

Higher fertility among the first-generation Korean immigrants in the U.S.:

An assimilation mechanism towards a new way of living

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Abstract

The first-generation Korean immigrants in the U.S. have sustained higher levels of fertility than the home country whereas TFR in South Korea dropped at record-low in 2018. The estimated TFR of the first-generation Korean immigrants is higher by 0.4 on average. This study suggests that the extent to assimilation in the U.S. of the first-generation Korean immigrants correlate with the higher number of children, intertwined with sociodemographic and socioeconomic determinants. The paper uses data on Korean immigrants in the American Community Survey (ACS) 2016 obtained through IPUMS-USA. Poisson regression model is used to examine the association between demographic and economic characteristics and the number of children at the household level. Contrary to the home country, results suggest that a new way of living among the first-generation Korean immigrants correlates with higher fertility. Sociodemographic and socioeconomic determinants of this population correlate with an increase in the number of children depending on the extent to assimilation which is measured by the length of stay.

Keywords: the first-generation Korean immigrants, fertility, assimilation, a new way of living

1. Introduction

For the first time in South Korea (hereafter Korea), total fertility rates (TFR) records below 1.0 in 2018, which was 0.977 (Korea Statistical Information Service, 2019). Within two decades, Korean TFR rapidly plummeted from 1.5 to below 1.0 since the Asian financial crisis in 1997. On the contrary, TFR of the first generation Korean immigrants in the U.S. consistently shows higher rates than the home country though TFR of this population has decreased from 2.3 to 1.4. Notwithstanding the unprecedented fertility rates, the desired number of children is still around two per women in Korea (Korean General Social Survey, 2012). Jones (2007) argues that the common factors that stand in the way of achieving the desired number of children in East Asia are occupational instability, incompatibility of work and family, lack of efficient pro-natalist policies, the ideology of the “quality” child (Becker, 1960), financial burdens of childrearing, and the rapid urbanization.

Migrants are not the representative samples of their home countries’ population. Thus, the specific socioeconomic characteristics in family-formation patterns among the first-generation immigrants are not sufficiently understood (Feliciano, 2005). Although many researchers have explored the fertility transition and its determinants (Becker, 1960; McDonald, 2000a; Morgan, 2001; Friedman et al., 1994) and immigrants’ fertility outcomes in the U.S. (Parrado, 2011; (Lindstrom & Ramírez, 2010), not many studies shed light on why the fertility of the first-generation Asian immigrants in the U.S is higher than home country.

By using a Poisson regression model, this paper finds evidence of distinctive socioeconomic characteristics of higher fertility of this population. This paper achieves this empirical aims through the American Community Survey (ACS) 2016 5-year data, obtained from IPUMS-USA. The first generation is centered for this analysis because not only there is downward in assimilation among the second generation from the context of migrants’ boundary crossing (Portes & Zhou, 1993; Alba, 2005) but also this population has similar characteristics

from the population of the home country.

Given that the language barrier and limited working permits by immigration laws stand in the way of employment opportunities, the higher TFR of first-generation Korean immigrants implies that different mechanisms exist other than demographic selectivity. Many previous studies contribute to the acculturation process and their achievement of East Asian immigrants (Cohen, 2011; Choi et al., 2016), especially focusing on the second generation, few studies shed light on how the second generation was reproduced and why TFR of the first generation Korean migrants is higher than home countries. Also, relatively few researchers have focused on the variation of fertility outcomes depending on the length of stay among the first generation immigrants.

The purpose of this paper, thus, is to find what socioeconomic characteristics lead to higher fertility from the context of the assimilation process and different lifestyle in the United States. This empirical test focuses on the first-generation females and their fertility outcomes at the household level because out-of-wedlock childbearing is very low among this population. First, we describe the differences in demographic characteristics among the Korean population, the first-generation Korean immigrants, and the U.S. population. Then, Poisson regression models examine how different socioeconomic characteristics are associated with TFR based on the extent to the assimilation defined by the length of stay.

2. Literature Review

The mean age at first birth for Korea is 31.8 as of 2015 (United Nations, 2017). Higher female educational attainment and female labor force participation (FLFP) correlate with an increase in delay and avoidance of marriage as well as the postponement of fertility in East Asia (Grossbard & Shoshana, 2002; Jones 2007). Also, increasing singlehood has contributed to low fertility in Korea where singles are expected to live with parents (Jones, 2011). Bongaarts (2001) suggests that three primary factors reduce TFR from desired family size (DFS)

in more developed countries: the tempo effect of fertility postponement, involuntary infecundity, and competition with other desires. Also, Bongaarts (2001) predicts that these post-transitional societies might experience a further decline in population size and rapid aging without recovery toward replacement fertility level.

Immigrants' selectivity connotes differences in demographic, social, and economic aspects of the population. Selectivity in educational attainments and occupations fosters mobility aspiration, supporting lower or higher fertility than countries of origin (Lindstrom & Saucedo, 2002). Migrants who have economic motivation are unlikely a random representation of the country of origin but have particular attributes that distinguish them from non-migrant peers (Lindstrom & Ramírez, 2010). Even though pioneer migrants are improbable to have huge wealth, they are overall more educated than their non-migrant peers and have strong upward mobility aspiration (Piore, 1979). More than two-thirds of immigrants from East Asia have a bachelor's degree or higher whereas six percent of Mexican immigrants and seventeen percent of those from other Latin American countries have the equivalent educational attainments (Baum & Flores, 2011).

In the neo-classical economic theory of migration, the first generation takes advantage of the human network, income sources, and the land use within immigrants' enclaves, differentiating from subsequent generations (Massey et al., 1999). These highly motivated individuals will be more likely to migrate to seek for better opportunities in abroad (Villarreal & Blanchard, 2013). Their economic consequences are more likely to be successful, gaining more opportunities in a way that they can establish a business or purchase land and improve their economic status (Lindstrom & Lopez-Ramirez, 2010). Also, Borjas and Friedberg (2009) suggest that the trend in the earnings among new immigrants has upturned since the 1990s after plummeting during 1960s-1990s. This improvement of immigrants' earnings results from three changes: a shift in immigration policies favorable for the high-skilled labor force, an increase

in the earnings of Mexican immigrants, and improvement among high school dropouts (Borjas & Friedberg, 2009).

On the other hand, the assimilation mechanism works as following destination fertility norms and values. Fertility in the U.S. has shown the preference for couples to have both a son and a daughter. Thus, couples without this sex balance are more likely to have an additional child of different sex (Pollard & Morgan, 2002). Also, The adaptation hypothesis articulates an adjustment of fertility behaviors in response to the economic opportunities in the destination country (Lindstrom & Saucedo, 2002). Higher educational attainment and employment opportunities correlate with lower fertility in the U.S.; delay of childbearing is a common strategy used by high-educated women to deal with long and demanding work schedules and a normative environment that does not tend to be supportive of childbearing (Morgan, 2015).

The assimilation hypothesis explains the process of experiencing significant economic and residential mobility of East Asians immigrants (Alba & Nee, 1997). The age-at-arrival effect shows assimilation fertility patterns of migrants (Rumbaut, 2006), depending on the fertility level in home countries; a decrease in fertility for the immigrants from higher fertility societies; an increase in fertility among the immigrants from lower fertility societies (Bleakley & Chin, 2010). In moving to more economically developed areas, migrants face higher living costs, more educational opportunities, and wage increases. These changes in the economic environment hinder immigrants from having higher-order birth (Becker, 1981; Willis, 1974). Also, immigrants are more likely to be young adults; they become a union and have children soon after arrival in the U.S. This early family formation makes immigrants' fertility much higher when measured on a period basis (Morgan, 2015).

Language proficiency has a role in communicating in the destination country, providing access to institutions that are critical for children's development (Dustmann & Van Soest, 2002). English proficiency among immigrants in Australia ensures not only a high chance of

employment but also professional and managerial jobs (Foroutan & McDonald, 2016). Among the first generation immigrant females in Canada, the arrival in late adolescent shows higher fertility than arrival before adolescent or in early child regardless of the countries of origin (Adsera & Ferrer, 2018). Contrary to the tendency of low fertility in a liberal society and its market-oriented family, the English-speaking countries show higher fertility rates among the OECD countries (McDonald & Moyle, 2011).

The negative impact of FLFP on fertility is theoretically well established (Willis, 1973; Cramer, 1980; Becker, 1981). However, the high fertility rates of Netherland, where shows a male-breadwinner model, short maternal leave, and the popularity of part-time jobs among mothers, are exceptional examples despite the lack of pro-natalist policies (Mill, 2015). Similarly, in the U.S. and Australia, where labor markets are more flexible than East Asian countries, have near replacement level of fertility (Rindfuss & Kim, 2015). However, unstable and temporary employment status in Southern European countries is associated with a decrease in fertility rates while a large share of public employment and generous parental benefits in Scandinavian countries relate to an increase in fertility rates (Adserà, 2004). In Italy, where low FLFP and low fertility exist, the rigid labor market tends to raise the costs of childrearing and to depress the labor market participation of married women (Del Boca, 2002).

3. Data and methods

This study uses the American Community Survey microdata 2016 5-year obtained through IPUMS-USA. The most recent data is selected to consider a structural change in economic factors as well as to capture the variance of age at arrival. Because out-of-wedlock is rare among the first-generation Korean immigrants, the level of measurement is household: the number of own children in the household, total household income, poverty status, living place, and housing types. The other socio-demographic characteristics rely on individual females ages 15 to 44: birthplace, length of stay, educational attainment, marital status, citizenship, and

English proficiency.

From the context of selectivity and assimilation of the first-generation immigrants, this paper examines whether immigrants' socioeconomic status and flexible job market of the U.S., which lead to different living style, correlate with higher fertility of this population. The birthplace identifies whether the respondents are the first generation in ACS (Rumbaut, 2006). Indeed, the demographic characteristics of the first-generation Korean immigrants are not only different from those of the population of the home country but also those of the destination country. Therefore, this study takes into account both the demographic differences and the socioeconomic characteristics of this population.

Following the age at arrival effect (Piore, 1979; Rumbaut, 2006), the test of this study comprises three models defined by the length of stay in the U.S.: less than 10 years, from 10 years to 20 years, and more than 20 years. Through this classification, the model for the newest migrants group (Model 1) could closely reflect the structural fertility decline of Korea. Specifically, the Model 1 more preserves the characteristics of the home country compared to the older migrants (Model 2 & 3). On the other hand, Model 3, a relatively older migrants group, focuses more on the assimilation characteristics of migrants who arrive at an early stage in life. The oldest group (Model 3), who live in the U.S. for more than 20 years, is assumed to live with the most different lifestyle and different fertility behaviors among the first-generation Korean migrants.

Educational attainment includes three variables taking into account that the high school degree is universal among the Korean migrants: below college, college, and graduate degree. Marital status consists of three formations: marriage, separate/divorce, and single. Even though females who completed fertility provides the final fertility outcomes, the female's ages 45 or older have a risk to distort the other socio-economic factors: employment status, educational attainment, and incomes. Instead, this study adopts samples of all fecund females ages 15 to

44 controlling for all ages, not of females who completed fertility behaviors. Citizenship variables are only dichotomized with the holding citizenship or not because ACS does not provide the legal status with details.

One of the most effective assimilation processes for the first generation migrants is through labor market with English proficiency (Carliner, 2000; Dustmann & Van Soest, 2002). The variable of 'English proficiency' includes three self-rated categories: 'Very Well,' 'Not Well,' and 'None.' Household income comprises four quartiles based on the amount of household incomes. Also, this study includes the people at risk of poverty because the first-generation immigrants less than 10 years after arrival are less likely in the labor force and more likely in poverty status. Last, we consider housing types and residential areas because housing is one of the critical hardships for having more children in the home country, which is relatively affordable in the U.S and varies by urban-rural setting. So, geographic areas of living consist of four categories by affordability and density: rural areas, a mid-sized city, principal cities suburb, and principal central cities. Also, housing types include homeownership and rent.

First, this paper uses Poisson regression models to examine the associations between the number of children among Korean migrants and socioeconomic determinants. These models focus on why the first-generation Korean migrants in the U.S. show higher fertility than the country of origin. Specifically, each model investigates how the length of stay and age at arrival influence fertility outcomes. Three models assume that fertility outcomes vary by not only the life stages of individuals arrival endogenously but also the factors of structural fertility transition exogenously.

Second, this paper controls selectivity factors because previous studies suggest that different characteristics of immigrants' attribute to different fertility outcomes (Feliciano, 2005; Lindstrom & Ramírez, 2010). To find a mechanism to reach higher births beyond selectivity, this study controlled immigrants' distinctive characteristics such as educational attainment, age,

and marital status. Then, this analysis examines how socioeconomic factors of first-generation immigrants influence higher fertility outcomes in the U.S. Specifically; the focuses are on the relationship between fertility behaviors and economic factors: labor market participation, employment status, poverty, and housing conditions among Korean immigrants.

4. Results

This study aims to find why the fertility of the first-generation Korean immigrants is higher than that of the home country. Even though fertility rates of the first-generation Korean immigrants accordingly have declined during the recent two decades, the averaged TFR of this population is higher than the home country by 0.4 children per women (Figure1). This population, the collected female Korean samples from 2016 ACS, is different from both the Korean female population of the home country and the female population in the U.S. in the specific demographic features (Table 1).

[Figure 1. & Table 1. about here]

The median age of this population is 47, which is older than 42 of the U.S. and 42.7 of Korea. The educational attainment of this population, measured by median educational attainment, is college year 1, which is higher than both of two other populations. An interesting point related to selectivity is that the median household income of this population is still higher than that of the U.S. population even though the percentage of labor-force participation is lower than that of both of two other populations. The percentage of married in this population is 60.8, which is much higher than the U.S females but much lower than Korean females of the home country. The share of who can speak English well or better is about 73 percent, which still shows about 30 percent or more of this population limitedly have job opportunities. About 50 percent of this population is living in principal cities and their suburb, which is 15 percent point higher than the U.S. population in principal cities and suburb but still far lower than the home

country. On the other hand, home-ownership of this population is much lower than that of the U.S. population, which is still higher than 57 percent of the home country.

[Table 2. about here]

The Poisson regression models here used are designed to count the numbers of children by the length of stay from less than 10 years to more than 20 years consecutively (Table 2). This analysis controlled the demographic selectivity of this population: educational attainment, marital status, age, and citizenship. Then, these models examine the association between the number of children and socioeconomic factors: English proficiency, household income, poverty status, and housing conditions.

For the covariates of these models, it is unexpected that the influence of ‘educational attainment’ is statistically insignificant while ‘marriage’ and ‘older age’ show a higher number of children than other categories in all models. However, the longer length of stay in the U.S. is, the weaker association with ‘educational attainments’ of this population has. The fertility differentials by the length of stay support the assumption that immigrants who have lived more than 20 years in this population are more likely to arrive in earlier than the adolescent stage because the age of the sample ranges from 15 to 44. Moreover, their fertility behaviors could be different from the immigrants who arrived later stage of life (Adsera & Ferrer, 2018). Also, this age at arrival effect on fertility could be identified in the association with ‘citizenship’ status. ‘Citizenship’ has a positive association with an increase in the number of children in relatively recent immigrants whereas the early arrival or longer period of immigrants are not.

One of the important factors for employment is ‘language proficiency.’ Model 1, who are relatively new in the U.S., shows ‘English proficiency’ correlates with the lower number of children (Table 2). In other words, improficiency of language skills is associated with a higher number of children in Model 1. This tendency is similar but somewhat weak in Model 2. However, Model 3 exhibits that the language factors are irrelevant to an increase in the number

of children for the groups who live relatively longer in the U.S.

Regarding the economic activities and income effect on the fertility of this population, all three models in common show that female immigrants not in labor market tend to have more children than immigrants either employed or unemployed. On the other hand, the positive association between income and higher fertility is identified only in Model 1. The immigrants who came early or lived relatively longer in the U.S. tend to have more children regardless of their household incomes (Model 3). However, the poverty status correlates with the fewer number of children, which association is more apparent in Model 3.

Culturally, the housing conditions are crucial to Koreans in the home country. Model 1 and Model 3 show the length of stay in the U.S. has a different influence of housing on fertility. Model 1 shows that 'housing types' are irrelevant to the number of children. Also, living in the principal capital (e.g., L.A., New York, and Chicago) correlates with fewer number of children. On the contrary, Model 3 suggests that living with home ownership among immigrants more than 20 years in the U.S. correlate with a higher number of children. Also, immigrants living in rural areas or mid-sized cities tend to have more children than immigrants in principal cities.

In sum, sociodemographic and socioeconomic determinants of the first-generation Korean immigrants in the U.S. correlate with an increase in the number of children depending on the extent to assimilation which is measured by the length of stay. English proficiency and household income are associated with the fewer number of children intertwined with employment status among the relatively-new immigrants whereas language proficiency and household income are irrelevant to the number of children among immigrants more than 20 years. Also, among the Korean immigrants with longer length of stay, the homeownership and residential sparseness correlate with having more children.

5. Discussion

The primary purpose of this paper is why the first-generation Korean immigrants show

higher fertility than countries of origin and how it varies by the extent to assimilation. One of the most highlighted explanations for the lowest-low fertility in East Asia is economic uncertainties about occupations and housing (Eun, 2007; Jones, 2007; Lee & Choi, 2015; Sobotka, 2011). Based on the results, the employment status not in labor force, identified in table 1 and 2, lead to higher fertility in the U.S. Even among the longer-staying immigrants, the economic factors like employment status, income amounts are irrelevant to childbearing. As long as obtaining a certain amount of incomes and affordable housing, the first-generation Korean immigrants seem to satisfy with the life as middle-class of American families whereas Koreans of home country are still much aggressive in social mobility. Similar to the higher fertility rates of Netherland where lack of pro-natalist policies and flexible labor market (Mill, 2015), the more assimilated Korean immigrants, who are not in labor force even with proficient language skills, exhibit higher fertility outcomes. Also, the flexible labor market and relatively affordable living costs in rural areas and mid-sized cities in the U.S. lead to the inadvertently favorable fertility outcomes. Although a similar lifestyle with the home country exists among the recently arriving Korean immigrants, the assimilation process of following new lifestyle eventually lead to higher fertility among this population.

There could be a counter-intuitive explanation of which the first generation is selectively well-educated and more risk-taking characteristics (Massey et al. 1993), which leads to higher fertility than countries of origin. Precisely, the first generation follows the fertility patterns of countries of destination in the process of adaptation and socialization (Milewski, 2010). In addition to both arguments, the high fertility rates of East Asian migrants in the U.S. could be only a compositional effect that will disappear in the next generation (Parrado & Morgan, 2008). Also, there is a chance to be a case of the timing of childbearing correlates with migration (Parrado, 2011). However, the high educational attainment but low labor force participation of this population indicates that a different way of living patterns from home country exist among

the first-generation Korean immigrants in the U.S.

This study has a limitation in that Model 3 may include the young children who adopted from Korea in the early stage of life. Also, it is possible that Model 1 and 2 include immigrants who had children before arriving in the U.S. Moreover, the low labor force participation possibly results from some unlawful and temporal employment, particularly in several sizable Korean enclaves in the U.S. (Yoon, 2012) Notwithstanding the limitations, our findings in this paper suggest that the pro-natalist policies of home country need to consider new lifestyle of immigrants and affordable housing market of mid-sized cities in the U.S. Indeed, the pro-natalist policies of Korea concentrate on the child-care subsidies, taking the rigid labor market for granted. Also, extremely high housing costs in metropolitan cities, where young Koreans mostly live, need to take into account the balance between urban and rural labor markets.

6. Conclusion

The first-generation Korean immigrants are only a small fraction in both the U.S. population and the Korean population. Although this population speaks Koreans at home, their way of living is much different from the home country and more likely to follow the U.S. population. Jones (2007) argue that East Asian countries have extreme competitions to enter prestigious schools, which continue as a hallmark even until the last of life. Economic uncertainty severely suppresses young generations on top of housing burden and retirement concerns. However, when they migrate to the U.S., their fertility outcomes are more likely to get closer to their desired family size. Indeed, the TFRs of the first generation is higher by about 0.4 children per woman (Figure 1).

This study suggests that sociodemographic and socioeconomic determinants of the first-generation Korean immigrants correlate with an increase in the number of children varying by the extent to assimilation in the United States. Unlike previous research on the lowest-low fertility in Korea, this study focuses on the determinants of higher fertility of the first-

generation Korean immigrants. Proficient language skills and household incomes correlate with the fewer number of children intertwined with employment status for the new immigrants whereas language proficiency and household incomes are irrelevant to childbearing among the immigrants staying more than 20 years. Also, Korean immigrants who have experienced more than 20 years in the U.S. show that the homeownership and sparse and spacious residential environment are important for having more children.

The purpose of this study is to find evidence for why the first-generation Korean immigrants have more children in the U.S. beyond the selectivity and assimilation process. Arguably, the first-generation Korean immigrants seem to live with the new-type of male breadwinner model in the more flexible labor market, which is seemingly alike to the case of Netherlands. The higher fertility of first-generation who live more than 20 years in the U.S. implies that the current Korean pronatalist policies need to consider the flexibility of the labor market rather than subsidy-oriented policies given the extremely rigid labor market of Korea for granted. After twenty years of pro-natalist policies with billions of dollars spent, Korean TFR records 0.977 as of 2018. Now is the time to learn from the same Koreans who migrated for the desirable life opportunities and live in a different lifestyle.

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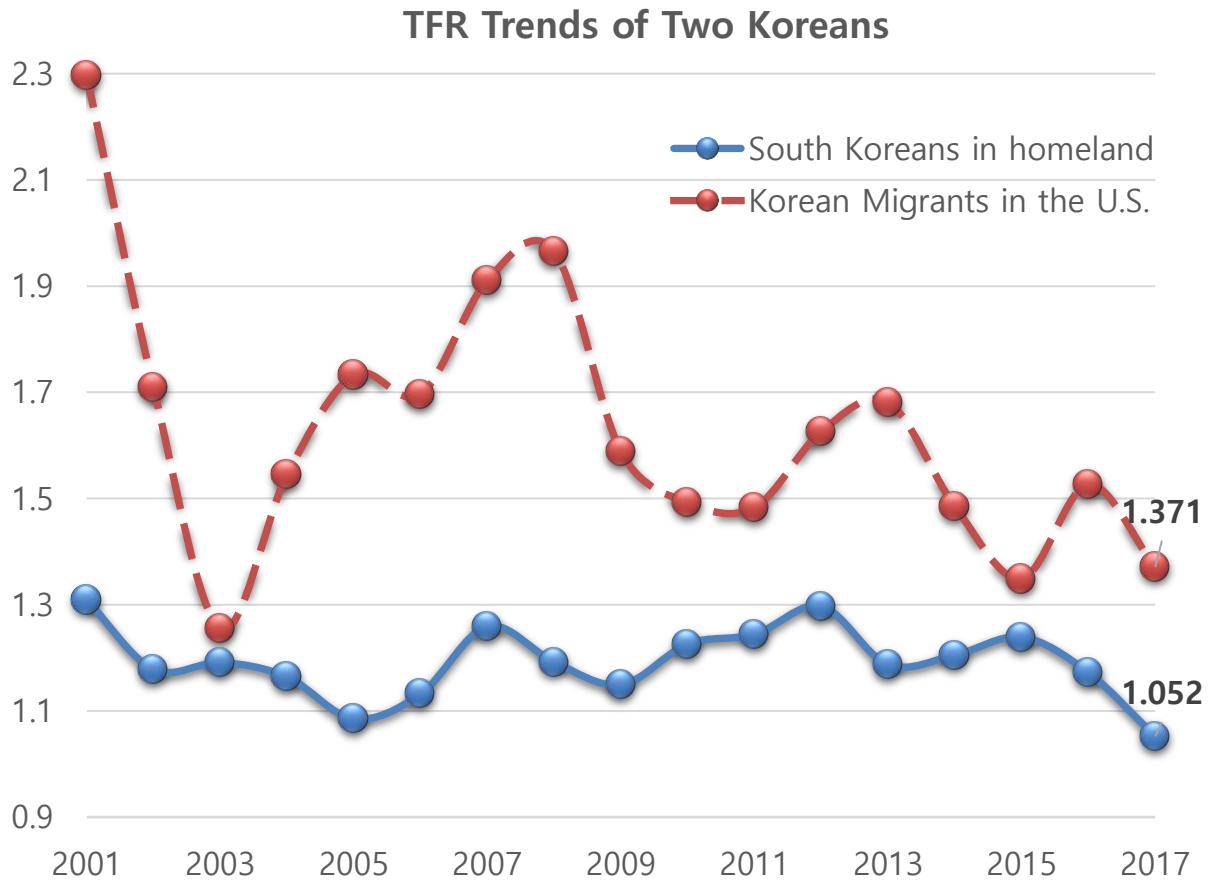
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Figure 1. Comparison of TFRs in the countries of origin and the first-generation Korean migrants in the U.S.



Source: Korea Statistical Information (KOSIS), IPUMS USA 2016 ACS

Table 1. Poisson models predicting the total number of children among East Asian immigrants
by period

Socio-economic variables	Measurement	South Korea population	Korean Migrants in the U.S.	The U.S. population
		KOSIS ¹⁾	ACS 2016 5yr	ACS 2016 5yr
Age	median ²⁾	42.7	47.0	42.0
Educational Attainment ³⁾	median	Grade 12	College 1year	Grade 12
Household income ⁴⁾	median	\$47,991	\$76,634	\$66,769
Female labor	percentage	52.2%	47.9%	51.7%
Marital Status ⁵⁾	percentage	73.3%	60.8%	41.3%
English proficiency	percentage	n/a	72.8%	96.1%
Home ownership	percentage	56.8% ⁶⁾	58.1%	68.2%
Principal cities&suburb	percentage	69.8%	50.1%	34.5%
TFR	2016	1.172	1.526	1.82 ⁷⁾

1) Korea Statistical Information Service (KOSIS, 2016)

2) Different population structure between a migrant group of Koreans and the U.S population

3) 2016 OECD median (50%) educational attainment for South Korea and ACS 2016 for the others

4) USD/KRW exchange rate is 1100 won for estimation

5) Proportion of the status of married out of total females

6) Korea Housing Finance Corporation

7) Population Reference Bureau 2016 official TFR of the United States

Source: KOSIS (Korea Statistical Information System), IPUMS USA 2016 ACS 5yr

Table 2. Poisson models predicting the number of children among Korean immigrants

		Model 1		Model 2		Model 3	
Increase in the number of children		Years in the U.S.<10		Years in the U.S.<20		Years in the U.S.>21	
		Coef.	S.E	Coef.	S.E	Coef.	S.E
Educational Attainment	Below college	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	College	0.06	(6.00)	-0.03	(0.06)	-0.07	(0.05)
	Graduate	0.00	(0.07)	-0.05	(0.07)	-0.08	(0.06)
Marrital Status	Married	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	Separated/Divorced	-0.49	(0.13) ***	-0.50	(0.10)	-0.54	(0.07) ***
	Single	-2.96	(0.20) ***	-2.80	(0.21) ***	-2.00	(0.08) ***
Age	15-24 years	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	25~34 years	1.79	(0.33) ***	3.98	(1.01) ***	0.85	(0.22) ***
	35~44 years	2.44	(0.33) ***	4.67	(1.01) ***	1.38	(0.22) ***
Citizenhsip	Not Citizen	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	Citizen	0.16	(0.07) *	0.09	(0.04) *	0.00	(0.06)
English Proficiency	Very well	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	Not well	0.22	(0.04) ***	0.12	(0.05) *	-0.05	(0.09)
	Unable	0.12	(0.13)	0.05	(0.03)	0.13	(0.36)
Employment	Employed	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	Unemployed	-0.05	(0.14)	0.13	(0.14)	-0.01	(0.09)
	Not in laborforce	0.29	(0.05) ***	0.21	(0.05) ***	0.27	(0.04) ***
Household income	First quartile	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	Second quartile	0.14	(0.07) *	0.00	(0.08)	0.07	(0.07)
	Third quartile	0.16	(0.07) *	0.01	(0.08)	0.01	(0.07)
	Fourth quartile	0.13	(0.08)	0.05	(0.09)	0.09	(0.07)
Poverty	Poverty line	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	Poverty line>100%	0.16	(0.07) *	0.09	(0.11)	0.41	(0.09) ***
Geography	Rural	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	Mid-sized City	-0.09	(0.14)	0.46	(0.32)	-0.25	(0.09) **
	Principal Suburb	0.01	(0.14)	0.46	(0.32)	-0.17	(0.09) *
	Principal Central	-0.36	(0.15) *	0.27	(0.32)	-0.56	(0.09) ***
Houing types	Homeowner	<i>Ref</i>		<i>Ref</i>		<i>Ref</i>	
	Renter	0.00	(0.05)	-0.11	(0.05) ·	-0.16	(4.00) ***
Sample size		3,614		2,783		4,140	

Signif. codes: *** p< 0.001, ** p< 0.01, * p<0.05, · p<0.1

Source: IPUMS USA 2016 ACS 5yr