# Source-country gender roles and the division of labor within immigrant families

# ABSTRACT

This study asks whether source-country gender roles continue to influence the gender division of labor after individuals move to a new society. The analysis focuses on the impact of source-country gender roles on the division of paid and unpaid labor within immigrant families. The results show that the two indicators of source-country gender roles – female/male labor activity ratio and female/male secondary education ratio– are both positively associated with immigrant wives' share in their family labor supply and negatively associated with their share in housework. The effect of source-country female/male labor activity declines over time, but the magnitude of the decline is small, particularly in the effect on housework. The effect of source-country is enhanced if immigrant couples come from the same country.

## INTRODUCTION

The gendered division of labor has received significant attention from social scientists. Three prominent explanations for the unequal division of household labor are found in the literature. Researchers employing the "relative resources" or "time availability-constraints" hypotheses argue that the household division of labor is determined by partners' relative earnings or relative hours spent in paid labor respectively (Coltrane 2000). Both theories suggest that housework is primarily tied to couples' paid work circumstances. Sociologists have given particular attention to the "gender ideology" explanation, asserting that men and women are socialized to assume particular gender roles within the household and subsequently practice these roles within their

marriage. This theory advances the idea that gender roles are socially constructed rather than dependent on a "trade off" strategy based on the work hours or incomes of one spouse relative to the other.

Although much of the research centres on individual- or couple-level characteristics, an emerging literature examines the relationship between macro-level factors and the household division of labor. Theoretical discussions of gender stratification provide a broader understanding of how women's paid and unpaid labor activities are impacted by macro-level factors. Arguing that gender stratification is fundamentally based on the degree of women's economic power, Blumberg (1984:48) asserts that a "nesting" system exists, whereby micro-level processes occur within the context of a society's higher-level systems. Thus, a couple's division of labor is situated within, and influenced and legitimized by, the social institutions of its society (Voicu, Voicu and Strapcova 2009; West and Zimmerman 1987). Several studies conclude that societal factors impact how couples divide tasks within the household (e.g., Craig and Mullan 2011; Geist 2005).

Sociological studies have been instrumental in their use of cross-country variations to quantify the effects of national-level factors on the division of housework but are often confined to the limited range of variations among western developed countries and small numbers of observations at the country-level allow for the inclusion of only a few control variables. As a result, it is difficult to distinguish the effects of cultural factors from the influences of national policies, economic development, and other institutional structures that women encounter within their country.

In addition, while many have examined the effect that migration has on the gender roles of specific immigrant groups (e.g., Hondagneu-Sotelo 1992; Min 2001; Parrado and Flippen 2005;

Shirpak, Maticka-Tyndale and Chinichian 2011; Su, Richardson and Wang 2010; Yu 2006, 2011), there is a dearth of empirical literature examining macro-level influences on the division of labor of immigrant families from a range of source countries. The existing literature in this field is limited to immigrant groups from the same source country and, in some cases, very small sample sizes. This lack of heterogeneity provides only a partial picture of how cultural factors impact the renegotiation or maintenance of source-country gender roles in the host country.

The above issues can be mostly addressed by examining variations in the social and labor market behavior of immigrants who come from a range of cultural backgrounds and are exposed to the same social and policy environment of the host society. This study examines whether macro-level gender roles in immigrants' source countries continue to influence women and their families after they move away from their culture of origin. This approach contributes to the study of how macro-level factors affect women's labor activities in two ways. First, it addresses the question of whether differences in the gendered division of labor across countries are primarily due to cultural differences or institutional variations, which is difficult to determine through cross-national comparisons. This is accomplished by analyzing whether source-country gender roles persist at the household level when individuals leave their source countries and live in the same institutional context. Second, this study contributes to the study of gender and migration by recognizing the importance of linking micro- and macro-level factors to better understand the process of immigrant integration (Pedraza 1991). In particular, examining whether the influence of source-country gender roles on women's labor activities fades over time will yield new insight into whether macro-level cultural influences persist at the household level over many years or whether they are primarily influential during the initial phase of immigration during which families experience pronounced instability (Yu 2006, 2011).

CROSS-NATIONAL COMPARISONS OF THE DIVISION OF LABOR WITHIN FAMILIES Several sociological studies examine the influence of macro-level factors on household labor through cross-national comparisons (Batalova and Cohen 2002; Baxter 1997; Bittman et al. 2003; Fortin 2005; Fuwa 2004; Fuwa and Cohen 2007; Geist 2005; Heisig 2011; Hook 2006; Kan, Sullivan and Gershuny 2011; Knudsen and Wærness, 2008; Ruppanner 2010a, 2010b; Yodanis 2005). This literature investigates different aspects of nations' economic and social situations, such as their levels of economic development, levels of female empowerment, and characteristics of welfare regimes and largely conclude that women's share of household labor and labor force participation vary across nations. Thus, macro-level factors are found to significantly influence women's paid and unpaid labor.

The institutional context in which families live both directly and indirectly affects the gender division of labor within the household. National policies are believed to "produce, reinforce or reflect" gender roles and inequalities within a society and, subsequently, within the household (Hook 2010:1482). A strong link is found between the level of gender equality in a nation and its welfare regime. Several studies discuss the relationship between the division of household labor and social policies that impact employment and child care (e.g., Craig and Mullan 2011; Fuwa and Cohen 2007; Geist 2005; Gershuny and Sullivan 2003; Kan, Sullivan and Gershuny 2011; Lewis 1992). Women in countries with policies that actively promote women's labor force participation are found to assume a smaller share of housework than women in countries with policies based on assumptions of "traditional" family responsibilities (i.e., the male breadwinner-female caregiver model) (Fuwa 2004; Geist 2005; Kan, Sullivan and Gershuny 2011). Evidence then suggests that greater gender equality at the national level may significantly impact women's labor at the household level.

Greater representation of women in positions of political or economic power within a society is also associated with greater equity in the division of household labor (e.g., Batalova and Cohen 2002; Fuwa 2004; Knudsen and Wærness 2008; Ruppanner 2010b). Women's housework is correlated with the level of female empowerment<sup>1</sup> in their country while men's absolute contributions to housework are more strongly correlated with their country's level of economic development (Knudsen and Wærness 2008).

# THE 'PORTABILITY' OF CULTURAL FACTORS: EVIDENCE FROM IMMIGRANTS

While cross-national studies shed light on the role that varying macro-level characteristics play in women's housework across nations, it is difficult to distinguish the effects of cultural factors from the influences of a country's institutional structures. To understand whether cultural elements are the main component of macro-level influences, some studies have examined the persistence or renegotiation of gender roles among immigrant women from different source countries, providing insight into the nature of the household division of labor for immigrant women in their host country.

Migration to a new country involves a process of adjustment in which gender and family play a significant role (Yu 2011). An increased focus on the success and stability of the family unit often places numerous pressures on immigrant women to maintain cultural traditions. Some research indicates that pressure to maintain cultural norms is highly influential in preventing immigrant women from adopting gender roles that are prevalent in the host country. The continuation of a traditional division of labor is found to be "integrally linked" to maintaining the ethnic identity of some immigrant groups (DasGupta 1998:955). The reinforcement of traditional gender roles is also used as a means to stabilize the family after migration or to protect values formed in the source country from potentially threatening cultural traits encountered in the host country (Dion and Dion 2001; Parrado and Flippen 2005; Yu 2006). Previous research has found that some immigrant women express a conflict between preserving the cultural traditions of their source countries and taking advantage of new opportunities available to them in the host country (DasGupta 1998).

Despite a potential improvement in macro-level gender equality in the host country, the extent to which immigrant women experience increased equality at the household level is debated. Research on the persistence of gender norms within a new social environment has received some attention within the sociological literature, although results are limited to a small range of immigrant groups from the same source country (e.g., Hondagneu-Sotelo 1992; Min 2001; Parrado and Flippen 2005; Shirpak, Maticka-Tyndale and Chinichian 2011; Su, Richardson and Wang 2010; Yu 2006, 2011). Central to this literature is the question of whether immigrant women's increased labor force participation translates into a more equal division of labor at the household level. Although some studies find that immigrant women's engagement in paid labor leads to greater authority in household decision-making (e.g., Hondagneu-Sotelo 1992), others have found that, for some immigrant groups, traditional gender roles continue to be performed in the household despite women's labor force participation (e.g., Min 2001). Therefore, traditional gender roles may not change when immigrants move to a new institutional context or even when women become more active in paid labor; rather, the maintenance of source-country gender roles could prevent immigrant women from assimilating to the gender norms of the receiving country.

The varying results found in the literature suggest that differences in immigrant groups' "core values" may mediate the ability or degree to which immigrants assimilate to the gender

norms of their new society (Dion and Dion 2001:520; Min 2001). While some evidence indicates that strong traditional values persist in a new social context, other results suggest that a compromise emerges depending on the barriers encountered in the host country. For example, Shirpak, Macticka-Tyndale and Chinichian (2011) find that, among Iranian families in Canada, men will assume more household work than they did prior to migration if they are unemployed and their wife is in the labor force. While the "breadwinner" status continues to be central to these men's identities, they are willing to adopt a less traditional approach when necessary, despite their preference for a division of labor similar to what is prevalent in their source country. This is identified by the participants as a "Canadian" approach, thereby indicating how strongly individuals associate differences in gender roles with cultural factors (Shirpak, Maticka-Tyndale and Chinichian 2011: 760).

While economic or social pressures in the host country may impact immigrant families' division of labor, recent economic research examining immigrants from a wide range of origins indicates that macro-level factors associated with source-country gender roles, such as female labor force participation rates, continue to influence both first and second generation women's labor market decisions in the United States (Antecol 2000; Blau, Papps and Kahn 2011; Fernandez and Fogli 2009). However, some degree of assimilation occurs in immigrant women's labor market behavior with increased time in the host country. Although immigrant women work less than native-born women upon arrival, the hours that immigrant women work "assimilate dramatically" with those of native-born American women over time (Blau, Papps and Kahn 2011:52). This is true for women from countries with both high and low levels of female labor force participation. Nonetheless, a gender gap persists across source-country groups, as women from countries with a high female labor force participation rate show smaller gaps with native-

born women than do women from nations with lower rates (Antecol 2000). Regional-level differences were also found to persist over time and place within unified Germany due to the perseverance of "different ideological legacies" (Geist 2009:420). Therefore, the literature generally indicates that although some assimilation may occur, "a permanent, portable" cultural factor continues to influence women's labor behavior after they move to a new institutional and social context (Antecol 2000:419).

The effect of source-country gender roles on the division of labor within immigrant families could be enhanced or reduced depending on whether the couple shares the same cultural background. For example, Baker and Benjamin (1997) find that immigrant women with nativeborn spouses work less upon arrival in Canada than immigrant women with foreign-born spouses. Blau, Papps and Kahn (2011) also find that husband's source-country characteristics have a significant influence on the labor supply of immigrant women. Additionally, husbands' cultural backgrounds correlate with women's share in household labor (Fuwa 2004). Findings regarding the relationship between husband's cultural background and the gender division of labor could represent the impact of husbands' attitudes toward their wives' labor market participation or indicate that women and men select spouses with similar beliefs as themselves; however, in either case, cultural factors appear to play a significant role (Blau, Papps and Kahn 2011).

Considering the contributions of previous literature, the extent to which immigrant women adopt the cultural and economic norms of the host country with increased length of exposure is unclear. Because attitudes toward the division of housework are strongly rooted in cultural values and family practices, women from countries with high levels of gender inequality may represent less assimilation to the typical family division of labor of a country with greater gender

equality than women from other nations, particularly if they migrate as adults. However, some evidence suggests that immigrants show some degree of assimilation over time. An examination of whether source-country cultural factors continue to influence immigrant women's paid and unpaid labor activities and how increased time in the host country may affect these behaviors is thus warranted.

# **RESEARCH FOCUS**

This study contributes to the literature on the impact of preferences and beliefs developed in a different time or place on subsequent economic and social behaviors (e.g., Antecol 2000; Blau, Papps and Kahn 2011; Geist 2009) in two important ways. First, while previous research primarily focuses on immigrant women's labor supply, this paper examines the impact that source-country characteristics have on the relative role of immigrant women in their families' employment and housework, acknowledging that these two behaviors are inextricably linked. The main outcome variables, immigrant women's share in the couple's total weeks worked for pay and total hours of housework, are suitable for establishing the association between source-country gender roles and the division of labor within immigrant families.

Second, this study extends the primarily U.S.-focused studies on the "portability" of cultural factors to the Canadian context. An examination of Canadian data is primarily undertaken because previous research has shown differences between Canada and the U.S. with respect to immigrant women's labor force participation. Due to differences in the immigration selection systems of these two countries, Canada's emphasis on human capital results in a more selective group of immigrants whose characteristics likely diverge more from their source-country population than immigrants who enter the United States. Accordingly, immigrants to

Canada may be less affected by source-country cultural factors than immigrants to the U.S. However, it is possible that Canada has a more favourable social and policy environment for the retention of immigrants' cultural heritages than in the U.S. Some scholars argue that Canada's active multiculturalism institutionalizes minority cultures in the public sphere, while the passive multiculturalism that exists in the United States confines minority cultures to the private sphere (Bloemraad, Korteweg and Yurdakul 2008). Therefore, it is uncertain whether the U.S. results are applicable to the Canadian context. In addition, Canadian census data provide information on the amount of unpaid household labor performed by husbands and wives, which is not available in U.S. census data.

This study will address two questions: (1) Are immigrant wives from source countries with more traditional gender roles less likely to participate in the labor force and more likely to perform a large share of housework?; (2) How durable is the effect of source-country gender roles (a) over increased time in the host country or (b) if a husband and wife are from different cultural backgrounds?

#### DATA, MEASURES, AND METHODS

#### Data

This study employs a data set that attaches immigrant source-country attributes to individual immigrants in micro-data files. The Canadian 1981, 1986, 1991, 1996, 2001 and 2006 census 20% sample micro-data files were used to provide individual-level variables on labor market activities, housework, and other socio-demographic characteristics. The data for immigrant source-country attributes were compiled from various sources (see Measures section) and contain socio-economic indicators for countries on an annual basis from 1970 to 2005.

Our analysis focuses on immigrants aged 20 to 65 who are married or live as common-law spouses. Their spouses can be either Canadian-born or immigrants, also aged 20 to 65. For simplicity, we use the term "wives" to refer to both wives and common-law female partners and "husbands" to refer to both husbands and common-law male partners. Wives and husbands were matched with the unique census family identification number. With both wives' and husbands' information, we can calculate couples' total weeks worked and total hours of housework, and incorporate the spouse's characteristics in the modelling. We exclude immigrants who arrived in the census year and the year prior to the census since these immigrants might not have stayed a full year to have a valid measure on one of our main outcome variables – weeks worked in the year prior to the census.

Our main interest is the effect of source-country attributes on immigrant wives. We also repeated the same analysis for immigrant husbands to gain additional insight into the family division of labor (results for this analysis are available upon request). In the analysis for immigrant wives, we included only women who immigrated to Canada between age 18 and 55 so they have at least 10 years before reaching age 65 to participate in the Canadian labor market. We further restricted immigrant wives to those who arrived since 1970 for two reasons. First, since the 1970s the source regions of immigrants to Canada started to shift rapidly from Europe to developing countries as a result of the adoption of a points system in immigration selection. Second, the data for main source-country attributes are sparse for the years before 1970. While we made several restrictions to immigrant wives, we intentionally made no restriction on their husbands' immigrant status so we could test whether the effect of source-country attributes on immigrant wives varied with their husbands' immigration status.

The sample of immigrant wives selected from the micro-data file for each census year was merged with the database on source-country attributes using detailed country of birth and year of arrival as the link keys. Immigrants in the census files were assigned a set of his/her sourcecountry attributes measured at the year when they came to Canada. The data files from the six censuses were then pooled together for model estimation, allowing a given cohort of immigrants to be followed over time; thus we were able to simultaneously estimate immigrant cohort differences and the changes within a given cohort (the assimilation effect).

## Measures

The outcome variables include both labor market activities and unpaid household work. The main indicator of labor market activities is the share of wife's weeks worked in the couple's total weeks worked for pay in the year prior to the census (e.g., 2005 for the 2006 census). For each spouse, the weeks worked variable is coded from 0 to 52. To check whether the results are sensitive to the outcome measures, we also use wife's weeks worked for pay in the year prior to the census as an alternative outcome.<sup>2</sup>

The main indicator for unpaid housework is the share of wife's total hours of unpaid housework in the couple's total unpaid housework in the week prior to the census. The total hours of unpaid housework for each spouse is the hours that the person spent doing housework, maintaining the house or doing yard work without getting paid for doing so.<sup>3</sup> The wife's share in the couple's total hours of housework reflects the role played by the wife relative to the husband in performing unpaid domestic work. Alternatively, we also use wife's total hours of housework to test the robustness of our results.

The focal explanatory variables are two indicators that reflect the degree of traditional gender roles in immigrants' source countries. The first is the female-to-male labor activity ratio in the source country (hereafter referred to as female/male labor activity). It is the ratio of women's labor force participation rate to men's labor force participation rate. These rates are calculated for individuals age 15 years and over.<sup>4</sup> The ratio of female/male labor force participation rates reflects the relative difference between women and men in labor force participation, and thus captures the gender division of labor explicitly (Blau, Papps and Kahn 2011). This relative indicator can mitigate the problems associated with cross-country differences in the definition and measurement of labor force participation since such problems may affect women's and men's labor force participation rates similarly (Antecol 2000; Blau, Papps and Kahn 2011). The second indicator is the ratio of the female secondary school enrolment rate to the male secondary school enrolment rate (hereafter referred to as female/male education).<sup>5</sup> This ratio reflects the gender difference in accessing secondary school education. A measure of female/male ratio in tertiary school enrolment is also available but not included in the analysis because it is strongly correlated with the ratio for secondary education. When both are included in the same model predicting immigrant wives' division of labor in the host country, the effect of the ratio in tertiary school enrolment is often not significant.

We also include three source-country characteristics as control variables. The first is the total fertility rate which represents the number of children that would be born to a woman by the end of her childbearing years in accordance with current age-specific fertility rates. The second is GDP per capita in 2005 US dollars.<sup>6</sup> The third is a dummy variable for whether either English or French, Canada's two official languages, is an official language in the source country.<sup>7</sup> These

three variables are likely correlated with the two indicators of gender roles and with preparedness for work in the host-country labor market.

At the individual level, we include the following explanatory variables for the models: age, age squared, common-law status (1=common law, 0=legally married), racial minority status (1=racial minority, 0=whites), husband's immigration status, years since immigration, cohorts (period of immigration), levels of education, husband's level of education, language spoken, and geographic region of residence. Husband's immigration status is coded as two dummy variables: husband is Canadian-born (non-immigrant) and husband is an immigrant from a country different from the wife's source country, with the common reference group of husbands from the same country. Cohorts are coded as six dummy variables: 1970-74, 1975-79, 1980-84, 1985-89, 1990-94, and 1995-99, with the 2000-04 cohort as the common reference group. The wives' and husbands' levels of education are both coded as four dummy variables: graduate degrees, some post-secondary education, high school graduation, and less than high school, with bachelor's degrees as the common reference group. Language spoken is coded as four dummy variables: mother tongue is not English or French and not speaking English or French, mother tongue is not English or French but speaking French, mother tongue is not English or French but speaking English, and mother tongue is French, with English mother tongue as the common reference. Three variables are also included to capture the presence of children: the number of children age 0 to 5 years, the number of children age 6 to 14 years, and the number of children age 15 to 17 years. Finally, the geographic region variables distinguish the three largest metropolitan areas (Toronto, Montreal and Vancouver), 10 provinces (excluding the three metropolitan areas), and combined three territories.

# Methods

For each outcome variable, we estimate three models in sequence. Model 1 includes only the five selected source-country attributes.

$$Y_{ij} = \alpha Z^{g}_{\ j} + \beta Z^{c}_{\ j} + \varepsilon_{ij} \qquad (1)$$

For immigrant wife i from source country j,  $Y_{ij}$  is the chosen outcome variable.  $Z_{j}^{g}$  represents the two indicators of source-country gender roles: female/male labor activity and female/male education.  $Z_{j}^{c}$  represents the three source-country control variables: the total fertility rate, GDP per capita and official languages. This model shows the overall effect of source-country gender roles after controlling for socio-economic development and official languages in the source country.

Model 2 adds individual-level variables, X<sub>i</sub>, as discussed in the previous section.

$$Y_{ij} = \alpha' Z^g_{\ j} + \beta' Z^c_{\ j} + \gamma X_i + \varepsilon_{ij} \quad (2)$$

The change in the coefficients of gender roles from  $\alpha$  in Model 1 to  $\alpha$ ' in Model 2 would show the extent to which the effect of gender roles in the source country works through individual characteristics.

Model 3 adds in the interaction terms between source-country gender roles and the husband's immigration status (HIM), and between source-country gender roles and years since immigration (YSM).

$$Y_{ij} = \alpha^{\circ} Z^{g}_{j} + \beta^{\circ} Z^{c}_{j} + \gamma X_{i} + \alpha^{h} Z^{g}_{j} * HIM_{ij} + \alpha^{y} Z^{g}_{j} * YSM_{ij} + \varepsilon_{ij} \quad (3)$$

From Model 3, we can test whether the effect of source-country gender roles is reduced if the husband is not from the same source country as the immigrant wife, and whether the effect of source-country gender roles decreases with length of stay in the host country.

Since source-country attributes attached to each immigrant are measured at the group level which is the combination of country of birth and year of arrival, we allow a cluster effect in estimating standard errors. This cluster effect corrects the correlated error terms within a group (Blau et al. 2011). Such a model is equivalent to a fixed-intercept model with level-1 covariates within the framework of Hierarchical Linear Models (HLM) (Raudenbush et al. 2000). This approach essentially first estimates the mean outcome for each cluster adjusted for differences in individual-level characteristics across clusters, and then regresses the mean outcome on cluster-level predictors. The cluster in this study is based on the combination of source country/region (about 79 depending on the census year) and year of immigration (total 35 years). The cluster variable potentially has 2855 groups (35 years of arrival x 79 countries). There are actually 2753 groups in our data since there is no observation in some year-country combinations.

# RESULTS

## Descriptive results

Immigrants to Canada came from source countries that differed significantly in gender roles and other attributes (Table 1). Countries in West Asia and South Asia tended to have the lowest female/male labor force activity ratios, while those in East Asia and Eastern Europe had the highest ratios. Countries in the Americas and Europe had much higher female/male secondary education ratios than those in South Asia, Africa and West Asia. Source-country gender roles seemed to be correlated with married immigrant women's labor activity and housework in the host country. This is particularly evident in the results for immigrant women from West Asia and South Asia who ranked among the lowest in weeks worked and among the highest in hours of housework.

# <Table 1 about here>

Immigrant women from different source regions also varied considerably in individuallevel socioeconomic characteristics (Table 1). In particular, married immigrant women from the U.S. and Eastern Europe had the highest rates of holding university degrees, ranging from 37% to 42%, while those from Southern Europe and the Caribbean still had the lowest rates – under 10%. These group differences are primarily the results of women's overall educational levels in the source country and how immigrants from a particular source country are selected for entry into Canada (i.e., mainly as skilled workers, family class, or refugees).

Married immigrant women from different source regions varied considerably in their likelihood of having a Canadian-born husband (Table 1). Those from the U.S., Northern and Western Europe, and Central America had a high rate of having a Canadian-born husband, while those from Africa and Asia had a very low rate. These group differences likely reflect the effects of ethnic ancestry, culture, religion, language, and education on intermarriage (Kalmijn 1998; Rosenfeld 2008). There were also large group differences in the share of women who were racial minorities and in the share whose mother tongue was English or French. These group differences are likely correlated with source-country gender roles. Thus, the effect of source-country gender roles on married immigrant women's labor activity and housework in the host country may partially work through group differences in individual characteristics.

## The effects of source-country gender roles on immigrant wives' labor activities

Source-country female/male labor activity and female/male education are significantly associated with immigrant wives' share in couples' total weeks worked (Table 2, Model 1). These effects change little when individual-level characteristics are controlled (Model 2). A 0.5-point increase in the source-country female/male labor activity ratio, which is close to the difference in the ratio between China (0.85) on the high end, and India (0.40) and Pakistan (0.25) on the low end in 2006, is associated with a 0.042-point increase in immigrant wives' share in the couples' weeks worked (i.e., one-half of the coefficient). The effect of 0.042 is about 10% of the average in immigrant wives' share in the couple's total weeks worked. To a lesser extent, a 0.5-point increase in the source country female/male education ratio, which is close to the difference in the ratio between the Philippines (1.12) and Mali (0.62) in 2006, is associated with a 0.021-point increase in immigrant wives' share in the couples' weeks worked.

#### *<Table 2 about here>*

The effect of source-country female/male labor activity tends to weaken with length of stay in Canada. As shown in Chart 1, a 0.5-point increase in the source-country female/male labor activity ratio is associated with 0.055-point increase in the wife's share in the couple's weeks worked among immigrant wives who have stayed in Canada for 5 years. This effect is reduced to 0.038 among immigrant wives who have lived in Canada for 15 years. The effect of sourcecountry female/male labor activity on immigrant wives' labor activity in Canada also varies significantly by their husbands' immigration status (Table 2, Model 3 and Chart 2). If the husband is an immigrant from the same country as the wife, a 0.5-point increase in the sourcecountry female/male labor activity ratio is associated with 0.045-point increase in the wife's share in the couple's weeks worked. This effect is reduced to 0.028 if the husband is an immigrant from a different country.

#### *<Figure 1 about here>*

# <Figure 2 about here>

The effect of source-country female/male education does not vary with husband's immigrant status or length of stay in the host-country. The effects of two other source-country characteristics, GDP per capita and official language, are statistically significant. Age, common-law status, years since immigration, and education tend to increase immigrant wives' share in paid work within the family, while husband's education and having a husband who is Canadian-born or from a different source country tend to reduce immigrant wives' share in paid work within the family (Model 2 and Model 3).

When immigrant wives' own weeks worked is the outcome variable, source-country female/male labor activity and female/male education both have significant and positive effects (tables available upon request). These effects change little when individual characteristics are controlled, as a 0.5-point increase in the source-country female/male labor activity ratio is associated with 3.9 more weeks worked in a year (i.e. one-half of the coefficient), and a 0.5-point increase in the source-country female/male education ratio is associated with 2.5 more weeks worked in a year (i.e. one-half of the immigrant wife has an immigrant spouse from a different source country. In addition, the effect of source-country labor activity does not decrease with length of stay in the host country. Further analysis shows that the effect of source-country labor activity on immigrant husbands' weeks worked decreases with length of stay, suggesting that the effect of source-country labor activity on immigrant wives' share in the couples' total weeks worked decreases over time because of the effect on husbands' weeks

worked is reduced, not because the effect on wives' own weeks worked decreases (table available upon request).

## The effects of source-country gender roles on immigrant wives' housework

Source-country female/male labor activity and female/male education are also significantly associated with immigrant wives' share in couples' total hours of housework. However, the effects are in the opposite direction to the results on labor supply. The higher the source-country female/male labor activity and female/male education, the lower immigrant wives' shares in family housework (Table 3, Model 1). These effects change little when individual-level characteristics are controlled (Model 2). A 0.5-point increase in the source-country female/male labor activity ratio is associated with a 0.035-point increase in immigrant wives' share in family housework. To a lesser extent, a 0.5-point increase in source-country female/male education is associated with a 0.022-point increase in immigrant wives' share in family housework.

### *<Table 3 about here>*

The effect of source-country female/male labor activity declines as immigrant wives stay longer in the host country (Chart 3), but the magnitude of this decline is small. Based on the model coefficients, it would take over 40 years of stay in Canada before the effect becomes 0. The effect of source-country female/male labor activity is reduced if the husband is born in Canada or is an immigrant whose source country is different from his wife's (Table 3, Model 3 and Chart 4). If the husband is an immigrant from the same country as the wife, a 0.5-point increase in the source-country female/male labor activity ratio is associated with a 0.036-point decrease in the wife's share in the couple's weeks worked. This effect is reduced to 0.025 if the husband is an immigrant from a different country and to 0.023 if the husband is Canadian-born.

# <*Figure 3 about here>*

# <Figure 4 about here>

The effect of source-country female/male education does not vary with husbands' immigration status and does not change with the length of stay in Canada (Table 3, Model 3). The effects of the other three source-country attributes are statistically significant. Age, husband's education, number of children and a mother tongue other than English or French are associated with a higher share of housework among immigrant wives. Common-law status, education, and years since immigration are associated with a smaller share in housework for immigrant wives.

When immigrant wives' total hours of housework is the outcome variable, the effect of source-country female/male labor activity remains large and significant (tables available upon request), and the effect changes little when individual characteristics are controlled. In model 2, a 0.5-point increase in the source-country female/male labor activity is associated with a decrease of 3.8 hours per week in immigrant wives' housework. Similar to the results with wives' share in the couple's total hours of housework, the effect of source-country female/male labor activity is about one-half as strong if an immigrant woman has a Canadian-born husband as if her husband is from the same source country. The effect also tends to weaken slowly with length of stay in Canada. The effect of female/male education is negative and statistically significant.

## CONCLUSIONS

The division of labor between spouses is influenced by various macro-level factors. While crossnational studies provide insight into how different institutional contexts can affect the gender division of labor, information regarding the persistence of traditional gender roles in the absence

of structural constraints is lacking. Our study addressed this issue by examining the influence that cultural influences from immigrants' source countries, measured as macro-level gender roles have on immigrant couples' division of labor within their host country. Canadian immigrants come from source countries that differ considerably in gender roles and are therefore valuable in determining whether these cultural traits are maintained or modified after exposure to a new social, cultural and institutional environment.

The results of the analysis on immigrants to Canada show that source-country female/male labor activity and female/male education are both positively associated with immigrant wives' share in their family labor supply and negatively associated with immigrant wives' share in their family housework. These findings indicate that the gender roles that are prevalent in immigrant women's source countries continue to impact their labor activities in a new institutional environment.

Since the process of adapting to a new society involves "both continuity and change" (Dion and Dion 2001:519), potential changes in women's role within the household were examined by assessing the effects of source-country gender roles over time. The effect of sourcecountry female/male labor activity on the family division of paid and unpaid labor tended to decrease with length of stay in the host country; however, the magnitude of the decline in its effect on housework was small. These results suggest that while some assimilation occurs, the weakening of practices representing gender-related source-country characteristics occurs slowly, particularly with respect to women's unpaid labor. The finding that the effect of source-country gender roles weakens somewhat as years since immigration increases lends support to the theory that the influence of source-country cultural traits is most pertinent during the initial phase of migration, during which the family experiences a significant disruption. Thus, the reduction in

source-country effects may be due to assimilation to a host country with new opportunities available to women and conditions for greater equality.

Immigrant women's labor force participation may also change in the host country out of economic necessity (Dion and Dion 2001). However, the continued influence of source-country factors on immigrant women's labor activities, and the small decreases in their effects over time, suggest that cultural gender norms continue to play a significant role several years after migration. It should also be noted that changes in the household division of labor in the host country do not necessarily reflect changes in immigrants' beliefs or attitudes. This is particularly true for husbands who come from countries with a strong system of patriarchal authority (e.g., Min 2001; Shirpak, Maticka-Tyndale and Chinichian 2011).

The immigrant status of women's husbands is therefore a key factor in understanding their labor activities in the host country. The effect of source-country female/male labor activity is reduced, but does not disappear, if immigrant women have husbands who are not from the same country as themselves. That is, the effect of source-country female/male labor activity is enhanced if immigrant wives and their husbands share the same cultural background, but the effect remains significant even if immigrant wives and their husbands have different cultural backgrounds. This suggests that cultural factors are especially influential on the division of labor in households where both spouses share the same cultural background, indicating that couples with shared cultural values are particularly likely to reproduce and reinforce source-country gender roles in the host country.

The findings indicate that cultural factors related to source-country gender roles persist within a new national context. The results suggest that immigrant women's share of labor in Canada is largely influenced by the gender roles within their countries of origin as indicated by

the labor market and educational participation of women in their source countries. While immigrant women show some degree of assimilation over time, cultural factors continue to have a large influence on their labor activities. The gender roles formed in source countries appear to be reproduced at the household level after migration and to some degree function independently of the institutional contexts in which they were formed. NOTES:

<sup>1</sup> The literature measures "female empowerment" through the use of the Gender Empowerment Measure (GEM) index developed by the United Nations Development Program. This measurement is based on several factors including the percentage of parliamentary seats held by women, the percentage of female professional and technical workers, and women's share of earned income compared to men (Fuwa 2004).

<sup>2</sup> Some researchers argue that using both relative and absolute measures allows for a "more complete understanding" of the division of work within families (Lachance-Grzela and Bouchard 2010:770; Bianchi et al. 2000; Ruppanner 2010b). Utilizing both types of measures also prevents some methodological drawbacks. When only a relative measure of labor activities between husbands and wives is used, the actual meaning of changes in the variable may be masked. For example, increases in a husband's share in housework may be due to an actual increase in the husband's labor or a decrease in the wife's labor (Bianchi et al. 2000).

<sup>3</sup> The census question is "last week, how many hours did this person spend doing the following activities: doing unpaid housework, yard work or home maintenance for members of this households or others?". The number of hours spent on housework is in 6 intervals: no hours, < 5 hours, 5 to 14 hours, 15 to 29 hours, 30 to 59 hours, and 60 hours or more. Hours spent on housework was computed by assigning the mid-point for each bounded category and 65 hours for the unbounded upper category. A similar approach has been used in previously (Frenette 2011).

<sup>4</sup> These rates, from 1980 to 2005, were downloaded from World Bank online database <u>http://data.worldbank.org/indicator/</u> in December 2011. National labor force participation rates from 1970 to 1979 were downloaded from International Labor Organization

http://www.ilo.org/statistics-and-databases/ in December 2011. The World Bank data were originally from the International Labor Organization but were formatted by country and year. The majority of the countries only had one or two data points from 1970 to 1979, so data for the missing years were replaced with the observed data point in the adjacent years. For countries without any valid data points, the missing values were replaced with the values of the means of the region to which the country belongs (e.g., Guyana to South America). The same imputation approach is also used to treat missing values in other source-country attributes.

<sup>5</sup> These data were downloaded from World Bank online database

http://data.worldbank.org/indicator/ in December 2011.

<sup>6</sup> GDP per capita data from 1970 to 2006 were extracted from United Nations Statistics Division National Account Aggregate database <u>http://unstats.un.org/unsd/snaama/</u> in December 2011.

<sup>7</sup> This variable is compiled from the World Almanac and Book of Facts (2000) and Wikipedia <u>http://en.wikipedia.org/wiki/list\_of\_official\_languages\_by\_state</u>

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Table 1. Descriptive statistics of source country attributes and individual characteristics among immigrant wives in Canada by source region														
		United	Central		South	Northern	Western	Southern	Eastern		South	Southeast	East	West
	All	States	America	Caribbean	America	Europe	Europe	Europe	Europe	Africa	Asia	Asia	Asia	Asia
Source country attributes														
Female/male labor activity	0.56	0.64	0.43	0.58	0.43	0.57	0.58	0.47	0.78	0.61	0.34	0.68	0.70	0.29
Female/male secondary education	0.89	1.00	1.06	1.10	1.05	1.02	0.99	0.92	1.01	0.67	0.63	0.86	0.89	0.75
Total fertility rate	3.16	1.94	4.31	3.99	3.55	1.96	1.69	2.17	1.85	5.41	4.10	4.61	2.12	4.54
Log GDP per capita	7.91	10.15	7.94	8.04	7.67	9.96	10.13	8.99	8.31	6.66	6.05	6.44	7.79	7.62
Official language is English /French	0.51	1.00	0.01	0.96	0.41	0.95	0.44	0.01	0.00	0.63	0.83	0.59	0.31	0.00
Individual level outcomes														
Share in couples' total weeks worked	0.39	0.37	0.35	0.43	0.39	0.38	0.38	0.37	0.41	0.38	0.35	0.43	0.40	0.32
Own total weeks worked	33.06	32.28	28.82	37.06	34.07	34.56	33.29	31.17	35.32	32.87	29.42	37.67	32.96	25.75
Share in couples' total hours of housework	0.65	0.64	0.67	0.63	0.64	0.64	0.66	0.66	0.63	0.66	0.66	0.60	0.64	0.70
Own total hours of housework	24.35	25.07	26.81	23.24	24.74	25.08	24.88	25.27	21.33	24.65	27.19	22.15	22.83	27.44
Selected individual level predictors														
Age in years	41.12	40.84	39.84	41.63	40.95	42.88	41.68	41.92	41.28	40.56	39.20	41.41	41.83	39.62
Common Law status	0.04	0.06	0.07	0.07	0.06	0.06	0.11	0.02	0.06	0.04	0.01	0.05	0.02	0.02
Racial minority	0.60	0.03	0.80	0.96	0.77	0.03	0.02	0.01	0.01	0.76	0.99	0.99	0.99	0.75
Husband is Canadian born	0.13	0.65	0.19	0.09	0.12	0.27	0.35	0.05	0.08	0.07	0.02	0.10	0.05	0.05
Husband from a different country	0.14	0.14	0.18	0.16	0.17	0.13	0.23	0.07	0.14	0.24	0.07	0.13	0.19	0.16
Year since immigration	12.31	13.73	11.34	14.45	12.64	14.62	12.95	14.56	10.44	11.69	11.05	12.63	10.91	10.25
With university degrees	0.25	0.42	0.14	0.09	0.14	0.13	0.23	0.08	0.37	0.27	0.33	0.29	0.29	0.28
Husband with university degree	0.31	0.44	0.18	0.14	0.20	0.24	0.31	0.10	0.41	0.41	0.37	0.28	0.43	0.40
Mother tongue in English/French	0.31	0.97	0.05	0.86	0.44	0.92	0.39	0.05	0.03	0.40	0.15	0.16	0.04	0.10
Sample size	527886	31356	10915	28255	25923	48016	21076	46905	41252	29214	71099	62511	81606	23442
Source: the 1981 1986 1991 1996 2001 and 2006 Census of Population														

Table 2. OLS Regression models for immi	igrant wi	ves s Mode	el 1	ouples t	otai Mode	<u>weeks wor</u> -12	кеа	-13		
		Standard		1010dx	Standard	Standard		Standard		
	Coeffici	ents	errors	Coeffici	ents	errors	Coeffici	ents	errors	
Intercept	0.293	***	0.015	0.427	***	0.012	0.408	***	0.015	
Female/male labor activity	0.097	***	0.008	0.084	***	0.006	0.132	***	0.012	
Female/male secondary education	0.046	***	0.007	0.042	***	0.005	0.029	**	0.009	
Total fertility rate	0.005	**	0.001	0.000		0.001	0.001		0.001	
Log GDP per capita	-0.004	**	0.001	-0.008	***	0.001	-0.008	***	0.001	
Official language is English /French	0.029	***	0.003	0.021	***	0.002	0.023	***	0.002	
Age				-0.001	***	0.000	-0.001	***	0.000	
Age squared				0.000	***	0.000	0.000	***	0.000	
Common law				0.041	***	0.002	0.041	***	0.002	
Racial minority				0.008		0.002	0.007		0.002	
Husband is Canadian-born (H CB)				-0.015	***	0.002	0.001		0.009	
Husband from a different country (H DC)				-0.006	***	0.001	0.002		0.006	
Year since immigration (YSM)				0.003	***	0.000	0.004	***	0.000	
Cohort 1970-74				0.031	***	0.005	0.032	***	0.005	
Cohort 1975-79				0.032	***	0.005	0.033	***	0.005	
Cohort 1980-84				0.029	***	0.004	0.032	***	0.004	
Cohort 1985-89				0.040	***	0.004	0.042	***	0.004	
Cohort 1990-94				0.037	***	0.004	0.039	***	0.004	
Cohort 1995-99				0.018	***	0.005	0.018	*	0.005	
Graduate degrees				0.025	***	0.002	0.025	***	0.002	
Some post-secondary education				-0.011	***	0.002	-0.011	***	0.002	
High school graduation				-0.044	***	0.002	-0.043	***	0.002	
Less than high school				-0.075	***	0.002	-0.075	***	0.002	
Husband - graduate degrees				-0.022	***	0.002	-0.022	***	0.002	
Husband - some post-secondary education				0.012	***	0.001	0.012	***	0.001	
Husband - high school graduation				0.026	***	0.001	0.026	***	0.001	
Husband - less than high school				0.049	***	0.002	0.049	***	0.002	
Mother tongue not E/F, not speaking E/F				-0.031	***	0.004	-0.030	***	0.004	
Mother tongue not E/F, speaking French				-0.009	*	0.004	-0.008	*	0.004	
Mother tongue not E/F, speaking English				-0.004	*	0.002	-0.003		0.002	
Mother tongue French				0.016	***	0.004	0.016	***	0.004	
Number of children aged 0 to 5				-0.075	***	0.001	-0.074	***	0.001	
Number of children aged 6 to 14				-0.025	***	0.001	-0.024	***	0.001	
Number of children age 15 to 17				-0.004	***	0.001	-0.003	***	0.001	
YSIM*Female/male labor activity							-0.003	***	0.001	
YSIM*Female/male secondary education							0.001		0.000	
H_CB*Female/male labor activity							0.002		0.009	
H_CB*Female/male secondary education							-0.017		0.010	
H_DC*Female/male labor activity							-0.033	***	0.007	
H_DC*Female/male secondary education							0.012		0.006	
CMAs and Provinces fixed effects	Not included				Inclu	ded	Included			
Sample size		527886			5278	886	527886			
Adjusted R-squared		0.009			0.07	79	0.079			
Source: the 1981,1986,1991, 1996, 2001, and	2006 Cens	sus of	f Populatior	1						
Note: * significant at p <0.05, ** p <0.01, **	*p <0.001									



Figure 1. The effect of source-country female/male labor activity on immigrant wives' share in the couple's total weeks worked. by years in Canada

Source: the 1981, 1986, 1991, 1996, 2001 and 2006 Census of Population



Source: the 1981, 1986, 1991, 1996, 2001 and 2006 Census of Population

Table 5. OLS Regression models for	ession models for wives' share in					couples total hours of housework						
	Model 1			1	Mode	12	Model 3					
			Standard			Standard			Standard			
	Coefficients		errors	Coefficients		errors	Coeffic	eients	errors			
Intercept	0.684	***	0.008	0.592	***	0.010	0.611	***	0.012			
Female/male labor activity	-0.069	***	0.005	-0.067	***	0.004	-0.109	***	0.007			
Female/male secondary education	-0.048	***	0.006	-0.044	***	0.005	-0.033	**	0.011			
Total fertility rate	0.001		0.001	0.003	***	0.001	0.002	**	0.001			
Log GDP per capita	0.007	***	0.001	0.009	***	0.001	0.009	***	0.001			
Official language is English /French	-0.024	***	0.002	-0.013	***	0.002	-0.015	***	0.002			
Age				0.001	***	0.000	0.001	***	0.000			
Age squared				0.000		0.000	0.000		0.000			
Common law				-0.020	***	0.002	-0.020	***	0.002			
Racial minority				-0.014	***	0.002	-0.014	***	0.002			
Husband is Canadian-born (H_CB)				-0.005	**	0.002	-0.040	***	0.011			
Husband from a different country (H_DC)				0.008	***	0.002	-0.011		0.008			
Year since immigration (YSM)				-0.002	***	0.000	-0.003	***	0.000			
Cohort 1970-74				0.017	**	0.006	0.023	***	0.006			
Cohort 1975-79				0.021	***	0.005	0.025	***	0.005			
Cohort 1980-84				0.018	***	0.004	0.017	***	0.004			
Cohort 1985-89				0.007		0.004	0.007		0.004			
Cohort 1990-94				0.001		0.003	0.001		0.003			
Cohort 1995-99				0.001		0.003	0.002		0.002			
Graduate degrees				-0.024	***	0.002	-0.024	***	0.002			
Some post-secondary education				0.013	***	0.001	0.013	***	0.001			
High school graduation				0.024	***	0.002	0.024	***	0.002			
Less than high school				0.030	***	0.002	0.030	***	0.002			
Husband - graduate degrees				0.019	***	0.002	0.019	***	0.001			
Husband - some post-secondary education				-0.010	***	0.001	-0.010	***	0.001			
Husband - high school graduation				-0.009	***	0.002	-0.008	***	0.002			
Husband - less than high school				-0.009	**	0.002	-0.009	***	0.002			
Mother tongue not E/F, not speaking E/F				0.033	***	0.003	0.033	***	0.003			
Mother tongue not E/F, speaking French				0.026	***	0.003	0.025	***	0.003			
Mother tongue not E/F, speaking English				0.011	***	0.002	0.010	***	0.002			
Mother tongue French				-0.004		0.003	-0.004		0.003			
Number of children aged 0 to 5				0.029	***	0.001	0.029	***	0.001			
Number of children aged 6 to 14				0.015	***	0.001	0.015	***	0.001			
Number of children age 15 to 17				0.020	***	0.001	0.020	***	0.001			
YSIM*Female/male labor activity							0.003	***	0.000			
YSIM*Female/male secondary education							-0.001		0.000			
H_CB*Female/male labor activity							0.027	**	0.009			
H_CB*Female/male secondary education							0.020		0.011			
H_DC*Female/male labor activity							0.023	***	0.007			
H_DC*Female/male secondary education							0.005		0.008			
CMAs and Provinces fixed effects	Not in		uded	Included			I	ed				
Sample size		335839			33583	39	335839					
Adjusted R-squared	0.008				0.02	8	0.029					
Source: the 1996,2001, and 2006 Census of Po	opulatior	ı										
Note: * significant at p <0.05, ** p <0.01, ***	<sup>*</sup> p <0.00	1.										

Table 3. OLS Regression models for wives' share in couples' total hours of housework



Figure 3. The effect of source-country female/male labor activity on immigrant wives' share in the couple's total hours

Source: the 1996, 2001 and 2006 Census of Population



Source: the 1996, 2001 and 2006 Census of Population