

Household extension and employment among Asian immigrant women

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Abstract

To help explain variation in immigrant women's employment, we provide an empirical model specifying women's labor supply decisions, focusing on the presence of older household members in the homes of younger immigrants. Using the American Community Survey 2008-2010, the paper incorporates individual, familial, and labor market resources of married, Asian immigrant women. We find traditional human capital explanations are insufficient. Varied employment patterns interact with household composition, husbands' incomes, family members' characteristics, and local labor markets circumstances across ethnic groups. Women's employment rates significantly change with the presence of older adults. Hampered by housework and care work, we suspect, Asian immigrant women apparently receive some support from extended household members (especially women), which increases their employment rates. Employed adults support women's market labor participation, while disabled adults' discourage women's employment outside the home. Additional ethnic variations in these dynamics deserve future study.

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Introduction

Asian American women's employment patterns display disparity across ethnic groups. However, there are fewer studies of economic adaptation by Asian American than there are of studies for Hispanic and African American women (Yamanaka and McClelland 1994). Asian immigrants' distinctive characteristics were not well reflected in most research (for exceptions, see, e.g., Yamanaka and McClelland 1994; Wong and Hirschman 1983). These include high self-employment rates (Hipple 2010), and family extension because of cultural norms (Kamo and Zhou 1994) and/or responses to economic hardship (Rosenbaum and Gilbertson 1995).

Analysis of immigrant women's economic adaptation mostly derives from models for single men, focusing on human capital. But the male-centered human capital explanation is challenged by empirical findings. For example, Asian Indian and Korean women have relatively low rates of employment despite their high levels of education and English proficiency (Read and Cohen 2007). Recent research suggests different effects of education, family structure, and immigration experience to explain ethnic disparities in women's employment rates (e.g. Espiritu 1999; Read and Cohen 2007; Read 2004). Asian immigrant women's economic behavior should be understood in the interplay among individual, familial, cultural and collective resources and constraints. Based on our review, we focus on one question set of questions that may yield important explanatory leverage: the implications of household extension, especially the role of extended family members, because this reflects familial financial and cultural circumstances as well as individual characteristics and dynamics among family members. Although previous research supports the important role of household extension (e.g. Cohen 2002), the nature of this influences, and its variability, are less understood. Our research will help explain how such family dynamics influence women's market labor participation.

We next discuss explanations for the labor force participation of immigrant women, then outline our data and models. The paper then describes the economic activity of Asian immigrant women and examines the probability of women's entering the labor market according to their personal endowments, material and family circumstances, and labor market characteristics. We conclude with discussion of what Asian

immigrant women encounter in their adaptation to U.S. society within their various ethnic, familial and local labor market contexts. In light of persisting differentials in labor force participation among immigrant women, these insights into immigrant women's labor market behavior provide a useful advance on existing research.

Labor Force Participation of Immigrant Women

Individual resources, local labor market conditions, and family conditions are conventionally used to predict immigrants' employment decisions. Newer research considers the effects of family conditions such as household extension.

Individual Resources

Individual resources such as education, length of residence and English proficiency are positively associated with immigrant women's labor force participation. Human capital theory suggests that women with adequate education and job skills are more likely to enter employment compared to those with lower levels of these resources (Cohen and Bianchi's 1999; Haines 1987). Education also substantially accounts for group differences in employment between White, Black, and Latina women (England et al. 2004). For immigrants, duration of residence is an important precursor of knowledge and resources needed to function in the labor market of the host country, including language skills as well as formal credentials and licenses. For those from more traditional societies, longer duration increases women's exposure to social norms regarding dual-earner roles (Schoeni 1998; Yamanaka and McClelland 1994). These factors may influence both the ability to get a job and the potential wages offered, which affect immigrant employment rates.

However, recent studies find these conventional explanations are less applicable for the experiences of some ethnic groups of women (Light and Gold 2000; Read 2004). For example, female immigrants from certain countries (e.g. Japan, India, Iran) are not as able to convert their education into higher occupational status, compared with male immigrants (Waldinger and Gilbertson 1994). More recently, Asian Indian and Korean women have been shown to have much lower employment rates than their high levels of education would predict (Cohen and Read 2007). The effects of longer duration of U.S. residency also are mixed. Long (1980) found a negative effect of time in the United States for married immigrant women, speculating that poor income prospects of their husbands upon arrival might force wives to enter the work force. If the

husbands' income contribution proved adequate to meet home budgets, wives might choose to return to home production.

Family Conditions

For immigrant women, spouses' earnings, non-labor income, and the number of children – particularly young children – all affect employment rates. Husbands' income is expected to reduce the labor supply of wives (Becker 1965; Berk 1985: 201). However, among White, Black, and Hispanic immigrant women England (2004) found trivial effects of husband's income in deterring women's employment – an effect that declined from the 1970s to the 1990s (Cohen & Bianchi 1999). Whether these findings will hold for Asian immigrant women is unknown.

The presence and greater number of children lowers women's employment rates, among both married and single mothers (Cohen and Bianchi 1999; Tienda and Glass 1985). Because mothers are generally more responsible for child care than are fathers, access to childcare to replace their own services is important for employment. Children therefore increase the potential wage required to make employment pay off (Herbst 2010). Although the downward pressure that children exert on mothers' labor supply decreased over time, the effect is still substantial (Juhn & Potter 2006; Leibowitz & Klerman 1995).

In addition, family-oriented small businesses affect women's employment. Given immigrants' reliance on family labor (Sanders and Nee 1996), immigrant women are more likely to be self-employed or family workers. Women's endeavors in family-run businesses (Dallalfar 1994) as well as their crucial roles in the family business of men (Anthias and Mehta 2003) have been recognized as important economic strategies for immigrant families' upward mobility.

There is little empirical evidence to document whether the presence of other adults permits women with children to enter the labor force. A long-standing question asks to what extent additional family members take care of family responsibilities for women versus adding extra household labor burdens for them. Previous findings support the idea that extended adult members' help provide child care and housework (Marta and Glass 1985; Min 1998; Treas 2009; J. Treas and Mazumdar 2002, 2004). Some grandparents do the cooking, cleaning and babysitting that helps permit dual earner couples, or single mothers, to improve their job prospects (Min 1998; Treas 2009; Treas & Mazumdar, 2004). Overall, the

evidence suggests the economic contributions of household extension increase women's employment more than their cultural pressures keep women at home – but we do not expect the pattern for women in different ethnic groups to be uniform.

Although the effect of employed non-nuclear adults' roles on women's employment are largely positive (Cohen and Casper 2002; Figueroa and Melendez 1993), extended members' gender, employment status, and health state may be important factors in determining their family roles and contributions. Women members are much more likely to care for young children (England, Hermesen, and Cotter 2000). Economically active members may help women's employment by contributing income for child care services (Cohen 2002, Jarrett 1994) or by generating employment contacts (Stoloff, Glanville, and Jayne 1999). Tienda and Glass (1985) found positive effects, even though they expected employed extended adults would hinder women's employment by imposing additional housework burdens. Extended members' health status may determine their ability to work around the house versus their needs for assistance and support; co-residence with disabled older relatives may lower women's market labor force participation. Thus, a simple view of family extension as an economic strategy may miss the complex variation and dynamics among extended households.

Local labor market conditions

Immigrant women's employment may be affected by local labor market conditions, including the level of ethnic concentration (Greenlees and Saenz 1999; Sanders and Nee 1996), women's overall employment rates (Cotter, Hermesen, and Vanneman 2001), and local unemployment rates (Kahn & Whittington 1996). The evidence is mixed regarding ethnic variation. High ethnic concentration may allow immigrant women to use their native language and previous work experience to gain employment (Min 1997; Portes and Bach 1985). On the other hand, if better-paying jobs in the enclave economy are reserved for men, as was the case in New York with Chinese immigrants (Zhou 1992), there might be little if any concentration advantage. Further, high ethnic concentration may strengthen the effect of traditional cultures that discourage women's employment (Min 2001; Read 2004). For instance, Korean immigrants' economic segregation, and their affiliation with ethnic churches, perpetuates the patriarchal ideology that stresses husbands as primary family breadwinners and decision makers (Min 2001). With regard to unemployment rates, married immigrant women living in areas of higher unemployment are less likely to be employed (Cooke and Bailey 1996), a pattern also found for Latinas in particular (Kahn & Whittington 1996), suggesting the effect may vary across

ethnic groups. The predominance of female-typed occupations in a local labor market helps explain women's employment rates, but the effects across ethnic groups are not yet known (Cotter et al. 2001)

Hypotheses

We focus on familial characteristics, which have been less explored than other factors. We expect female non-nuclear adults are more likely to provide householder women with child care and traditional housework. Healthier older adults will more likely be able to support childcare and housework, while disabled adults will likely add care work burdens for women. Employed members will increase host mothers' market labor participation. Possible ethnic variations are expected as well, as we will discuss. Specifically, we hypothesize:

1. A positive association between the presence of female extended household members and women's employment;
2. A positive association between the presence of employed extended household and women's employment, and;
3. A negative association between disabled extended household members and women's employment.

Data and Methods

Using American Community Survey 2008-2010 pooled data, we sample married Asian immigrant women living in their own households: Chinese, Asian Indian, Korean, Japanese, Filipina, Vietnamese, and Pakistani. Three years of data are pooled to increase the reliability of estimates of smaller groups in the sample. The 3-year files include approximately 3% of the population.

Restricting our analysis to foreign-born women, we coded them into one of the seven ethnic/nationality groups based on the Census "race" question – which in the Asian category presents a list of national origins – instead of relying on country of birth. This prevents, for example, Chinese who were born in the Philippines from being counted as Filipina.

We include women who are ages 18-45, married, and not attending school. Because native-born and foreign-born immigrants are distinctive in the extent of their assimilation, we excluded the native-born. Women aged 18-45 are both more likely to have young children (living in their homes) – thus potentially

needing for childcare support – and to be hosting older extended household members. To capture these dynamics, we restrict the sample to those who are householders or spouses of the householder, thus excluding those who live in the homes of others. Such “guests,” who live as extended household members in others’ homes (Casper & Cohen 2002), enter the analysis as part of the context for employment that we seek to understand for householder women. Students are excluded because the dynamics of their labor force participation are unique.

Measures and models

Dependent Variables

Immigrant women’s current employment status specifies whether each woman was employed at least one hour for pay or profit during the reference period. We used this indicator because it identifies those who are gainfully employed from those who are unemployed as well as those who are not in labor force. After recoding the non-dichotomous variable to dichotomous variable, the model predicting women’s employment uses logistic regression.

Independent Variables

Individual factors include age, education, English ability, duration of U.S. residency, potential earnings and disability. Age is measured as a continuous variable. Educational attainment (high school graduate, some college, four-year degree, advanced degree) is treated with dummy variables. English ability is measured with dummy variable indicating whether the women report speaking English “very well.” We categorize duration of U.S. residency into 0-9 years, 10-19 years, 20 or more years.

Family conditions include, most importantly, the presence of extended family members. These are defined as any parent, parent-in-law, sibling, sibling-in-law, or other relatives of the householder over the age of 45. We code their gender, employment and disability status with dummy variables. To identify the most pertinent disabilities for the question of care-intensive labor demands, we code those defined as self-care, ambulatory, and independent living disabilities.¹ Additional family variables include husband’s income (logged) and any income except the husbands’ or wife’s wages (also logged), the number of the

¹ The Chronbach’s alpha reliability score for the index of three care-intensive disabilities was .75, which is generally considered a reliably high score.

householder's own children and presence of children under age 5, and the presence of any self-employed family member (to capture family businesses). Self-employed family members can be the women themselves, their husbands, or any extended adults.

Local labor market conditions include women's share of employment in the local metropolitan area, the local unemployment rate, and the degree of ethnic concentration in the local metropolitan area. Ethnic concentration indicates the density of the co-ethnic population in the local area relative to the national proportion of the population from the ethnic group (calculated as in Cohen and Read 2007).

Models

Including these individual, familial and labor market variables, the probability of immigrant women's employment is estimated using logistic regression models. We use three models. Model 1 includes all women, without the extended household variables. Model 2 adds a variable indicating the presence of an extended-family member, which allows examination of the overall effects of household extension, as well as changes in the effects of children and other variables. Model 3 includes only those in extended-family households, and adds variables for the characteristics of extended family members.

In model 3, the variable for female adults shows the difference between effects of female versus male adults as extended-household members. Model 3 was omitted for the Japanese model because of the small number of extended –family households.

Results

Description of married Asian immigrant women

Table 1 presents mean scores for all variables used in the analysis for each of the seven Asian ethnic groups. Immigrant women's employment rates are disparate by family extension as well as ethnicity. Women in extended households were more employed than those in nuclear households – as shown in Figure 1. Filipinas had employment rates close to 80 percent, with Vietnamese and Chinese women having rates around 70 percent. Korean and Asian Indian women had lower rates less than 60 percent. Pakistani and Japanese women had the lowest rates of about 40 percent. Women in extended-family households have higher employment rates in every group, but the order of groups by employment rate is the same

We turn next to examining how much the difference in women's human capital, family characteristics,

and labor market circumstances explain variations in employment rates.

Asian immigrant women's generally high educational attainment and varying degree of English proficiency do parallel the ethnic employment patterns. Duration of U.S residence is a better match. While nearly 80 percent Indian women, 64 percent Korean, 60 percent Filipina, 54 percent Japanese and 51 percent Pakistan completed over college degree, only 32 percent Vietnamese women completed over college degree. As for English proficiency, Filipina and Asian Indian women were the most proficient, and Vietnamese are the least proficient, many having come to the U.S. as refugees. But Asian Indians were less employed than Filipina and Vietnamese counterparts. Moreover, women in extended households were less educated on average, but they were more employed than nuclear householders. A majority of the recent immigrants (e.g., Japanese, Asian Indian, Filipina, and Pakistani women) who have been in the U.S less than 10 years had lower employment rates, except Filipinas. Women in extended-family households tend to have been in the U.S. longer, and are more likely to be employed.

Family characteristics also vary widely across ethnic group. Women in extended households have greater other family incomes (excluding their and their husbands' wages) and they are more likely to be mothers of young children. Greater household incomes and presence of young children should correspond with lower employment rates (but as Figure 1 shows, their employment rates are higher). Pakistani and Asian Indian women are more likely to have young children under age five and have greatest access to husband income, all of which are expected to lower employment rates. Despite low likelihood of having young children, Japanese women access to one high levels of husband income. Filipina and Vietnamese husbands' earnings are the lowest. Higher self-employment rates do not match to higher employment rates, as Korean, Pakistani and Vietnamese are more often running family businesses, but only Vietnamese women are highly employed.

Family extension is more common practice among Vietnamese and Filipino women, while Korean and Japanese women are the least likely to extend their families. Within extended households, there are on average one or two extended adults and nearly 90 percent of them are women. Disabled extended adults are more common than those who are employed. (In results not shown, we found disabled adults are less prevalent in households having young children.)

Measures of labor market structures show no big difference among groups. Only ethnic concentration

scores considerably vary with Japanese recording the highest ethnic concentration (especially, in Hawaii). Within each group extended families tend to live in more ethnically concentrated areas. In the broad terms of local share of women's employment and level of unemployment rates, Asian immigrant women are facing nearly the same job opportunities in their local labor markets. Women's share of local employment are around 47 percent, and local unemployment rates are around 8 percent at the time of the survey.

Models of employment odds

Table 2 presents the results of logistic regression models examining how these factors affect women's employment across ethnic groups. Significance, magnitude and even direction of some effects change with characteristics of extended adults as seen in model 3, which shows interactions with extended adults' family roles and women's roles. Despite ethnic variation, however, our hypotheses are supported. Female extended adults, and employed ones, are positively associated with women's employment; disabled adults are negatively associated with women's employment. Individual resources, familial and local labor market circumstances have disparate impacts for the different ethnic groups.

Family conditions significantly influence women's employment in the predicted fashion. Family extension is positively associated with women's employment across all ethnic groups. This finding is consistent with prior works (Stier and Tienda 1992; Stier and Glass 1985) but we test this for disaggregated groups of married Asian immigrant women. When we closely examine the effects of extended adults, however, the roles of extended adults differ by gender, employment, and health status.

Female extended adults, compared to men, are found to have positive effects on immigrant women's market labor activity across ethnic groups, except Koreans. The odds of employment for women with female adults in their home are about 50% to 60% higher than those for extended-householder women with no female adults. Among Pakistani women the effects three times greater than for those with no female guests. The result is consistent that female extended guests being more likely to take on housekeeping or child care responsibilities than men.

Disabled guests generally are negatively related to women's employment. For Chinese, Korean, and Filipina, the presence of disabled adults significantly reduced young women's odds of employment. For Asian Indian and Pakistani, not significant relationship was captured. Only Vietnamese women are more

likely to work with disabled adults in the home.

Employed extended adults have positive impacts on women's employment, as we expected. Particularly, the odds of Korean women's employment are around 2.4 times higher than those with no working extended member. For Vietnamese, Filipina, and Asian Indian, the presence of working member also increases the likelihood of women's market labor participation. Only Chinese women with working adults are less likely to be employed than those with no working adults.

Presence of young children, number of own children and increase in husband's incomes and additional household incomes universally dampen employment. Particularly, Asian Indian and Pakistani women who enjoy the highest level of husbands' earnings are much less likely to be employed with increase in husband's income than other groups. However, in model 3 young children no longer significantly hinder Vietnamese women. Indian women are 34% more likely to work with presence of young children. Korean women are around 20% more likely to work with increase in number of own children. The results suggest family extension reduces women's child care work.

Family member's self-employment is positively associated with women's employment. For Japanese and Korean, the odds of employment for women with any family member (including the women themselves) running a business are nearly two-times higher than those who have no family business. The same relationship holds for other groups to a lesser extent, except Filipinos who are the least self-employed. The effects of family business did not change for women in extended households.

English proficiency, duration of U.S residency and educational attainment increase the odds of women's employment, but for some groups the relationship is unclear. English proficiency has no significant effect to Filipina women. Chinese, Korean, and Vietnamese high school graduates are more likely to work than college-graduate counterparts. Moreover, in model 3, advanced degreed Vietnamese women contrarily reduce employment; Korean women educated less than high school further increases market labor. Longer duration of residency has little effect for Filipina, Vietnamese and Pakistani women. Those who have lived in the U.S over 20 years are no more likely to be employed than those who for 10-19 years. Although conventional human capital explanations are useful for predicting women's employment, patterns for each group differ.

Local labor market structural effects vary by ethnicity and household structure. With higher local

unemployment rates, Japanese, Korean, and Filipina women's likelihood of employment increases about 1 to 7 percent, perhaps suggesting that their ethnic niches are less affected by market fluctuations. Where the local women's share of employment is greater, Pakistani women are less likely to work, while Chinese women are about 8 percent and other groups are to a less extent more likely to work. Higher ethnic concentration has no effects on Vietnamese, Korean and Indian women's employment. However, in model 3, ethnic concentration becomes to obstruct Korean and Asian Indian women. Greater local women's share of employment also hinders Korean women.

Discussion

Our results are consistent with our hypotheses that family extension facilitates women's employment, depending however on the extended adults' family roles according to gender, employment and health status. Although women's human capital, children, and local labor market conditions explain women's decision to participate in market labor, the extended family members' household roles interact with women's roles, thus determining women's employment.

There is support for the first hypothesis that female extended adults increase women's employment across ethnic groups (except Koreans). In addition, the support of extended-family women alone is salient compared with men, suggesting child care or housekeeping help from older women is important for young immigrant women to deal with domestic and economic needs. It also implies that support for young women can be overwhelmed by care for extended-family men. Family extension appears to help resolve some childcare responsibilities. (e.g. Vietnamese, Korean, and Asian Indian). The higher rates of extension among families with young children than among families with no young children are also consistent with the idea that extension is partly a response to childcare burdens.

About Korean female non-nuclear adults' negative net effects, our speculation is that the causality can be reversed. That would be the case if mothers of young children are motivated to stay at home and extend their households to receive child care support mostly from mothers (in-laws). Descriptive results not shown here reveal that Korean women who live with female extended adults are 1.5-times more likely to have young children -- and are less employed than those who live with no female adults. However, why mothers' duty might be such a strong motivation for Korean women not to work cannot be explained here.

We also find support for the hypothesis that the presence of extended household members with jobs increases the employment of hosting women. Imposing additional housework, employed extended adults could impede women's market labor. However, the results are not consistent with that interpretation. Working adults' income might help purchase child care or housekeeping services, and their social networks might bring job opportunities, although the specific mechanisms are not captured in this analysis. This suggests the possibility that family extension is one strategy for dealing with inequalities in labor market.

Our finding that family business generally increases women's employment is subject to ethnic variation. The presence of family business owners decreases women's employment for Filipina and Asian Indians, while it further increase Korean women's employment. Our results point to varying ethnic effects of extended families to women's roles in running family businesses.

Evidence for disabled adults' lowering women's employment counters the simple view of family extension as an economic strategy. Extending their households to adults having disability appears to be a costly option for women. But social and cultural expectations attached to women play a key role in determining women's family extension, as they extend their households to care for sick elders at home. Our findings point to a cultural impetus as well as economic drive behind family extension that influences Asian immigrant women's market labor decisions. On the other hand, the opposite effect for Vietnamese women requires further examination, with their poorer economic circumstances presumably a leading issue.

The lower likelihood of being employed when living with a high concentration of co-ethnics (e.g., Korean, Asian Indian, and Pakistani) is consistent with the suggestion that jobs in the ethnic community are reserved for men (Zhou 1992), or that concentrated ethnicity reinforces the traditional culture of women's subordination (Min 2001; Read 2004).

The deterring effects of husband's earnings and other additional incomes to women's employment decision persist. Hence, with greater access to household incomes, Asian immigrant women do not choose employment, distinct from contemporary trends of White, Black and Hispanic immigrant women (Cohen & Bianchi 1999; England 2004). The findings suggest that Asian immigrant women are not free from the traditional male-breadwinner-female-homemaker family ideology.

Conclusion

We provide a more inclusive model elaborating familial and material circumstances as well as individual characteristics to examine disparities in Asian immigrant women's employment. Immigrant women's employment patterns vary by individual, familial and economic contexts across ethnicity, and interact with husbands' incomes, family members' characteristics, and local labor markets circumstances. Taking both domestic and market responsibilities of family maintenance, women's market labor supply decisions significantly change with the presence of older adults in their homes. Hampered by housework and childcare, women apparently receive some support from older women, while disabled adults' impose additional burdens of care work on women, discouraging working outside the home. Faced with less favorable structure of opportunities, women might get support from employed adults to increase market labor participation. Thus, family extension appears not only to be an important economic strategy but also a response to social and cultural considerations of Asian immigrant women. Asian immigrant women's employment decisions are made through the process of gender, economic, cultural negotiation within families.

Certain limitations of our research are clear. The causality of women's family extension may be reversed. It could be that employed and wealthier women are more likely to attract extended families; employed women are more likely to extend their households to employed adults; or women who are less motivated to work outside are more likely to extend their households to care for sick family members. These competing explanations cannot be resolved with cross-sectional data analysis. Second, our measure of employment is less comprehensive compared to employment in terms of occupational attainment. Espiritu (2008) posits Asian immigrants exhibit distinctive gender dynamics according to occupational class structure. Specification of husbands' and extended family members' occupation will improve our explanation.

Additional ethnic variations—e.g. negative net effects of Korean female extended adults, Chinese working extended adults, and positive net effects of Vietnamese disabled adults—deserve future research. Later we should investigate the unique patterns based on understanding their unique immigration histories, community structures, and/or cultural prescriptions. In light of increasing labor force activity among women and persisting disparities in labor force participation among immigrant women, our insight into immigrant women's labor decisions in relation to family roles should be useful.

Notes

Stier and Tienda's two-stage estimation (1992) was initially referred to but was discarded because of unobserved conflicts with other variables used in our paper. The estimation first computes married immigrant women's potential wages based on their individual characteristics (e.g. age, education, English proficiency, marital status, and number and age of children) as well as considering median area wage rates to indicate labor market conditions. Because the estimations were produced from the women who are already working, the observed values were biased (Heckman 1980). To fix the selection bias, the inversed Mill's ratio was generated then used in the estimation model for women's potential earnings. The first model was as follows:

$$\widehat{W}_i = \beta_0 + \beta_i X_i + \lambda_i + \varepsilon_i$$

$\widehat{W}$ is the predicted wage rate of immigrant mothers, X_i denotes a vector of exogenous predictor variables (e.g. age, education, duration of residency), λ_i is the estimate to correct for selection bias in the equation, and ε is an error term.

The predicted wage rate was then used in the immigrant mothers' employment model (the second model), with the familial and labor market variables:

$$\widehat{P}_i = \gamma_0 + \gamma_i Z_i + \delta \widehat{W}_i + \varepsilon_i$$

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Figure 1. Proportion of Asian Immigrant Women Employed, by Household Extension Status

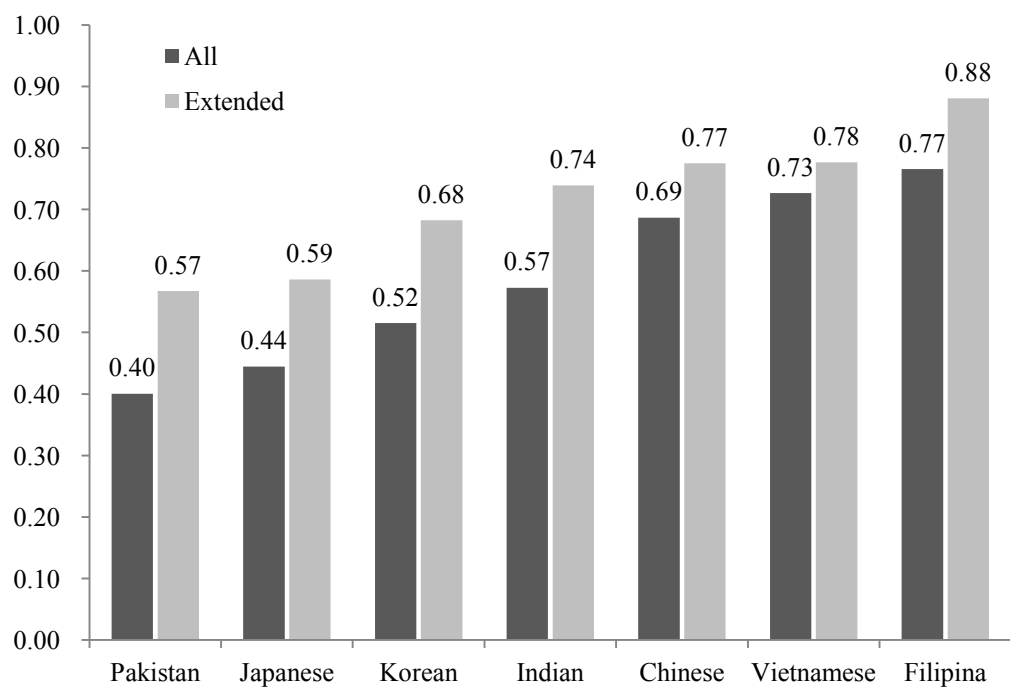


Table1. Means of variables used in the analysis: Asian immigrant women

	All Women							Women in Extended-Family Households						
	Chinese	Japanese	Korean	Filipina	Vietnamese	Indian	Pakistan	Chinese	Japanese	Korean	Filipina	Vietnamese	Indian	Pakistan
Employed	0.69	0.44	0.52	0.77	0.73	0.57	0.40	0.77	0.59	0.68	0.88	0.78	0.74	0.57
Immigrated 0-9	0.36	0.51	0.34	0.40	0.26	0.51	0.40	0.30	0.24	0.18	0.30	0.29	0.32	0.36
Immigrated 10-19	0.40	0.34	0.28	0.33	0.41	0.36	0.44	0.49	0.41	0.37	0.46	0.47	0.46	0.44
Immigrated 20+	0.24	0.14	0.38	0.28	0.34	0.14	0.16	0.21	0.34	0.45	0.23	0.24	0.22	0.20
English not very well	0.81	0.80	0.77	0.99	0.65	0.95	0.85	0.75	0.90	0.76	0.99	0.64	0.93	0.85
Less than high school	0.10	0.01	0.03	0.03	0.24	0.04	0.12	0.13	0.03	0.05	0.02	0.24	0.07	0.08
High school graduate	0.10	0.12	0.12	0.11	0.22	0.06	0.18	0.15	0.14	0.18	0.08	0.26	0.12	0.20
Some college	0.15	0.33	0.21	0.27	0.23	0.10	0.18	0.17	0.41	0.26	0.26	0.24	0.18	0.23
College degree	0.28	0.39	0.44	0.51	0.23	0.38	0.31	0.24	0.41	0.38	0.57	0.21	0.36	0.35
Advanced degree	0.37	0.15	0.20	0.09	0.09	0.41	0.21	0.31	0.00	0.13	0.07	0.05	0.28	0.14
Currently in school	0.09	0.07	0.09	0.08	0.07	0.07	0.07	0.07	0.14	0.10	0.08	0.08	0.07	0.04
Own children	1.30	1.15	1.41	1.51	1.69	1.37	2.10	1.57	1.86	1.67	1.80	1.68	1.71	1.99
Any child under 5	0.35	0.35	0.35	0.35	0.40	0.41	0.45	0.45	0.34	0.38	0.42	0.48	0.41	0.45
Self-employment	0.15	0.15	0.24	0.10	0.26	0.13	0.22	0.20	0.34	0.40	0.10	0.27	0.25	0.20
<i>Extended HH variables</i>														
Guest adult	0.14	0.02	0.06	0.15	0.17	0.11	0.14	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Male adult	0.08	0.01	0.03	0.07	0.09	0.06	0.07	0.60	0.34	0.41	0.46	0.52	0.61	0.50
Female adult	0.12	0.01	0.06	0.13	0.15	0.09	0.12	0.89	0.86	0.91	0.87	0.86	0.89	0.87
Care-Intensive adult	0.03	0.01	0.01	0.04	0.05	0.03	0.05	0.18	0.31	0.19	0.26	0.29	0.30	0.37
Employed adult	0.02	0.00	0.01	0.05	0.04	0.02	0.03	0.18	0.14	0.18	0.32	0.26	0.20	0.23
Husband Income (ln)	9.92	10.43	9.68	9.53	9.75	10.70	10.17	9.79	10.63	9.46	9.88	9.60	10.58	10.32
Other income (ln)	4.30	3.07	3.01	4.15	3.90	3.51	3.31	7.18	8.87	7.03	7.75	8.55	7.14	6.20
Ethnic concentration	3.00	5.78	2.47	3.00	2.92	2.26	2.64	3.37	7.31	2.95	3.82	3.32	2.30	2.93
Women's emp. share	47.18	47.11	47.12	46.95	46.76	47.46	47.46	47.18	47.17	46.90	46.73	46.60	47.39	47.19
Unemployment rate	8.41	8.36	8.43	8.76	8.46	8.37	8.30	8.54	8.68	8.61	8.99	8.59	8.68	8.50
Age	37.18	37.21	36.99	37.04	36.76	34.56	35.41	36.88	38.21	37.62	37.74	35.69	35.93	34.67
N	9,621	1,745	4,339	7,128	4,525	11,359	1,027	1,311	29	274	1,073	774	1,204	141

Table 2. Logistic regression results for women's employment on individual, family, and labor market characteristics (odds ratios).

	Chinese			Japanese		Korean			Vietnamese		
	All		Guest	All		All		Guest	All		Guest
	model1	model2	model3	model1	model2	model1	model2	model3	model1	model2	model3
Disability	0.70	0.71	0.64	0.64	0.64	0.46	0.45	0.16	0.61	0.61	0.60
Age	1.14	1.14	1.22	0.72	0.72	0.79	0.78	1.93	1.32	1.31	1.78
Age-squared	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99
English	1.74	1.79	1.55	4.82	4.82	1.58	1.58	1.20	1.45	1.44	1.30
Immigrated 10-19	2.13	2.09	2.49	2.53	2.53	2.10	2.06	2.10	1.48	1.49	1.68
Immigrated 20+	2.70	2.74	3.53	3.84	3.84	3.95	3.88	2.77	1.43	1.48	1.55
Less than high school	1.13	1.10	0.92 ^a	0.21	0.21	0.94 ^a	0.91	5.67	0.93	0.92	0.89
High school	1.24	1.19	1.02 ^a	0.83	0.83	1.33	1.30	1.68	1.11	1.07	0.77
Some college	0.85	0.83	0.96 ^a	0.62	0.62	1.24	1.22	2.39	0.88	0.87	0.87
Advanced degree	2.30	2.34	2.71	1.50	1.50	1.92	1.97	4.42	1.42	1.45	0.77
Own children	0.83	0.81	0.97 ^a	0.65	0.65	0.83	0.82	1.19	0.84	0.84	0.92
Any child under 5	0.75	0.73	0.62	0.60	0.60	0.56	0.55	0.68	0.63	0.62	0.99
Self-employment	1.60	1.59	1.24	2.36	2.36	1.99	1.95	2.41	1.82	1.82	1.35
Guest adult	--	2.06	--	--	2.17	--	2.27	--	--	1.79	--
Female adult	--	--	1.61	--	--	--	--	0.38	--	--	1.68
Employed adult	--	--	0.73	--	--	--	--	2.44	--	--	1.05
Care-intensive adult	--	--	0.70	--	--	--	--	0.68	--	--	1.16
Unemployment rate	0.97	0.97	0.95	1.07	1.07	1.01	1.01	0.79	0.97	0.97	0.80
Women's emp share	1.08	1.08	1.02	1.01 ^a	1.00 ^a	1.00 ^a	1.00 ^a	0.79	1.03	1.03	1.11
Ethnic concentration	1.05	1.04	1.08	1.02	1.02	1.00 ^a	0.99 ^a	0.75	1.00 ^a	1.00 ^a	1.00 ^a
Husband Income (ln)	0.91	0.91	0.92	0.92	0.92	0.98	0.98	0.93	0.94	0.93	0.93
Other income (ln)	0.99	0.98	0.96	0.99	0.98	0.97	0.96	0.87	0.98	0.96	1.01 ^a
<i>N</i>	8708	8708	1218	1618	1618	3938	3938	246	4212	4212	715
Likelihood ratio χ^2	33029.64	35756.40	5502.31	17156.25	17233.10	24466.19	25501.29	1813.46	8506.27	9408.83	1848.74
Percent Concordance	69.9	71	72.8	79.7	79.7	71.6	72.2	73.6	65.4	66.5	67

Table 2 (continued)

	Filipina			Indian			Pakistan		
	All model1	Guest model2	Guest model3	All model1	Guest model2	Guest model3	All model1	Guest model2	Guest model3
Disability	0.47	0.52	0.76	0.53	0.50	0.41	0.22	0.25	0.49 ^a
AGE	1.40	1.36	1.15	1.45	1.45	1.29	1.43	1.38	2.35
Age square	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
English	0.98	0.95	1.00	2.10	2.09	1.19	2.26	2.29	2.72
Immigrated 10-19	2.26	2.14	3.15	2.20	2.17	2.89	1.68	1.66	0.68
Immigrated 20+	2.04	2.11	2.75	2.69	2.64	2.18	3.18	2.95	1.13 ^a
Less than high school	0.26	0.27	0.60	0.64	0.62	0.74	0.24	0.25	0.10
High school	0.38	0.40	0.30	0.79	0.73	0.48	0.80	0.81	0.74
Some college	0.59	0.60	0.72	0.98 ^a	0.93	0.98 ^a	0.89	0.90	2.64
Advanced degree	1.22	1.28	1.68	1.46	1.49	1.49	1.81	2.02	3.12
Own children	0.84	0.83	0.76	0.71	0.70	0.71	0.78	0.77	0.74
Any child under 5	0.69	0.65	0.56	0.88	0.88	1.34	0.49	0.47	0.47
Self-employment	0.99 ^a	0.99 ^a	0.79	1.48	1.41	0.79	1.06 ^a	1.10	0.94 ^a
Guest adult	--	3.40	--	--	2.45	--	--	3.00	--
Female adult	--	--	1.61	--	--	1.50	--	--	3.33
Employed adult	--	--	1.35	--	--	1.49	--	--	1.23 ^a
Care-intensive adult	--	--	0.58	--	--	1.02 ^a	--	--	1.11 ^a
Unemployment rate	1.02	1.01	0.93	0.99	0.98	0.98	0.97	0.97	1.08
Women's employment	1.01 ^a	1.01	1.00 ^a	1.01	1.01	1.06	0.86	0.87	0.76
Ethnic concentration	1.03	1.02	1.01	1.00 ^a	1.00 ^a	0.96	1.09	1.07	1.36
Husband Income (ln)	0.93	0.92	0.99 ^a	0.86	0.86	0.92	0.87	0.86	0.62
Other income (ln)	0.99	0.96	0.93	1.02	1.01	1.00 ^a	1.01	0.98	0.96
<i>N</i>	6566	6566	985	10555	10555	1120	954	954	135
χ^2	16487.61	20668.09	2013.51	52248.38	56930.31	3593.35	8528.76	9441.34	1713.91
Percent concordance	67.2	69.1	72.5	70.3	71.2	66.7	75	76.1	80.9

Note: ^a: $p > 0.05$