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Antecol, Heather; Bedard, Kelly

Working Paper

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Claremont Colleges Working Papers, No. 2002-34

Provided in Cooperation with:

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Suggested Citation: Antecol, Heather; Bedard, Kelly (2002): The decision to work by married immigrant women: the role of extended family households, Claremont Colleges Working Papers, No. 2002-34, Claremont McKenna College, Department of Economics, Claremont, CA

This Version is available at: https://hdl.handle.net/10419/31444

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The Decision to Work by Married Immigrant Women: The Role of Extended Family Households

Heather Antecol
Department of Economics
Claremont McKenna College
heather.antecol@claremontmckenna.edu

Kelly Bedard
Department of Economics
University of California, Santa Barbara
kelly@econ.ucsb.edu

October 2002

Abstract: We find differential rates of cohabitation with adult relatives as well as differential impacts of that cohabitation on the probability of employment for married female immigrants across regions of origin. This suggests that traditions and/or cultural determinants of family structure influence female labor force participation. Not surprisingly, we also find that the labor supply response is biggest for immigrants with young children. This further suggests that cohabitation allows married immigrant women to share childcare and other household responsibilities, which in turn increases the probability that they work outside of the home.

JEL: J1, J2

Keywords: Family Structure, Female Labor Force Participation and Immigrants

1. Introduction

A number of recent studies examine the determinants of the decision to work among married women in Japan (see for example, Morgan and Hirosima 1983; Shimada and Higuchi 1985; Yamada, Yamada, and Chaloupka 1987; Hill 1984, 1989; Ogawa and Ermisch 1996; and Sasaki 2002). The unique nature of Japanese family structure is a key factor examined in many of these studies (Morgan and Hirosima 1983; Ogawa and Ermisch 1996; and Sasaki 2002). Cohabitation with one's parents/parents-in-law (henceforth referred to as in-laws) is relatively common in Japan, in 1995 18.5 (18.7) percent of married men (women) cohabitated with their parents/in-laws (Sasaki, 2002). Further, Ogawa and Ermisch (1996) point out that 80 percent of cohabitating households among married couples between the ages of sixteen and forty-nine are with the husband's parents. They argue that the presence of parents/in-laws may lower the cost to married women of working by providing help with household responsibilities, such as childcare. Not surprisingly, these studies generally find a strong positive correlation between cohabitation and labor market participation among married women in Japan.

Much less is known about the effect of cohabitation on married women's decision to work in the United States.² This may be due to the fact that cohabitation is much less common in the U.S. than in Japan. According to the 1990 U.S. Census (see Table 1), only 1.5 percent of married native (U.S. born) women cohabitate with their parents/in-laws. While cohabitation with parents/in-laws is more common among immigrant groups in the United States, it is still substantially lower than in Japan. Overall, 6.2 percent of

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¹ The childcare literature similarly finds that a reduction in the market price of childcare leads to an increase in married women's labor force participation. See for example, Blau and Robins (1988), Ribar (1992), Connelly (1992), Anderson and Levine (1999), and Powell (2002).

² The relationship between family structure and female labor force participation has been examined in other countries (see for example, Wooden and Vanden Heuvel 1997 and Gong and van Soest 2002).

u.S. Census. In addition, the incidence of cohabitation with parents/in-laws ranges between 1.5 percent for married immigrant women from North America (primarily Canada) and Northern/Western Europe to 10.9 percent for married immigrant women from Southeast Asia. Defining cohabitation more broadly to include any relative eighteen years of age and older (henceforth referred to as adult relatives), leads to cohabitation rates among immigrants ranging from 3 to 22 percent.

The results of the U.S. studies that do examine the effect of family structure on women's decision to work are mixed. Cain (1966) and Hall (1973) find an ambiguous role for extended family in explaining black/white differences in female labor force participation. Macpherson and Stewart (1989) and Duleep and Sanders (1993) find a positive relationship between labor force participation among married immigrant women and the presence of adult relatives. Stier and Tienda (1992) find that the presence of adult relatives increases the probability of working for married Mexican and Puerto Rican female immigrants, but that it has no effect on the employment probability of married women who are U.S. born Mexicans, other Hispanics (immigrants or natives), or non-Hispanic white natives. Finally, Tienda and Glass (1985) find limited evidence that cohabitation with adult relatives increases labor force participation for mothers.³

Interestingly, only a few of these U.S. studies consider both native and immigrant women and/or separately analyze the effect of cohabitation on various immigrant groups. Further, the studies that do separately analyze different immigrant groups by region of origin only consider a small subset of the immigrant population. For example, Stier and

³ Smith and Ward (1985) find a negative relationship between the presence of extended family members and female employment in 1900.

Tienda (1992) examine Hispanic immigrants while Duleep and Sanders (1993) examine Asian immigrants. It is also important to note that all of these studies use data from 1980 or before. Finally, none of these studies directly examine the role of parents/in-laws.

This paper attempts to shed new light on the role that cohabitation plays in explaining the decision to work by married immigrant and native women. First, we examine two measures of cohabitation: co-residence with adult relatives and co-residence with parents/in-laws. Secondly, we stratify the immigrant sample by region of origin. We do this because first generation immigrants may be culturally similar to their birth country/region, and hence their social and labor market behavior may differ from both natives and each other (Reimers 1985 and Antecol 2000, 2001). In particular, the tendency to cohabitate and/or the propensity to work outside of the home differ across countries and hence cohabitation and employment among immigrants in the U.S. may differ across countries/regions of origin.

Finally, we further stratify the immigrant and native samples by the presence of young children. In particular, we examine the following samples: the total immigrant and native samples, the immigrant and native samples with resident children less than eighteen years of age, and the immigrant and native samples with resident children less than six years of age. Casual empiricism suggests that cohabitation should have the biggest impact on female employment among women with young children since cohabitation may allow married women to share the burden of household responsibilities, such as childcare. Sub-sampling women with resident children less than eighteen (six) years of age allows us to investigate this possibility. Furthermore, focusing on women with children under the age of six reduces the possibility that parents/in-laws are elderly

and are cohabitating because they are no longer able to care for themselves. In this case, the presence of parents/in-laws may actually reduce female employment.

Using the 1990 U.S. Census, we find that cohabitation with adult relatives, particularly one's parents/in-laws, increases the probability that married women work. As one might expect, the effect is larger for married immigrant women. While married native (U.S. born) women are 2.4 percentage points more likely to work if they cohabitate with their parents/in-laws, similarly cohabitating married immigrant women are 10.5 percentage points more likely to work. The cohabitation effect is even larger for married women with resident young children; married immigrant women whose youngest child is less than six years old are 15.9 percentage points more likely to work if they cohabitate with their parents/in-laws. Finally, we find substantial differences in the effect of cohabitation on married immigrant women's decision to work by region of origin. For example, among married immigrant women with resident children under the age of eighteen, women from East Asia who cohabitate with their parents/in-laws are 17.8 percentage points more likely to work than their non-cohabitating counterparts compared to a difference of only 6.8 percentage points for similar women from Eastern/Central Europe, and no statistically significant difference in employment for women from Northern/Western Europe.

The remainder of the paper is as follows. Section 2 describes the data. Section 3 examines cohabitation patterns by nativity and region of origin. Section 4 explores the relationship between cohabitation and employment. Section 5 presents the estimation strategy and results. Section 6 concludes.

2. Data

We use the 1990 U.S. Census 5 percent Public Use Microdata sample. These data report country of origin (ancestry, race and place of birth), a rich set of labor market variables (employment status, hours worked in the previous year, weeks worked in the previous year and wages earned during the previous year), personal characteristics (age, year of arrival, education, marital status, fertility, English fluency and region of residence) and spousal information (for the household head and the spouse of the head).

We restrict both the immigrant and native (U.S. born) samples to married women between the ages of 25 and 54 who are either the head of the household or married to the head of the household. We chose this age range so as to focus on women who have completed their formal schooling and are young enough to rule out a substantial outflow from the labor force into retirement. Further, respondents who reported a disability that limits or prevents work, those attending school at the time of the survey and those missing spousal information are excluded from the sample. To increase comparability of the native sample and improve their usefulness as a control group, we exclude non-whites from the native (but not the immigrant) samples. We also exclude immigrants whose parents were born in the United States. These restrictions produce samples of 147,931 married immigrant women and 1,253,312 married native women. Further restricting the samples to households with resident children under the age of eighteen (six) produces sub-samples of married immigrant and native women totaling 106,055 (50,286) and 798,342 (361,978), respectively.

A woman is defined as employed if she reports being employed and at work, employed with a job but not at work, worked a positive number of weeks in the previous

calendar year and whose usual hours worked per week in the past calendar year are positive. Table 1 reports employment and family structure by nativity and region of origin. The first column reports the employment rate for the various groups. 68.6 percent of married native women work compared to 56.0 percent of married immigrant women. While the gap between natives and immigrants is only 12.6 percentage points on average, there is substantial variation in employment rates across regions of origin. For example, only 39.3 percent of first generation married female immigrants from the Middle East work while 70.2 percent of married female immigrants from Southeast Asia are employed.

We construct two measures of cohabitation: the presence of at least one adult relative and the presence of parents/in-laws. The former measure includes all relatives in the female's household who are at least eighteen years of age and are not her children or step-children. Related individuals include brothers/brothers-in-law, sisters/sisters-in-law, fathers/fathers-in-law, mothers/mothers-in-law, sons-in-law/daughters-in-law, nephews/nieces, grandparents, grandchildren, uncles/aunts and cousins. The latter measure is restricted to the presence of parents/in-laws in the woman's household.

The last 6 columns of Table 1 report the percentage of married women living in cohabitating households. The middle three columns report the percentage of women cohabitating with at least one adult relative, the percentage with resident children under the age of eighteen who cohabitate with at least one adult relative and the percentage with resident children under the age of six who cohabitate with at least one adult relative. The last three columns replicate the middle three columns restricting the cohabitation definition to include only parents/in-laws. Not surprisingly, first generation immigrants

are more likely to cohabitate than natives. 14.8 (6.2) percent of married immigrant women reside in a household with one or more adult relative (parent/in-law), in addition to their spouse while only 3.1 (1.5) percent of married native women cohabitate with at least one adult relative (parent/in-law). Again there are substantial differences across regions of origin. While less than 3 percent of immigrants from North America and Northern/Western Europe cohabitate with at least one adult relative, 20 percent or more of immigrants from Central America (including Mexico) and Southeast Asia live with one or more adult relative. The cohabitation patterns by nativity and region of origin are discussed in greater detail in Section 3.

Summary statistics for all variables beyond employment and cohabitation are reported in Appendix Table 1. Non-labor income is defined as total family income minus the wage and/or self-employment income of the female head or the female spouse of the head. Non-labor income is bottom-coded at zero and is reported in 1000s. Married native women have more non-labor income on average than married immigrant women, \$41,000 compared to \$38,000. However, the native advantage is largely due to the low levels of non-labor income among married immigrant women from Central America (\$28,000), South America (\$36,000), and Southeast Asia (\$35,000).

We use two fertility measures: the number of own children ever born and the presence of resident children under the age of six. As might be expected, married immigrant women have more children on average than married native women (2.0 children compared to 2.3 children). Further, married immigrant women are more likely to have resident children under the age of six than married native women (34.4 percent compared to 29.4 percent). Once again, the patterns vary across regions of origin.

Immigrants from Central America have more children (2.8 children) than any other immigrant group. In addition, married immigrant women from Central America, Africa, and the Middle East are much more likely to have resident children under the age of six (more than 40 percent).

To allow for possible non-linearity in the relationship between education and employment, we define 7 education categories: less than grade 9 (omitted category), grades 9-11, grade 12, some college, associate degree, college degree, and graduate/ professional degree. Appendix Table 1 reveals that immigrants are much more likely to complete less than 9 years of schooling than natives (21.2 percent compared to 1.5 percent) while natives are more likely to have grade 12 and some college than immigrants (60.3 percent compared to 42.1 percent). At upper levels (college degree and above) the educational attainment of the two groups is similar. The large fraction of immigrants at the bottom of the schooling distribution is largely due to immigrants from Central America and Southern Europe.

We also construct an indicator variable equal to one if the female respondent's husband is American born. Not surprisingly, 97.3 percent of married native women are married to native men, while only 28.2 percent of married immigrant women are married to native men. Again there are distinct patterns across regions of origin. While 72.5 percent of North American immigrant women are married to native men only 5.3 percent of Southwest Asian immigrant women are married to native men.

The following variables are constructed for the immigrant sample only. First, place of birth is used to determine country of origin. In order to maintain reasonable cell sizes, country of origin is aggregated into 13 regions: North America, Central America

(including Mexico, the Caribbean and the outlying U.S. areas), South America, Africa, Oceania, Northern/Western Europe, Southern Europe, Eastern/Central Europe, East Asia, Southeast Asia (omitted category), Southwest Asia and the Middle East. Central America is the largest region of origin constituting 36.1 percent of the immigrant sample while Oceania is the smallest region of origin making up only 0.6 percent.

Secondly, we define 8 arrival cohorts: before 1950, 1950-59, 1960-64, 1965-69, 1970-74, 1975-79, 1980-1984 and 1985-90 (omitted category). 36.2 percent of the total immigrant sample arrived between 1980 and 1990. Interestingly, 49.2 percent of East Asian immigrants arrived during this period compared to 27.1, 12.8 and 26.1 percent of Northern/Western European, Southern European and Eastern/Central European immigrants, respectively.

Finally, respondents were asked whether they speak a language other than English at home, and those who answered affirmatively were then asked how well they speak English with possible responses of "very well," "well," "not well" or "not at all." We define an individual as fluent in English if she speaks only English or reports speaking English "well" or "very well." Under this definition, 75.1 percent of immigrants are fluent in English. Not surprisingly, fluency rates differ substantially across regions of origin. For example, 99.3 percent of immigrants from North America are fluent in English compared to only 59.4 percent of immigrants from Central America.

3. The Prevalence of Cohabitation

While cohabitation is relatively uncommon among native prime-aged married couples, it is a substantially more important form of family structure for some immigrant

groups (see Table 1). For example, 21.2 percent of married immigrant women from Southeast Asia live with one or more adult relative. Similarly, 19.9, 16.4 and 15.3 percent of married immigrant women from Central America, Southwest Asia and South America cohabitate, respectively. At the other extreme, married immigrant women from Northern/Western Europe and North America have cohabitation rates similar to American born women at 2.6 and 2.7 percent, respectively.

Progressively restricting the sample to women with at least one resident child under the age of eighteen and then to women with at least one resident child under the age of six reveals several interesting patterns. The average married native woman with young children is less likely to cohabitate than the overall average native woman. This suggests that a substantial fraction of native cohabitation may serve to care for elderly relatives. In contrast, the cohabitation rate tends to be higher among married immigrant women with young children rather than lower. Married immigrant women from Southwest Asia are a good example. 16.4 percent of these women cohabitate with at least one adult relative. This percentage rises to 17.1 percent when we restrict the sample to women with resident children under the age of eighteen, and then rises further to 20.2 percent when we restrict the sample further to women with resident children under the age of six. There are, however, exceptions. The probability of cohabitating is fairly constant across the age of resident children for married immigrant women from North America, Northern/Western Europe, Southern Europe and the Middle East.

Not surprisingly, the percentage of women cohabitating falls when the definition of cohabitants is restricted to the presence of parents/in-laws. For example, the percentage of married native women who cohabitate falls from 3.1 percent to 1.5 percent

for the entire sample and the fraction of cohabitators similarly falls from 2.7 (2.3) percent to 1.3 (1.0) percent for the sample of women with resident children under the age of eighteen (six). While the cohabitation rate also falls for all immigrant groups, the magnitude of the drop varies substantially across regions of origin. For example, the overall cohabitation rate falls from 15.3 percent to 5.9 percent for married immigrant women from South America but only from 13.0 percent to 8.5 percent for married immigrant women from East Asia.

The distinct differences in the rates of cohabitation across regions of origin suggest that cultural traditions play a crucial and/or primary role in determining cohabitation patterns. For example, the relatively high rate of cohabitation with parents/in-laws among Indian immigrants likely reflects the strong history of patriarchal cohabitation in India (Khatri, 1975). Similarly, cohabitation among Japanese couples in Japan depends on the birth order of sons; there is a patriarchal tradition of parents' cohabitating with their oldest son (Morgan and Hirosima 1983; Ogawa and Ermisch 1996; and Sasaki 2002). Logan, Bian and Bian (1998) similarly point out that the decision to cohabitate with one's parents/in-laws in China is based on the decision of the parents rather than their children. Finally, Glick, Bean and Van Hook (1997) argue that cohabitation patterns in the U.S. reflect the composition of immigrant regions of origin. Specifically, the fraction of immigrants from less developed countries where cohabitation is more prevalent has a substantial effect on the amount of cohabitation observed in the United States.

Taken as whole, these findings suggest that the traditions and/or cultural determinants of family structure in the home country largely determine differences in

cohabitation rates across immigrant groups. The question that we focus on is whether or not these differences in the rate and form of cohabitation effect the decision of married immigrant women to work outside of the home.

4. Cohabitation and Employment

Before formally analyzing the relationship between cohabitation and female employment it is worth simply looking at the fraction of married immigrant and native women who work across family structures. Table 2 reports the fraction of employed married women in non-cohabitating and cohabitating households by nativity and region of origin. Table 2 further distinguishes between women cohabitating with at least one adult relative and those cohabitating with parents/in-laws. Again, we want to investigate the possibility that childcare responsibilities are shared by cohabitating relatives, and limit the possible financial and time burdens associated with caring for elderly relatives. To this end, we also report female employment for the sub-samples of cohabitators and non-cohabitators with resident children under the age of eighteen and under the age of six.

Focusing on the native sample, there is no pattern across cohabitation status. While the difference between cohabitators and non-cohabitators is statistically significant at conventional levels for the samples of all married women and women with resident children under the age of eighteen, the magnitudes are both economically small and fluctuate in direction. For example, among native women with resident children under the age of eighteen, 64.6 percent of non-cohabitators work compared to 63.9 percent of

women who cohabitate with one or more adult relative and 65.9 percent of women who cohabitate with parents/in-laws.

In contrast to the native sample, there are substantial differences in employment rates across cohabitating and non-cohabitating immigrants. Married immigrant women with resident children under the age of eighteen who cohabitate with adult relatives (parents/in-laws) are 5.6 (12.9) percentage points more likely to work than non-cohabitators. As might be expected the difference between cohabitors and non-cohabitators is even larger for women with resident children under the age of six. In this case, women cohabitating with adult relatives (parents/in-laws) are 8.7 (17.2) percentage points more likely to work than non-cohabitators.

Furthermore, there is substantial variation in employment by cohabitation status across region of origin groups. Focusing on the sample as a whole, North American immigrants are 7.7 (16.4) percentage points more likely to work if there is at least one cohabitating adult relative (parent/in-law). The employment increases are similarly large for immigrants from Oceania, East Asia, Southeast Asia and Southwest Asia who cohabitate with adult relatives or parents/in-laws. At the other extreme, there is little or no difference in employment across cohabitation status for immigrants from Northern/ Western Europe, Eastern/Central Europe or the Middle East.

Not surprisingly, the difference in employment between the entire sample and the sub-sample of women with very young children varies considerably across cohabitation status. Women who do not cohabitate are much less likely to work if they have young children relative to the average non-cohabitating woman. For all region of origin groups the drop in the employment probability is 8 percentage points or higher, with most groups

seeing 14 to 15 percentage-point drops. In contrast, cohabitating women (with adult relatives or parents/in-laws) with young children exhibit much smaller declines in their employment rates relative to the average cohabitating woman from their region of origin; ranging from 1 to 7 percentage points in general.

While these results are not conditional on observable characteristics, they clearly suggest that cohabitation increases the probability of work among married immigrant women. The remainder of the paper provides a more formal analysis of the relationship between cohabitation and the employment decision for married women.

5. The Impact of Cohabitation on the Decision to Work

This section focuses on estimating the relationship between cohabitation and the decision to work in a discrete choice single-equation probit framework. Let the indicator variable $Y_i = 1$ if the married woman works and let $Y_i = 0$ otherwise. The choice problem is then described by the following latent variable model:

$$Y_i^* = C_i \delta + X_i \beta + \varepsilon_i \tag{1}$$

where Y_i^* is the propensity to work, C_i is an indicator variable equal to one if the married woman cohabitates and zero otherwise, X_i is a vector of individual characteristics (age and education), family characteristics (non-labor income, fertility and nativity of husband), regional characteristics (metropolitan status and census division), and characteristics specific to the immigrant sample (English fluency, year of arrival and region of origin) and ε_i is a normally distributed disturbance term with mean zero and unit variance. The probability that the married woman is observed working is given by:

$$\operatorname{prob}(Y_i = 1) = \operatorname{prob}(C_i \delta + X_i \beta + \varepsilon_i > 0) = \Phi(C_i \delta + X_i \beta). \tag{2}$$

where Φ is the standard normal cumulative density function.

Table 3 reports the probit estimates for the decision to work by married native and immigrant women when cohabitation is defined as the presence of one or more adult relative. In order to more easily describe the quantitative importance of the explanatory variables, Table 3 (and all remaining tables) report the marginal effects $(\partial \text{prob}(Y_i=1)/\partial X_i)$ for continuous variables and average treatment effects for the discrete variables, in both cases evaluated at means, as well as standard errors calculated using the "delta" method.

The first 3 columns of Table 3 report the results for the entire native sample, the native sub-sample with resident children under the age of eighteen, and the native sub-sample with resident children under the age of six, respectively. The last 3 columns of Table 3 report similar specifications for immigrant women. The only difference between the native and immigrant specifications is that the immigrant models include an English proficiency indicator, year of arrival indicators and indicators for region of origin.

The marginal effects are generally as one would expect, more educated women are more likely to be employed, the probability of employment increases at a decreasing rate as women age, women with more children are less likely to work, and women with more non-labor income are less likely to work. While these patterns hold across both native and immigrant groups, the magnitudes differ somewhat. For example, referring to the entire sample of natives (column 1) and immigrants (column 4), native high school graduates are 19.9 percentage points more likely to work than natives with less than 9 years of schooling while immigrant high school graduates are only 8.1 percentage points more likely to work than immigrants with less than 9 years of schooling. Similarly, each

additional child reduces the probability that a native works by 3.5 percentage points but only reduces the probability that an immigrant works by 2.7 percentage points.

There are also clear patterns across English proficiency, year of arrival, and region of origin for immigrants. English proficient immigrants are 11.2-12.8 percentage points more likely to work, depending on the sub-sample. Similarly, immigrants who have been in the U.S. for longer are more likely to work. Finally, there are clear differences in employment probability across region of origin. For example, immigrants from the Middle East are 30.3 percentage points less likely to work than immigrants from Southeast Asia while immigrants from Oceania are only 10.8 percentage points less likely to work than immigrants from Southeast Asia.

Most importantly for our purposes, cohabitation with at least one adult relative has a much bigger impact on the probability of working for immigrants than it does for natives. For the entire native sample cohabitation increases the probability of working by 2.7 percentage points, while for the entire immigrant sample it increases the probability of working by 10.3 percentage points. Restricting the sample to women with resident children under the age of eighteen, cohabitation increases the native work probability to 3.8 percentage points and the immigrant work probability to 11.4 percentage points. Similarly, restricting to women with resident children under the age of six, cohabitation increases the probability of working to 7.3 percentage points for natives and 14.0 percentage point for immigrants. The increasing impact of cohabitation as the sample is progressively restricted to women with younger resident children suggests that cohabitants play an important childcare role.

Table 4 again reports the probit estimates for the decision to work for married native and immigrant women but restricts the cohabitation definition to the presence of parents/in-laws of the female head or spouse. Although the definition change has little or no impact on most of the marginal effects, it does change the marginal effect of cohabitation slightly. While there is little change in the marginal effect of cohabitation for the entire native and immigrant samples, the marginal effects for the native sample restricted to women with resident children under the age of eighteen and the native and immigrant samples with resident children under the age of six are somewhat higher. For natives with resident children under the age of eighteen the presence of at least one parent/in-law increases the probability of working from 3.8 percentage points higher than non-cohabitators when cohabitation is defined as at least one adult relative to 4.4 percentage points higher when cohabitation is defined as at least one parent/in-law. When the sample is restricted to women with resident children under the age of six, natives who cohabitate with parents/in-laws (adult relatives) are 8.8 (7.3) percentage points more likely to work than non-cohabitators and immigrant cohabitators are 15.9 (14.0) percentage points more likely to work than non-cohabitators.

Table 5 re-estimates equation (2) for each region of origin separately. We do this to allow for the possibility that more than the intercepts differ across regions of origin. In addition, the results reported in Table 5 are based on the sample of women with resident children under the age of eighteen. We do this to focus on the women for whom cohabitator-assisted childcare may be important. We use the sample of women with resident children under the age of eighteen rather than under the age of six in an attempt to maintain sufficient samples for each region of origin. For the same reason, Table 5

only reports results for 8 of the 13 regions. Insufficient sample sizes for North America, Africa, Oceania and the Middle East force us to exclude these regions.⁴ For comparative purposes, Appendix Table A2 replicates Table 5 for the sample as a whole.

Many of the factors that determine employment are similar across regions of origin. First, non-labor income decreases the probability of employment for immigrants from all regions of origin. Secondly, with the exception of immigrants from Northern/ Western Europe, English fluency increases the probability of employment for immigrants from all regions. Finally, the number of children and presence of young children decreases the probability of employment for immigrants from all regions.

However, just as there are distinct differences in employment across regions of origin (Table 1), some of the factors that determine employment also differ across regions of origin. For example, high levels of education increase the probability of working for Central and South American immigrants and Northern/Western, Southern and Eastern/Central European immigrants, while there is little discernable pattern in employment across schooling levels for East Asian immigrants, except at very high levels of education.

The employment impact of the presence of at least one adult relative also differs substantially across regions of origin. Holding all else constant, cohabitating immigrants from Central and South America are 8.8 and 9.6 percentage points more likely to work than their non-cohabitating counterparts. The cohabitation impact is even stronger for Asian immigrants. Cohabitators from Southeast Asia, Southwest Asia and East Asia are 11.4, 13.7 and 16.8 percentage points more likely to work than their non-cohabitating

⁴ We only analyze regions with at least 5000 observations in the sub-sample of married women with resident children less than eighteen years of age. The number of observations in the regions not analyzed are 3221, 1764, 677, and 2211 for North America, Africa, Oceania and the Middle East, respectively.

counterparts. At the other extreme, the difference in employment between cohabitating and non-cohabitating women from Northern/Western Europe is statistically insignificant.

Table 6 replicates Table 5 re-defining cohabitation as the presence of parents/in-laws only.⁵ While the pattern of results is very similar, the marginal effect of cohabitation is generally slightly larger. There is one notable exception; the estimated impact of cohabitating falls from 8.8 to 6.0 percentage points for Central American immigrants. This is the same group for which the rate of cohabitation falls the furthest when the cohabitation is changed from the presence of any adult relative to parents/in-laws.

6. Conclusion

This paper documents the substantial variation in cohabitation rates among married women by nativity and region of origin. The distinct differences in cohabitation rates across regions of origin suggest that social norms and customs play a crucial and/or primary role in determining cohabitation patterns (see for example, Morgan and Hirosima 1983; Ogawa and Ermisch 1996; Sasaki 2002; Logan, Bian and Bian 1998; and Glick, Bean and Van Hook 1997).

Furthermore, we find that cohabitation increases the probability that married women work outside the home, with the effect being bigger for immigrants. Not surprisingly, we also find substantial differences in the effect of cohabitation on married immigrant women's decision to work by region of origin. In particular, the cohabitation effect is much larger among immigrants from Asia. This result is consistent with Morgan and Hirosima (1983), Ogawa and Ermisch (1996) and Sasaki (2002) who find that

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⁵ Appendix Table A3 replicates Table 6 for the entire sample.

cohabitation among Japanese couples in Japan significantly increases female labor force participation.

Taken together, our results suggest that the traditions and/or cultural determinants of family structure in the home country translate into the family structure decisions of immigrants in the host country and thereby have significant implications for female labor market behavior. This is consistent with Reimers (1985) and Antecol (2000) who find that cultural factors play a role in explaining inter-ethnic variation in female labor force participation rates of immigrants. These results are important in a broader context because they shed new light on the labor market assimilation path of female immigrants.

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Table 1. Cohabitation and Employment by Nativity and Region of Origin

	E	Employment		Presence	of Adult Rela	tives	Presence	of Parents/In-	Laws
	Total	Kids<18	Kids<6	Total	Kids<18	Kids<6	Total	Kids<18	Kids<6
Natives	0.686	0.646	0.565	0.031	0.027	0.023	0.015	0.013	0.010
	(0.464)	(0.478)	(0.496)	(0.173)	(0.163)	(0.150)	(0.122)	(0.115)	(0.099)
Immigrants	0.560	0.526	0.447	0.148	0.162	0.186	0.062	0.069	0.072
_	(0.496)	(0.499)	(0.497)	(0.355)	(0.369)	(0.389)	(0.241)	(0.254)	(0.259)
North America	0.628	0.573	0.475	0.027	0.026	0.025	0.015	0.016	0.014
	(0.483)	(0.495)	(0.500)	(0.162)	(0.159)	(0.157)	(0.123)	(0.125)	(0.118)
Central America	0.497	0.470	0.412	0.199	0.205	0.231	0.055	0.056	0.057
	(0.500)	(0.499)	(0.492)	(0.399)	(0.403)	(0.421)	(0.228)	(0.231)	(0.232)
South America	0.562	0.526	0.453	0.153	0.160	0.164	0.059	0.065	0.065
	(0.496)	(0.499)	(0.498)	(0.360)	(0.367)	(0.370)	(0.236)	(0.247)	(0.247)
Africa	0.580	0.569	0.506	0.114	0.117	0.136	0.049	0.053	0.057
	(0.494)	(0.495)	(0.500)	(0.318)	(0.321)	(0.343)	(0.216)	(0.224)	(0.233)
Oceania	0.578	0.551	0.460	0.109	0.119	0.141	0.036	0.044	0.058
	(0.494)	(0.498)	(0.499)	(0.312)	(0.324)	(0.349)	(0.188)	(0.206)	(0.233)
Northern/Western Europe	0.590	0.534	0.418	0.026	0.026	0.025	0.015	0.017	0.014
•	(0.492)	(0.499)	(0.493)	(0.160)	(0.160)	(0.156)	(0.121)	(0.128)	(0.117)
Southern Europe	0.556	0.523	0.458	0.091	0.091	0.082	0.060	0.063	0.054
•	(0.497)	(0.499)	(0.498)	(0.288)	(0.288)	(0.274)	(0.238)	(0.243)	(0.225)
Eastern/Central Europe	0.613	0.574	0.464	0.069	0.080	0.090	0.044	0.054	0.056
_	(0.487)	(0.495)	(0.499)	(0.253)	(0.272)	(0.286)	(0.205)	(0.225)	(0.231)
East Asia	0.562	0.540	0.437	0.130	0.144	0.158	0.085	0.100	0.109
	(0.496)	(0.498)	(0.496)	(0.336)	(0.351)	(0.364)	(0.279)	(0.301)	(0.312)
Southeast Asia	0.702	0.679	0.608	0.212	0.224	0.244	0.109	0.122	0.130
	(0.457)	(0.467)	(0.488)	(0.409)	(0.417)	(0.429)	(0.312)	(0.327)	(0.336)
Southwest Asia	0.556	0.540	0.438	0.164	0.171	0.202	0.090	0.100	0.115
	(0.497)	(0.498)	(0.496)	(0.370)	(0.376)	(0.402)	(0.287)	(0.299)	(0.319)
Middle East	0.393	0.343	0.245	0.103	0.099	0.102	0.054	0.057	0.056
	(0.489)	(0.475)	(0.431)	(0.304)	(0.298)	(0.303)	(0.227)	(0.232)	(0.231)

Sampling weights used.

Table 2. Employment by Cohabitation, Nativity and Region of Origin

	No	Cohabitators		Presence	of Adult Rela	ntives	Presence of Parents/In-Laws		
	Total	Kids<18	Kids<6	Total	Kids<18	Kids<6	Total	Kids<18	Kids<6
Natives	0.687	0.646	0.565	0.671	0.639	0.566	0.680	0.659	0.581
	(0.464)	(0.478)	(0.496)	(0.470)	(0.480)	(0.496)	(0.467)	(0.474)	(0.493)
Immigrants	0.554	0.517	0.431	0.591	0.573	0.518	0.659	0.646	0.603
	(0.497)	(0.500)	(0.495)	(0.492)	(0.495)	(0.500)	(0.474)	(0.478)	(0.489)
North America	0.626	0.569	0.470	0.703	0.698	0.664	0.790	0.831	0.879
	(0.484)	(0.495)	(0.499)	(0.458)	(0.462)	(0.479)	(0.410)	(0.379)	(0.335)
Central America	0.496	0.466	0.405	0.502	0.484	0.438	0.561	0.537	0.502
	(0.500)	(0.499)	(0.491)	(0.500)	(0.500)	(0.496)	(0.496)	(0.499)	(0.500)
South America	0.554	0.516	0.437	0.605	0.578	0.535	0.652	0.620	0.551
	(0.497)	(0.500)	(0.496)	(0.489)	(0.494)	(0.499)	(0.477)	(0.486)	(0.499)
Africa	0.568	0.556	0.487	0.672	0.664	0.627	0.684	0.674	0.671
	(0.495)	(0.497)	(0.500)	(0.471)	(0.474)	(0.485)	(0.467)	(0.471)	(0.474
Oceania	0.563	0.529	0.426	0.701	0.715	0.668	0.745	0.748	0.643
	(0.496)	(0.500)	(0.495)	(0.460)	(0.454)	(0.476)	(0.442)	(0.441)	(0.490
Northern/Western Europe	0.590	0.533	0.418	0.614	0.573	0.437	0.675	0.618	0.429
•	(0.492)	(0.499)	(0.493)	(0.488)	(0.496)	(0.501)	(0.470)	(0.488)	(0.503
Southern Europe	0.553	0.518	0.446	0.588	0.580	0.582	0.618	0.602	0.599
•	(0.497)	(0.500)	(0.497)	(0.493)	(0.494)	(0.495)	(0.486)	(0.490)	(0.493
Eastern/Central Europe	0.613	0.573	0.461	0.608	0.589	0.493	0.613	0.592	0.487
•	(0.487)	(0.495)	(0.499)	(0.488)	(0.492)	(0.501)	(0.487)	(0.492)	(0.501
East Asia	0.544	0.518	0.403	0.683	0.675	0.622	0.708	0.704	0.674
	(0.498)	(0.500)	(0.490)	(0.465)	(0.469)	(0.485)	(0.455)	(0.457)	(0.469)
Southeast Asia	0.680	0.653	0.573	0.785	0.770	0.720	0.821	0.811	0.773
	(0.467)	(0.476)	(0.495)	(0.411)	(0.421)	(0.449)	(0.384)	(0.392)	(0.419)
Southwest Asia	0.544	0.525	0.410	0.617	0.616	0.549	0.639	0.645	0.572
	(0.498)	(0.499)	(0.492)	(0.486)	(0.487)	(0.498)	(0.481)	(0.479)	(0.496)
Middle East	0.397	0.345	0.242	0.366	0.328	0.274	0.439	0.385	0.367
	(0.489)	(0.475)	(0.429)	(0.483)	(0.471)	(0.448)	(0.498)	(0.489)	(0.486)

Sampling weights used. Standard deviations in parentheses. Bold indicates that the difference in employment probabilities between cohabitators and non-cobabitators (between columns 1&4, 2&5, 3&6, 1&7, 2&8 and 3&9) are statistically different at the 5% level.

Table 3. Employment Probits for Married Women by Nativity Including a Control for the Presence of Adult Relatives (Marginal Effects)

		Natives			Immigrants	
	Total	Kids<18	Kids<6	Total	Kids<18	Kids<6
Presence of Adult Relatives	0.027 (0.003)	0.038 (0.004)	0.073 (0.006)	0.103 (0.004)	0.114 (0.005)	0.140 (0.007)
Age	0.010	0.020	0.021	0.024	0.029	0.017
Age Squared (/10)	(0.001) -0.001	(0.001) -0.002	(0.002) -0.002	(0.002) -0.003	(0.003) -0.003	(0.005) -0.002
Grades 9-11	(0.000) 0.064	(0.000) 0.076	(0.000) 0.058	(0.000) 0.012	(0.000) 0.015	(0.001) 0.011
Grade 12	(0.004) 0.199	(0.005) 0.219	(0.011) 0.200	(0.006) 0.081	(0.007) 0.084	(0.011) 0.070
Some College	(0.003) 0.241	(0.005) 0.262	(0.010) 0.251	(0.005) 0.144	(0.006) 0.144	(0.009) 0.125
Associate Degree	(0.003) 0.256	(0.004) 0.286	(0.009) 0.306	(0.005) 0.181	(0.007) 0.182	(0.010) 0.177
College Degree	(0.002) 0.270	(0.003) 0.288	(0.008) 0.295	(0.006) 0.198	(0.007) 0.193	(0.012) 0.195
	(0.002)	(0.004)	(0.009)	(0.005)	(0.006)	(0.010)
Grad/Prof Degree	0.299 (0.001)	0.334 (0.002)	0.379 (0.005)	0.271 (0.005)	0.282 (0.007)	0.295 (0.011)
Children Ever Born	-0.035 (0.000)	-0.044 (0.001)	-0.073 (0.001)	-0.027 (0.001)	-0.029 (0.001)	-0.044 (0.002)
Children <6	-0.225 (0.001)	-0.177 (0.002)		-0.164 (0.004)	-0.146 (0.004)	
Native Husband	0.020 (0.003)	0.021 (0.004)	0.017 (0.005)	0.004 (0.004)	-0.007 (0.005)	-0.010 (0.007)
Non-Labor Income (/1000)	-0.002 (0.000)	-0.003 (0.000)	-0.003 (0.000)	-0.002 (0.000)	-0.002 (0.000)	- 0.002 (0.000)
English Fluency	(0.000)	(0.000)	(0.000)	0.112 (0.004)	0.121 (0.005)	0.128 (0.007)
Immigrated pre-1950				0.222	0.228	0.239
Immigrated between 1950-59				(0.009) 0.222	(0.015) 0.237	(0.050) 0.271
Immigrated between 1960-64				(0.006) 0.219	(0.007) 0.224	(0.013) 0.279
Immigrated between 1965-69				(0.005) 0.220	(0.007) 0.216	(0.011) 0.259
Immigrated between 1970-74				(0.005) 0.215	(0.006) 0.219	(0.010) 0.264
Immigrated between 1975-79				(0.005) 0.216	(0.006) 0.217	(0.009) 0.254
Immigrated between 1980-84				(0.005) 0.172	(0.005) 0.169	(0.008) 0.185
North America				(0.005) -0.146	(0.005) -0.167	(0.007) -0.175
Central America				(0.009) -0.139	(0.011) -0.144	(0.014) -0.133
South America				(0.006) -0.155	(0.006) -0.162	(0.009) -0.155
Africa				(0.008) -0.154	(0.009) -0.140	(0.012) -0.132
Oceania				(0.012) -0.108	(0.014) -0.109	(0.017) -0.128
Northern/Western Europe				(0.019) -0.171	(0.022)	(0.027) -0.201
•				(0.007)	-0.191 (0.009)	(0.012)
Southern Europe				-0.184 (0.008)	-0.200 (0.009)	-0.182 (0.013)
Eastern/Central Europe				-0.157 (0.007)	-0.164 (0.008)	- 0.163 (0.011)
East Asia				-0.150 (0.006)	-0.149 (0.007)	-0.175 (0.009)
Southwest Asia				-0.195 (0.008)	-0.193 (0.009)	-0.209 (0.011)
Middle East				-0.303 (0.009)	-0.317 (0.010)	-0.312 (0.011)
Sample Size	1,253,312	798,342	361,978	147,931	106,055	50,286

Sampling weights used. Standard errors in parentheses. Bold coefficients significant at the 5 percent level. Probits also include controls for census division and metropolitan status. Omitted categories are less than grade 9, immigrated between 1985-90 and Southeast Asia.

Table 4. Employment Probits for Married Women by Nativity Including a Control for the Presence of Parents/In-Laws (Marginal Effects)

		Natives	T7' 1 . c		mmigrants	17:1 -
	Total	Kids<18	Kids<6	Total	Kids<18	Kids<6
Presence of Parents/In-Laws	0.024 (0.004)	0.044 (0.005)	0.088 (0.009)	0.105 (0.006)	0.115 (0.007)	0.159 (0.010)
Age	0.010	0.019	0.020	0.023	0.027	0.014
Age Squared (/10)	(0.001) -0.001	(0.001) -0.002	(0.002) -0.002	(0.002) -0.003	(0.003) -0.003	(0.005) -0.001
Grades 9-11	(0.000) 0.063	(0.000) 0.076	(0.000) 0.058	(0.000) 0.009	(0.000) 0.013	(0.001) 0.008
Grade 12	(0.004) 0.198	(0.005) 0.219	(0.011) 0.199	(0.006) 0.077	(0.007) 0.080	(0.010) 0.063
Some College	(0.003) 0.241	(0.005) 0.262	(0.010) 0.250	(0.005) 0.139	(0.006) 0.139	(0.009) 0.116
Associate Degree	(0.003) 0.256	(0.004) 0.285	(0.009) 0.305	(0.005) 0.175	(0.007) 0.176	(0.010) 0.166
College Degree	(0.002) 0.269	(0.003) 0.287	(0.008) 0.294	(0.006) 0.192	(0.007) 0.187	(0.012) 0.184
Grad/Prof Degree	(0.002) 0.298	(0.004) 0.333	(0.009) 0.378	(0.005) 0.266	(0.007) 0.275	(0.010) 0.284
Ç	(0.001)	(0.002)	(0.005)	(0.005)	(0.007)	(0.012)
Children Ever Born	-0.035 (0.000)	-0.044 (0.001)	-0.073 (0.001)	- 0.027 (0.001)	-0.030 (0.001)	-0.045 (0.002)
Children <6	-0.225 (0.001)	-0.177 (0.002)		-0.163 (0.004)	-0.144 (0.004)	
Native Husband	0.020 (0.003)	0.021 (0.004)	0.016 (0.005)	0.001 (0.004)	-0.012 (0.005)	-0.017 (0.007)
Non-Labor Income (/1000)	-0.002 (0.000)	-0.003 (0.000)	-0.003 (0.000)	-0.002 (0.000)	-0.002 (0.000)	-0.002 (0.000)
English Fluency	(,	(******)	(,	0.108 (0.004)	0.116 (0.005)	0.121 (0.007)
Immigrated pre-1950				0.221 (0.009)	0.226 (0.015)	0.238 (0.051)
Immigrated between 1950-59				0.221	0.235	0.270
Immigrated between 1960-64				(0.006) 0.217	(0.007) 0.220	(0.013) 0.274
Immigrated between 1965-69				(0.005) 0.218	(0.007) 0.213	(0.011) 0.254
Immigrated between 1970-74				(0.005) 0.214	(0.006) 0.217	(0.010) 0.260
Immigrated between 1975-79				(0.005) 0.216	(0.006) 0.217	(0.009) 0.254
Immigrated between 1980-84				(0.005) 0.173	(0.005) 0.170	(0.008) 0.186
North America				(0.005) -0.150	(0.005) -0.172	(0.007) - 0.179
Central America				(0.009) -0.136	(0.011) -0.140	(0.014) -0.125
South America				(0.006) -0.155	(0.006) -0.161	(0.009) - 0.154
Africa				(0.008) -0.156	(0.009) -0.142	(0.012) -0.131
Oceania				(0.012) -0.110	(0.014) -0.111	(0.017) -0.129
Northern/Western Europe				(0.019) -0.176	(0.022) -0.196	(0.027) -0.206
Southern Europe				(0.007) -0.190	(0.009)	(0.011) -0.188
1				(0.008)	-0.206 (0.009)	(0.013)
Eastern/Central Europe				-0.161 (0.007)	-0.169 (0.008)	-0.167 (0.011)
East Asia				-0.156 (0.006)	-0.155 (0.007)	-0.182 (0.009)
Southwest Asia				-0.198 (0.008)	-0.196 (0.009)	-0.211 (0.011)
Middle East				-0.307 (0.009)	-0.322 (0.010)	-0.315 (0.011)
Sample Size	1,253,312	798,342	361,978	147,931	106,055	50,286

Sampling weights used. Standard errors in parentheses. Bold coefficients significant at the 5 percent level. Probits also include controls for census division and metropolitan status. Omitted categories are less than grade 9, immigrated between 1985-90 and Southeast Asia.

Table 5. Employment Probits for Married Women with Kids less than 18 by Region of Origin Including a Control for the Presence of Adult Relatives (Marginal Effects)

	Central	South	Northern/	Southern	Eastern/	East	Southeast	Southwest
	America	America	Western	Europe	Central	Asia	Asia	Asia
			Europe		Europe			
Presence of Adult Relatives	0.088	0.096	0.047	0.087	0.077	0.168	0.114	0.137
	(0.007)	(0.020)	(0.048)	(0.025)	(0.023)	(0.014)	(0.011)	(0.019)
Age	0.030	0.024	0.028	0.025	0.026	0.019	0.033	0.034
	(0.004)	(0.011)	(0.012)	(0.011)	(0.010)	(0.009)	(0.007)	(0.013)
Age Squared (/10)	-0.004	-0.003	-0.004	-0.003	-0.003	-0.002	-0.004	-0.003
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Grades 9-11	-0.013	0.043	0.087	-0.024	-0.033	-0.004	0.097	0.094
	(0.009)	(0.036)	(0.077)	(0.028)	(0.039)	(0.028)	(0.017)	(0.050)
Grade 12	0.082	0.042	0.152	0.027	0.034	-0.036	0.138	0.087
	(0.008)	(0.028)	(0.068)	(0.020)	(0.031)	(0.020)	(0.013)	(0.042)
Some College	0.164	0.088	0.223	0.099	0.114	-0.044	0.164	0.090
-	(0.010)	(0.031)	(0.064)	(0.030)	(0.031)	(0.024)	(0.013)	(0.046)
Associate Degree	0.196	0.103	0.270	0.137	0.143	-0.011	0.213	0.197
	(0.013)	(0.036)	(0.059)	(0.038)	(0.032)	(0.025)	(0.012)	(0.043)
College Degree	0.218	0.095	0.252	0.185	0.175	-0.032	0.273	0.145
	(0.013)	(0.034)	(0.060)	(0.034)	(0.030)	(0.022)	(0.012)	(0.042)
Grad/Prof Degree	0.312	0.226	0.358	0.305	0.237	0.154	0.220	0.233
-	(0.016)	(0.034)	(0.046)	(0.034)	(0.028)	(0.024)	(0.013)	(0.040)
Children Ever Born	-0.022	-0.022	-0.025	-0.030	-0.034	-0.016	-0.031	-0.052
	(0.002)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)	(0.003)	(0.009)
Children <6	-0.122	-0.163	-0.203	-0.153	-0.175	-0.154	-0.129	-0.152
	(0.007)	(0.018)	(0.020)	(0.020)	(0.016)	(0.013)	(0.012)	(0.019)
Native Husband	-0.018	-0.007	0.046	0.047	-0.007	-0.032	-0.110	0.017
	(0.008)	(0.020)	(0.018)	(0.020)	(0.016)	(0.014)	(0.013)	(0.038)
Non-Labor Income (/1000)	-0.002	-0.001	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
English Fluency	0.118	0.138	-0.015	0.044	0.118	0.099	0.199	0.167
•	(0.006)	(0.019)	(0.091)	(0.021)	(0.025)	(0.013)	(0.016)	(0.027)
Sample Size	42,641	5,578	5,530	5,431	7,850	12,583	12,838	5,728

Sampling weights used. Standard errors in parentheses. Bold coefficients significant at the 5 percent level. Probits also include controls for census division, metropolitan status and year of arrival dummies. Less than grade 9 is the omitted category.

Table 6. Employment Probits for Married Women with Kids less than 18 by Region of Origin Including a Control for the Presence of Parents/In-Laws (Marginal Effects)

	Central	South	Northern/	Southern	Eastern/	East	Southeast	Southwest
	America	America	Western	Europe	Central	Asia	Asia	Asia
			Europe		Europe			
Presence of Parents/In-Laws	0.060	0.105	0.073	0.095	0.068	0.178	0.111	0.143
	(0.012)	(0.028)	(0.058)	(0.030)	(0.028)	(0.016)	(0.013)	(0.024)
Age	0.028	0.023	0.028	0.024	0.026	0.017	0.033	0.033
	(0.004)	(0.011)	(0.012)	(0.011)	(0.010)	(0.009)	(0.007)	(0.013)
Age Squared/10	-0.004	-0.003	-0.004	-0.003	-0.003	-0.002	-0.004	-0.003
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
Grades 9-11	-0.015	0.043	0.087	-0.025	-0.035	-0.007	0.098	0.097
	(0.009)	(0.036)	(0.077)	(0.028)	(0.039)	(0.028)	(0.017)	(0.049)
Grade 12	0.077	0.041	0.152	0.027	0.033	-0.039	0.140	0.087
	(0.008)	(0.028)	(0.068)	(0.020)	(0.031)	(0.020)	(0.013)	(0.042)
Some College	0.158	0.086	0.223	0.097	0.112	-0.048	0.165	0.087
C	(0.010)	(0.031)	(0.064)	(0.030)	(0.031)	(0.024)	(0.013)	(0.046)
Associate Degree	0.190	0.101	0.270	0.134	0.141	-0.017	0.213	0.194
C	(0.013)	(0.036)	(0.058)	(0.038)	(0.032)	(0.025)	(0.012)	(0.043)
College Degree	0.209	0.091	0.252	0.183	0.174	-0.038	0.270	0.142
	(0.013)	(0.034)	(0.060)	(0.034)	(0.030)	(0.022)	(0.012)	(0.042)
Grad/Prof Degree	0.304	0.223	0.358	0.303	0.236	0.147	0.217	0.227
Č	(0.016)	(0.035)	(0.046)	(0.034)	(0.028)	(0.024)	(0.013)	(0.041)
Children Ever Born	-0.022	-0.022	-0.025	-0.030	-0.034	-0.016	-0.032	-0.052
	(0.002)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)	(0.003)	(0.009)
Children <6	-0.119	-0.162	-0.203	-0.152	-0.174	-0.153	-0.127	-0.147
	(0.007)	(0.018)	(0.020)	(0.020)	(0.016)	(0.013)	(0.012)	(0.019)
Native Husband	-0.025	-0.011	0.046	0.047	-0.008	-0.035	-0.120	0.013
	(0.008)	(0.020)	(0.018)	(0.020)	(0.016)	(0.014)	(0.013)	(0.038)
Non-Labor Income/1000	-0.001	-0.001	-0.002	-0.002	-0.002	-0.002	-0.001	-0.002
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
English Fluency	0.114	0.133	-0.016	0.043	0.118	0.099	0.195	0.166
<i>6</i>	(0.006)	(0.019)	(0.091)	(0.021)	(0.025)	(0.013)	(0.016)	(0.027)
Sample Size	42,641	5,578	5,530	5,431	7,850	12,583	12,838	5,728

Sampling weights used. Standard errors in parentheses. Bold coefficients significant at the 5 percent level. Probits also include controls for census division, metropolitan status and year of arrival dummies. Less than grade 9 is the omitted category.

Appendix Table 1. Descriptive Statistics by Nativity and Region of Origin

	Natives							Immigra	ants					
		Total	North America	Central America	South America	Africa	Oceania	Northern/ Western Europe	Southern Europe	Eastern/ Central Europe	East Asia	Southeast Asia	Southwest Asia	Middle East
Age	38.448	38.655	40.104	37.307	37.900	36.848	37.639	41.787	40.723	41.707	38.763	38.377	37.599	37.801
Less than Grade 9	(8.072) 0.015	(8.039) 0.212	(8.154) 0.026	(7.985) 0.396	(7.902) 0.097	(7.327) 0.046	(7.684) 0.065	(8.207) 0.015	(8.087) 0.338	(7.971) 0.058	(7.692) 0.093	(7.497) 0.166	(7.397) 0.049	(7.850) 0.126
Grades 9-11	(0.120) 0.067	(0.409) 0.085	(0.158) 0.072	(0.489) 0.124	(0.296) 0.077	(0.210) 0.039	(0.247) 0.097	(0.121) 0.038	(0.473) 0.099	(0.233) 0.058	(0.291) 0.056	(0.372) 0.061	(0.217) 0.052	(0.332) 0.078
Grade 12	(0.250) 0.392	(0.278) 0.291	(0.258) 0.313	(0.329) 0.257	(0.266) 0.372	(0.193) 0.256	(0.297) 0.375	(0.192) 0.391	(0.299) 0.358	(0.234) 0.388	(0.230) 0.301	(0.240) 0.212	(0.222) 0.193	(0.268) 0.331
Some College	(0.488) 0.211	(0.454) 0.130	(0.464) 0.209	(0.437) 0.103	(0.483) 0.190	(0.436) 0.150	(0.484) 0.179	(0.488) 0.210	(0.479) 0.079	(0.487) 0.165	(0.459) 0.114	(0.409) 0.132	(0.395) 0.096	(0.471) 0.141
Associate Degree	(0.408) 0.086	(0.336) 0.073	(0.406) 0.125	(0.304) 0.045	(0.393) 0.081	(0.358) 0.114	(0.384) 0.094	(0.408) 0.123	(0.270) 0.041	(0.372) 0.102	(0.318) 0.091	(0.339) 0.082	(0.295) 0.061	(0.348) 0.070
College Degree	(0.280) 0.160	(0.260) 0.141	(0.331) 0.171	(0.207) 0.051	(0.274) 0.117	(0.318) 0.266	(0.293) 0.131	(0.328) 0.138	(0.198) 0.055	(0.303) 0.121	(0.288) 0.243	(0.275) 0.284	(0.239) 0.312	(0.255) 0.162
Grad/Prof Degree	(0.367) 0.070	(0.348) 0.069	(0.377) 0.085	(0.220) 0.024	(0.321) 0.066	(0.442) 0.129	(0.338) 0.058	(0.345) 0.085	(0.228) 0.030	(0.326) 0.108	(0.429) 0.102	(0.451) 0.062	(0.463) 0.236	(0.369) 0.091
Children Ever Born	(0.255) 2.031	(0.253) 2.291	(0.279) 1.944	(0.153) 2.773	(0.249) 1.955	(0.335) 2.040	(0.235) 2.236	(0.279) 1.966	(0.171) 2.195	(0.310) 1.940	(0.302) 1.765	(0.241) 2.306	(0.425) 1.899	(0.288) 2.413
Children <6	(1.357) 0.294	(1.621) 0.344	(1.431) 0.254	(1.838) 0.419	(1.351) 0.363	(1.352) 0.425	(1.639) 0.400	(1.412) 0.218	(1.261) 0.225	(1.318) 0.201	(1.167) 0.315	(1.751) 0.365	(1.165) 0.365	(1.618) 0.416
Native Husband	(0.455) 0.973	(0.475) 0.282	(0.435) 0.725	(0.493) 0.185	(0.481) 0.225	(0.494) 0.190	(0.490) 0.478	(0.413) 0.639	(0.418) 0.256	(0.401) 0.483	(0.465) 0.256	(0.481) 0.272	(0.482) 0.053	(0.493) 0.177
Non-Labor Income	(0.161) 41.300	(0.450) 37.986	(0.447) 52.599	(0.389) 28.157	(0.417) 36.234	(0.393) 44.011	(0.500) 47.498	(0.480) 54.983	(0.437) 42.779	(0.500) 45.277	(0.436) 41.512	(0.445) 35.220	(0.224) 50.738	(0.382) 45.399
English Fluency	(34.597)	(35.446) 0.751	(45.092) 0.993	(25.402) 0.594	(33.044) 0.753	(44.359) 0.934	(46.586) 0.938	(44.795) 0.994	(34.444) 0.794	(38.315) 0.919	(38.413) 0.690	(29.152) 0.822	(46.272) 0.889	(43.656) 0.876
Immigrated pre-1950		(0.432) 0.016	(0.082) 0.048	(0.491) 0.016	(0.431) 0.003	(0.248) 0.003	(0.240) 0.014	(0.078) 0.032	(0.404) 0.021	(0.273) 0.043	(0.462) 0.003	(0.382) 0.002	(0.314) 0.002	(0.329) 0.009
Immigrated 1950-59		(0.125) 0.084	(0.215) 0.201	(0.124) 0.071	(0.057) 0.026	(0.058) 0.035	(0.118) 0.036	(0.177) 0.187	(0.142) 0.167	(0.202) 0.223	(0.056) 0.028	(0.046) 0.011	(0.045) 0.006	(0.093) 0.065
Immigrated 1960-64		(0.278) 0.090	(0.401) 0.196	(0.258) 0.092	(0.159) 0.085	(0.185) 0.038	(0.186) 0.062	(0.390) 0.175	(0.373) 0.128	(0.416) 0.151	(0.165) 0.050	(0.105) 0.024	(0.076) 0.014	(0.247) 0.064
Immigrated 1965-69		(0.286) 0.119	(0.397) 0.144	(0.290) 0.126	(0.279) 0.129	(0.191) 0.074	(0.242) 0.107	(0.380) 0.147	(0.334) 0.233	(0.358) 0.126	(0.219) 0.088	(0.154) 0.081	(0.116) 0.058	(0.246) 0.092
Immigrated 1970-74		(0.324) 0.153	(0.351) 0.087	(0.332) 0.172	(0.335) 0.162	(0.261) 0.149	(0.310) 0.159	(0.354) 0.095	(0.423) 0.200	(0.332) 0.087	(0.284) 0.160	(0.273) 0.164	(0.233) 0.168	(0.289) 0.156
Immigrated 1975-79		(0.360) 0.174	(0.282) 0.099	(0.378) 0.180	(0.369) 0.154	(0.356) 0.183	(0.366) 0.210	(0.293) 0.093	(0.400) 0.123	(0.282) 0.109	(0.366) 0.179	(0.370) 0.260	(0.374) 0.255	(0.363) 0.211
Immigrated 1980-84		(0.379) 0.191	(0.299) 0.106	(0.384) 0.197	(0.361) 0.223	(0.387) 0.260	(0.407) 0.171	(0.290) 0.113	(0.328) 0.070	(0.312) 0.114	(0.383) 0.220	(0.439) 0.282	(0.436) 0.249	(0.408) 0.194
Immigrated 1985-90		(0.393) 0.172	(0.307) 0.118	(0.398) 0.144	(0.416) 0.218	(0.439) 0.258	(0.376) 0.241	(0.316) 0.158	(0.255) 0.058	(0.318) 0.147	(0.414) 0.272	(0.450) 0.176	(0.432) 0.250	(0.396) 0.209
Sample Size	1,253,312	(0.378) 147,931	(0.323) 5,712	(0.351) 53,397	(0.413) 7,779	(0.438) 2,373	(0.428) 920	(0.365) 10,249	(0.235) 8,173	(0.354) 14,260	(0.445) 18,030	(0.381) 16,752	(0.433) 7,402	(0.407) 2,884

Sampling weights used. Standard deviations in parentheses.

Appendix Table 2. Employment Probits for Married Women by Region of Origin Including a Control for the Presence of Adult Relatives (Marginal Effects)

	Central America	South America	Northern/ Western Europe	Southern Europe	Eastern/ Central Europe	East Asia	Southeast Asia	Southwest Asia
Presence of Adult Relatives	0.080	0.095	0.034	0.056	0.048	0.154	0.111	0.120
Tresence of Frault Relatives	(0.006)	(0.017)	(0.033)	(0.021)	(0.018)	(0.012)	(0.009)	(0.017)
Age	0.026	0.015	0.002	0.007	0.023	0.031	0.023	0.038
	(0.003)	(0.008)	(0.007)	(0.008)	(0.006)	(0.006)	(0.005)	(0.009)
Age Squared/10	-0.003	-0.002	-0.001	-0.001	-0.003	-0.004	-0.003	-0.004
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Grades 9-11	-0.013	0.030	0.084	-0.031	-0.035	0.009	0.075	0.107
	(0.008)	(0.031)	(0.050)	(0.022)	(0.027)	(0.023)	(0.015)	(0.041)
Grade 12	0.085	0.029	0.147	0.027	0.033	-0.023	0.124	0.100
	(0.007)	(0.023)	(0.046)	(0.016)	(0.021)	(0.016)	(0.011)	(0.034)
Some College	0.162	0.082	0.218	0.101	0.100	0.009	0.149	0.125
	(0.009)	(0.025)	(0.041)	(0.024)	(0.021)	(0.019)	(0.011)	(0.037)
Associate Degree	0.201	0.127	0.251	0.110	0.141	0.020	0.195	0.225
8	(0.011)	(0.028)	(0.036)	(0.031)	(0.021)	(0.020)	(0.010)	(0.033)
College Degree	0.227	0.122	0.263	0.199	0.169	0.012	0.254	0.183
	(0.011)	(0.027)	(0.036)	(0.026)	(0.020)	(0.018)	(0.010)	(0.034)
Grad/Prof Degree	0.308	0.199	0.330	0.292	0.218	0.182	0.208	0.270
Č	(0.013)	(0.028)	(0.027)	(0.026)	(0.019)	(0.018)	(0.010)	(0.032)
Children Ever Born	-0.023	-0.024	-0.022	-0.038	-0.024	-0.006	-0.025	-0.047
	(0.002)	(0.005)	(0.004)	(0.005)	(0.004)	(0.004)	(0.003)	(0.007)
Children <6	-0.137	-0.180	-0.285	-0.183	-0.199	-0.174	-0.130	-0.164
	(0.006)	(0.016)	(0.016)	(0.018)	(0.014)	(0.011)	(0.010)	(0.016)
Native Husband	-0.004	0.016	0.045	0.048	0.010	-0.027	-0.101	0.045
	(0.007)	(0.017)	(0.012)	(0.016)	(0.011)	(0.011)	(0.010)	(0.029)
Non-Labor Income/1000	-0.001	-0.001	-0.002	-0.001	-0.002	-0.002	-0.002	-0.002
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
English Fluency	0.118	0.128	0.048	0.047	0.103	0.083	0.186	0.134
•	(0.006)	(0.016)	(0.071)	(0.017)	(0.020)	(0.011)	(0.014)	(0.025)
Sample Size	53,397	7,779	10,249	8,173	14,260	18,030	16,752	7,402

Sampling weights used. Standard errors in parentheses. Bold coefficients significant at the 5 percent level. Probits also include controls for census division, metropolitan status and year of arrival dummies. Less than grade 9 is the omitted category.

Appendix Table 3. Employment Probits for Married Women by Region of Origin Including a Control for the Presence of Parents/In-Laws (Marginal Effects)

	Central America	South America	Northern/ Western Europe	Southern Europe	Eastern/ Central Europe	East Asia	Southeast Asia	Southwest Asia
Presence of Parents/In-Laws	0.057 (0.011)	0.111 (0.024)	0.093 (0.041)	0.073 (0.025)	0.041 (0.023)	0.159 (0.014)	0.104 (0.011)	0.121 (0.022)
Age	0.024	0.015	0.002	0.007	0.023	0.030	0.022	0.037
	(0.003)	(0.008)	(0.007)	(0.008)	(0.006)	(0.006)	(0.005)	(0.009)
Age Squared (/10)	-0.003	-0.002	-0.001	-0.001	-0.003	-0.004	-0.003	-0.004
	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Grades 9-11	-0.014	0.029	0.084	-0.032	-0.036	0.005	0.076	0.108
	(0.008)	(0.031)	(0.050)	(0.022)	(0.027)	(0.023)	(0.015)	(0.041)
Grade 12	0.081	0.027	0.147	0.026	0.032	-0.027	0.125	0.098
	(0.007)	(0.023)	(0.046)	(0.016)	(0.021)	(0.016)	(0.011)	(0.034)
Some College	0.157	0.079	0.219	0.100	0.099	0.004	0.149	0.121
	(0.009)	(0.025)	(0.041)	(0.024)	(0.021)	(0.019)	(0.011)	(0.037)
Associate Degree	0.195	0.124	0.252	0.108	0.140	0.012	0.195	0.222
	(0.011)	(0.028)	(0.036)	(0.031)	(0.021)	(0.020)	(0.010)	(0.033)
College Degree	0.219	0.117	0.263	0.197	0.168	0.005	0.252	0.179
	(0.011)	(0.027)	(0.036)	(0.026)	(0.020)	(0.018)	(0.011)	(0.034)
Grad/Prof Degree	0.301	0.196	0.331	0.291	0.217	0.174	0.205	0.265
<u>C</u>	(0.013)	(0.028)	(0.027)	(0.026)	(0.019)	(0.018)	(0.011)	(0.032)
Children Ever Born	-0.024	-0.024	-0.022	-0.039	-0.024	-0.005	-0.026	-0.047
	(0.002)	(0.005)	(0.004)	(0.005)	(0.004)	(0.004)	(0.003)	(0.007)
Children <6	-0.135	-0.180	-0.286	-0.183	-0.198	-0.173	-0.128	-0.161
	(0.006)	(0.016)	(0.016)	(0.018)	(0.014)	(0.011)	(0.010)	(0.016)
Native Husband	-0.010	0.012	0.045	0.048	0.009	-0.031	-0.111	0.041
	(0.007)	(0.016)	(0.012)	(0.016)	(0.011)	(0.011)	(0.010)	(0.029)
Non-Labor Income (/1000)	-0.001	-0.001	-0.002	-0.001	-0.002	-0.002	-0.001	-0.002
,,	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
English Fluency	0.114	0.123	0.047	0.046	0.102	0.084	0.182	0.132
S ,	(0.006)	(0.016)	(0.071)	(0.017)	(0.020)	(0.011)	(0.014)	(0.025)
Sample Size	53,397	7,779	10,249	8,173	14,260	18,030	16,752	7,402

Sampling weights used. Standard errors in parentheses. Bold coefficients significant at the 5 percent level. Probits also include controls for census division, metropolitan status and year of arrival dummies. Less than grade 9 is the omitted category.