INTERETHNIC MARRIAGES

Delia Furtado

University of Connecticut, Department of Economics

Storrs, Connecticut, USA

delia.furtado@uconn.edu

Tao Song

The University of the South, Department of Economics and Finance

Sewanee, Tennessee, USA

tasong@sewanee.edu

Abstract

For many years, interethnic marriages have been used as a measure of social distance between groups. For the case of immigrants, interethnic marriage has even been called the "final stage" of assimilation (Gordon 1964). This chapter presents the theoretical reasons why intermarriage is likely to be a good measure of social distance between groups. The chapter focuses on the process through ethnic minorities become more similar to the general population but comments on the cases where this process is not very smooth. The chapter then goes over the empirical literature on intermarriage, first examining the factors that lead to intermarriage and following with a discussion of the likely outcomes of interethnic marriage.

1 Introduction

Interethnic marriages, also known as ethnically exogamous marriages, are marriages between people from two different ethnic groups. Ethnicity is a label used to categorize groups of people who share distinctive characteristics such as language, ancestry, religious beliefs, and cuisine. Because it is socially constructed, this categorization is likely to differ across societies. For example, China has over fifty officially recognized ethnic groups, but anyone with a Chinese background living in the United States is likely labeled Chinese regardless of specific ethnic background. Ethnic categorizations can also change within a society over time as different groups become viewed as more (or less) similar to each other. For instance, some Italians were coded as having Neapolitan or Tuscan ancestries in the 1980 U.S. Census, but in the following years, people in these groups were coded as Italian. This is likely because in more recent years, most Italians living in the U.S. are second or third plus generation and self-identify as Italian.

For many years, the prevalence of interethnic marriage has been used as a measure of the permeability of boundaries between ethnic groups (Gordon 1964). However, to really understand what these types of marriages signify, it is important to consider the determinants of intermarriage as well as the consequences of intermarriage both for the individuals involved in the marriage and the broader society (Furtado and Trejo 2013, Furtado 2015, Nottmeyer 2015). This chapter starts with a discussion of the significance of interethnic marriage focusing on the theoretical motivations for marrying within ethnicity. Next, an exploration of the empirical relationships between various factors and interethnic marriage is provided. The chapter then considers the impacts of intermarriages on sociodemographic outcomes of the intermarried married spouses, and perhaps more importantly, their children. The chapter ends with a discussion of open questions in this literature.

2 Significance of Interethnic Marriages

There are many reasons why the prevalence of marriages between people of different ethnic groups is so often used as a measure of social distance between these groups. At the extreme, if there were no social interactions between people with different ethnic backgrounds, there would not be any interethnic marriage. The more two groups interact with each other at school, at work, or in the community, the more common interethnic marriages between these two groups will be. In addition to the role of simple exposure, successful marriages often involve two people who hold similar worldviews, are able to communicate well with each other, and have support from their family and friends. The number of ethnic intermarriages should therefore increase as people within an ethnic group become more similar to people in other groups, and especially as they become more similar to the largest ethnic group in a society. Moreover, regardless of how different ethnic groups start, more intermarriages will in themselves create more intermingling of ethnic groups within extended-family events and social gatherings of friends, and this is likely to further increase similarities and promote an understanding or even appreciation of ethnic differences.

Nevertheless, many ethnic groups remain distinct over many generations despite the occasional interethnic marriage (see Bisin and Verdier 2000). In fact, sporadic racial and ethnic conflicts may even lead to fewer interethnic marriages. The processes governing interethnic marriage as well as other forms of ethnic commingling can be complex. This chapter starts by examining theories of marriage and assimilation.

2.1 Theories of Marriage

Conceptualizing couples as small firms producing "commodities" such as children, companionship, and joint meals, Becker (1973) predicts that when there are returns to specialization in producing commodities, spouse-seekers will pursue spouses with very different comparative advantages. In his classic example, a high-wage worker (usually male) will match well with a low-wage worker (usually female) who can specialize in domestic skills. His theory also predicts, however, that people will instead prefer spouses with similar characteristics when these similarities make them more efficient at producing commodities. When couples have similar ethnic backgrounds, they may be more efficient at producing ethnic traits in their children (for example, the ability to speak a native language fluently). Sharing the same native tongue is likely to make it easier for immigrants who are not fluent in the host country's language to jointly produce almost any commodity within the household.

Focusing on couples' joint consumption of household public goods, as opposed to production of commodities, Lam's (1988) theory of marriage implies that to maximize surplus, couples should form so that spouses have similar demands for household public goods. Because two people with the same ethnic background are more likely to have similar preferences for household public goods such as ethnic foods, vacations to the homeland, attending ethnic festivals, ethnic characteristics in children, and the language spoken in the household, therefore, Lam's model also predicts high rates of ethnic endogamy.

In practice, optimal couple configurations--regardless of whether determined by Becker or Lam's model-do not always occur because of search costs. Search costs in the marriage market include the financial and time costs associated with actual dating. They also include opportunity costs; time spent searching for an optimal spouse is time not spent enjoying the benefits of marriage, an issue that may become especially important for women nearing the end of their childbearing ages. A marriage market participant may prefer a same-ethnicity spouse, but if it is costly to find such a spouse who also has other valuable characteristics, for example, a similar educational background, an interethnic marriage may occur. For this reason, search theory predicts that the fewer potential same-ethnicity spouses in a marriage market, the more prevalent interethnic marriages will be, regardless of the incentives to marry within ethnicity.

Exchange theory predicts that a marriage market participant who may otherwise prefer a same ethnicity spouse will choose an interethnic marriage when compensated with some other observable trait (Davis 1941; Merton 1941). In the classical example, a black-white marriage might indicate that a highly educated black man has exchanged his high socioeconomic status for the racial status of a white woman (Davis 1941; Merton 1941). Similar exchanges might occur among immigrants exchanging high levels of education or youth for the citizenship status of a different-ethnicity native (e.g., Niedomysl et al. 2010; Behtoui 2010). In the case of some refugees, education and youth might be exchanged for security and even survival in the host country (Uddin 2021).

2.2 Immigrant Assimilation and Marriage Market Preferences

While marriage market models can provide explanations for the prevalence of same-ethnicity marriages, what it means to have a particular ethnic background and what that implies for marriage preferences can vary greatly from person to person. A newly arrived immigrant to the U.S. from Mexico is likely to have very different preferences for a same-ethnicity spouse than a U.S.-born native who identifies as Mexican but only has one great grandparent who was born in Mexico. These two marriage market participants would also be differentially attractive to non-Mexicans, including people in the U.S. who do not identify with any particular ethnicity. Classical theories of assimilation predict that immigrants arrive with characteristics that are very different from the characteristics of people in the host country, but with time spent in the

country, immigrants become more and more similar to natives both culturally and socially (Gordon 1964). Similarly, while the native-born children of immigrants (second-generation immigrants) may still have some very distinctive ethnic traits, these distinctly ethnic traits become rarer by the third generation, and future generations of immigrants are typically indistinguishable from natives (Gordon 1964).

Newer theories of assimilation point to a more nonlinear assimilation process that varies across immigrant groups. Discrimination and prejudice can play important roles in the assimilation process of certain immigrant groups, especially when they result in certain institutions (Alba and Nee 2003). These barriers are likely to decrease the incidence of interethnic marriages for these groups. While most immigrant groups experience upward intergenerational mobility as they assimilate, segmented assimilation theory (Portes and Zhou 1993) predicts that in some ethnic groups, the native-born children and grandchildren of immigrants can have lower earnings and educational attainments than their parents and grandparents. For example, Portes and Zhou (1993) present evidence that, even with similarly or even better educated immigrant parents, the native-born black children of immigrants from Jamaica, Trinidad and other English-speaking Caribbean republics experience less upward mobility in education and socioeconomic status than the nativeborn white children of Cuban parents. Segmented assimilation theory suggests that, because of racial discrimination, black second and third generation immigrants tend to integrate socially with inner city African Americans, who typically have low educational attainments and earnings. This implies that, while in general, the children of immigrants with weaker ethnic identities tend to perform better academically than those with stronger ties to their ethnic roots, the descendants of black immigrants who maintain strong ethnic identities or pan-ethnic identities could instead experience more upward mobility than those who are less attached to their ancestral backgrounds (Rumbaut 1994).

The theories of marriage predict that people with more distinct ethnic traits, i.e. the least assimilated, are least likely to marry outside of their ethnic group. This is both because they are likely to themselves have strong preferences for ethnic traits in their spouses and because those outside of their ethnic group may not appreciate their distinct ethnic traits and may even find them undesirable. This implies that the prevalence of interethnic marriages might be used as a broad measure of assimilation of different groups. In fact, Gordon (1964) refers to intermarriage as the "final stage" of assimilation. By considering whom immigrants and their offspring are marrying, one can also gain insight about the segment of a diverse host country's society that is socially absorbing them. While most immigrants eventually reach this final stage, some immigrant groups maintain high rates of ethnic endogamy and distinctive ethnic traits over many generations in a new country. Examples include the Orthodox Jewish community in New York and French Canadians in Quebec. This is only possible if these groups continuously marry within their ethnic groups despite these groups representing a minority of their countries' populations. Bisin and Verdier (2000) present a model in which spouse-searchers who want their children to have ethnic characteristics are more likely to marry within ethnicity when they are in small ethnic groups. This is because same-ethnicity parents can more efficiently transmit ethnic traits to their children, and this efficiency is more valuable when it is difficult for children to develop ethnic traits via socialization in the community.

2.3 Outside Influences

Marriages do not form in a vacuum. They are formed and maintained within communities. Regardless of personal preferences regarding interethnic marriages, if same-ethnicity spouses have more support from

their family and friends (Hohmann-Marriot and Amato 2008; Milewski and Kulu 2014), then endogamous marriages are more likely to form (Kalmijn 1998) and remain intact (Kalmijn et al. 2005).

More broadly, public policies may make interethnic marriage more or less attractive. At the extreme, many types of interethnic marriages were not legal in several U.S. states in the not-so-distant past; laws prohibiting interracial marriages only became illegal in the U.S. in 1967. Laws prohibiting certain interethnic or interracial marriages were also in place in Nazi Germany and apartheid-era South Africa. In Bangladesh today, marriages between Rohingya and Bangladeshi nationals are prohibited. More widespread today, however, are policies that are not specifically about interethnic marriage but that nonetheless can have important consequences on marriage patterns. For example, housing policies can create residential segregation of many ethnic groups making ethnic intermingling, and hence intermarriage, between groups difficult (Villazor 2018).

Immigration policies can also affect interethnic marriage prevalence. Continuously open immigration policies allow for a constant stream of new immigrants making it easier for co-ethnics from different generations to find good matches within ethnicity. In contrast, if immigration from a country ends abruptly, second and higher generation immigrants can become more likely to out-marry because they have fewer same-ethnicity potential spouses from which to choose. Intermarriage rates among Asians have been decreasing over the last few decades because the influx of immigrants from Asia has increased the number of potential Asian spouses for all Asians (Qian and Qian 2020). If governments enact more closed immigration policies within a political climate that is unfriendly towards immigrants from particular ethnic groups, then this may further decrease the attractiveness of marriage market participants in those groups.

Lastly, policies related to the institutional benefits associated with different marriage types can change the attractiveness of certain marriage types. For example, specific rules about heritage governing whether a person can be recognized as Native American may guide marriage choices of Native Americans (Ahtone 2011). The benefits of citizenship acquired through marriage may also lead to more interethnic marriages if it is easier to find a citizen spouse outside of the same ethnicity than within the same ethnicity.

3 Empirical Determinants of Interethnic Marriage

3.1 Immigrant Assimilation and Interethnic Marriage

Both Becker's and Lam's theories predict that people who are less assimilated to the host society are more likely to marry co-ethnics. Exchange theory suggests that people who are least assimilated may be willing to exchange more in terms of their own higher earnings, good looks, and other positive characteristics for a same-ethnicity spouse even if that person does not have these same characteristics. For empirical support of these theories, it is useful to consider the relationship between commonly used measures of assimilation, such as age at arrival or host country language proficiency, and intermarriage rates.

Focusing on immigrants who arrived in the U.S. before marriage, Chiswick and Houseworth (2011) show using U.S. data that the probability of marrying someone with a different ancestry increases the lower the age at arrival of an immigrant. A study considering intermarriage in the Netherlands finds that Turkish, Moroccan, Surinamese and Antillean immigrants who arrive at older ages are more likely to be married within ethnicity than those arriving at younger ages (Kalmijn and van Tubergen 2006).

It is also reasonable to expect that immigrants who are more fluent in the host country's language are less likely to marry within ethnicity. Empirically verifying this, however, is difficult because immigrants who are more interested in interethnic marriages, or assimilation more generally, are more likely to invest in

learning the host country language. In fact, the direction of causality could go in the opposite direction; interethnically married immigrants may acquire host country language skills after marriage as a direct result of their marriage choice. Chiswick and Houseworth (2011) show that in the U.S. immigrants whose native languages are linguistically more distant from English are less likely to marry someone of different ethnic background, a finding pointing to the importance of language while addressing reverse causality concerns. To examine the importance of English language proficiency without relying solely on differences across native languages, Bleakley and Chin (2010) present evidence of a causal effect of (self-reported) English fluency on the likelihood of interethnic marriage by instrumenting for English fluency. Guven and Islam (2015) make the same conclusions taking a similar approach using data from Australia.

The relationship between assimilation and interethnic marriage also holds for the descendants of immigrants. The foreign born are more likely to marry within ethnicity than are their native-born children (Lieberson and Waters 1988; Qian et al. 2012). Third plus generation immigrants are less likely to marry someone of the same ancestry than are second-generation immigrants in the U.S. (Alba 1976, Logan and Shin 2012) and in Australia (Giorgas and Jones 2002, Khoo 2004).

Education is also likely to speed up the assimilation process and increase the likelihood of interethnic marriage. More highly educated immigrants may be better equipped to learn a new language and adapt to the new culture. Even second-generation immigrants, who have spent their entire lives in the host country and are surely fluent in the host country's language and familiar with the culture, may be more likely to outmarry in response to more years of schooling if education helps people become more appreciative of different cultures. There is substantial empirical evidence showing a positive relationship between education and intermarriage. First-generation immigrants in the Netherlands are more likely to marry outside of their ethnicity when they have more schooling (van Tubergen and Maas 2007). Using data from the U.S. but focusing on interracial marriage, Qian and Lichter (2007) show that highly educated Asians and Hispanics are more likely to marry whites than their less educated counterparts. Again using U.S. data, Furtado (2012) finds that second-generation immigrants with more education are generally more likely to marry outside of their ethnicity. Several other studies find similar relationships in a variety of different country contexts and populations (see Trilla et al. 2008, Chiswick and Houseworth 2011, Jian 2017, Qian and Qian 2020, Bandyopadhyay and Green 2021, Bohm-Jordan and Yang 2021).

Interethnic marriage patterns reveal information not only about how assimilated immigrants are but also to which groups within host societies they are (or are becoming) more similar. Consistent with the insights in Alba and Nee (2003), white immigrants in the U.S. are more likely to marry someone outside of their ancestral (or country of origin) group than are racial minorities (Chiswick and Houseworth 2011). This may be due to the particularly strong barriers preventing interracial marriages and the fact that the majority of the U.S. population is white. White immigrants are likely to find it easier to find a good marriage partner, with a different ancestral background, but within the same race than are other immigrants. Kalmijn and van Tubergen (2010) find similar results using a sample of both first- and second-generation immigrants. Focusing on Puerto Ricans, Mexicans, Chinese, and Filipinos, one study has shown that ethnic endogamy is high among both the foreign and native born, but to a lesser extent, so is panethnic endogamy. That is, individuals in these groups are especially likely to marry others of the same ethnicity, but when they do not, Puerto Ricans and Mexicans are likely to marry other Hispanics while the Chinese and Filipinos are especially likely to marry other Asians (Qian et al. 2012).

3.2 Opportunities for Meeting Same-Ethnicity Spouses

While there are many reasons to expect preferences to affect interethnic marriage tendencies, search models of marriage imply that changes in the frequency of interethnic marriage may say more about the likelihood

of meeting a same-ethnicity spouse than about the preferences for same-ethnicity spouses. People in larger ethnic groups are more likely to marry within ethnicity than are those with few fellow co-ethnics living in their country of residence. Analyzing over 140 ethnic groups in the U.S. from 1880 and 2011, Spörlein et al (2014) find that ethnic intermarriages increase when the relative size of an immigrant group decreases. Similar conclusions have been made in studies focusing on Asian Americans in the U.S. (Hwang et al. 1997) and immigrants in the Netherlands (Van Tubergen and Maas 2007).

It is important to keep in mind, however, that marriage markets typically do not extend to the entire country; they tend to be quite local. For this reason, what matters most is the representation of co-ethnics in local areas (Blau et al. 1982). Mexicans in the U.S. tend to have high rates of ethnic endogamy (Furtado 2015) not only because there are many Mexicans living in the U.S., but also because they typically live in areas with many other Mexicans due to residential segregation (Anderson and Saenz 1994; Lichter et al. 2007).

Even for people within a large ethnic group, meeting same-ethnicity spouses locally may be difficult when sex ratios are skewed (Anderson and Saenz 1994). A shortage of co-ethnic men in the 1980s induced more Asian women to marry outside of their ethnic group (Hwang et al 1997). Exploiting variation in sex ratios across ethnic groups during periods of mass migrations from England, Germany, Ireland, Italy, Poland, and Russia, Weiss and Stecklov (2020) show using data from the 1930 U.S. Census that an overrepresentation of a certain gender within a mass migration makes it less likely for people in the over-represented gender to marry a co-ethnic partner.

A final way in which opportunities can play a role in interethnic marriage decisions is through preferences for some characteristic in a spouse, besides ethnicity. If, for example, marriage market participants prefer spouses with a similar educational attainment, then individuals within an ethnic group with a large number of co-ethnics with a similar education level will find it easier to marry within ethnicity than do individuals within a group with very few co-ethnics having the same educational attainment. Furtado (2012) shows that increases in years of schooling lead to more interethnic marriage among second-generation immigrants in country of origin groups with low average educational attainments but less interethnic marriage for those in high education groups. Using more recent data, Furtado and Theodoropoulos (2011) make similar conclusions when using ancestry to measure country of origin and focusing on childhood arriving immigrants as well as the native-born who identify with a particular ancestry.

3.3 Impacts of Outside Factors

Outside forces such as world events and public policies can also change interethnic marriage tendencies. The 9/11 terror attacks transformed the economic and diplomatic landscape of the entire world. In the U.S. and in many other countries, the attacks induced a backlash against Muslim communities (see Gould and Klor (2016) for more details) and immigrants more generally. Exploiting state and time variation in the number of hate crimes against Muslims in the U.S., Gould and Klor (2016) show that after 9/11, Muslim immigrants in states with the largest increases in hate crimes became especially less likely to marry someone with an ancestry from a non-Muslim country.

Interestingly, the 9/11 attacks may have had the opposite effect on Hispanic immigrants. Wang and Wang (2012) show that foreign-born Hispanics became especially likely to marry natives (including non-Hispanic natives) after 9/11. Exploiting temporal and geographic variation in the toughness interior immigration enforcement in more recent years, Amuedo-Dorantes et al. (2020) show that increases in enforcement increase the likelihood that non-citizen Mexicans marry citizens. This broad set of results suggests that the legal status and perhaps even citizenship, often gained from marriage to a native, helped Hispanic

immigrants, particularly the likely undocumented, mitigate the harmful impacts of increased deportations of undocumented immigrants.

4 Effects of Interethnic Marriages

As an additional way of evaluating whether interethnic marriages are a good measure of the social integration of different ethnic groups, this chapter next considers the effects of interethnic marriages, rather than just their causes. Empirical studies of the relationship between intermarriage and various outcomes typically consider the effects of immigrant marriage to a native (as opposed to another immigrant) rather than focusing on interethnic marriage per se. While marriages consisting of two immigrants can involve two immigrants with very different ethnic backgrounds and mixed-nativity marriages can involve people with the same ethnic background, most same-nativity immigrant marriages are between immigrants from the same country and mixed-nativity marriages often involve different ethnicities. Even when immigrants marry natives with the same ethnic background, the native-born spouse will typically have many of the ethnic characteristics of the majority population in the host country, certainly more so than would a typical immigrant with the same ethnic background.

4.1 Labor Market Effects on the Partners

There are many theoretical reasons to believe that immigrants married to people outside of their ethnicity, and specifically the native-born, will assimilate more quickly than immigrants married to other immigrants from the same country of birth. First, marriage to someone of a different ancestry often implies that the host country's language is used within the household as well as with friends and family members of the nativeborn spouse. This additional exposure to the host country's language is not only likely to improve intermarried immigrants' textbook knowledge of the host country language, but also to help them understand host country norms and customs, as well as historical and cultural references. Improved language proficiency can then lead to higher wages (Bleakley and Chin 2004), employment in more secure jobs (Roshid and Chowdhury 2013), decreased likelihood of residing in ethnic enclaves (Bleakley and Chin 2010), and improved children's English proficiency (Bleakley and Chin 2008). Second, interethnic marriages may improve labor market opportunities by expanding the size or improving the quality of people's social networks. Between 30 to 60 percent of all job openings are filled using personal connections (Bewley 1999), and different immigrant groups tend to segregate into different types of occupations (Patel and Vella 2013). This implies that forming social connections in a different ethnic group might open doors in new occupations. Since many immigrant interethnic marriages involve marrying a native, then immigrants might also benefit from their native spouse's connections to other natives with higher paying jobs.

While there are theoretical reasons to expect interethnic marriage to accelerate the assimilation process, empirically verifying this is difficult. Ethnic minorities who are more similar to the majority population are more likely to intermarry. This implies that if ethnically intermarried minorities are indeed more assimilated, it is difficult to determine whether the interethnic marriage leads to more assimilation or if those intermarried people were more assimilated long before marriage.

One way to address this issue using longitudinal data is to determine whether there is a jump in the relative wages of intermarried immigrants after marriage. Analyses following individuals over time in general find no wage jumps after marrying a native (Nekby 2010; Nottmeyer 2010; Dribe and Nystedt 2014). However, although these findings imply little impact of immediate *marriage* to a native, abrupt changes soon after

marriage might not be expected. After all, it is likely not the marriage itself that generates higher wages but the broader association with natives that occurs starting in the courting stage of the relationship and continuing years after marriage.

A more popular way to identify causal impacts of intermarriage is to use instrumental variables strategies. These types of analyses typically use instruments that exploit plausibly exogenous variation in the likelihood of meeting same-ethnicity potential spouses. As discussed previously, fewer opportunities to meet same-ethnicity (gender-appropriate) spouses certainly increase the likelihood of inter-ethnic marriages, and it can be argued that marriage market conditions are not directly associated with wages and other measures of assimilation.

A seminal paper using the instrumental variables technique shows that male immigrants married to natives earn higher wages than those married to other immigrants in Australia (Meng and Gregory 2005). Similar results were found using data from France (Meng and Meurs 2009). Using similar techniques, Furtado and Theodoropoulos (2009) show that marriage to a native increases employment for male immigrants in the U.S., and Furtado and Theodoropoulos (2010) present several pieces of evidence suggesting that access to native networks is an important driver of this relationship. In terms of entrepreneurship, immigrants married to natives are less likely to start their own businesses, but conditional on starting a business, they are less likely to exit from entrepreneurship (Georgarakos and Tatsiramos 2009). This may be because access to native networks help immigrants enter paid employment positions, but these same networks also facilitate business survival.

Interestingly, marriage to a native does not generally improve labor market outcomes of women. Again taking an instrumental variables approach and using U.S. data, Basu (2015) finds that marriage to a native decreases Asian immigrant women's wages as well as hours worked. This may be a result of an income effect since native-born husbands tend to have higher wages than do foreign-born husbands. Using data from Italy, Medina and Valentova (2021) find no impact of marriage to a native on women's wages when using instrumental variables techniques.

While all of these studies use marriage market variables, such as the size of the ethnic group or the sex ratio within the group, as IVs, they differ in terms of how they define marriage markets. Meng and Gregory (2005) use both instruments and define marriage markets based on age and religion. Meng and Meurs (2009) also use both but define marriage markets based on age and region of residence. Furtado and Theodoropoulos (2009) use only the size instrument and specify marriage markets based on age and city of residence. Since there were no statistical differences between OLS and IV results based on this instrument (and IV results were actually larger in magnitude), Furtado and Theodoropoulos (2010) do not use IV techniques in their preferred specification. Basu (2015) and Medina and Valentova (2021) use the two instruments and specify marriage markets according to age and local area. Georgarakos and Tatsiramos (2009) use the share of female migrants in a state at the time of the immigrant's arrival as the instrumental variable.

As discussed previously, one of the potential mechanisms driving the relationship between intermarriage and labor market outcomes is that intermarried immigrants are more likely to adopt the host country customs and norms. Intermarried immigrants are more likely to choose domestic names for their children (Gerhards and Hans 2009) and less likely to live in ethnic enclaves (Ellis et al. 2006). Immigrants married to natives also appear more committed to remaining in the host country making it more likely that they will invest in host country specific human capital. They acquire the native language faster (Meng and Gregory 2005) and are less likely to express intentions to return to their home country and to send home remittances (Weber 2015).

While most of the literature finds positive outcomes for immigrants married to natives, intermarriages need not always have beneficial labor market effects. There are scenarios in which access to ethnic networks may be more useful than native networks. After all, ethnic networks are often very cohesive and may provide more and better information to network members. In the U.S., higher rates of ethnic endogamy among childhood-arriving immigrants in an ethnic group tend to increase the group's industrial concentration among the self-employed (Kerr and Mandorff 2021). This result is consistent with a model in which more socially isolated immigrant groups can more easily share sector-specific skills with coethnics in non-work settings (Kerr and Mandorff 2021).

4.2 Effects on Children of Interethnic Marriages

In considering the relationship between intermarriage and the intergenerational assimilation of immigrants, it is useful to compare outcomes of children based on the ethnicity and nativity of their parents. From a theoretical perspective, it is reasonable to believe that intermarriage-induced assimilation of parents is transmitted to children. For example, given the evidence that intermarried couples are less likely to live in ethnic enclaves (Ellis et al. 2006), children of intermarried parents are also going to be less likely to live in ethnic enclaves. The evidence that immigrants married to natives tend to earn higher wages than do those immigrants married to other immigrants (Meng and Gregory 2005, Meng and Meurs 2009) suggests that children with one native-born parent will also earn higher wages than children with two immigrant parents. On the other hand, the native-born children of immigrants have spent their entire lives in the host country and rarely struggle with the host country language. It may be then that the outcomes of native-born children of immigrants are not sensitive to the ethnicity or nativity of their parents.

At the other extreme, it is also possible that children with two foreign-born parents from the same country inherit the optimism and ambition of their parents without having to struggle with language difficulties, discrimination, and the shock of migration (Kao and Tienda 1995). Moreover, their exposure to ethnic communities may help develop an appreciation for diversity that is useful in the labor market. Indeed, segmented assimilation theory predicts that more attachment to ethnic communities can actually be protective for certain groups of native-born children (Portes and Zhou 1993). Additionally, intermarriages are associated with higher divorce rates (Dribe and Lundh, 2012; Kalmijn et al 2005), and there is evidence that in general children with divorced parents have worse outcomes (McLanahan et al 2013). For all of these reasons, the children of two immigrant same-ethnicity parents may actually have better human capital and labor market outcomes than the children of mixed nativity (and most likely interethnically married) parents.

The empirical relationship between intermarriage of parents and children's outcomes is far from clear in the literature. On average, U.S.-born children of one foreign-born parent and one native-born parent tend to complete more years of schooling than those children with two foreign born parents (Ramakrishnan 2004). Consistent with this result, using data on second-generation immigrants in four European countries, Kalmijn (2015) finds that teenage children of mixed nativity parentage tend to score better on language achievement tests than do children with two foreign-born parents but worse than children with two native-born parents. This same study also shows that children with intermarried parents have more social interactions with other natives and tend to be less religious than children with two foreign born parents.

It is difficult to interpret these results, however, because marriage types of parents are not randomly assigned. As discussed in Section 3.1, highly educated immigrants are generally more likely to marry interethnically, but they are also likely to have high achieving children regardless of their marriage choices. Researchers have taken several different approaches to address this issue. Controlling for parental

characteristics such as education typically does not change the main relationships in the raw data, leading some authors to conclude that selection into marriage is important but not transformational (e.g. Kalmijn 2015). Tegunimataka (2021) finds that children of one native parent and one immigrant parent earn substantially higher grades than children with two immigrant parents, even after controlling for school fixed effects and cousin fixed effects.

While controlling for parental characteristics is helpful for gaining some sense of the magnitude of the selection bias, it is impossible to control for characteristics such as ambition, which is difficult to measure and certainly unavailable in most surveys. To control for unobservable characteristics, some authors have used instrumental variables techniques exploiting variation in marriage market conditions at the time parents were likely to have gotten married. Taking advantage of plausibly exogenous variation in the placement of Moluccan refugees in the Netherlands within an IV analysis, van Ours and Veenman (2010) show that children of Moluccan fathers and native mothers are better educated than children of endogamous Moluccan couples. A potential concern with the van Ours and Veenman (2010) analysis is that the size of the Moluccan population in an area, even if exogenous, might affect outcomes of children for reasons unrelated to the ethnicity or nativity of their parents. To address this issue, Furtado (2009) controls for the size of co-ethnic population at the time and place of the survey in her baseline specification but uses the size of the opposite sex co-ethnic population at the time and place parents were likely on the marriage market as an instrumental variable. Empirical evidence in Furtado (2009) suggests that while in general, children with two foreign born parents have higher dropout rates than children of mixed nativity parents, the relationship reverses when an IV approach is taken to address selection into mixed marriages.

An analysis of the relationship between intermarriage and child outcomes for the third generation and beyond is more difficult because the most commonly used data sets in this literature typically do not contain information on grandparents' or great-grandparents' countries of birth. Using relatively small sample sizes, one study finds that third-generation Mexicans with Mexican ancestry on both sides of the family have fewer years of schooling than those with Mexican ancestry on only one side of the family (Duncan et al. 2020). In addition, schooling among third-generation Mexicans tends to decrease with the number of Mexican-born grandparents (Duncan et al. 2020), pointing to a positive relationship between inter-ethnic marriage and schooling across the generations.

These findings make it important to use caution when interpreting measures of immigrant intergenerational assimilation that rely on self-identification of ancestry. There is evidence that the native-born children of interethnically married immigrant parents and grandparents are less likely to self-identify with a particular ancestry (Duncan and Trejo 2011a; Duncan and Trejo 2011b). Since interethnically married couples tend to be more highly educated, then in the third generation and beyond, those who self-identify with a particular ancestry are going to be less educated on average than those who do not. This implies that studies relying on self-identification of ethnicity in the third generation are going to find less assimilation in terms of education attainment than studies using objective measures of ancestry based on countries of birth of ancestors (Duncan and Trejo 2011a, 2011b, 2017). Similar problems arise for studies examining intergenerational assimilation of immigrants in terms of health (Antman et al. 2020).

5 Open Questions

There is ample evidence that individuals who are more similar to people in ethnic groups besides their own are more likely to intermarry and some evidence that people who marry outside of their ethnicity become even less like those in their group. What is left unanswered is how these marriages affect others in their

social circles. From a theoretical perspective, if a co-ethnic close friend or family member is married to someone of a different ethnicity, then this is likely to result in more exposure to people of that different ethnicity at family events and celebrations. Exposure in itself can lead to more understanding and appreciation of people in different groups. Even if no additional exposure occurs, the fact that a personal acquaintance chose to marry someone of a different group might be interpreted as evidence that people in the outside group are not as different as one might have believed. The increased exposure together with potentially increased openness for the many people socially connected to the interethnic couple may lead to further decreased boundaries for the two groups, potentially leading to more interethnic marriages, which in turn, lead to a further break-down of social boundaries. Future research may examine the conditions under which an interethnic marriage leads to relatively faster or slower breaking down of boundaries between ethnic groups. It would also be useful to learn the extent to which discrimination and stigmatization of certain groups slows down this process.

Another potential avenue for future research is to use interethnic marriage patterns as a way to examine the impacts of policy changes on attitudes towards people of different groups. Many controversial public policies, perhaps specifically those related to race and immigration, run the risk of actually hurting the very people they intend to protect if they result in worsening attitudes of the majority towards racial and ethnic minorities. For example, affirmative action policies can lead to backlash (Pierce 2012) and generous welfare programs for refugees can lead to more resentment towards refugees. By examining how interethnic marriage or even cohabitation patterns change as a result of the enactment or even just discussion of controversial policies, policymakers can observe the impact of policies on attitudes without needing to conduct specialized surveys.

Summary

For many years, the prevalence of interethnic marriages has been used as a measure of social distance between ethnic groups. For the case of immigrants, interethnic marriage has even been called the "final stage" of assimilation (Gordon 1964). This chapter starts with a theoretical examination of why intermarriage is likely to be a good measure of social distance providing arguments for why interethnic marriages can be both the outcome of assimilation and a catalyst for further assimilation.

The chapter then goes over the empirical literature on intermarriage. In general, immigrants who arrive in the U.S. at a younger age, who are more fluent in the host country language, and who are better educated are more likely to interethnically marry. The native-born children of immigrants (second generation) are less likely to marry than endogamously than (first generation) immigrants but are more likely to marry within ethnicity than third and higher generation immigrants. However, even holding individual characteristics such as these constant, social environments also play an important role in intermarriage formation. People in smaller ethnic groups are generally less likely, all else equal, to marry within ethnicity simply because it is more difficult for them to find acceptable marriage partners within a small pool. Holding constant ethnic group size, how dispersed a group is throughout the country is also an important measure of the availability of potential same-ethnicity spouses. People in highly segregated groups may find it easier to meet appropriate same-ethnicity spouses within their local communities than those in more dispersed groups. Skewed sex ratios within ethnic groups can also make it difficult for heterosexual spouse searchers to find good matches within ethnicity. The chapter also discusses how institutional factors, such as immigration policies and their implementation, can also affect preferences for interethnic marriages.

The chapter ends with a survey of the effects of interethnic marriages. Compared to those married endogamously, immigrants in interethnic marriages tend to have better labor market outcomes. This may be because most immigrants in interethnic marriages are married to natives of a different ethnicity, and the

increased exposure to natives can lead to improved host country language fluency and access to social networks with better labor market prospects. The chapter also considers the relationship between immigrant intermarriage the educational attainment of the next generation, but results are quite mixed depending on which empirical strategies are used to estimate causal effects.

Cross References

Ethnicity Race and Minorities

Group Identity, Ingroup Favoritism, and Discrimination

Social Integration and Identity

Social Norms and the Labor Market

Acknowledgement

Responsible Section Editor: Dr. Klaus F. Zimmermann

The article has benefitted from valuable comments of the editors and anonymous referees. There is no conflict of interest.

References

Ahtone T (2011) Native American intermarriage puts benefits at risk.

https://www.wbur.org/npr/134421470/native-american-intermarriage-puts-benefits-at-risk. Accessed Jan 12 2021

Alba R (1976) Social assimilation among American Catholic national-origin groups. American Sociological Review 41(6): 1030–1046

Alba R, Nee V (2003) Remaking the American mainstream: assimilation and contemporary immigration. Cambridge, Mass: Harvard University Press.

Amuedo-Dorantes C, Arenas-Arroyo E, Wang C (2020) Is immigration enforcement shaping immigrant marriage patterns? Journal of Public Economics 190

Anderson R, Saenz R (1994) Structural determinants of Mexican American intermarriage, 1975-1980. Social Science Quarterly (University of Texas Press) 75(2): 414–430

Antman F, Duncan B, Trejo S (2020) Ethnic attrition, assimilation, and the measured health outcomes of Mexican Americans. Journal of Population Economics 33(4): 1499–1522

Bandyopadhyay S, Green E (2021) Explaining inter-ethnic marriage in Sub-Saharan Africa. Journal of International Development 33(4): 627

Basu S (2015) Intermarriage and the labor market outcomes of Asian women. Economic Inquiry 53(4): 1718–1734

Becker G (1973) A theory of marriage: Part I. Journal of Political Economy 81(4): 813-846

Behtoui A (2010) Marriage pattern of immigrants in Sweden. Journal of Comparative Family Studies 41(3): 415–435

Bewley T (1999) Why wages don't fall during a recession. Harvard University Press.

Bisin A, Verdier T (2000) "Beyond the melting pot": cultural transmission, marriage, and the evolution of ethnic and religious traits. The Quarterly Journal of Economics 115(3): 955–988

Blau P, Blum T, Schwartz J (1982) Heterogeneity and intermarriage. American Sociological Review 47(1): 45–62

Bleakley H, Chin A (2004). Language skills and earnings: evidence from childhood immigrants. The Review of Economics and Statistics 86(2): 481–496

Bleakley H, Chin A (2008) What holds back the second generation? The intergenerational transmission of language human capital among immigrants. The Journal of Human Resources 43(2): 267–298

Bleakley H, Chin A (2010) Age at arrival, English proficiency, and social assimilation among US immigrants. American Economic Journal: Applied Economics 2(1): 165–192

Bohm-Jordan M, Yang P (2021) Determinants of intermarriages among foreign-born Asians in the United States. Marriage & Family Review 57(1): 59–91

Chiswick B, Houseworth C (2011) Ethnic intermarriage among immigrants: human capital and assortative mating. Review of Economics of the Household 9(2): 149–180

Davis K (1941). Intermarriage in caste societies. American Anthropologist 43(3): 376–395

Dribe M, Lundh C (2012) Intermarriage, value context and union dissolution: Sweden 1990—2005 / Mariage mixte, contexte des valeurs et rupture d'union: Suède 1990—2005. European Journal of Population / Revue Européenne de Démographie 28(2): 139–158

Dribe M, Nystedt P, (2014) Is there an intermarriage premium for male immigrants? Exogamy and earnings in Sweden 1990-2009. The International Migration Review 49(1): 3–35

Duncan B, Trejo S (2011a) Inter-marriage and the intergenerational transmission of ethnic identity and human capital for Mexican Americans. Journal of Labor Economics 29 (2): 195–227

Duncan B, Trejo S (2011b) Tracking intergenerational progress for immigrant groups: the problem of ethnic attrition. The American Economic Review 101(3): 603–608

Duncan B, Trejo S (2017) The complexity of immigrant generations: implications for assessing the socioeconomic integration of Hispanics and Asians. ILR Review 70(5): 1146–1175

Duncan B, Grogger J, Leon A, Trejo S (2020) New evidence of generational progress for Mexican Americans. Labour Economics, 62

Ellis M, Wright R, Parks V (2006) The immigrant household and spatial assimilation: partnership, nativity, and neighborhood location. Urban Geography 27(1): 1–19

Furtado D (2009) Cross-nativity marriages and human capital levels of children. In: Ethnicity and labor market Outcomes, vol. 29. Bingley, U.K.: Emerald, p 273–296

Furtado D (2012) Human capital and interethnic marriage decisions. Economic Inquiry 50(1): 82-93

Furtado D (2015) Ethnic intermarriage. In: Wright J (ed) International encyclopedia of social and behavioral sciences, 2nd edn. Elsevier, Oxford, p 118-122

Furtado D, Theodoropoulos N (2009) I'll marry you if you get me a job: marital assimilation and immigrant employment rates. International Journal of Manpower 30(1–2): 116–126

Furtado D, Theodoropoulos N (2010) Why does intermarriage increase immigrant employment? the role of networks. B.E. Journal of Economic Analysis & Policy: Topics in Economic Analysis & Policy 10(1)

Furtado D, Theodoropoulos N, (2011) Interethnic marriage: a choice between ethnic and educational similarities. Journal of Population Economics 24(4): 1257–1279

Furtado D, Trejo S (2013) Interethnic marriages and their economic effects. In: Constant A, Zimmermann K (eds) International handbook on the economics of migration (Chapter 15). Edward Elgar Publishing, Cheltenham, p 276–292

Georgarakos D, Tatsiramos K (2009) Immigrant self-employment: does intermarriage matter? In: Constant A, Tatsiramos K, Zimmermann K (eds.) Ethnicity and Labor Market Outcomes (Research in Labor Economics, Vol. 29), Emerald Group Publishing Limited, Bingley, p 253-271

Gerhards J, Hans S (2009) From Hasan to Herbert: name - giving patterns of immigrant parents between acculturation and ethnic maintenance. American Journal of Sociology 114(4): 1102 - 1128

Giorgas D, Jones F (2002) Intermarriage patterns and social cohesion among first, second and later generation Australians. Journal of Population Research 19(1): 47

Gordon M (1964) Assimilation in American Life: The Role of Race, Religion, and National Origins. New York: Oxford University Press

Gould E, Klor E (2016) The long-run effect of 9/11: terrorism, backlash, and the assimilation of Muslim immigrants in the West. Economic Journal 126(597): 2064–2114

Guven C, Islam A (2015) Age at migration, language proficiency, and socioeconomic Outcomes: evidence from Australia. Demography (Springer Nature), 52(2), 513–542.

Hohmann-Marriott B, Amato P (2008) Relationship quality in interethnic marriages and cohabitations. Social Forces 87(2): 825–855

Hwang S, Saenz S, Aguirre B (1997) Structural and assimilationist explanations of Asian American intermarriage. Journal of Marriage and Family 59(3): 758–772

Jian Z (2017) The recent trend of ethnic intermarriage in China: an analysis based on the census data. The Journal of Chinese Sociology 4(1): 1–23

Kalmijn M (1998) Intermarriage and homogamy: causes, patterns, trends. Annual Review of Sociology 24: 395–421

Kalmijn M (2015) The children of intermarriage in four European countries. Annals of the American Academy of Political and Social Science 662(1): 246–265

Kalmijn M, van Tubergen F (2006) Ethnic intermarriage in the Netherlands: confirmations and refutations of accepted insights. European Journal of Population 22(4): 371–397

Kalmijn M, van Tubergen F (2010) A comparative perspective on intermarriage: explaining differences among national-origin groups in the United States. Demography 47(2): 459–479

Kalmijn M, de Graaf P, Janssen J (2005) Intermarriage and the risk of divorce in the Netherlands: The effects of differences in religion and in nationality, 1974-94. Population Studies 59(1): 71–85

Kao G, Tienda M (1995) Optimism and achievement: the educational performance of immigrant youth. Social Science Quarterly 76(1): 1–19

Kerr W, Manorff M (2021) Social networks, ethnicity, and entrepreneurship. Journal of Human Resources 57(1)

Khoo S (2004) Intermarriage in Australia: patterns by ancestry, gender and generation. People and Place 12(2): 35

Lam D (1988) Marriage markets and assortative mating with household public goods: theoretical results and empirical implications. The Journal of Human Resources 23(4): 462–487

Lichter D, Brown B, Qian Z, Carmalt J (2007) Marital assimilation among Hispanics: Evidence of declining cultural and economic incorporation? Social Science Quarterly 88(3): 745–765

Lieberson S, Waters M (1988) From many strands: ethnic and racial groups in contemporary America. Russell Sage Fndtn.

Logan J, Shin H (2012) Assimilation by the third generation? Marital choices of white ethnics at the dawn of the twentieth century. Social Science Research 41(5): 1116–1125

McLanahan S, Tach L, Schneider D (2013) The causal effects of father absence. Annual Review of Sociology 39: 399–427

Medina J, Valentova M (2021) The effects of intermarriage on wages for immigrant women in Italy. Journal of Family Issues

Meng X, Gregory R (2005) Intermarriage and the economic assimilation of immigrants. Journal of Labor Economics 23(1): 135–174

Meng X, Meurs D (2009) Intermarriage, language, and economic assimilation process. International Journal of Manpower 30(1/2): 127-144

Merton R (1941) Intermarriage and social structure. Psychiatry 4: 361–374

Milewski N, Kulu H (2014) Mixed marriages in Germany: a high risk of divorce for immigrant-native couples / Mariages mixtes en Allemagne: un risque de divorce élevé pour les couples immigrant(e) et natif(ve) d'Allemagne. European Journal of Population / Revue Européenne de Démographie 30(1): 89–113

Nekby L (2010) Inter-and intra-marriage premiums revisited: It's probably who you are, not who you marry! IZA DP No. 5317

Niedomysl T, Östh, J, van Ham, M (2010) The globalisation of marriage fields: the Swedish case. Journal of Ethnic & Migration Studies 36(7): 1119–1138

Nottmeyer O (2010) Does intermarriage pay off? A pane; data analysis. IZA DP No. 5104

Nottmeyer O (2015) Intermarriage and the economic success of immigrants. IZA World of Labor. 1–10

Patel K, Vella F (2013) Immigrant networks and their implications for occupational choice and wages. Review of Economics & Statistics 95(4): 1249–1277

Pierce, J. (2012). Racing for innocence: whiteness, gender, and the backlash against affirmative action. Stanford University Press

Portes A, Zhou M (1993) The new second generation: Segmented assimilation and its variants. The Annals of the American Academy of Political and Social Science 530: 74–96

Qian Z, Lichter D (2007) Social boundaries and marital assimilation: interpreting trends in racial and ethnic intermarriage. American Sociological Review 72(1): 68–94

Qian Z, Qian Y (2020) Generation, education, and intermarriage of Asian Americans. Journal of Ethnic & Migration Studies 46(14): 2880-2895

Qian Z, Glick J, Batson C (2012) Crossing boundaries: nativity, ethnicity, and mate delection. Demography (Springer Nature) 49(2): 651–675

Ramakrishnan K (2004) Second-generation immigrants? The '2.5 generation' in the United States. Social Science Quarterly 85(2): 380–399

Roshid M, Chowdhury R (2013) English language proficiency and employment: A case study of Bangladeshi graduates in Australian employment market. Mevlana International Journal of Education 3(1), 68–81.

Rumbaut R (1994) The crucible within: ethnic identity, self-esteem, and segmented assimilation among children of immigrants. The International Migration Review 28(4): 748–794

Spörlein C, Schlueter E, van Tubergen F (2014) Ethnic intermarriage in longitudinal perspective: testing structural and cultural explanations in the United States, 1880–2011. Social Science Research 43: 1–15

Tegunimataka A (2021) The intergenerational effects of intermarriage. Journal of International Migration and Integration / Revue de l'integration et de La Migration Internationale 22(1): 311

Trilla C, Esteve A, Domingo A (2008) Marriage patterns of the foreign-born population in a new country of immigration: The case of Spain. International Migration Review 42(4): 877–902

Uddin M (2021) The meaning of marriage to the Rohingya refugees, and their survival in Bangladesh. Journal of Refugee Studies 34(2): 2036–2051

van Ours J, Veenman J (2010) How interethnic marriages affect the educational attainment of children: evidence from a natural experiment. Labour Economics 17(1): 111–117

van Tubergen F, Maas I (2007) Ethnic intermarriage among immigrants in the Netherlands: an analysis of population data. Social Science Research 36(3): 1065–1086

Villazor R (2018) Residential segregation and interracial marriages. Fordham Law Review 86(6): 2717–2726

Wang C, Wang L (2012) The effects of 9/11 on intermarriage between natives and immigrants to the U.S. Review of Economics of the Household 10(2): 171–192

Weber R, (2015) Does intermarriage change migrants' preferences for the home country? IZA Journal of Migration 4(1): 1–21

Weiss I, Stecklov G (2020) Assimilation and ethnic marriage squeeze in early 20th century America: A gender perspective. Demographic Research 42: 99–132

Index Terms

Assimilation, 2 Ethnicity, 3 Interethnic marriage, 2 Intergenerational assimilation, 11