

Legal Entitlement and Bargaining Power of Marriage Immigrants in Korea

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Abstract

The fraction of marriages between South Korean males and marriage immigrants from other Asian countries has increased sharply since 1990, reaching approximately 10% of new marriages in 2005. We employ a large data set from 2012 to investigate how acquiring citizenship affects the bargaining power of these brides in the household and in labor markets. We employ propensity score matching using detailed information from citizenship applications regarding brides, their spouses, and households. Our results show that marriage immigrants' legal entitlements increase their chances of being hired as regular workers and augment their decision-making power in the household. The findings in this paper imply that the legal framework is an important determinant of the bargaining power of immigrants in the labor market and in their households.

JEL Code: J12, J15, J16

Keywords: citizenship, marriage immigrants, bargaining power, propensity score matching

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1 Introduction

International marriage between Asian men from developed countries and women from developing countries sharply increased over the last decade. In South Korea, approximately 10% of new marriages in 2005 involved a South Korean male and a bride from another Asian country. According to Lena Edlund, Elaine M. Liu, and Jin-Tan Liu (2013), one in four marriages in Taiwan in 2003 was an international marriage between a Taiwanese male and a foreign-born bride from a developing country. We define these foreign-born brides as marriage immigrants who migrate in order to marry males in developed countries because of the economic benefits and opportunities.

In spite of the rapid increase in foreign-born brides, relatively little research has been done on marriage immigrants or the relevant policy affecting them. In this paper, we document that marriage immigrants in Korea are exposed to much higher domestic violence than native Korean women. We utilize unique data which surveyed both marriage immigrants and native Korean women regarding their experience of domestic violence and show that marriage immigrants are often the targets of emotional abuse and have little control over economic resources in their households.

We argue that patriarchal control over marriage immigrants and their low bargaining power is related to their dependent legal status. The distribution of power within couples is not simply determined by the characteristics of two people in a family but also by the surrounding social environment such as cultural norms and legal systems. In particular, laws related to the dissolution of marriage can affect the outside option of marriage, thereby influencing bargaining power within couples.

The vulnerable legal status of and potential threat to immigrant women has been studied in the prior legal literature. Deena L. Jang (1994) studied immigrants and refugee women and reported that these women are often the victims of domestic violence. Batterers often take advantage of legal dependency to abuse their partners by claiming marriage annulment based on alleged fraud regarding the marriage. Tien-Li Loke (1997) also

demonstrated that battered immigrant women face fears of deportation along with linguistic and cultural barriers.

The legal status of immigrants is generally related to their performance in the labor market as well. Sherrie A. Kossoudji and Deborah A. Cobb-Clark (2002) examined the 1986 Immigration Reform and Control Act in the United States and found that legalization of unauthorized immigrants is related to wage benefits. Francisco L. Ribera-Batiz (1999) also analyzed legal and illegal Mexican immigrants in the United States and found that observed characteristics can explain only half of the earnings differential between the two groups. The unexplained portion of the earnings gain of legal immigrants should be attributed to their legal status. Bernt Bratsberg, James F. Ragan, Jr., and Zafar M. Nasir (2002) also examined young male immigrants in the U.S. and found that citizenship is related to accelerated wage growth.

In this paper, we propose that acquiring citizenship by marriage immigrants can strengthen their bargaining power in households and in the labor market. The Korean government enacted the two-year conditional residence and spousal support as requirement for marriage immigrants to become naturalized citizens. Therefore, without spousal support, marriage immigrants cannot acquire stable legal status in Korea and may face deportation upon divorce. This legal change redistributed the bargaining power from female marriage immigrants to their male counterparts by increasing their dependence on their husbands. We examine whether this legal change affected the bargaining power of female marriage immigrants in the household and in the labor market.

To examine our hypothesis, we employed a propensity score matching strategy to carefully measure the impact of legal entitlement on the decision-making power of marriage immigrants. Using detailed information on marriage immigrants and the institutional requirements of the Korean Immigration Authority, we construct a control group and a treatment group of marriage immigrants with and without Korean citizenship.

Our results show that having Korean citizenship increases the chance of being hired as a regular worker in the labor market. It also increases the bargaining power of foreign

brides by increasing their involvement in asset-related decision making and expenditure decisions regarding whether to invite their family members from their home countries. Our results are consistent when we include a network variable and indicate that legal entitlement has an independent impact regardless of whether there is a connection with other immigrants from the home country.

This paper is the first in the literature to examine the relationship between legal entitlement and bargaining power of marriage immigrants who migrate to developed countries. We document domestic violence against marriage immigrants and show that their low bargaining power is related to their dependent legal status. Our paper fills the gap in the literature by providing empirical evidence that legal institutions that prevent sham marriage also have an effect on marriage immigrants who maintain their marriage.

The remainder of this paper is organized as follows. In section 2, we first review the political economy of increasing marriage immigration and changes in Korean citizenship law. In section 3, we document the exposure of marriage immigrants to domestic violence. In section 4, we describe our 2012 Multicultural Family Data and discuss measures of bargaining power. In section 5, we provide our empirical results using propensity score matching. We conclude in section 6.

2. Multicultural Families in Korea

2.1 Political Economy of Marriage Immigrants in Korea

<Figure 1 to be Inserted Here>

Since the 1990s, marriage immigrants from other Asian countries have accounted for a significant portion of immigration to Korea. <Figure 1> shows that the share of foreign brides sharply increased from 1% in 1993 to 8% in 2009 relative to that of foreign grooms. <Figure 2> also shows that there has been sharp change in the nationalities of foreign-born brides as well. In the early 1990s, a significant portion of foreign brides were Japanese and Chinese. Most unions between the Koreans and Japanese are known to be

through the Unification Church³ (Hye-Kyung Lee 2005). Chinese immigrants began to move into South Korea in 1992, when the two countries established international relations. Many of these Chinese immigrants are ethnically Korean and speak Korean.⁴

<Figure 2 to be Inserted Here>

In the late 1990s, the share of foreign-born brides from Vietnam and the Philippines began to increase. These foreign brides also began to reflect the characteristics of marriage immigrants, such as a short pre-marriage period and the involvement of brokerage agencies. Three factors should be considered in assessing the rapid increase in marriage immigrants from developing countries: sending country, receiving country, and brokerage agencies between the two.

The trend of increasing marriage immigrants can be observed in other Asian countries, such as Taiwan and Japan. Daiji Kawaguchi and Soohyung Lee (2012) suggest that the rapid improvement of women's labor market opportunities is the main driving force behind the demand for marriage immigrants from developing countries to developed countries. As women's labor market options in the receiving country increase, the relative gains from marriage deteriorate. Therefore, women with considerable options in the labor market may remain single, resulting in significant imbalances in the sex ratio in the marriage market.

Hee-Kang Kim (2012) claims that the gendered structure of Korean society by class and region (urban-rural) is the source of demand for foreign-born brides. Many educated women in urban areas postpone marriage while focusing on their careers and thereby remain unmarried. In addition, many rural men who are farmers and fishermen encounter difficulties finding marriage partners as they are relatively less educated and thereby considered unattractive in the marriage market. An imbalance in the sex ratio caused by the

³ The Unification Church was founded in South Korea in 1954 by Sun Myung Moon and has expanded throughout the world, although most members live in Korea, Japan, and the Philippines.

⁴ Approximately 70% of the Chinese foreign-born brides are ethnically Korean and are mostly from Yanbian Korean Autonomous Prefecture in northeastern China.

preference for sons (Andrew Eungi Kim 2009) is also suggested as another strong factor affecting demand for foreign-born brides. The sex ratio of Korea in 1989 was 116.5 and had slightly decreased to 110.2 in 2000. (National Statistical Office 2007)

Conversely, women in developing countries with poor economic conditions seek better socioeconomic status through marriage migration. Hee-Kang Kim (2012) examined Vietnamese brides who received visas from the Korean Embassy and found that 82 percent of the brides were from rural areas in southern Vietnam, particularly the Mekong River Delta region, which includes some of the poorest communities in the country. For these women, international marriage migration to the USA, Japan, Korea or Taiwan is typically considered a means of raising their social rank. Additionally, for these unskilled and relatively uneducated women in developing countries, marriage abroad may be easier than pursuing job opportunities in developed countries such as Korea as migrant workers. (Dong-Hoon Seol 2006)

The number of brokerage agencies handling international marriage began to increase in 2000 as regulations covering these companies changed from a license system to a self-reporting system in 1999 (Hye-Kyung Lee 2005). According to Lee's survey, there were 180 brokerage agencies for international marriage on the internet in 2004. In a survey of female marriage migrants in 2005, Dong-Hoon Seol (2006) found that that 27.7% of marriage immigrants met their husbands through brokerage agencies. However, more than one fifth of total marriage immigrants and 44% of marriage immigrants who used brokerage agencies reported that they received untrue information regarding their husbands before their marriage. Hong-zen Wang and Shu-ming Chang (2002) examined the cross-border marriage market and found that brokerage agencies were a source of growing commodification of female migrant partners as the marriage market matured.

There are two issues to be addressed in marriage migration in Korea: prevention of sham marriage and protection of marriage immigrants. It has been reported that many of these female migrants experience great difficulties in Korea. According to Dong-Hoon Seol's 2006 survey, 31% of female marriage migrants reported being verbally abused by

their husbands, and 14% reported physical abuse; further, only 10% of women who experienced abuse reported it to the police. Hye-Kyung Lee (2005) claims that economic disparities between countries aggravate the unequal relationships between female marriage migrants and their spouses.

At the same time, the increase in sham marriages also remains a major policy issue. The frequency of sham marriage is difficult to determine, but some small-scale research and media reports have raised concerns about this issue.⁵ To prevent this kind of marriage fraud, the Korean government changed the requirements and qualifications for marriage immigrants who apply for Korean citizenship.

2.2 Legal Institution Regarding Marriage Immigrants in Korea

Enacted in 1948, the Korean Citizenship Act offered two kinds of naturalization: one for individuals married to Koreans and one for all other people wishing to acquire Korean citizenship. In the paternalistic society of that time, there were different rules for foreign brides and foreign grooms. Foreign brides could automatically acquire Korean citizenship with marriage while foreign grooms had to stay in Korea for at least three years and pass a citizenship eligibility exam to acquire Korean citizenship. The citizenship of children was also decided by the citizenship of their father.

<Table 1 to be Inserted Here>

<Table 1> shows the time line of citizenship change in Korea. The notable change is a revision in 1997 that required all foreign-born spouses to reside in Korea for two years in order to apply for citizenship. Until 2003, the revision also required them to take an exam and achieve a certain score in Korean language and Korean history. The purpose of conditional residence was to protect Korean men from sham marriage. Therefore, marriage immigrants must obtain a consensus and an affidavit of financial support from their Korean

⁵ Hye-Kyung Lee (2005) conducted a small scale survey on female migrant workers at 20 restaurants. More than 50% of marriage migrants working in these restaurants reported that their marriage to a Korean is indeed a sham marriage to acquire citizenship.

spouses when applying for Korean citizenship. This revision thus created the conditions in which a marriage immigrant's ability to remain in Korea depends exclusively on their husband's good will and having a stable marriage.

<Table 2> shows different kinds of visa status and legal eligibility in Korea. Most marriage immigrants acquire Spouse of Korean (F2) status when they enter Korea. Korea does not allow dual citizenship for its people,⁶ and permanent residency is applied in a very restrictive fashion. The status labeled Spouse of Korean is generally extended every three years. Additionally, an F2 visa requires marriage to a Korean spouse and a spousal reference. Therefore, marriage immigrants who want to have independent legal status in Korea typically pursue naturalization, forcing them to give up their original citizenship.

<Table 2 to be Inserted Here>

The revision and new requirements raised concerns about the bargaining position of foreign brides, whose empowerment was already low. When faced with domestic violence or neglect at home, they now have to choose between uncertain public protection and deportation upon divorce. Therefore, it is possible that many women would choose to remain in unhappy marriages, as termination of marriage can lead to loss of legal status.

Faced with this critique, the government added some exceptions in 2004 allowing foreign spouses to acquire Korean citizenship in case of death or disappearance of the Korean spouse, even if the foreign spouse has not fulfilled all requirements. However, these new exceptions could hardly help foreign brides since language and cultural barriers often preclude them from obtaining legal support or seeking help. The Korean government then introduced KIIP (the Korea Immigration and Integration Program), which provides education to foreigners who want to become naturalized. We restrict our sample to foreign-born brides who are not under the KIIP system to estimate the effect of legal status not confounded with the education effect.

⁶ In 2010, the Korean government allowed dual citizenship under the condition that people do not exercise their foreign citizenship while in Korea.

3. Marriage Immigrants, Bargaining Power, and Domestic Violence

3.1 The Demographic Characteristics of Multicultural Families

We compared the demographic characteristics of multicultural families and native Korean families in Table 3. The sample of multicultural families consists of marriage immigrants between the ages of 20 and 50 from a 2012 multicultural survey, while the sample of native Korean families consists of first-married women between the ages of 20 and 50 from the 2012 National Survey on Fertility, Family Health & Welfare in Korea.

<Table 3 to be Inserted Here>

There are several notable differences between the two groups of families. The age gap between husband and wife is on average much greater in multicultural families (13.9) than in (2.73) native Korean families, implying unbalanced bargaining power between husbands and wives in multicultural families. Additionally, the share of families with monthly income less than 2 million KRW is much higher among multicultural families (51.4%) than native Korean families (37.6%). Another notable difference is the share of families living with in-laws. Multicultural families are more likely to cohabit with in-laws, implying unbalanced power between husbands and wives in those families.

Both surveys also provide a direct measure of decision-making power in households regarding daily living expenses and investment decisions. The scale of measure is integers between 1 and 5, where 1 indicates that only the husband exercises decision-making power on a matter while 5 indicates that the wife alone exercises decision-making power on a matter. On average, in native Korean families, wives tend to lead decisions on daily living expenses and exercise equal power in investment decision making. On the other hand, in multicultural families, husbands are on average more likely to make decisions about daily expenses or investments.

<Table 4 to be Inserted Here>

To evaluate women's employment, we used the 2012 Foreigner Labor Force Survey in Table 4, which includes all foreigners in Korea's labor force. We restricted our sample to women between the ages of 20 and 50. We divided the sample into three groups:

single foreign women, foreign women married to a Korean husband, and foreign women married to someone of the same national origin. We presume that foreign women married to Korean spouses are more likely to be marriage immigrants. This simple comparison shows that foreign women married to a Korean spouse are more likely to follow the traditional role of women: 59% of these women answered that their main activity is housework, while 19% and 1% of married foreign women and single women, respectively, cited housework as their main activity.

3.2 Violence against Marriage Migrants

Violence against marriage migrants is not well documented. In this regard, we employ the Study on Violations of the Human Rights of International Marriage Migrants (2011) produced by the Korea Institute of Criminology. To our knowledge, this is the only data set to document domestic violence against marriage immigrants in Korea.

The survey employed convenience sampling, which surveys marriage immigrants who visit government and religious institutes that provide support for multicultural families. These marriage immigrants are those seeking labor market information, legal support, or shelter from domestic violence. Notably, approximately 19.1% of respondents (161 out of 841) are visitors to a shelter implying that they are seeking shelter from danger at home or domestic violence. Therefore, the data should be interpreted with caution. The survey also contains a sample of native Korean women between the ages of 40 and 49 who have had the experience of working as unskilled workers, salespeople, or production workers.

<Table 5 to be Inserted Here>

<Table 5> shows differences in exposure to domestic violence between married native Korean women and marriage immigrants. We employed 11 different measures of domestic violence and show that marriage immigrants are significantly more likely to be exposed to all types of domestic violence. The measures include various types of violence, including emotional abuse, physical intimidation, and economic control over women.

There are particularly sharp differences among emotional and physical violence against marriage immigrants. For example, 42% of marriage immigrants responded that they had ever experienced abusive language from a spouse or in-law while 17% of native Korean married women reported such abuse. The sharp difference between native Korean women and marriage immigrants remains strong for emotional abuse and economic control even after we remove the 19.5% of the sample representing shelter visitors. Also, 31% of marriage immigrants reported that their spouse ever punched or threw something while 3% of native Korean women reported such experience.

Husband's exclusive control over economic resources is also notable among marriage immigrants. Around 45% of marriage immigrants reported that their spouses solely controlled the household resources, and 34% responded that their spouses had refused at some time to provide daily expenses. At the same time, only 12% and 7% of native Korean women responded that they have ever experience such unequal access to economic resources. Overall, data implies that the prevalent form of violence against marriage immigrants is patriarchic power and control.

4 Multicultural Family Data and Descriptive Statistics

4.1 Multicultural Family Data and Legal Status of Foreign Brides

We employ the Multicultural Family Data collected by the Ministry of Gender Equality and Family in 2012 to examine the impact of acquiring citizenship on the bargaining power of marriage immigrants. The survey includes multicultural households with foreign-born brides, foreign-born grooms, and single immigrants who are naturalized Koreans. The sample contains 15,000 marriage immigrants, their spouses, their children, and any other family member living in the household. The survey was conducted in ten different languages in order to acquire accurate information of foreign-born individuals with low Korean proficiency. All our estimates are calculated based on survey design and given weights.

The survey contains not only demographic characteristics and labor-market activities but also measures of decision-making power within the household, subjective well-being, and conflicts with other family members. The survey provides information about country of origin, past work experience in country of origin, and financial situation of spouses. The richness of our data allows us to perform propensity score matching based on all characteristics existing before citizenship acquisition.

The survey is targeted at multicultural families living in Korea and therefore does not keep track of marriage immigrants whose marriage has been dissolved and who therefore went back to their countries of origin. The bias stemming from such attrition is unknown; however, we believe that attrition of these people would not limit the policy implications of this paper.

<Figure 3 to be Inserted Here>

<Figure 4 to be Inserted Here>

<Figure 3> shows the differences in preference for legal status across foreign-born brides from different origin countries. Foreign-born brides from major sending countries such as Vietnam, China, Cambodia, and the Philippines are more likely to prefer acquisition of Korean citizenship. On the contrary, most brides from Japan, the United States, and Canada prefer to keep their original passport. <Figure 4> shows that this legal preference is reflected in their actual status. Very few brides from developed countries are become naturalized Koreans, whereas more than 50% of brides from developing countries acquired Korean citizenship.

<Figure 5 to be Inserted Here>

<Figure 5> shows the time elapsed between year of marriage and citizenship acquisition for foreign-born brides from developing countries. The share of brides with Korean citizenship sharply increases after two years and quickly reaches more than 50% for most marriage cohorts within six years, which implies that the lag between marriage and naturalization mainly comes from the two-year conditional residence requirement and additional administrative processes.

4.2 Marriage Immigrants and Measures of Bargaining Power

To identify marriage immigrants, we restricted our sample to foreign-born brides who have very short pre-marriage periods with their spouses. Foreign-born brides in our sample are from developing countries and are characterized by having the following all occur in the same year; first meeting their spouse, marriage, and entry into Korea. These couples reported that they were introduced to each other through a third party in more than 70% of cases.⁷

These marriage immigrants do not have solid relationships with their spouses nor do they have good knowledge of Korean culture and language. Separated from their own families and/or social networks in their home country, these marriage immigrants are very likely to have low bargaining power in households. We argue that their dependent legal status denigrates their bargaining position by making their option of remarriage unfavorable.

Their dependent legal status not only affects these marriage immigrants upon divorce but also indirectly affects their position by causing unfavorable labor market conditions. Table 6 shows that there is no statistically significant difference between marriage immigrants with Korean citizenship and without Korean citizenship in terms of working status. However, the direction of difference indicates that brides with Korean citizenship have a stronger chance of being hired as a regular worker, on the condition that they are currently working in the labor market.

<Table 6 to be Inserted Here>

To examine the bargaining power of marriage immigrants, we chose three variables showing their decision-making power in expenditure and asset allocation in households. Women's decision making has been used in the literature as a measure of bargaining power. Keera Allendorf (2007) used the question of who has the final say on household

⁷ Out of all international couples, about 22% reported meeting through brokers, while 17% and 27% reported having met through relatives and friends, respectively.

expenditures as a measure of women's empowerment. Rachel Connelly, Kenneth Roberts, and Zhenzhen Zheng (2010) also employed questions about who usually makes decisions on large purchases as a variable reflecting women's position in a household. Also, exclusive control over resources by one member of the household is considered to be domestic violence.

The multicultural survey has questions asking respondents about their level of equality in several areas of decision making. The questions have a five-point scale where the middle point indicates equal involvement in decision making. We created indicator variables of active involvement in decision making for respondents who answered that their involvement in those decisions is more than equal.

It is challenging to ensure that variables about everyday expenditure decision making captures women's bargaining power in a household. Women who do not make their own income may be given a budget from their husband for food and household expenses. In this case, decision making in everyday expenditures is their responsibility rather than a reflection of the woman's higher position in the household.

Therefore, we also use questions regarding the degree of equality in asset allocation decisions. Ownership of or control over assets has been found to be related to women's bargaining power in previous studies. Kathleen Beegle, Elizabeth Frankenberg and Duncan Thomas (2001) found that the wife's control of assets owned by the family affects the use of prenatal care in Indonesia. Pradeep Panda and Bina Agarwal (2005) also found that land ownership decreases domestic violence against women in India. Therefore, we employ women's active involvement in asset allocation decisions as our variable reflecting their bargaining power in a household.

Consumption is in general a measure of people's well-being. In most cases, the data does not allow us to assess individual consumption. However, in cases in which there are goods that can be clearly identified as private individual goods, expenditures on these goods can be used as an outcome measure of that individual's bargaining power. Jennifer

Golan and Jann Lay (2008) categorize alcohol and tobacco as male items, and examined how the share of income affects expenditure on those male items.

We employ the experience of inviting family living in the origin country as an important bargaining power indicator of marriage immigrants. Inviting family from the origin country is a type of consumption that is considerably costly and more desirable to marriage immigrants. Thus, it should be considered as an indirect measure of bargaining power, as consumption is an outcome of bargaining power in a household.

<Table 6> demonstrates that there is a significant difference in these bargaining power indicators between marriage immigrants with citizenship and without citizenship. Foreign brides in general show a low level of participation in asset allocation decisions. However, marriage immigrants who have acquired Korean citizenship are 8 percentage points more likely to show involvement in asset allocation decisions. For expenditure and invitation decisions, having Korean citizenship is also related to significantly more bargaining power, by 10% and 20% respectively. These summary statistics suggest that having legal entitlement reinforces the bargaining power of marriage immigrants.

4.3 Possible Endogeneity Issues

Can the observed association between citizenship and bargaining power be causal? The association between the observed bargaining power of a bride and her citizenship can be biased if those groups with citizenship and without citizenship have systematic differences. Brides with citizenship may have lived in Korea for a longer period of time and have more experience, stronger/larger networks, and better communication skills. They are more likely to be hired as regular workers than brides without citizenship. Experience and communication skills may also allow them to exercise more decision-making power in households.

Differences in preferences for citizenship acquisition can also affect these results. Marriage immigrants from difficult economic situations are more likely to acquire Korean citizenship. If they are also relatively unskilled workers, then the impact of citizenship

acquisition on their bargaining power in the labor market and in their households would be underestimated. Therefore, in chapter 5 we use propensity score matching to estimate the unbiased effect of independent legal status on their bargaining power.

5. Propensity Score Matching Estimation of Legal Entitlement and the Bargaining Power of Marriage Immigrants

5.1 Empirical Strategy

In this chapter, we employ a non-parametric propensity score matching approach to identify the causal effect of legal entitlement on the bargaining power of marriage immigrants. The difficulty of this estimation comes from selection bias, which we shall carefully address throughout the implementation of our matching.

Following the notation in the evaluation literature, let $D = 1$ if a foreign bride acquired Korean citizenship and $D = 0$ otherwise. We then define the outcome for naturalized brides ($D = 1$) as $Y(1)$ and the outcome for foreign brides ($D = 0$) as $Y(0)$. The parameter we are interested in is the average treatment effect on the treated (ATT), which focuses on the effects on those who want to acquire Korean citizenship, and is given by the following equation.

$$\tau_{ATT} = E(\tau|D = 1) = E[Y(1)|D = 1] - E[Y(0)|D = 1] \quad (1)$$

The expected value of ATT is the difference of the expected outcomes with and without citizenship for those who actually acquired citizenship. The parameter directly measures the actual effect of citizenship acquisition, and it can be compared with its costs. The estimation issue is that the counter-factual mean for those obtaining citizenship $-E[Y(0)|D = 1]$ is not observed, so researchers must choose a proper substitute for it to estimate ATT. Using untreated brides who have not acquired citizenship can bias the results if factors affecting citizenship acquisition also affects outcome variables of our interest. The bias can be noted as the difference between a true average treatment effect and “selection bias” in the following equation.

$$\begin{aligned}
& E[Y(1)|D = 1] - E[Y(0)|D = 0] \\
& = \tau_{ATT} + E[Y(0)|D = 1] - E[Y(0)|D = 0] \quad (2)
\end{aligned}$$

The unbiased average treatment effect can be identified only if the selection bias is zero. To tackle selection bias, our estimation should satisfy the conditional independence assumption, which requires that systematic differences between the two groups be attributed to acquisition of citizenship given a set of observable variables that affect acquisition of citizenship. However, these variables should not be affected by actual acquisition of citizenship or anticipation of such acquisition.

To ensure the conditional independence assumption, we rely on the migration study of Philip Q. Yang (1994) and the requirements for citizenship imposed by the Korean government in its citizenship application. Philip Q. Yang (1994) showed that the origin of immigrants is an important determinant of their naturalization. The requirements for acquiring citizenship can serve as first stage covariates as they affect the probability of naturalization. Requirements include marriage, two-year conditional residence, and the financial documents of support⁸ of a Korean spouse. Both country of origin and financial characteristics of spouses are not likely to be affected by citizenship acquisition of foreign-born brides, and thereby satisfy conditional mean independence requirements to be first-stage covariates for matching.

5.2 First Stage Estimation

We restricted our sample to satisfy a good matching condition. We only included marriage immigrants from seven developing countries in Asia: China, Mongolia, Vietnam, the Philippines, Thailand, Cambodia, and Uzbekistan. To identify marriage immigrants, we selected only people whose year of marriage and year of first entry into Korea is the same. Also among marriage immigrants without Korean citizenship, we restricted our sample to

⁸ Documents of financial support to be submitted include bank balance, lease contract or real estate contract, more than 30 million won, and certificate of incumbency.

foreign brides whose current visa status is Spouse of Korean (F2). We also excluded those whose preference for naturalization is ambiguous or negative.

Our targets were married at the time of survey and between 20 and 50 years old. We excluded marriage immigrants who had been in Korea under two years since they are not eligible to acquire citizenship. We also excluded foreign brides who stayed more than seven years or were married more than 10 years to focus our analysis on brides who married after the 1997 revision in Korean citizenship law.

<Table 7> shows the list of variables we included in the first stage estimation. We estimate propensity scores using the characteristics of marriage, spouse, and foreign-born brides. Marriage characteristics include whether the union is remarriage to either foreign-born brides or Korean spouses. House ownership is included to control for the financial support of Korean spouse. The characteristics of foreign-born brides such as age, education, and years of being in Korea are also included in the first stage as these variables could affect the chance of acquiring citizenship. Detailed characteristics of Korean spouses are important determinants of citizenship acquisition. We controlled for their age, working status, education and income quantile as spousal support as the most important factors in application for citizenship.

<Table 7> shows that multicultural families in our sample have several notable characteristics. Of these, 23.5% of all marriages are remarriage for Korean males and 14.9% of these are remarriage is to marriage immigrants. Additionally, the Korean spouse is on average much older (44.5) than marriage immigrants (30.6). The number of years of schooling of the average Korean male spouse is 11.3, which is slightly lower than that of a similar age group.⁹ The average number of years of schooling of marriage immigrants is 9.7, which is much lower than the average number of years of schooling of a similar age group

⁹ According to Robert Barro and Jong-Wha Lee (2013), average years of schooling by Korean male between age 40 and 44 is 13.78 years in 2010.

among Korean females¹⁰.

<Table 7> also demonstrates that there are substantial differences between marriage immigrants with and without citizenship. The years of being in Korea and the age of marriage immigrants are statistically higher for foreign-born brides. Additionally, home ownership, which eases the process of acquiring citizenship, also turned out to be significantly different between the two groups of marriage immigrants.

We employed the methodology of Paul Rosenbaum and Donald B. Rubin (1983), which suggests that the use of the probability of acquiring citizenship conditional on those pre-application characteristics in order to reduce the dimensionality problem. <Table 8> shows our first stage estimation in which the years of residence, education of couples, indicator of remarriage, income level of spouse, and home ownership are significant factors affecting acquisition of citizenship. Origin country matters because economic and political conditions of the origin country affect the willingness of foreign brides to apply for Korean citizenship.

5.3 Assessment of Matching Quality

Propensity score matching requires the common support condition to be satisfied. Mathematically, it simply says that perfect predictability of program participation (citizenship acquisition) should be excluded.

$$0 < P(\textit{Citizenship} = 1|X) < 1 \quad (4)$$

This condition ensures that individuals with the same covariates have a positive probability of being both citizen and non-citizen. (James J. Heckman, Robert J. LaLonde, and Jeffrey A. Smith 1999). Therefore, for each observation in the treatment group, we should be able to find an observation in the control group with the same combination of characteristics.

¹⁰ According to Robert Barro and Jong-Wha Lee (2013), average years of schooling by Korean female between age 30 and 34 is 14.55 years in 2010.

Detection of common support can easily be done by visual inspection of the propensity score distribution. <Figure 6> shows the distribution of propensity scores in the treated group (with citizenship) and untreated group (without citizenship). Although the untreated group has a significant population with very low propensity to acquire citizenship, we can find matchable observations from the treated group. Off-support observations with very high propensity to achieve citizenship are dropped from the sample for analytic purposes.

We employed nearest-neighbor matching with replacement. We also allowed oversampling (2-NN) for efficient use of data. Since the matching process depends on propensity score and not on all covariates in the first stage, it is important to check whether the matching process effectively balances the distribution of all the covariates in both the treatment and control groups.

<Table A> in the appendix shows the balance test results of covariates included in the first stage estimation using standardized bias as an indicator. All origin indicators and most income quantile indicators are well matched and post-matching bias is below 7%, except for two income categories¹¹. Most demographic variables are also well matched except for age of foreign brides and their spouses, although the magnitude of difference is less than one year. Overall, our matching quality satisfies the criteria suggested in the literature.

5.4 Empirical Results and Interpretation

<Table 9> demonstrates that citizenship acquisition does not affect the probability of working in the labor market but increases the chance of being hired as a regular worker at a 10% significance level. Being a regular worker implies that workers can get all the employee benefits and protections of the Labor Standard Act. Our results suggest that having Korean citizenship raises the probability of getting hired as a regular worker by 8.7

¹¹ Only two income categories (6 and 7) showed -9.1% and -10.9% of bias separately, which results because these two groups do not have many observations.

percentage points and therefore increases the option of outside marriage by raising the chance that they can obtain a secure job in a formal sector.

<Table 9> also shows the effect of citizenship acquisition on bargaining power before and after matching. Before matching, all measures show significantly higher bargaining power for marriage immigrants with Korean citizenship. After matching, bargaining power in asset allocation decisions and invitation of the foreign-born bride's family members remain statistically significant. However, bargaining power in everyday expenditure is no longer statistically meaningful, implying that involvement in expenditure decisions may not be a proper measure of bargaining power, as discussed in Chapter 4.2.

Estimates show that having Korean citizenship increases foreign brides' probability of being involved in asset allocation decisions by 5.7 percentage points. Additionally, legal entitlement increases the probability of inviting the bride's family members from her origin country by 14 percentage points. On the whole, our results imply that having stable legal status increases the bargaining power of marriage immigrants with regard to important decisions such as assets and consumption.

The previous literature suggests that having a network within one's own ethnic group improves employment and welfare benefit usage of immigrants. (Marianne Bertrand, Erzo F.P. Luttmer, and Sendhil Mullainathan, 2000). Timothy J. Hatton and Andres Leigh (2011) also found that the longer the immigrant community has been established, the better immigrants tend to assimilate. Using long-run data in U.S. multicultural surveys, these researchers directly asked marriage immigrants whether they have their own ethnic networks to share information. In our sample, approximately 50% of marriage immigrants responded that they have their own ethnic networks, whereas the other 50% responded that they do not have such a network group. We re-estimated our results across these two groups in <Table 10> to see whether our previous results are related to having one's own network group.

The results summarized in <Table 10> suggest the possibility that network and legal entitlement interactively affect the bargaining power of marriage immigrants in a

labor market and a household. In a labor market, legal entitlement both affects the probability of being employed and being employed as a regular worker only when marriage immigrants have their own network groups. However, for groups of marriage immigrants without any network, legal entitlement has no impact on either outcome. These results suggest that proper labor market information is a pre-requisite for benefitting from the effects of stable legal status.

For bargaining power in a household, our results show that legal entitlement has its own effect on female marriage immigrants' decision-making power in a household. Although some results lost statistical significance because of reduced sample size, the results show that having citizenship contributes to more involvement in decision making in asset allocation and invitation of the female's family members from origin countries.

It should be noted that our results are made regarding samples of marriage immigrants who maintain their marriage with their Korean spouse. Marriage immigrants in survey can be tracked by authorities and confirmed to live together at the time of survey¹². Our results imply that policies targeted at people who do not sustain their marital relationship actually have effects on people who maintain their marital relationship. Having stable legal status increases the option of remarriage by increasing one's chances of being hired as a regular worker and providing protection from deportation. Therefore, acquiring citizenship strengthens the bargaining power of marriage immigrants who are in marital union.

6 Conclusions

Our paper aims to show that legal status could be an important determinant of bargaining power among female marriage migrants. Using detailed surveys of multicultural families and the requirements of Korea's citizenship application, we examined propensity score matching estimates that compared female marriage immigrants with and without

¹² There were very few marriage immigrants in our sample who reported to be separated or divorced with their Korean spouses. Those observations are not included in our analyses.

Korean citizenship. Our results demonstrate that legal entitlement matters for having a regular job in a labor market and greater decision-making power in households. We also show that having a network is a pre-requisite for benefitting from the effects of citizenship in the labor market.

The bargaining power of female marriage immigrants is able not only to protect women from domestic violence but also to provide better assimilation outcomes. Women with independent legal status and empowerment can access more resources, take advantage of public protection and more easily gain acceptance from society. Empowering female marriage immigrants will be vital to the developmental outcome of the second generation in areas such as health and education. Future research should focus more on the linkage between marriage immigrants and developmental outcomes in assimilating the second generation resulting from marriage immigration.

This study has important policy implications for Asian countries with increasing numbers of marriage immigrants. Our paper suggests that supplementary legal support should be provided for those immigrants with vulnerable legal status. A careful policy focusing on language education and labor market training will also be necessary for marriage immigrants' successful assimilation into society.

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Figure 1: Share of Marriages with Foreign Spouses

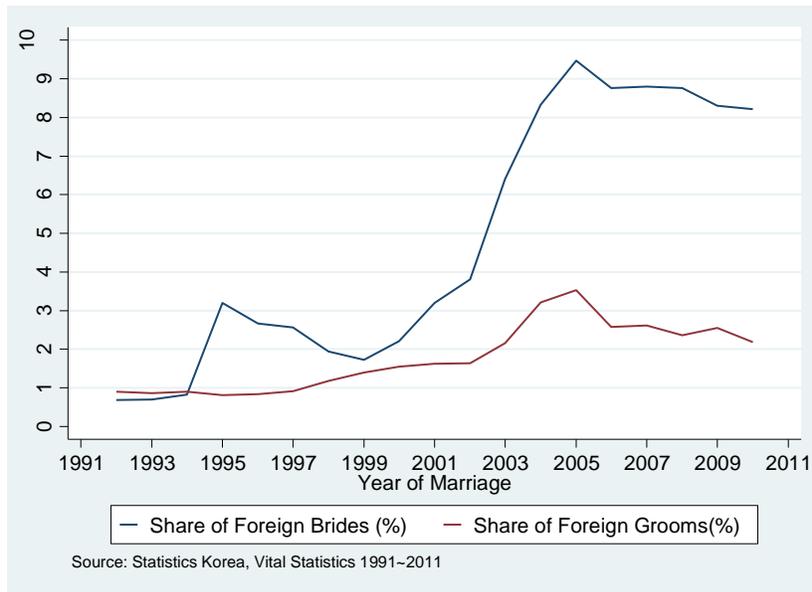


Figure 2: Origin of Foreign Brides

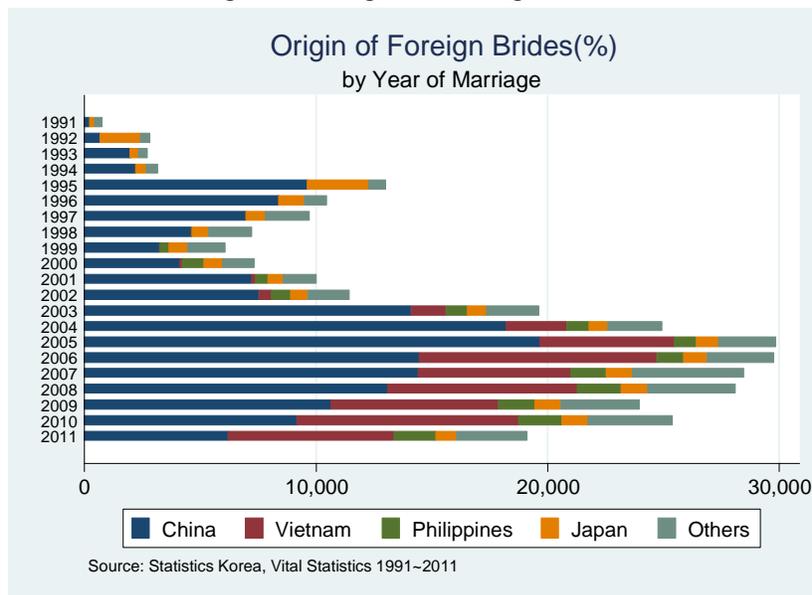


Figure 3: Foreign Brides' Preference of Legal Status

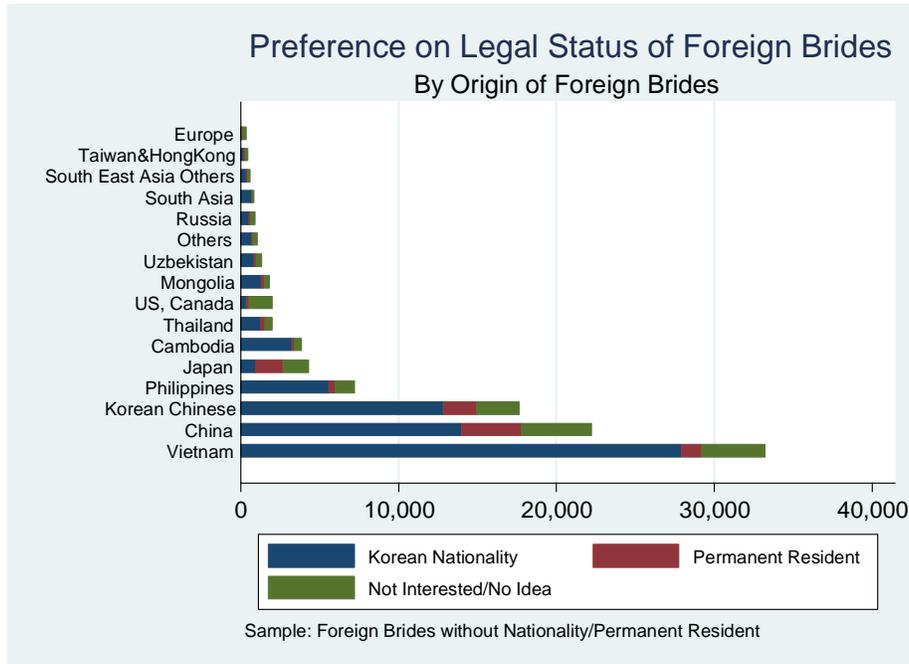


Figure 4: Legal Status of Foreign Brides

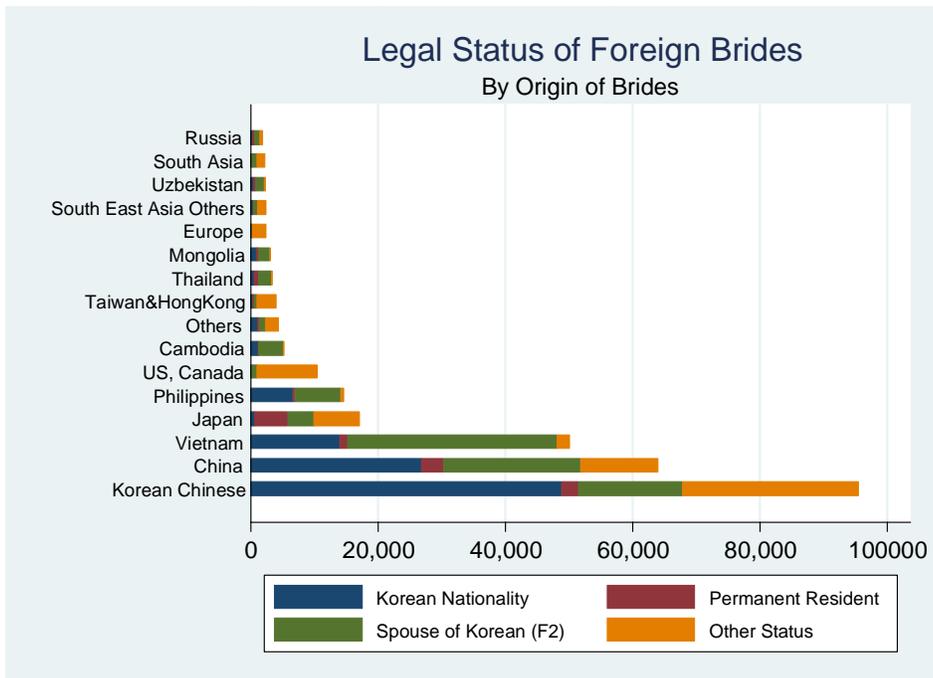


Figure 5: Marriage Duration and Share of Naturalization

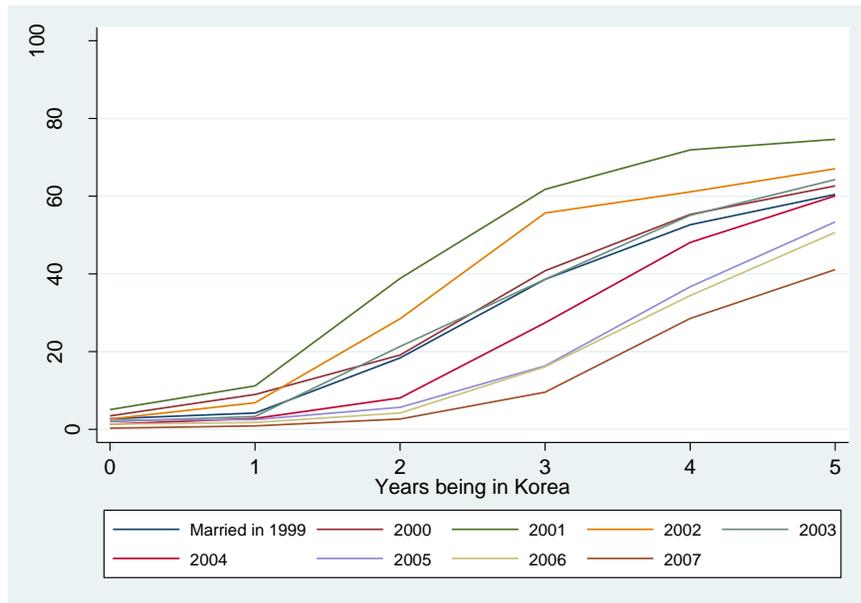


Figure 6: Common Support

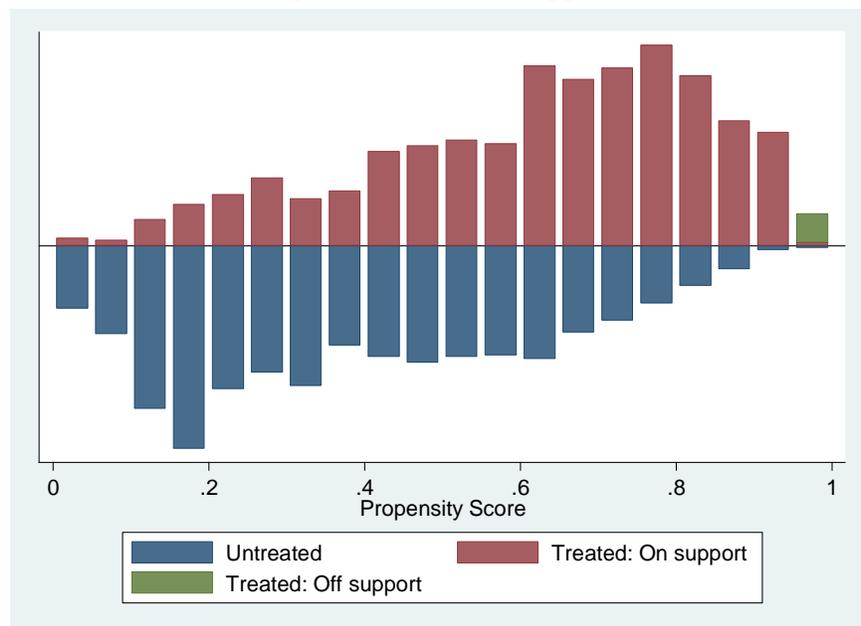


Table 1: The Timeline of the Change of Korean Nationality Act

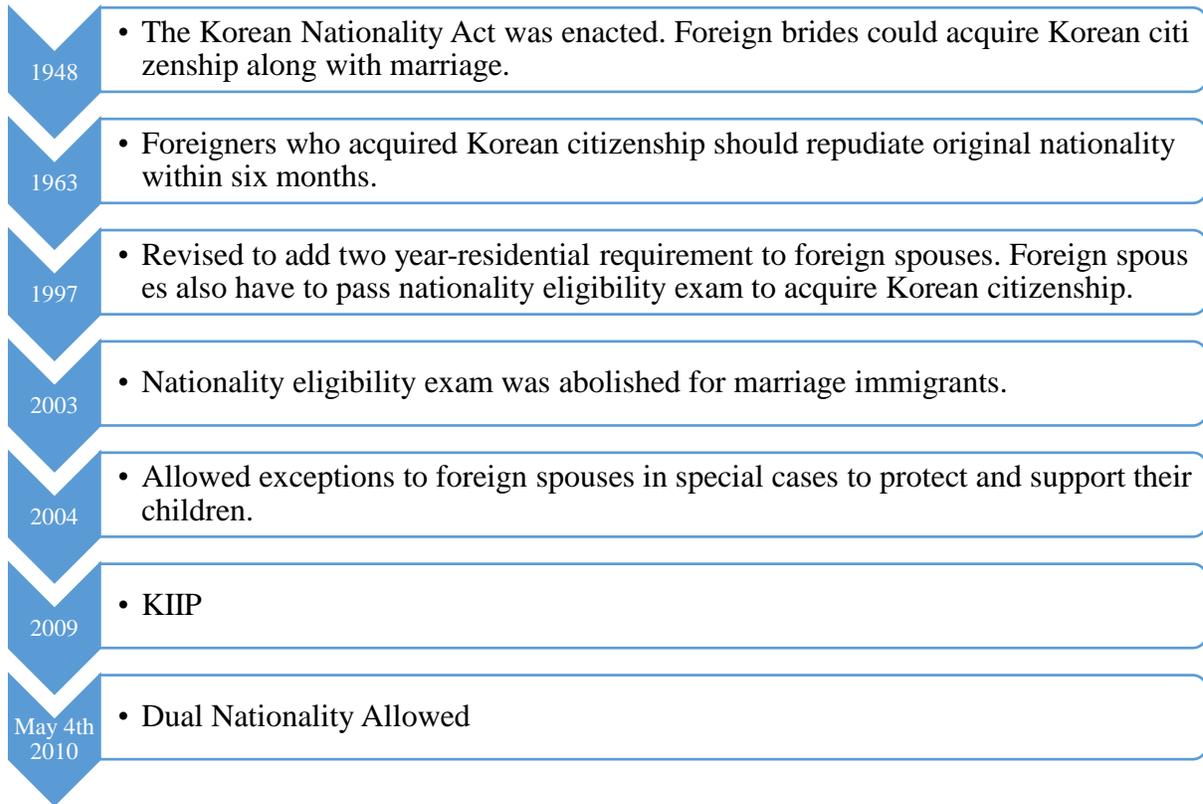


Table 2: Visa Status and Legal Eligibility

	Suffrage	Working	The Length of Stay	Extension
Citizenship	Yes	Allowed	No restriction	N/A
Permanent Resident	No	Allowed	No restriction	N/A
Spouse of Korean (F2)	No	Allowed	3 Years	Yes
Employment Visa (E)	No	Allowed	Varies by Occupation	Varies by Occupation
Student Visa (D2)	No	Allowed	2 Years	Yes
Occupational Trainee Visa (D3,E8)	No	Allowed	2 Years	Yes
Business Visitors (H)	No	Allowed	3 Years	Varies by Origin Country
Visitors Visa (C)	No	No	90 Days	No

<Table 3 Comparison of Multicultural Family and Native Korean Family>

	Multicultural Family	Native Korean Family
Age gap (Husband-Wife)	13.9	2.73
Monthly income less than 2,000,000 KRW*	51.4%	37.6%
Women's labor force participation rate	52.2%	50.5%
At least one or more child	81.6%	91.9%
Number of children	1.55	1.76
Living with in-laws	29.6%	12.2%
Living with a person with disability	0.3%	2.6%
Daily living expenses†	2.90	3.84
Investment†	2.53	3.00

Source: The 2012 National Survey on Fertility, Family Health & Welfare in Korea. Sample includes first-married women between ages 20 and 50. *Equivalent to 2,000USD. † The scale is an integer between 1 and 5, where 1 indicates only husband exercises decision-making power on this matter, while 5 indicates wife alone exercises decision-making power on this matter.

<Table 4 Comparison of Labor Force Participation of Foreign Women>

All foreign women	Out of all foreign women	% working	%housework
Single	41%	54%	1%
Married to Korean	35%	34%	59%
Married to someone with the same origin	23%	63%	19%

Source: 2012 Foreigner Labor Force Survey. Sample: All foreign women in our survey are between 20 and 50 years of age.

<Table 5 Summary Statistics of Violence against Marriage Immigrants>

	Native	Marriage Immigrants	Difference
Spouse or in-law ever used abusive language	0.17	0.42	0.25**
Spouse ever forced sex when not wanted	0.16	0.24	0.08*
Spouse or in-law ever restricted going out	0.12	0.26	0.15**
Spouse ever threatened to harm	0.13	0.21	0.08**
Spouse ever pushed	0.11	0.21	0.10**
Spouse ever slapped or kicked	0.07	0.20	0.13**
Spouse ever punched or threw something	0.03	0.31	0.29**
Spouse ever threatened with knife/weapon	0.01	0.07	0.05**
Spouse ever controlled money by himself	0.12	0.45	0.33**
Spouse ever refused to provide money for all expenses	0.07	0.34	0.27**
Spouse or in-law ever disposed my property without my consent	0.07	0.19	0.11**

Note: ** indicates statistical significance at 1%. Source: A Study on Violation of Human Right of International Marriage Migrant Women, 2011. Korea Institute of Criminology. The sample of marriage immigrants are from Vietnam, China, Philippines or Cambodia.

Table 6: Labor Market and Bargaining Power Statistics

Dependent Variables	Whole Sample	Without Citizenship	With Citizenship	Difference
Labor Market Outcomes				
Working	0.522 (0.013)	0.521 (0.018)	0.522 (0.018)	0.001 (0.026)
Employed as a regular worker (only workers)	0.317 (0.017)	0.290 (0.024)	0.340 (0.024)	0.050 (0.034)
Bargaining Power in Household				
Active involvement in asset allocation decision	0.167 (0.010)	0.124 (0.013)	0.201 (0.015)	0.077** (0.020)
Active involvement in expenditure decision	0.308 (0.012)	0.253 (0.016)	0.354 (0.018)	0.101** (0.024)
Ever invited family members	0.517 (0.013)	0.407 (0.018)	0.608 (0.018)	0.201** (0.025)

** significant at 1% Sample: Marriage immigrants

Table 7: First-Stage Covariates

Variable	Description	All	F2 Visa	Citizen	Difference
Citizen Dummy					
Citizen	=1 if respondent acquired citizenship	0.548 (0.013)			
Marriage Characteristics					
Remarriage	=1 if it is remarriage to foreign bride	0.149 (0.010)	0.150 (0.014)	0.149 (0.014)	0.001 (0.020)
Spouse Remarriage	=1 if it is remarriage to their spouse	0.235 (0.011)	0.251 (0.016)	0.222 (0.015)	-0.028 (0.022)
House Own	=1 if they own their house	0.564 (0.013)	0.507 (0.018)	0.611 (0.018)	0.103** (0.026)
Bride's Characteristics					
Age	Age of foreign brides	30.61 (0.183)	29.93 (0.267)	31.17 (0.248)	1.24** (0.365)
Stayed	Years in Korea	5.36 (0.028)	4.864 (0.037)	5.766 (0.036)	0.902** (0.051)
Schooling	Years of schooling	9.738 (0.067)	9.657 (0.099)	9.804 (0.091)	0.146 (0.135)
Spousal Characteristics					
Spouse Age	Age of Korean spouse	44.45 (0.158)	44.50 (0.227)	44.41 (0.220)	-0.090 (0.316)
Spouse Working	=1 if Korean spouse is working	0.985 (0.004)	0.983 (0.006)	0.986 (0.004)	0.003 (0.007)
Spouse Schooling	Years of schooling of Korean spouse	11.28 (0.052)	11.33 (0.072)	11.25 (0.073)	-0.079 (0.103)

Notes: Standard errors are reported in parenthesis.

The set of first stage covariates also includes origin fixed effects and income interval of their spouses.

Summary statistics are omitted here.

Table 8: Propensity Score Coefficient Estimates

Variables	Probability(Citizenship=1)		
Demographic Variables			
Age	-0.019** (0.007)	-0.001 (0.008)	-0.000 (0.009)
Years in Korea	2.093** (0.395)	2.099** (0.396)	2.056** (0.399)
Years in Korea ² -	0.143** (0.036)	-0.145** (0.036)	-0.139** (0.037)
Years of schooling	0.040** (0.013)	0.036** (0.014)	0.038** (0.014)
Household Variables			
Remarriage		-0.406** (0.157)	-0.392* (0.156)
Spouse remarriage		-0.053 (0.094)	-0.059 (0.098)
Home ownership		0.299** (0.072)	0.299** (0.072)
Broker		-0.123 (0.085)	-0.123 (0.085)
Spouse Characteristics			
Age			-0.007 (0.008)
Years of schooling			-0.038* (0.019)
Working			0.317 (0.332)
Fixed Effects			
Origin fixed effects	Controlled	Controlled	Controlled
Spouse income quantile			Controlled
Sub-population size	1,968	1,968	1,968

* significant at 5%, ** significant at 1%

Table 9: Labor Market Outcomes and Bargaining Power

Dependent Variables	Sample	Treated	Controls	Difference	T-statistic	N
Labor Market Outcomes						
Employed	Unmatched	0.518	0.498	0.019	0.85	979
	Matched	0.518	0.470	0.048	1.22	974
Employed as a regular worker (only workers)	Unmatched	0.346	0.275	0.071	2.43	488
	Matched	0.347	0.259	0.087	1.76	505
Bargaining Power in Household						
Involved in asset allocation decision	Unmatched	0.172	0.116	0.055	3.51	979
	Matched	0.168	0.111	0.057	2.42	989
Involved in daily expenditure decision	Unmatched	0.243	0.243	0.080	3.97	979
	Matched	0.283	0.283	0.038	1.20	974
Ever invited family members	Unmatched	0.588	0.418	0.171	7.68	979
	Matched	0.586	0.438	0.148	4.09	974

Table 10: Effect of Legal Status by Brides with and without Network

Dependent Variables	Sample	Treated	Controls	Difference	S.E.	T-Stat
Labor Market Outcomes						
Employed	With Network	0.527	0.432	0.096	0.046	2.08
	Without Network	0.530	0.587	-0.057	0.064	-0.89
Employed as a regular worker (only workers)	With Network	0.373	0.286	0.088	0.061	1.44
	Without Network	0.306	0.312	-0.005	0.072	-0.07
Bargaining Power in Household						
Involved in asset allocation decision	With Network	0.152	0.101	0.051	0.027	1.88
	Without Network	0.185	0.148	0.037	0.038	0.97
Involved in daily expenditure decision	With Network	0.313	0.318	-0.004	0.038	-0.11
	Without Network	0.316	0.211	0.105	0.048	2.20
Ever invited family members	With Network	0.622	0.472	0.150	0.042	3.58
	Without Network	0.519	0.275	0.244	0.055	4.44

Appendix (Online Publication Only)

Table A. Matching Quality

Variables	Sample	Mean		% bias	T-test
		Treated	Control		
Age	Unmatched	30.5	29.7	13.4	2.97
	Matched	30.5	29.8	10.4	2.38
Years in Korea	Unmatched	5.7	4.9	85.2	18.9
	Matched	5.7	5.6	4.4	0.94
Years of schooling	Unmatched	9.9	10.1	-4.4	-0.97
	Matched	9.9	10.1	-5.8	-1.35
Remarriage	Unmatched	0.11	0.12	-1.6	-0.36
	Matched	0.11	0.10	5.9	1.36
Spouse remarriage	Unmatched	0.21	0.23	-7.9	-1.75
	Matched	0.21	0.19	3.8	0.88
Home ownership	Unmatched	0.63	0.55	17.0	3.77
	Matched	0.62	0.66	-7.1	-1.61
Married through broker	Unmatched	0.48	0.52	-7.5	-1.67
	Matched	0.48	0.46	4.8	1.07
Spouse age	Unmatched	44.3	44.3	1.2	0.26
	Matched	44.4	43.6	13.1	2.89
Spouse years of schooling	Unmatched	11.2	11.3	-4.5	-1.01
	Matched	11.2	11.3	-3.9	-0.88
Spouse working	Unmatched	0.9	1.0	-3.8	-0.83
	Matched	0.9	1.0	-3.9	-0.86

Table A. Matching Quality (continued)

Origin Indicators	Sample	Mean		% bias	T-test
		Treated	Control		
Chinese	Unmatched	0.17	0.12	13.9	3.09
	Matched	0.17	0.16	3.5	0.73
Korean Chinese	Unmatched	0.16	0.05	34.8	7.72
	Matched	0.15	0.15	0.5	0.10
Mongolia	Unmatched	0.04	0.08	-18.4	-4.08
	Matched	0.04	0.04	-1.1	-0.30
Vietnam	Unmatched	0.36	0.34	3.3	0.73
	Matched	0.36	0.36	0.1	0.02
Philippines	Unmatched	0.11	0.16	-15.2	-3.36
	Matched	0.11	0.10	3.7	0.90
Thailand	Unmatched	0.01	0.06	-27.9	-6.21
	Matched	0.01	0.01	-2.4	-0.95
Cambodia	Unmatched	0.15	0.16	-3.3	-0.72
	Matched	0.15	0.16	-3.6	-0.78
Uzbekistan	Unmatched	0.02	0.04	-11.0	-2.45
	Matched	0.02	0.02	-4.5	-1.10

Table A. Matching Quality (continued)

Variables	Sample	Mean		% bias	T-test
		Treated	Control		
Income quantile 1	Unmatched	0.04	0.03	1.5	0.32
	Matched	0.04	0.04	-0.8	-0.18
Income quantile 2	Unmatched	0.07	0.09	-7.8	-1.73
	Matched	0.07	0.08	-2.1	-0.48
Income quantile 3	Unmatched	0.21	0.21	-0.3	-0.06
	Matched	0.21	0.20	3.3	0.73
Income quantile 4	Unmatched	0.26	0.26	0.3	0.07
	Matched	0.26	0.24	4.1	0.91
Income quantile 5	Unmatched	0.20	0.20	1.8	0.39
	Matched	0.20	0.18	5.0	1.12
Income quantile 6	Unmatched	0.11	0.11	-0.7	-0.15
	Matched	0.11	0.14	-9.1	-1.91
Income quantile 7	Unmatched	0.06	0.04	5.9	1.30
	Matched	0.05	0.08	-10.9	-2.13
Income quantile 8	Unmatched	0.02	0.03	-7.2	-1.60
	Matched	0.02	0.02	2.9	0.76
Income quantile 9	Unmatched	0.02	0.01	4.1	0.91
	Matched	0.02	0.02	-1.3	-0.26
Income quantile 10	Unmatched	0.01	0.01	7.6	1.68
	Matched	0.01	0.01	5.6	1.22