Intermarriage and the Labor-Force Participation of Immigrants: Differences by Gender

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Abstract

Studies of the impact of intermarriage on labor market outcomes of immigrants focus on labor force participants. However, intermarriage itself can change participation options and heterogeneously so for men and women. Using data from the 2010 American Community Survey, we find that the raw impact of intermarriage is to reduce labor-force participation for men, and increase it for women. However, upon controlling for observable and unobservable selection into intermarriage, the gains from intermarriage for women are reversed. The importance of human capital controls of education and experience in determining the labor force participation of married immigrants is underscored. Birthplace fixed effects play an important role in explaining the gender differences in labor force participation among intermarried immigrants.

Keywords: labor-force participation, immigrants, intermarriage, gender

JEL Classification: J15, J12, J22.

1. Introduction

Intermarriage between minority and majority groups is often considered the "final stage" in assimilation for ethnic minorities (Gordon, 1964). The common perception is that intermarriage "closes the socio-economic gap" between immigrants and natives. However, unlike other developed economies, immigrants in the U.S. are not seen to receive a wage premium from intermarriage (Kantarevic, 2004; Basu, 2015). There are some employment gains for intermarried male immigrants, as a result of access to native networks (Furtado and Theodoropoulos, 2010).

Wage assimilation studies incorporating intermarriage focus on labor-force participants. Studies often exclude female immigrants due to difficulties in interpreting their work-force life-cycle interruptions. Using data from the 2010 American Community Survey (ACS), this paper studies whether intermarriage also determines labor-force participation of immigrants. If intermarriage affects entry into the labor market, the observed wage distribution of intermarried individuals should account for this fact.

The selectivity of spouses can differ for native men and women. Intermarriage, and the act of immigration, can alter or reinforce traditional gender roles and affect the allocation of home and market work. In light of these concerns, we examine the impact of intermarriage separately on labor-force participation of married male and female immigrants.

1. Previous Literature

Theories on the implications and determinants of intermarriage also have implicit predictions about labor force participation of the married immigrants. According to the productivity hypothesis, an immigrant can improve their human capital and labor market opportunities via marriage to a native who is familiar with host-country institutions and language (Meng and Gregory, 2005). Intermarriage encourages investments in the immigrant's human capital and are also likely to increase labor force participation among intermarried immigrants. Intra-married immigrants have access to a social network comprising members of their own group, and such networks may be inferior compared to native networks in relation to labor market opportunities (Furtado and Theodoropoulos, 2010) – hence marriage to a native may encourage labor force participation since the labor market opportunities are better.

Contrary to the productivity hypothesis is the selection hypothesis which states that intermarried immigrants are positively selected on the basis of observable and unobservable traits into the labor market, as well as the marriage market. Intermarriages are characterized by positive assortative mating on the basis of human capital variables. This is particularly true of individuals with higher levels of education, income and proficiency in the English language (Chiswick and Houseworth, 2011; Furtado, 2012). Age at migration is also an important determinant of marital assimilation among immigrants – infant entrants have a higher propensity to intermarry (Chiswick and Houseworth, 2011), and these individuals also integrate better in the host country environment (Bleakley and Chin, 2010). It is not improbable that intermarried immigrants are also selected on the basis of unobservable variables such as motivation, desire to assimilate in the U.S. etc. which are attractive to both native spouses and native employers (Kantarevic, 2004; Meng and Gregory, 2005).

The effect of intermarriage on male and female immigrants can differ. Since spouses in an intermarriage tend of similar levels of human capital (Furtado, 2012), they may also have similar labor market opportunities. This can weaken traditional gender division of labor seen in intra-marriages. Grossbard-Schectman and Fu (2002) show that educated intermarried Filipino women in Hawaii are more likely to work compared to their intra-married counterparts. On the other hand, the native spouse can yield more bargaining power due to their higher social status in the host country. This can reinforce gender roles within the household. Basu (2015) finds evidence that native men, not native women, select spouses from traditional societies for family-building reasons. Native husbands usually earn more and work more market hours - this can exert an income effect that dampens labor supply incentives for the immigrant wife.

Intra-married households may coordinate their labor supply decisions – this is the family investment hypothesis. Upon arrival to the host country, immigrant wives work in low-paying but high-hours jobs while their immigrant husbands concentrate on human capital formation (Baker and Benjamin, 1997). These motives are missing for intermarried households because they are not credit-constrained, and we may see gender-based heterogeneity in labor force participation among intermarried immigrants.

Marriage market conditions in the immigrant's place of residence in the host country can also affect the probability of intermarriage. Chiswick and Houseworth (2011) show that higher

the availability of spouses from one's own group vis-à-vis natives, as well as a larger overall group size dampens intermarriage. The influx of immigrants to the U.S. over the last decades has allowed immigrants to marry within their racial and ethnic groups, and the rates of intermarriage have fallen (Qian, Glick and Batson, 2012). Regional sex-ratios also impact intermarriage, though differentially for men and women (Grossbard and Amuedo-Dorantes, 2008). These regional factors may also affect labor market conditions.

Finally, home-country factors like culture and gender roles play an important role in determining both intermarriage and post-migration labor supply. For first generation immigrant women, home-country female-to-male ratios in labor force participation are positively correlated to their labor supply in the host country (Antecol, 2000; Frank and Hou, 2015). Furtado and Theodoropoulos (2010) stress that decreased contact with own-country networks in the U.S. increased employment opportunities for intermarried males.

Intermarriage studies of immigrant labor market outcomes at the *extensive margin* are scarce. Previous studies consider labor-force participation as given, or exclude women. Using data from ACS 2010, which has a large sample of immigrants and information on their marriage histories and labor-market outcomes, this paper attempts to provide a more comprehensive picture of the role of intermarriage in immigrants' economic assimilation. It cautions against the use of aggregate or male-only estimates, in the presence of gender-based heterogeneous labor supply decisions.

2. Empirical Specification and Data

The equation identifying the effects of intermarriage on labor-force participation is:

$$LFP_i = \alpha + \beta \,\text{Inter}_i + \gamma Z_i + \lambda F_i + \theta N_i + \delta_i + \varepsilon_i \qquad (1)$$

LFP_i is the dependent variable which equals 1 if immigrant *i* participates in the labor-force, and 0 if not. Unemployed immigrants not looking for a job are also classified as out-of-labor-force. $Inter_i$ is the explanatory variable of interest. It equals 1 if the immigrant is married to a U.S.-born native, and 0 if the spouse is foreign-born. We focus on cross-country intermarriages, not cross-racial. A marriage can occur between individuals of the same ethnicity, but if one was a native and another an immigrant, the marriage is classified as an intermarriage.

Equation (1) is estimated separately for male and female immigrants; the base group is their intra-married counterparts. We are interested in an intermarriage premium or penalty, not a return to marriage per se. We restrict our sample to immigrants in heterosexual marriages. Z_i is a vector of an immigrant's observable characteristics. Higher human capital is associated with intermarriage (Chiswick and Houseworth, 2013). Z_i includes completed education, a square term in potential experience, veteran status, binary variables for metropolitan area (MSA) residence and for currently being enrolled in school, and state fixed effects. English proficiency and more years in the U.S. can determine intermarriage and be affected by intermarriage. The importance of these variables for labor market performance are indisputable and are included in Z_i.

F_i includes family, marriage and spousal characteristics. Number of children, age of the youngest child and overall family size are included as controls. Marriage duration and age at marriage are also included. Finally, we include controls for spousal market hours and spousal age, and for the difference in years of education between spouses.

Previous research has stressed the importance of immigrant and native networks for labor market outcomes of immigrants. N_i shows the proportion of own-birthplace immigrants in one's metropolitan area (or state if a person lives outside a MSA). Finally, to account for home-country conditions, we include birthplace fixed effects in δ_i.

Our sample is from the 2010 ACS Public-Use Microsample (Ruggles et. al. 2013). We restrict our sample to 22-65-year-old immigrants. The age-restriction assumes people have finished school, and are in labor-market age. The 2010 ACS reports immigrants' year of arrival, year of marriage and the number of times married. To ensure that the marriage decision was taken in the U.S., we restrict the data to immigrants who married after immigration, and are currently in their first marriage.

Table 1 compares characteristics of intermarried and intra-married male and female immigrants. 25% of men and 30% of women in the sample are intermarried. Consistent with positive selection into intermarriage (Meng and Gregory, 2005), average human capital of intermarried immigrants is higher. Concurrently, intermarried women exhibit higher labor-force participation; but this is not true for intermarried men. Also worth noting that the correlation between spousal education levels and work hours is lowest in intermarriages

[INSERT TABLE 1 HERE]

3. Estimation Results

As a baseline analysis of equation (1), ordinary least squares (OLS) estimates are presented in table 2. Columns 1 and 2 show the raw impact of intermarriage on labor-force participation on immigrant men and women respectively. In columns 3 and 4, own human capital controls are added. Men draw an intermarriage penalty of 1.2%-1.3%. This penalty stays fairly consistent when family and spousal traits are added in column 5, and then birthplace fixed effects are added in column 7.[1] On the other hand, intermarried women enjoy a raw 5.5% participation premium, which is reversed to a penalty when own observable characteristics are added (column 4). Therefore, intermarried women are positively selected into the labor force and marriage.

[INSERT TABLE 2 HERE]

The penalty persists, though slightly smaller in magnitude, when spousal controls are added (column 6). Interestingly, increased spouse's income significantly reduces an immigrant wife's labor supply but not an immigrant husband's. The income effect of a high earning husband in reducing work effort of wives has been discussed in intermarriage literature (Basu, 2015). Alternatively, increased market hours of wives reduce labor-force participation of immigrant husbands. Egalitarian division of labor might be more likely in intermarriages. Also, a higher concentration of own-country network in one's geographical area reduces labor force participation for males as noted by Furtado and Theodoropoulos (2010). It should be noted that the returns from intermarriage between male and female immigrants are significantly different until birthplace controls are added.

Due to issues of collinearity when marriage controls are eventually added, age at migration is not included as a control. Appendix Table 1 stratifies the table by infant, teenage, young adult and older adult entrants.[2] There are discernible gender-based differences, particularly among the young adult entrants who arrived during a college age (19-25) – these intermarried women are more likely to participate in the labor market, their male counterparts are not as likely. This may be an artefact of "who" receives college education in the U.S., and also

[1] Due to space constraints, only coefficients on selected explanatory variables are shown.

[2] Those who arrived at ages below 13 are infant entrants. Teenage entrants arrived between 13-18 years of age. Young adult entrants arrived between the ages of 19-25, whereas anyone migrating above the age of 25 is an older adult entrant. Of course all these individuals are constrained to taking their marital decisions post-migration.

meets their partners in a tertiary educational setting. Older adult entrants form the bulk of our sample and are less to participate in the labor market if intermarried, regardless of sex.

With an OLS estimate it is hard to pinpoint the relative role of predictors in accounting for the impact of intermarriage on the labor force participation of married immigrants. In table 3, we present a decomposition of the effects of the variables in explaining the difference in labor force participation of intermarried and intra-married individuals. We also retain the delineation on the basis of gender. The importance of the Mincerian controls of education and experience are underscored again – for both sexes. For married immigrant women, spousal characteristics and birthplace are also important. These results echo the findings from the OLS estimates.

[INSERT TABLE 3 HERE]

Furthermore, a linear estimation of equation (1) assumes that the marriage decision is exogenous. Besides observable traits, individuals with unobservable traits such as motivation and attachment to host country can be positively selected into both intermarriage and the labor market. Alternatively, the labor-force participation decision itself can determine the choice to intermarry. To deal with selection into intermarriage and endogeneity, we employ an instrumental variable strategy and present these results in table 4. The instrument, commonly used in intermarriage literature, is relative group size (RGS) which shows the availability of mates from one's home country versus native partners. People are usually attracted to those of their ethnic and religious groups (Qian and Lichter, 2001). However, since we are considering cross-national marriages rather than cross-ethnic marriages, we allow immigrants to search for partners within their birthplace group.[3] The relative group size variable facing individual *i* is defined as $RGS_{i,c,m} = \left(\frac{UM_{c,m}}{UM_{USA,m}} \right)$ where $UM_{c,m}$ is the number of unmarried people of the opposite sex from *i*'s country-of-birth *c* and residing in metropolitan area *m*. $UM_{USA,m}$ is similarly defined for unmarried U.S.-born natives. Estimates are only presented for those living in an identifiable MSA. The logarithm of the variable is taken to reduce skewness.

[3] Birthplace groupings are not single countries, rather country blocks. We create these blocks based on IPUMS groupings.

First-stage results are in columns 1 and 3. If own-country eligible individuals increase by 10% relative to natives, the likelihood of intermarriage decreases significantly by 1.5% for men, and 1.7% for women. The model passes under-identification and weak instrument tests as seen from the values of the Kleibergen-Paap χ^2-test and the F-test of excluded instruments.

[INSERT TABLE 4 HERE]

Columns 2 and 4 present second stage results. The human capital, assimilation and spousal controls from previous tables are carried over, though the coefficients on all are not shown. The intermarriage penalty for women's labor-force participation persists though the coefficient is insignificant. The magnitude, in absolute value, is larger, indicating positive selection into the labor market on unobservable traits. The labor force participation penalty for intermarried males is also larger, but smaller in magnitude compared to intermarried females.

An important source of variation for the instrument is the variability in immigrant residence across the U.S. Immigrants primarily reside in U.S. coasts. There may not enough variation to identify the marriage equation from the participation equation. Also the instrument is closely related to the overall, as well as country-of-origin-specific, concentration of immigrants in a state. This can affect labor market prospects of immigrants. Regressions include a control for own-people network in the metropolitan area. Nevertheless, concerns of instrument validity are raised if native 'openness' affects both intermarriage rates and immigrant inflows into an area. While the coefficients on the instruments seem reasonable, we are cautious about over-emphasizing the magnitude of the IV estimates.

4. Conclusion

The results in this paper shows that intermarriage affects immigrants' overall decision to participate in the labor market, and there is gender-based heterogeneity. Future work should focus on the channels via which intermarriage affects male and female immigrant labor-force participation. Results also suggest that home-country conditions play an important role, and caution against the use of aggregate estimates which ignore heterogeneous outcomes on the basis of origin. Marriage to natives is an important road to legal residence and citizenship in the U.S., and the complete role of intermarriage is important when considering the effectiveness of immigration policy.

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Table 1: Descriptive Statistics of Married Male and Female Immigrants: By Type of Marriage

	Males		Females	
	Immigrant Wife	*Native Wife*	*Immigrant Husband*	*Native Husband*
Percentage	***74.5***	***25.5***	***71.21***	***28.79***
% in Labor Force	***92.6***	***91.62***	***67.01***	***71.78***
	(26.19)	(27.72)	(47.02)	(45.01)
Years of Education	12.18 (4.87)	13.47 (4.09)	12.24 (4.46)	14.5 (3.28)
Age	42.93 (10.02)	42.56 (11.07)	41.14 (10.42)	41.58 (10.99)
% with Good Eng.	46.2 (32.5)	78.6 (41.020	46.78 (49.9)	85.01 (35.7)
In school	4.14 (19.93)	5.3 (22.43)	6.25 (24.2)	8.58 (28.01)
Years in USA	23.41 (10.79)	28.06 (14.21)	22.78 (11.33)	27.6 (14.1)
Age of Marriage	28.75 (6.57)	27.54 (6.06)	26.89 (6.85)	26.99 (6.42)
Marriage Duration	14.18 (9.8)	14.77 (11.3)	14.25 (10.26)	14.59 (11.44)
# Children	1.74 (1.27)	1.46 (1.27)	1.68 (1.26)	1.25 (1.18)
Spouse Lab. Force	62.87 (48.3)	72.12 (44.8)	90.68 (29.07)	89.83 (30.24)
Spouse Annual Inc. (if working)	$35,304.24 ($40456.99)	$41,763.36 ($45736.51)	$51,532.15 ($59910.54)	$75,571.69 ($76227.98)
Cor(own educ, spouse educ.)	0.6943	0.5619	0.6639	0.556
Cor(own mkthrs, spouse mkthrs)	0.1695	0.07	0.1752	0.0985
N	**30684**	**10496**	**24491**	**9903**

Source: 2010 ACS.

Table 2: Linear Regression Estimates of Intermarriage on Labor Force Participation of Immigrants

VARIABLES	Raw Male	Raw Female	Human Capital Controls Male	Human Capital Controls Female	Assimilation & Spousal controls Male	Assimilation & Spousal controls Female	Birthplace controls Male	Birthplace controls Female
intermarriage	-0.0132***	0.0553***	-0.0119***	-0.0251***	-0.0141***	-0.0332***	-0.0106**	-0.0096
	(0.0036)	(0.0065)	(0.0037)	(0.0069)	(0.0037)	(0.0069)	(0.0041)	(0.0074)
Years of Education			-0.0013***	0.0174***	0.1676***	0.1479***	0.1691***	0.1561***
			(0.0004)	(0.0009)	(0.0207)	(0.0256)	(0.0258)	(0.0257)
experience			0.0120***	0.0108***	0.1804***	0.1465***	0.1816***	0.1549***
			(0.0007)	(0.0011)	(0.0210)	(0.0258)	(0.0261)	(0.0260)
exp2			-0.0003***	-0.0002***	-0.0003***	-0.0003***	-0.0003***	-0.0003***
			(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
In Metro			0.0070	0.0576***	0.0067	0.0560***	0.0092	0.0362
			(0.0066)	(0.0133)	(0.0066)	(0.0132)	(0.0133)	(0.0249)
Years in USA			-0.0011***	0.0009***	-0.0008***	0.0024***	-0.0005**	0.0029***
			(0.0002)	(0.0004)	(0.0002)	(0.0004)	(0.0002)	(0.0004)
Good English			0.0174***	0.0897***	0.0162***	0.0869***	0.0161***	0.0762***
			(0.0036)	(0.0074)	(0.0036)	(0.0074)	(0.0039)	(0.0078)
In School			-0.0641***	-0.0020	-0.0644***	-0.0082	-0.0624***	-0.0208*
			(0.0092)	(0.0118)	(0.0092)	(0.0117)	(0.0095)	(0.0119)
Age at Marriage					-0.1682***	-0.1327***	-0.1696***	-0.1433***
					(0.0208)	(0.0256)	(0.0259)	(0.0258)
Marriage Duration					-0.1687***	-0.1358***	-0.1703***	-0.1454***
					(0.0208)	(0.0256)	(0.0259)	(0.0258)
Family Size					-0.0023*	0.0056**	-0.0025*	0.0050*
					(0.0013)	(0.0028)	(0.0013)	(0.0029)
No. of Children					0.0077***	-0.0351***	0.0079***	-0.0351***
					(0.0018)	(0.0039)	(0.0019)	(0.0039)
Diff. in educ. w.r.t. spouse					-0.0004	-0.0028**	-0.0007	-0.0027**

					(0.0006)	(0.0011)	(0.0006)	(0.0012)
Spousal hours worked					0.0001	-0.0004**	0.0001	-0.0004*
					(0.0001)	(0.0002)	(0.0001)	(0.0002)
Spousal age					-0.0010***	0.0005	-0.0008***	0.0004
					(0.0003)	(0.0005)	(0.0003)	(0.0005)
Own network in local area							-0.0032**	0.0021
							(0.0013)	(0.0027)
Chi-square test, by gender	85.21***		2.94*		5.92**		0.04	
p-value	0.000		0.0921		0.015		0.8363	
Spouse & Family Controls			No	No	Yes	Yes	Yes	Yes
Place of birth controls			No	No	No	No	Yes	Yes
Observations	41,180	34,394	41,180	34,394	41,180	34,394	41,180	34,394
R-squared	0.0005	0.0027	0.0845	0.0631	0.0860	0.0759	0.0919	0.0924

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Data Source: ACS 2010. Appropriate weights were used in estimations.

Table 3: Decomposition of the Gap in Labor Force Participation between Intra-married and Intermarried Immigrants: By Sex

In Labor Force	Male				Female			
Overall	Coefficient	Std.Error			Coefficient	Std.Error		
Intra-Married	0.929***	0.0017			0.673***	0.0037		
Intermarried	0.919***	0.0033			0.723***	0.0056		
Difference	0.009***	0.0037			-0.0585***	0.0067		
Explained	-0.0003	0.002			-0.059***	0.004		
Unexplained	0.0103**	0.004			0.0086*	0.0054		
	Explained		**Unexplained**		**Explained**		**Unexplained**	
	Coefficient	Std.Error	Coefficient	Std.Error	Coefficient	Std.Error	Coefficient	Std.Error
Own Education	0.241***	0.033	0.142	0.22	0.288***	0.0498	0.618	0.574
Own Experience	-0.373***	0.055	0.334	0.0402	-0.302***	0.0518	1.159	0.987
Years in USA	0.0025**	0.0011	-0.035***	0.013	-0.013***	0.002	0.0081	0.0209
Good English	-0.0058***	0.0012	0.0044	0.0078	-0.0318***	0.003	0.0182	0.016
Age at Marriage	0.207***	0.0312	-0.328	0.0467	-0.0189	0.014	-1.35	1.18
Marriage Duration	-0.0773***	0.0278	-0.206	0.231	0.0013	0.021	-0.705	0.591
Educ. diff. w.r.t spouse	-0.00003	0.0005	-0.0007	0.0035	-0.0008*	0.00043	0.0071	0.0062
Family charac.	0.0009**	0.0004	0.0031	0.011	-0.012**	0.0011	0.035*	0.0201
Spousal Charac.	-0.0013	0.0015	0.0395	0.0402	0.0131***	0.0015	0.188**	0.092
Other	0.0011**	0.0005	-0.0168	0.027	-0.0002	0.0005	0.0058	0.045
Own people proportion	0.0005	0.0005	-0.0023	0.0044	0.0009	0.001	-0.0031	0.008
State of Residence	0.0003	0.0004	0.0022	0.019	-0.0005	0.0007	-0.0348	0.0275
Birthplace	0.0043	0.0014	0.075	0.061	0.017***	0.0024	0.0601	0.189

Entries correspond to contribution of the variable to the labor-force participation gap. *** p<0.01, ** p<0.05, * p<0.1.

Table 4: Instrumental Variable Estimates of Intermarriage on Labor Force Participation of Immigrants

VARIABLES	First Stage Female	Second Stage Female	First Stage Male	Second Stage Male
Intermarriage		-0.1036		-0.0532
		(0.1179)		(0.0720)
Years of Education	0.0231	0.1477***	-0.011***	0.011***
	(0.0882)	(0.0271)	(0.0007)	(0.002)
Experience	0.0212	0.1449***	-0.0054***	0.0167***
	(0.0883)	(0.0274)	(0.0015)	(0.0012)
Years in USA	-0.0180	-0.1312***	0.0001***	-0.0003***
	(0.0882)	(0.0271)	(0.0000)	(0.0000)
Good English	0.1602***	0.1057***	0.0035***	-0.0056***
	(0.0061)	(0.0210)	(0.0011)	(0.0009)
In School	0.0043	-0.0083	0.1485***	0.0210*
	(0.0120)	(0.0123)	(0.0058)	(0.0117)
Age at Marriage	0.0070***	0.0032***	0.0017	-0.0625***
	(0.0005)	(0.0010)	(0.0136)	(0.0101)
Marriage Duration	0.04694*	-0.02393	0.0015***	0.0005
	(0.0285)	(0.0961)	(0.0004)	(0.0004)
Family Size	-0.0165***	0.0045	-0.0098***	-0.0022
	(0.0020)	(0.0036)	(0.0020)	(0.0015)
No. of Children	-0.0053*	-0.0377***	-0.0003	0.0076***
	(0.0030)	(0.0041)	(0.0028)	(0.0019)
Diff. in years of educ. b/w spouses	0.0000	-0.0029**	0.0076***	-0.0007
	(0.0009)	(0.0012)	(0.0008)	(0.0008)
Spouse mkt. hours	0.0006***	-0.0005**	0.0014***	0.0001
	(0.0002)	(0.0002)	(0.0001)	(0.0001)
Spouse age	-0.0038***	0.0001	-0.0028***	-0.0009**
	(0.0004)	(0.0007)	(0.0004)	(0.0004)
Own country network in MSA	-0.0000***	0.0000	-0.0001***	-0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Log Relative Group Size	-0.0169***		-0.0148***	
	(0.0034)		(0.0035)	
Observations	30,568	30,568	36,426	36,426
R-squared		0.0652		0.0836
Cragg-Donald F test	133.2	133.2	112.6	112.6
Kleinbergen-Paap rK LM ChiSquared	23.49	23.49	22.05	22.05

*** p<0.01, ** p<0.05, * p<0.1. Standard errors clustered by MSA and birthplace shown in parentheses. Only those living in identifiable metropolitan areas are included in the sample.

Data Source: ACS 2010. Appropriate weights were used in estimations.

Appendix Table 1: OLS Estimates of Intermarriage on Labor Force Participation of Immigrants: By Age of Entry

	Infant Entrant	Teen Entrant	Young Adult Entrant	Older Adult Entrant
Female Intermarriage	-0.0100	0.0221	0.0315*	-0.0245**
	(0.0258)	(0.0165)	(0.0183)	(0.0105)
Observations	2,418	4,813	6,043	21,120
Male Intermarriage	0.0165	0.0032	-0.0079	-0.0206***
	(0.0149)	(0.0088)	(0.0103)	(0.0055)
Observations	2,119	4,382	6,324	28,355
State Fixed Effects	Yes	Yes	Yes	Yes
Birthplace Fixed Effects	Yes	Yes	Yes	Yes

*** p<0.01, ** p<0.05, * p<0.1. Robust standard errors in parentheses. All controls from

Data Source: ACS 2010. Appropriate weights were used in estimations.