23.20	20.42	20.72	13.52
Uruguay	26.36	27.05	26.77	21.43	29.24	31.05	25.14
USSR	5.73	19.90	17.90	13.90	14.81	17.62	14.44
Venezuela	47.78	28.57	26.93	22.70	29.63	29.80	20.70
Vietnam	9.01	22.28	20.51	11.54	17.17	20.20	15.96

 Table 1

 Gender Gaps in Labor Force Participation Rates

Notes: (1) Home country LFPR data are from the ILO Yearbook of Labour Statistics, Various Years (For exceptions see footnote 9 in the text). (2) The home country LFPR are based on 1990 data for individuals between the ages 25 and 54 (For exceptions see footnote 10 in the text). (3) LFPR is defined as (employment+unemployment)/population ratios. The gender gap in LFPR is measured as the male LFPR minus the female LFPR. (4) Host country data is from the 1990 U.S. Census. The number of observations is 408,868. Sampling weights were used. For sample criteria see pages 5 & 6 in the text. (5) The predicted gender gaps in LFPR in the host country are based on LFPR regressions, which are pooled for men and women. The variables included in the LFPR regressions are: Column 2--a male dummy variable, 71 home country dummy variables, and cross terms between gender and the home country dummies. Column 3--includes Column 2 plus exogenous personal characteristics, which include a quartic in age, an urban/rural dummy variable, 9 region dummy variables, 8 year of arrival dummy variables, both in levels and interactions. Column 4--includes Column 3 plus potentially endogenous personal characteristics, which include education, marital status, number of children, and English fluency, both in levels and interactions (with the exception of number of children which is included only in levels). Column 5--a male dummy, home country male and female LFPR, and cross terms between gender and home country male and female LFPR. Column 6--includes Column 5 plus exogenous personal characteristics, both in levels and interactions. Column 7-- includes Column 6 plus potentially endogenous personal characteristics, both in levels and interactions. Column 7-- includes Column 6 plus potentially endogenous personal characteristics, both in levels and interactions.

		Sec	cond-and-Higher Ger	neration Immigrants	3	
	Full-Dummy Controls			Home Country LFPR Controls		
	unadjusted (1)	X-adjusted (2)	X,Z-adjusted (3)	unadjusted (4)	X-adjusted (5)	X,Z-adjusted (6)
Austria	16.55	16.38	12.40	18.54	18.65	8.58
Belgium	18.32	18.44	9.07	23.65	23.11	6.60
Canada	17.55	18.87	9.22	18.46	17.48	11.00
China	12.42	12.58	11.21	17.18	17.25	8.24
Cuba	9.29	9.97	3.11	19.69	19.10	11.04
Czechoslovakia	14.25	14.38	7.66	17.24	17.55	10.02
Denmark	18.49	19.02	9.88	17.86	17.74	9.79
Finland	14.49	14.97	5.85	18.28	17.90	8.99
France	18.48	19.14	8.94	18.38	18.00	11.19
Germany	18.28	18.24	9.63	18.48	18.58	10.85
Greece	20.65	20.61	15.15	19.30	19.00	8.69
Hungary	15.77	15.46	9.20	18.91	19.32	9.61
Ireland	18.40	18.34	10.20	19.12	19.02	10.31
Italy	20.32	20.09	12.47	18.89	18.99	10.72
Japan	11.51	11.64	8.24	17.83	17.69	8.71
Lebanon	15.04	15.28	10.56	19.58	19.04	7.46
Mexico	20.91	20.46	7.56	20.55	20.60	11.52
Netherlands	21.89	21.76	11.66	18.90	18.97	11.24
Norway	17.16	17.73	9.16	18.57	18.07	9.32
Philippines	5.89	6.31	-2.04	18.12	17.73	11.57
Poland	17.34	17.22	9.72	18.48	18.71	9.96
Portugal	17.92	19.12	10.60	18.52	17.27	10.20
Puerto Rico	16.92	16.09	8.39	21.50	21.97	10.99
Romania	18.13	17.74	12.49	18.39	18.93	9.24
Spain	25.44	25.11	15.44	19.25	19.47	10.46
Sweden	18.41	18.81	10.41	18.86	18.60	9.29
Switzerland	22.35	22.36	13.59	17.85	17.84	10.05
UK	19.92	20.02	11.76	18.48	18.50	9.79
USSR	16.40	16.45	12.44	17.44	17.69	8.24

 Table 2

 Gender Gaps in Labor Force Participation Rates

Notes: (1) Data is from the 1990 U.S. Census. The number of observations is 331,703. Sampling weights were used. For sample criteria see pages 5 & 6 in the text. (2) See Table 1 for a list of the variables included in the LFPR regressions.

		Panel 1: First Full-Dummy Controls (1)	Generation Immigrants Home Country LFPR Controls (2)
Unadjusted	(1)	8.98	5.67
X-adjusted	(2)	9.13	5.42
X,Z-adjusted	(3)	8.20	4.17
		Panel 2: Second-and Full-Dummy Controls (1)	I-Higher Generation Immigrants Home Country LFPR Controls (2)
Unadjusted	(1)	Full-Dummy Controls	Home Country LFPR Controls
Unadjusted X-adjusted	(1) (2)	Full-Dummy Controls (1)	Home Country LFPR Controls (2)

 Table 3

 Weighted Standard Deviation Measures, Various Specifications

Notes: (1) Host country data is from the 1990 U.S.Census. The number of observations is 408,868 for first generation immigrants and 331,703 for second-and-higher generation immigrants. Sampling weights were used. For sample criteria see pages 5 & 6 in the text. (2) For a discussion of the interpretation of the WSDs see pages 9 and 11 in the text.

CILN Working Papers (downloadable)

wp43 John Flemming John Micklewright Income Distribution, Economic Systems and Transition

wp42 **John Micklewright Kitty Stewart** Is Child Welfare Converging in the European Union?

wp41 **W Bentley Macleod** A Note on the Optimality of Bonus Pay

wp40 Xin Meng Robert G Gregory Impact of Interupted Education on Earnings: The Educational Cost of the Chinese Cultural Revolution

wp39 **Miles Corak** Death and Divorce: The Long Term Consequences of Parental Loss on Adolescents

wp38 **Lori Curtis** Martin Dooley Child Health and Family Socioeconomic Status in the Canadian National Longitudinal Survey of Children and Youth

wp37 **Heather Antecol** An Examination of Cross-Country Differences in the Gender Gap in Labor Force Participation Rates

wp36 **W. Craig Riddell** Canadian Labour Market Performance in International Perspective: Presidential Address to the Canadian Economics Association

wp35 **Shelley Phipps** Economics and Well-Being of Canadian Children

wp34 **W. Craig Riddell** Measuring Unemployment and Structural Unemployment

wp33 Susan Johnson

Automatic Certification or Mandatory Representation Votes? How the choice of union recognition procedure affects union certification success.

wp32 **James Andreoni Eleanor Brown Isaac C. Rischall** Charitable Giving by Married Couples: Who Decides and Why Does it Matter?

wp31 Herb Schuetze Peter Kuhn

Self-Employment Dynamics and Self-Employment Trends: A Study of Canadian Men and Women, 1982-1995

wp30 **Isaac C. Rischall** The Effect of High School Effort on Future Earnings

wp29 **Isaac C. Rischall** The Roles of Education, Skill and Parental Income in Determining Wages

wp28 **Isaac C. Rischall** The Value of a Fresh Start: Earnings Persistence and the Migration of Single Mothers

# wp27 Martin Browning Tom Crossley

Shocks, Stocks and Socks: Consumption Smoothing and the Replacement of Durables During an Unemployment Spell

## wp26 Heather Antecol Kelly Bedard

Against All Odds: The Surprising Labor Market Success of Young Mexican Women

wp25 **Heather Antecol** Why is there Inter-Ethnic Variation in the Gender Wage Gap? The Role of "Cultural" Factors

## wp24 Martin Browning Tom Crossley

Unemployment Insurance Benefit Levels and Consumption Changes

## wp23 Heather Antecol Peter Kuhn

Employment Equity Programs and the Job Search Outcomes of Men and Women: Actual and Perceived Effects

## wp22 Thomas F. Crossley

Firms and Wages: Evidence from Displaced Workers

## wp21 Jennifer Stewart Martin Dooley

The Duration of Spells on Welfare and Off-welfare among Lone Mothers in Ontario

## wp20 Peter Kuhn Arthur Sweetman

Vulnerable Seniors: Unions, Tenure and Wages Following Permanent Job Loss

## wp19 Kelly Bedard

Human Capital Versus Signaling Models: University Access and High School Drop-outs

## wp18 Peter Kuhn Arthur Sweetman

Assimilation and Economic Success in an Aboriginal Population: Evidence from Canada

## wp17 Martin D. Dooley

The Evolution of Welfare Participation Among Canadian Lone Mothers From 1973 - 1991

# wp16 Lori Curtis Martin D. Dooley Ellen L. Lipman David H. Feeny

The Role of Permanent Income and Family Structure in the Determination of Child Health in the Ontario Child Health Study

# wp15 **LaDonna A. Pavetti** A New Social Contract: Moving to a Work-Based Assistance System

## wp14 Gary Burtless

The Job Prospects of U.S. Welfare Recipients: Lousier Pay but Bigger Earnings Supplements

# wp13 J.B. Burbidge L. Magee A.L. Robb

Cohort, Year and Age Effects in Canadian Wage Data

# wp12 Martyn Andrews Alan Harrison

Testing for Efficient Contracts in Unionized Labour Markets

# wp11 Herb J. Schuetze

Taxes, Economic Conditions And Recent Trends in Male Self-Employment: A Canada-U.S. Comparison

# wp10 Peter Kuhn

Canada and the "OECD Hypothesis": Does Labour Market Inflexibility Explain Canada's High Level of Unemployment?

# wp9 Stephen R. G. Jones W. Craig Riddell

The Measurement Of Unemployment: An Empirical Approach

# wp8 Pierre Lefebvre Philip Merrigan Martin Dooley

Lone Female Headship and Welfare Policy in Canada

# wp7 Heather Antecol Peter Kuhn

Gender as an Impediment to Labor Market Success: Why do Young Women Report Greater Harm?

## wp6 John Myles Paul Pierson

Friedman's Revenge: The Reform of "Liberal" Welfare States In Canada and the United States

# wp5 Jeff Borland

Earnings Inequality in Australia: Changes and Causes

# wp4 Jeff Borland

Union Effects and Earnings Dispersion in Australia, 1986-1994

# wp3 Robert Gregory Boyd Hunter

The Macro Economy and the Growth of Income and Employment Inequality in Australian Cities

wp2 **Peter Kuhn** Labour Market Polarization: Canada in International Perspective

# wp1 Peter Kuhn A. Leslie Robb

Shifting Skill Demand and the Canada-US Unemployment Gap: Evidence from Prime-Age Men

Last updated March 27, 2000