

Different Contexts and Trends: Latina Immigrant Fertility in the US and Spain

G. Cristina Mora*, Juan J. Fernández** and Margarita Torre**

ABSTRACT

This article provides the first cross-national assessment of Latina immigrant fertility trends. Specifically, we compare Ecuadorian women in Spain (EiS) to Mexican women in the United States (MiUS). We focus on these two groups because they (1) have similar socio-economic profiles and (2) are the largest Latina subgroups in their respective host countries. We show that since 2001, the fertility rate of EiS has declined substantially more than the fertility rate of MiUS has. Drawing on census and administrative data in both countries, we assess four factors that might explain this difference: economic cycles, linguistic affinity, labor market participation, and education. We argue that labor market and education factors can best help to explain Latina fertility patterns. We conclude by discussing the findings with regard to contemporary arguments about Latino culture and immigrant fertility, and by describing the study's policy implications.

INTRODUCTION

In 2012 the Census Bureau forecasted that the United States would soon become a majority minority country (US Census Bureau, 2012). The announcement caused much media speculation about Latino families, with commentators repeating that Latinas had higher fertility rates than most other US groups (Cohn, 2014; Blau et al., 2008; Carter 2000). Indeed, while scholars have tried to explain this trend by pointing to social structures and debating the merits of Latino “familism” (Landale and Oropresa 2007; Bean, Swicegood, and Burg 2000; Vega 1995), the media have consistently fallen back on negative stereotypes of the overly-fertile Latina disposition (Chavez, 2008).

But what about the fact that Latinas who settle in Spain have one of the lowest fertility rates in the world? Although it was initially believed that Latinas could help pull Spain out of its demographic crisis (Prats, 2013; Aunion, 2014), academics now note that immigrant fertility has fallen there and failed to make much of an impact (Ibáñez, 2010; Roig Vila & Castro Martín, 2007). In fact, our analyses show that the fertility rates of Ecuadorian immigrant women, who compose the largest Latina group in Spain, have plunged dramatically in the last decade and are now roughly equal to the extremely low rates of Spanish women (Kohler, Billari, & Ortega, 2002; Bongaarts & Sobotka, 2012).

In this article, we use the comparative Latina case to illuminate how national context influences immigrant fertility and to complicate arguments about a culture of Latino familism. Specifically, we compare Ecuadorian women in Spain (hereafter, EiS) with Mexican women in the United States

* University of California, Berkeley. All authors contributed equally to this project.

** Universidad Carlos III de Madrid

(hereafter, MiUS). While not perfect matches, we argue that these groups are comparable because they hold roughly similar structural positions in their host countries and face many of the same social mobility barriers. Specifically, we draw on Spanish and US data to address whether four issues – economic climate, language affinity, labour market participation, and education – might explain why Latina fertility has fallen more in Spain than in the United States. We contend that differences in labour market and educational enrolment can best explain these patterns. Finally, we discuss these findings with respect to cultural explanations of Latina fertility and broader understandings of immigrant fertility and adaptation.

LITERATURE REVIEW

Latino Immigration to Spain and the United States

Since the 1990s, Latino immigration to Spain has increased more than fivefold. Numbering over 400,000 in 1991, this population rose to about 2.3 million by 2013 (INE 2015). Much of the increase coincided with Spain's rapid economic growth at the end of the 1990s and early twenty-first century, as Ecuadorans, Bolivians, Colombians and others took jobs in the Spanish construction, service, and domestic care sectors (Cachón Rodríguez, 2009; Aja, 2012; Hierro, 2013).

As a relatively new migrant stream, Latinos in Spain differ from those in the United States. While Latinos in Spain are mainly South American, those in the United States are most likely to come from Mexico, Central America, and the Caribbean. Using 2007 data, Connor and Massey (2010) also find that when their data is lumped together, Latinos in Spain tend to be better educated than those in the United States. However, this pattern is not confirmed for every group: Ecuadorians in Spain, for example, display similar socio-economic characteristics to Mexicans in the US (see Table A1 in the Appendix). Importantly, Latinos in Spain also share more cultural attributes with host-country natives than do Latinos in the US. Indeed, Latino immigrants speak Spanish and are predominantly Catholic, characteristics that may allow them to connect more easily with Spaniards than with non-Latino Americans (see Huntington, 2004; and Delgado and Lozano, 2007). Despite these differences, first generation Latino immigrants in both countries do share many similarities. To begin, Latinos in both Spain and the US are primarily channelled into low-wage labour systems (e.g. house-keeping and care-giving) (Aysa-Lastra and Cachón, 2015) and encounter restrictive legal regimes. An immigrant in Spain who has an irregular status, for example, does not have access to certain vital benefits of the Spanish welfare state (e.g., healthcare) and must find informal work opportunities where fair wage standards are often under-enforced (Pabón López, 2007; Calavita, 2005). Latinos in the United States face similarly adverse conditions, but they are also subject to more prevalent deportation campaigns that can have drastic effects on families (Gonzalez, 2013). Moreover, Latinos are subject to xenophobia and discrimination both in Spain and in the US, although there is much more research documenting the latter case (but see Retis and García, 2010; Flores, 2015.)

Taken together the differences and similarities of Latino immigrants in both countries provide an opportunity to add complexity to arguments about the purported existence of a Latino cultural predisposition to high fertility and a preference for larger families (Vega, 1995).

Immigration, Fertility and National Comparisons

Latino migration to Spain has coincided with a stark drop in Spanish fertility rates since the late 1970s. In 1981, Spain registered a total fertility rate of 2.2, but by 2012 this rate had dropped to 1.3 (Eurostat, 2014). Given this decline, scholars saw immigrant fertility as a possible means to limit population aging (Roig Vila and Castro Martin, 2007).

The research on European migrants, however, generally finds that immigrants adopt native fertility rates as their stay in the host country increases (Dubuc, 2012; Kahn, 1994; Sobotka, 2008). For instance, studies on Sweden show that women who migrated there as children adopted the fertility rates of natives much more quickly than those who had migrated later (Andersson, 2004). Similar assimilation trends have been found in Germany (Milewski, 2010; Mayer and Riphahn, 2000), the United Kingdom (Georgiadis and Manning, 2012; Coleman and Dubuc, 2010) and Spain (Ibáñez, 2010).

Immigrant fertility trends in the US are starkly different from those in Europe. In the US, immigrants, especially Latinos, consistently display higher fertility rates than non-immigrant whites (Bean, Swicegood, and Burg, 2000; Carter, 2000; Frank and Hueveline, 2005; Lichter et al., 2012), although the magnitude of the difference is still being hotly debated (see Parrado & Morgan, 2008; DeLeone, Lichter, & Strawderman, 2009). Researchers have paid considerable attention to Mexican fertility, in part because Mexicans seem to account for much of the fertility differential between Hispanics and non-Hispanics in the US (see Lichter et al., 2012).

To date, most studies on European and US immigrant fertility have been case-based, focusing on the fertility of different kinds of immigrants within a single country (see Adsera and Ferrer, 2014). Other work has compared the fertility rates of several types of immigrants across countries (Coleman, 1994; Sobotka, 2008). While informative, these studies were not designed to consider equivalent groups and thus do not allow scholars to assess the role that national context might play on immigrant fertility. By focusing on Latinas in Spain and the United States, however, we are able to offer a preliminary assessment of how national context affects fertility.

Figure 1 documents the total fertility rate (TFR)¹ of EiS and MiUS. The left plot reveals that the TFRs of Spanish and US citizens have remained rather stable. Additionally, it shows that the TFRs of EiS and MiUS declined between 2001 and 2013. It is important to note that the figure also reveals that the *degree* to which fertility declined for EiS and MiUS is strikingly different. The TFR of EiS declined from 2,739 to 1,162, a 57.6 per cent drop in only twelve years. The TFR of MiUS, however, declined from 3,416 to 2,694, a 21.2 per cent drop over the same period. As these findings demonstrate, the fertility decline has been much steeper for EiS than for MiUS.²

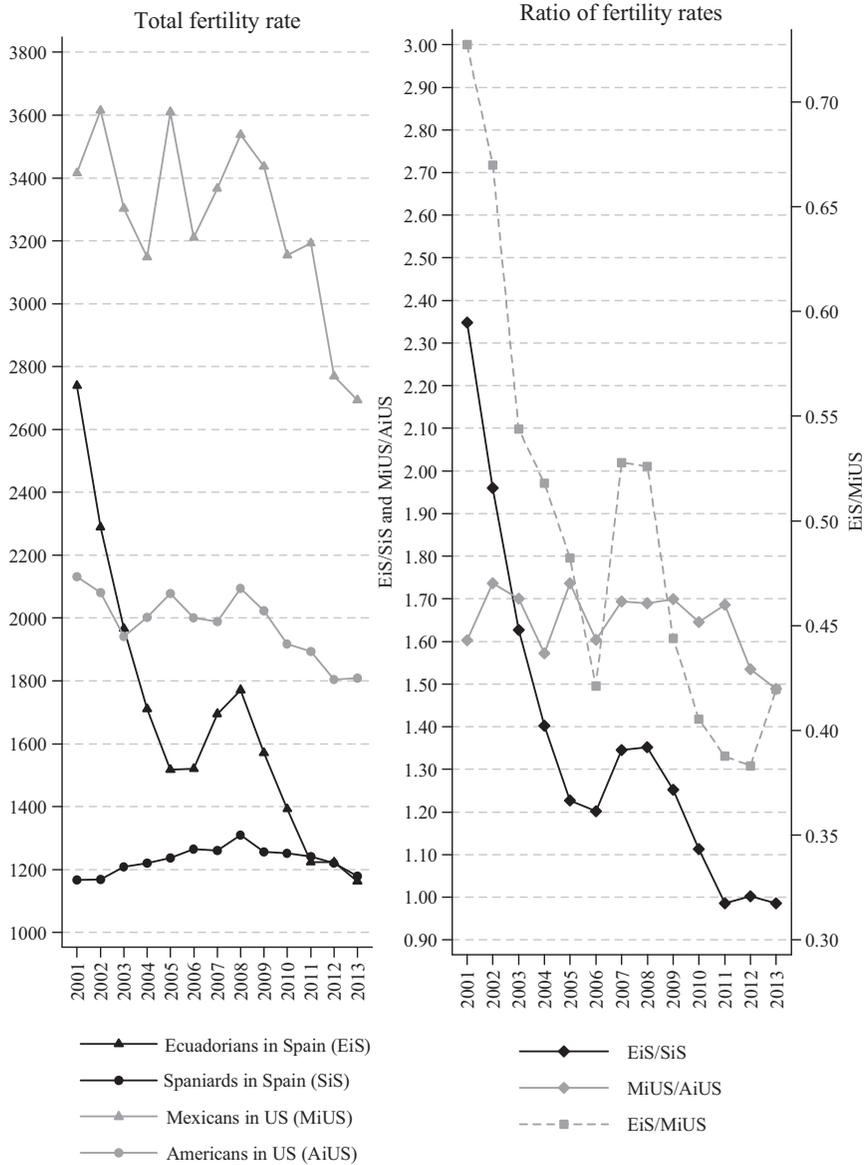
The right plot displays the ratio of the immigrant group's TFR to the native group's in each country. The ratio in Spain declined from 2.35 – that is, in 2001 Ecuadorians had a fertility rate roughly twice as high as Spaniards – to 0.99. Hence over a mere ten-year period, Ecuadorian women have reduced their number of births *much more* than Spanish women have. Overall, the Spanish case shows an increasing similarity between immigrant and native TFRs, along with a stark Latina immigrant fertility decline. In the US, we also observe some convergence in immigrant/native fertility trends, but to a lesser extent than the Spanish case.

To explain these different immigrant fertility patterns in Spain and the United States, we consider four factors – economic cycle, linguistic affinity, labour market participation, and educational enrolment – which have been said to influence fertility more generally.³ Although there are other factors that may influence fertility, such as individual preferences or certain features of an immigrant community's composition (especially presence of a co-ethnic second generation), data limitations restrict our analyses to these areas of investigation. After describing our data, we expand on each factor below.

DATA

Following previous research, we estimate fertility rates for MiUS using the American Community Survey (ACS), especially the Public Use Microdata Sample (PUMS) (United States Census Bureau, 2014a). For Spain, the Civil Register (equivalent to the US' Vital Statistics) provided the data on annual births, while the Municipal Population Register (*Padrón municipal*) provided the age structure of EiS and Spanish citizens (Instituto Nacional de Estadística, 2014b, 2014c). Both sources

FIGURE 1
TOTAL FERTILITY RATE OF FOUR GROUPS LIVING IN SPAIN AND THE US, 2001-2013



have been frequently utilized in previous Spanish demographic research (Rodríguez, Regidor and Gutiérrez-Fisca, 1995; Rosero-Bixby et al., 2011).

To assess labour market engagement and education enrolment, we rely on official labour market surveys: Active Population Survey (*Encuesta de Población Activa*, EPA) for Spain and Current Population Survey (CPS) for the US (Instituto Nacional de Estadística, 2014a; United States Census Bureau, 2014b). We complement data from these sources with descriptive statistics about EiS' socio-demographic characteristics. These were taken from a random sample of the latest Population

and Housing Census, taken in 2011 (Instituto Nacional de Estadística, 2014a). We restrict the analysis of fertility rates to 2001-2013 because the Spanish National Statistical Institute only provides information on the births of Ecuadorian Spanish citizens from 2001 onward.

RESULTS

Before we delve into the specific factors that might influence fertility trends in both countries, we first assess the socio-demographic profiles of EiS and MiUS. Selection theorists (Myers and Morris, 1966) might argue that differences in fertility between EiS and MiUS could be related to major socio-demographic differences between the two groups. Mexican emigration is an important case in point. Mexicans who settle Spain are probably much better educated and more likely to take on professional positions than Mexicans who migrate to the United States (Connor and Massey, 2010). Thus it could be the case that Spain's Latino immigrants simply have a higher socio-economic status than the predominantly working-class Latino migrants who settle in the United States and are therefore predisposed to reduce their fertility rate faster.

Bearing these socio-economic profiles in mind, we compare EiS to MiUS because they have roughly similar structural positions. Table A1 below compares the profiles of each immigrant group to those of the native women in the host countries in 2011. It shows that both EiS and MiUS are mainly middle-aged and have low levels of education (mostly less than high school). Moreover, if we compare these groups to the native population, we observe important differences. Notably, the immigrant groups are more likely to be unemployed and to be renting their home than the native population. This suggests that both migrant groups occupy a non-privileged position in the social structure and join the ranks of the lower or working classes in their new country (also Gratton, 2007: 587). Latinas (and Ecuadorian women) in Spain are also overrepresented in occupational groups with especially low upward occupational mobility, which contributes to preserving their dominated social status (Parella, Petroff and Solé, 2013: 1379).

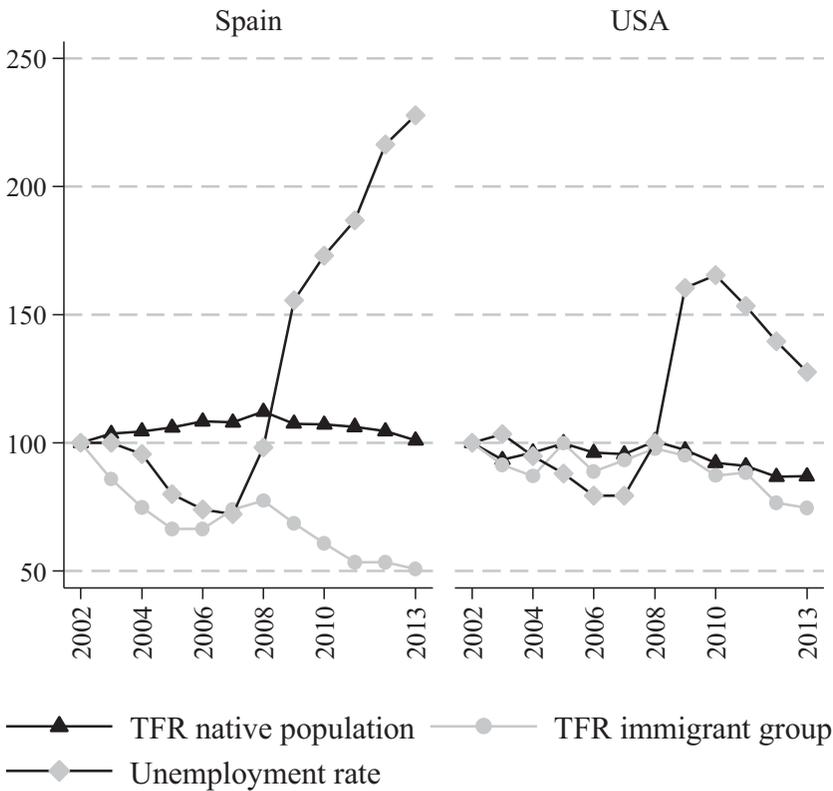
It is important to note that Ecuadorian and Mexican immigrant communities display similar gender ratios during the time period examined in this study. Indeed, although EiS were a highly feminized community during the 1990s, the proportion of women and men from 2001 onwards has become roughly equal (Iglesias Martínez et al., 2015). This more balanced sex ratio, more closely resembles that of Mexican immigrant communities in the United States and provides the opportunity for EiS to form ethnically homogenous couples and to be involved in reproductive behaviours.

Economic Cycle

If there are few socio-economic differences between EiS and MiUS, might it be that economic climate could explain the differential fertility assimilation patterns in both countries? In general, the economic cycle influences fertility rates because it influences job prospects, which in turn indirectly influence family formation decisions (Sobotka, Skirbekk, & Philipov, 2011). The relationship between economic growth and fertility is thus procyclical, as people generally delay having children until economic conditions have improved. While few studies examine economic climate and immigrant fertility directly, the existing ones do suggest that immigrants also respond to economic conditions when considering whether to expand their families (Milewski 2010). Research on migration to Israel and Norway, for example, suggests that immigrants limit the number of children they have because they are sensitive to the economic cycle and their ability to support larger families (Assave & Lappagard, 2009; Okun & Kagya, 2012).

Both Spain and the United States have recently undergone economic recessions, though the US is generally thought to be on a better recovery trajectory (Aysa-Lastra and Chacón, 2012). We thus

FIGURE 2
INDEX 100 OF THE TFR AND ECONOMIC CONDITIONS (2002=100), 2002-2013



investigate whether the lingering economic recession in Spain could be to blame for Latino's extreme fertility rate decline there. To assess this explanation, Figure 2 depicts the index 100 changes in the TFR and unemployment rates of the four groups. According to the recession explanation, the fertility rates in both Spain and the US should be procyclical, especially for EiS. However, Figure 2 shows that the fertility of EiS dropped the most *not* during the ongoing economic recession commencing in 2008, but rather during the economic boom that lasted from before 2000 and until 2008.

A possible concern with these findings is that the largest impact of the Great Recession was on the rate of unemployment growth, not on the rate of economic growth (Hoffman and Lemieux, 2013). The fertility rates of the two migrant groups could, we hypothesize, be particularly sensitive to these major changes in the unemployment rate. However, contrary to this expectation and inconsistent with the economic-cycle approach, the association between changes in the general fertility rates of EiS and MiUS and the mean country unemployment rate is rather low. In fact, Spanish women are the only group to clearly display procyclical fertility behaviour.

Cultural Affinity: Language in Spain

If the economic climate fails to account for the different trends in Latino fertility, then perhaps they can be explained in cultural terms. Scholars have argued that Latino fertility might increasingly

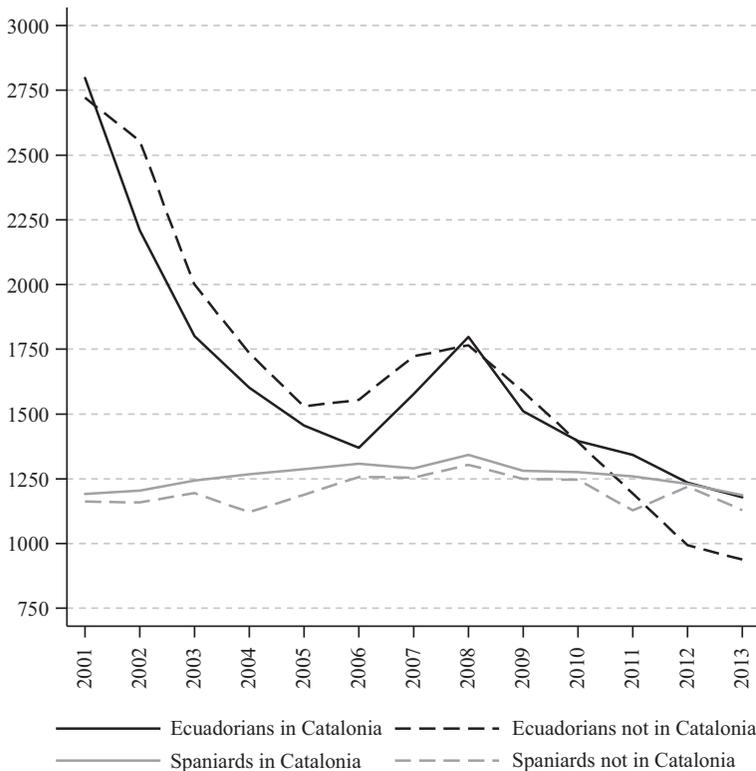
converge with Spanish rates because Latinos are simply more culturally attuned to Spaniards than they are to non-Latino Americans. Connor and Massey (2010), as well as Delgado and Lozano (2007), posit that sharing a common language allows Latinos to feel connected to Spaniards in a way that other immigrants in that country do not. Spanish immigration researchers have also argued that Latinos in Spain are viewed as a more assimilable population than African or Asian migrants because of this linguistic connection (Flecha, Santa Cruz and Serradell, 2002).

To assess whether Spanish immigrants can in fact assimilate and adopt cultural behaviours more quickly because they speak the host country’s language, we suspend for the moment the national comparative angle and instead focus on a particular regional development in Spain.

Unlike the United States, Spain is comprised of a loose federation of “autonomous communities,” some of which consider themselves to be culturally and linguistically distinct from Madrid, the Spanish capital. Catalonia is a case in point. The region is characterized by a strong nationalist sentiment, and Catalan is the official government language of Catalonia. Virtually all schools in the region instruct solely in Catalan (Artigal, 1997). Moreover, researchers consider Catalan a language of its own (i.e., not just a dialect), with a grammar and vocabulary different from Castilian or Spanish (Green, 2009).

If language does serve as an important mechanism helping immigrants assimilate into a native culture, we would hypothesize that *ceteris paribus*, the Latina TFR should decline slower in Catalonia than in the rest of Spain. Figure 3 shows the TFRs between 2001 and 2013 for Spanish and Ecuadorian women, distinguishing between those living in Catalonia and those living in the rest of

FIGURE 3
FERTILITY RATES OF FOUR GROUPS IN SPAIN, 2001-2013



the Spanish territory. As observed, the TFR of Spaniards is virtually the same regardless of their place of residence. Most important, during the period when EiS' fertility declined most sharply (2001-2007), the TFRs of EiS in Catalonia and in the rest of Spain fell at roughly the same rate. If anything, the TFR of EiS in Catalonia fell more sharply during this period, which contradicts the linguistic affinity explanation. Since 2010-2011, EiS outside of Catalonia have experienced a sharper decline in the TFR, but by that point they had already passed the TFR of Spaniards in Spain (SiS), hence this is not an indicator of convergence with the fertility of Spanish natives. In other words, the overlap between the two groups suggests that assimilation patterns of fertility among Ecuadorians and Spaniards cannot simply be linked to language affinity.

Labour Market Insertion and Education Enrolment

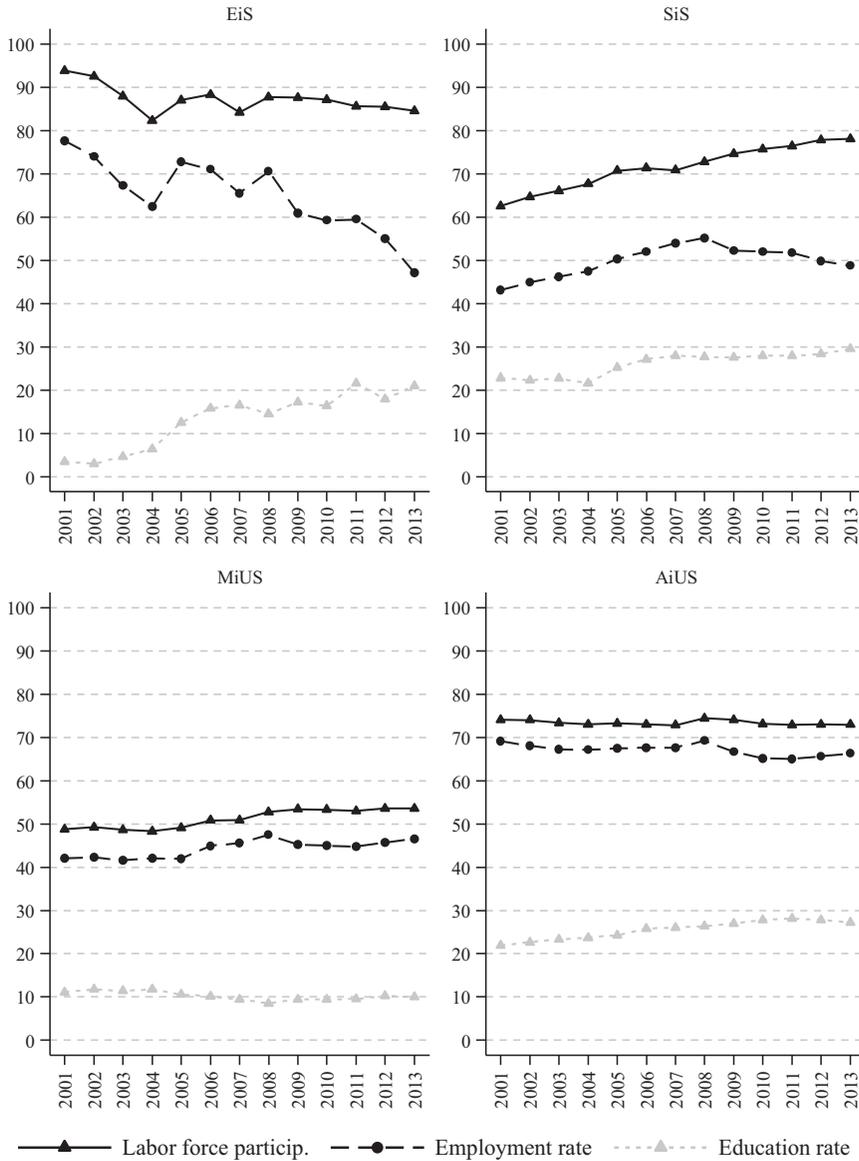
As an alternative to the economic cycle and cultural assimilation approaches, we focus instead on labour market insertion and education enrolment. We argue that, in contrast to other explanations, these two factors help us explain the fertility differences between EiS and MiUS. As we show in Figure 3 below, EiS display a much higher degree of labour market engagement and much faster rate of education enrolment than MiUS. This stronger orientation towards the labour market and education implies a move away from the male-as-breadwinner model that may significantly impact EiS' family formation behaviour.

We argue that there are three ways in which labour market involvement can affect immigrant women's fertility. First, child-rearing often conflicts with women's efforts to hold jobs (Marini and Brinton, 1984; Mincer and Polachek, 1974). This is especially true among precarious, low-skilled workers, as they usually lack employer-sponsored parental leave and cannot afford private childcare (Pettit and Hook, 2009; Gerstel and McGonagle, 1999). Second, we stress the interactionist dimension of labour participation. Among women, an economically-active status increases (a) the probability of interacting with native, working-age women juggling their jobs and family life and (b) exposure to the dominant cultural discourse surrounding the appropriate conditions for having a child. In other words, the labour market could have a major acculturation function that alters individual conceptions of family structure and major life events. Consequently, higher rates of labour participation among EiS would explain the rapid decline in their fertility rates when compared to MiUS.

Third, rigidities in European labour markets (Nickell, 1997) can also play a role. Adserá (2011) has recently shown that women employed in temporary jobs are the least likely to give birth to a second child. Here, we argue that perceived labour market instability – resulting from exposure to irregular or temporary work – might reduce EiS' willingness to having children. Indeed, the level of perceived job instability has been shown to be significantly higher in Spain than in other European countries (Böckerman, 2007). All together, this employment anxiety would help to explain EiS' steep fertility rate decline throughout the 2000s even as their employment rates remained high.

Taking all the data and past research into account, we hypothesize that the greater decline in fertility observed among EiS is related to their higher levels of labour participation. To assess this, Figure 4 displays the employment and labour force participation rates among EiS, MiUS, Spaniards and US citizens. It provides strong evidence of labour market status differences between the two immigrant groups. The plots show that Ecuadorian women in Spain are much more likely to be employed than are Mexican women in the US. The difference is quite large in 2001, around 35 percentage points, and remains substantial across most years. Even when the gap narrows, striking differences in the labour force participation rates of the four groups persist. In fact, EiS display the highest labour force participation of the four groups. On average, more than 80 per cent of EiS were economically active.⁴ By contrast, on average only about 50 percent of MiUS were

FIGURE 4
LABOR FORCE, EMPLOYMENT AND EDUCATION PARTICIPATION OF FOUR GROUPS LIVING IN SPAIN AND THE US, 2001-2013



economically active between 2001 and 2013. Interestingly enough, trends in the upper plots reflect an increasing convergence among EiS and SiS over time, both in terms of labour force participation and employment rates. Market behaviour differences among MiUS and American Woman, however, remain rather stable over the whole period.

Hence the evidence shows a stronger labour market engagement among EiS than MiUS. Moreover, as we noted before, EiS have high levels of perceived market instability. By being more

economically active within an insecure labour market, EiS have had to face larger time constraints and child-care burdens. At the same time, they may have also had more opportunities to meet Spanish co-workers and employers and become more familiar with the discourse of Spanish women regarding fertility and child-raising. All of these factors contribute to their declining fertility rate.

Together with labour market engagement, an increasing participation in formal education also accounts for EiS' decline in fertility rates. Indeed, much literature documents a generally negative relationship between education and fertility. Education enrolment increases the opportunity costs of child-bearing, reduces the short-term income needed to support a child, and fosters knowledge on contraceptives and gender equity (see Kravdal and Rindfuss, 2008). Hence we argue that *increases* in education enrolment could undergird the particularly large *decline* in fertility rate observed in Ecuadorian migrants.

Figure 4 also displays the education enrolment rates of the four considered groups. The most relevant finding from this subplot is the substantial increase in the education rate of EiS compared to the stagnant enrolment rate among MiUS. EiS' rate increased from 3.5 per cent in 2001 to 20.9 per cent in 2013. By contrast, the MiUS rate hovered around 10 per cent over that time. This increase in the EiS education rate mimics a similar trend among Spanish women, although the absolute and relative increase among EiS is substantially larger. Moreover, this sharp rise of education engagement among Ecuadorian women cannot be attributed to a change in the age distribution of this group. The percentage of Ecuadorian women in the 15-25 age group has remained rather stable, between 2001 (27.9%) and 2013 (27.8%).

As observed in Figure 4, the rise in education enrolment in Spain does not coincide with the onset of the economic crisis. Instead, we believe that this surge has been driven by the expansion of public education that still has certain *glass ceiling* effect. In recent years, the Spanish government has financed several new labour-training programme initiatives that target immigrants and others low-wage labourers. Unlike general education, these programmes are shorter in duration and focus on providing students with technical skills and certificates that may help them immediately in the job market. Many of these training programs do not require prior education, and are thus more widely accessible than university programmes, for example (Iglesias Martínez et al., 2015: 39). As such, the education programmes, and the policies that implement them, help immigrants to overcome problems of human capital transferability (Chiswick & Miller, 2009; Green, Kler and Leeves, 2007) and may help women to empower themselves (Parrado & Morgan, 2008; Kasarda, Billy, & West, 1986).

Table A2 in Appendix shows the distribution of MiUS and EiS enrolled in education by type of course. Data distinguish between general education programmes – high schools and college – and specific labour-training programmes. The percentage of women attending regular high school programmes is pretty similar across groups, about 34.9 per cent of MiUS and 39.1 per cent of EiS. However, significant divergences emerge in college attendance rates. Interestingly, 47.9 per cent of MiUS enrolled in educational programmes are attending college, a figure seven times higher than that of EiS (6.4%). By contrast, EiS are overrepresented among women attending some kind of labour-training programme. Specifically, 54.5 per cent of EiS take vocational courses as compared with only 17.2 per cent of MiUS. These courses, as we have noted, are becoming increasingly accessible in Spain and improve competitiveness in the labour market.

Finally, to further explore the relationship between EiS' fertility rates and EiS' education enrolment rates, we utilize the variability in these rates and the 17 Spanish regions. Although we cannot determine categorically the existence of a causal link between these two dimensions, regional-level evidence indicating a negative association between the fertility and educational enrolment of EiS would make the claim of causality even more plausible. Both rates display sufficient variability for the test. Using the full sample of 17 regions and 2013 data, the fertility rates of Ecuadorians in Spain is negatively related with their educational enrolment rate ($r=-.41$). This evidence is consistent with our expectation and our argument that the increasing educational engagement of EiS

increases their opportunity costs of having more children. Yet there are reasons for thinking that Asturias represents an atypical case. Scholars have stressed the extraordinary low fertility rates of this small north-west region since the 90s (Bosh, 1998). So much so, that in 2014 the *Eurostat Regional Yearbook* reported that it has the lowest fertility rates in all the European Union. When removing this singular region from the sample, the association between fertility rates and education enrolment rates is further improved ($r=-.60$, $p<.05$).

DISCUSSION AND CONCLUSION

This article uses Latino migration to Spain and the US as a comparative case to assess how national context might shape trends in immigrant fertility. We find that cultural variables, especially language, and national economic cycles do not adequately explain why Latinas in Spain have reduced their fertility much more than their US counterparts. Instead, our argument focuses on the role of labour market participation and education enrolment. Economically active women face more challenges in bearing and raising their children and arguably have more chances to interact with native mothers and become familiar with the host country's discourse on parenting. Moreover, education enrolment increases the opportunity cost of child-rearing and reduces the short-term income needed to support a child. Our empirical analysis shows that Latinas in Spain and the US differ substantially in both of these dimensions. Specifically, Latinas in Spain are more likely to be active in the labour market or enrolled in education programs, thus affecting their ability to have offspring.

Taken together, the findings in this study have at least four important implications for our understanding of immigrant fertility. The first centres on the debates about immigrant culture, and in particular arguments over the notion of Latino "familism." Scholars examining the US situation have often used this notion to help explain the seemingly higher fertility trends among Mexicans, Puerto Ricans, Dominicans, and other Latino groups. These scholars suggest that there is an inherent set of values that Latin Americans hold that impels them to have more children irrespective of social contexts and economic obstacles (Landale and Oropesa, 2007; Bean, Swicegood, and Burg, 2000; Vega, 1995).

Our work, however, points to limitations in the Latino "familism" theory, suggesting that national contexts do matter. On the one hand, the fact that fertility declines starkly for EiS raises the possibility that Latino "familism" is simply a characteristic of Latino immigrants in the US. On the other hand, it may be that Latinas in Spain, especially Ecuadorian women, do hold the same values as Latinas in the US but that structural conditions inhibit them from acting on these values. Moreover, it may be that these Latino cultural values are not static but rather dynamic, changing over time as immigrants adapt to the social structures of their new homeland. Future qualitative research in this area might help to shed light on these unresolved questions.

Second, our work provides avenues for further research. In strictly descriptive terms, our study shows that immigrant groups with a similar position in their host countries – Latinas in Spain and the US – can actually differ substantially in terms of their fertility rates. Given that most previous work in this area are case studies of immigrant fertility in a single country, our study suggests the potential for further cross-national research examining the macro-level foundations of immigrant fertility changes. Future work could, for instance, assess what country-level cultural, economic or social factors shape the fertility patterns of Latino immigrant communities living in affluent societies.

Third, with our findings in mind, future work could specify the mechanisms by which employment and education influence immigrant fertility. For example, qualitative work that examines different job types could help untangle whether employment has direct structural or indirect network effects on immigrant fertility. Indeed, a significant percentage of EiS are in the domestic care industry, working in unstable positions as live-in aides who often perform physically demanding

and poorly compensated tasks (Hondagneu-Sotelo, 2007). We can imagine, then, that Latina domestic caretakers in Spain are especially overburdened with time and resource constraints, and are thus less able to have more children. Conversely, there could be another mechanism at play; it may be that domestic care places Latinas in closer proximity with Spanish women, allowing them to learn new ideas about family formation. The issue is open to debate, and more investigative work that links Latina immigrant preferences with job type would provide valuable information for fertility and immigration scholars alike. In a similar manner, further research could also investigate the effects of different types of educational programs on immigrant fertility.

Last, our findings have important policy implications that should be heeded by policy-makers keen to ensure the general welfare of female Latino immigrants. We show that the fertility patterns of EiS are rather sensitive to the education enrolment and labour force participation of this group. This suggests that EiS may endure especial difficulties to reconcile work and family life. More family-friendly labour policies (e.g. a more generous maternity leave program) could attenuate reconciliation problems faced by EiS and reduce the Spanish demographic crisis by increasing EiS' fertility. By contrast, our findings suggest that the fertility patterns of MiUS are not as sensitive to their educational and labour market decisions and that both educational and labour market participation are rather low. This might be, at least in part, due to the lack of labour-training programs in the U.S context. A substantial expansion of labour-training programs targeted to immigrants would provide them with technical skills and certificates that should give them access to better jobs, increasing their labour force participation and ultimately the level of economic growth.

Overall, our study shows that national contexts influence immigrant fertility. While the cultural values of groups certainly do impact immigrant behaviours, these arguments should be delimited with respect to national structures.

ACKNOWLEDGEMENTS

We would like to thank Shannon Gleeson and Rickard Sandell for their comments and suggestions

NOTES

1. The TFR is the most standard indicator used to measure fertility patterns, because contrary to the crude birth rate, TFR is not affected by the age structure of the population. We calculated following convention as follows: $TFR = \sum_{age} ASFR$, with ASFR being the age-specific fertility rate (births/population) for the following seven age groups: 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49.
2. The trend in fertility rates of EiS is not specific to the Ecuadorian group. Figure A1 (Appendix) shows that two other large and Latin American immigrant groups – Bolivians in Spain and Colombians in Spain – display similar trends in their TFR.
3. This variation in the trends of the TFRs of EiS and MiUS, moreover, cannot be attributed to fertility trends in their home country. As noted in Figure A2 (Appendix), the fertility decline of Ecuadorians in Ecuador has been far milder than the TFR decline of EiS.
4. It is important to emphasize that the administrative data on employment available for both countries includes information from both documented and undocumented immigrants.

REFERENCES

- Aassve, A., and T. Lappegård
 2009 "Childcare cash benefits and fertility timing in Norway", *European Journal of Population*, 25: 67–88.

- Adserà A., and A. Ferrer
2014 "Immigrants and Demography: Marriage, Divorce and Fertility." *IZA Discussion Paper* No. 7982, Institute for the Study of Labor.
- Adserà, A.
2011 "Where Are the Babies? Labor Market Conditions and Fertility in Europe", *European Journal of Population*, 21: 1–32.
- Aja, E.
2012 *Inmigración y Democracia*, Alianza Editorial, Madrid.
- Artigal, J.
1997 "The Catalan Immersion Program", in Robert Keith Johnson and M. Swain (Eds), *Immersion Education: International Perspectives*, Cambridge University Press, Cambridge: 133–50.
- Aunión, J.A.
2014 "No hay niños para el parque." *El País* July 6.
- Aysa-Lastra, M., and L. Chacón
2012 "Latino Immigrant Employment During the Great Recession: A Comparison of the United States and Spain", *Norteamérica. Revista Académica del CISAN-UNAM*, 7: 7–42.
- Aysa-Lastra, M., and L. Chacón (Eds)
2015 *Immigrant Vulnerability and Resilience. Comparative Perspectives on Latin American Immigrants during the Great Recession*. Springer International Publishing, Switzerland.
- Bean, F. D., C. Gray Swicegood, and R. Burg
2000 "Mexican-Origin Fertility: New Patterns and Interpretations", *Social Science Quarterly*. 81(1): 404–20.
- Blau, F D., L.M. Kahn, A Yung-Hsu Liu, and K.L. Papps
2008 "The Transmission of Women's Fertility, Human Capital and Work Orientation across Immigrant Generations." *NBER Working Paper*, No14388.
- Böckerman, P.
2007 "Perception of job instability in Europe." *MPRA Paper* No. 4701.
- Bongaarts, J., and T. Sobotka
2012 "A Demographic Explanation for the Recent Rise in European Fertility", *Population and Development Review*, 38: 83–120.
- Cachón Rodríguez, L.
2009 *La España inmigrante*, Anthropos, Barcelona.
- Calavita, K.
2005 *Immigrants at the Margins: Race, Law and Exclusion in Southern Europe*, Cambridge University Press, Cambridge.
- Carter, M.
2000 "Fertility of Mexican Immigrant Women in the USA: A Closer Look", *Social Science Quarterly*, 81: 404–20.
- Chavez, L.
2008 *The Latino Threat*, Stanford University Press, Palo Alto.
- Chiswick, B.R., and P.W. Miller
2009 "The International Transferability of Immigrants' Human Capital Skills", *Economics of Education Review*, 28: 162–169.
- Cohn, D.
2014 "Falloff in Births Slows Shift to a Majority Minority Youth Population." *Pew Research Center*. June 26.
- Coleman, D.A., and S. Dubuc
2010 "The fertility of ethnic minority populations in the Populations in the United Kingdom, 1960s-2006", *Population Studies*, 64: 19–41.
- Coleman, D.A.
1994 "Trends in Fertility and Intermarriage among Immigrant Populations in Western Europe as Measures of Integration", *Journal of Biosocial Science*, 26: 107–36.
- Connor, P., and D.S. Massey
2010 "Economic Outcomes of Latino Migrants to Spain and the United States: Differences by Source Region and Legal Status", *International Migration Review*, 4: 802–29.

- DeLeone, F.Y., D.T. Lichter, and R.L. Strawderman
2009 "Decomposing Trends in Nonmarital Fertility among Latinas", *Perspectives on Sexual and Reproductive Health*, 41: 166–172.
- Delgado, L., and D. Lozano
2007 *Latinos en España: Como son y cómo viven colombianos, argentinos, ecuatorianos, venezolanos...* Madrid: La Esfera.
- Dubuc, S.
2012 "Immigration to the UK from High Fertility Countries: Intergenerational Adaptation and Fertility Convergences", *Population and Development Review*, 38: 353–68.
- Eurostat
2014 "File: Total Fertility Rate 1960-2012 (Live Births Per Woman)". Brussels: Eurostat.
- Flecha García, R., I. Santa Cruz, and O. Serradell
2002 "Impacto de las migraciones en la estructura social de la España actual." *IX Conferencia de Sociología de la Educación*. Palma de Mallorca. September 19-21.
- Flores, R.D.
2015 "The resurgence of race in Spain. Perception of discrimination among immigrants", *Social Forces*, 94(1): 237–269.
- Frank, R., and P. Heuveline
2005 "A Cross-over in Mexican and Mexican-American Fertility Rates: Evidence and Explanations for an Emerging Paradox", *Demographic Research*, 12(4): 77–104.
- Georgiadis, A., and A. Manning
2012 "Cultural Integration in the United Kingdom", in Yann Allan, Alberto Bisin, Allan Manning and Tierri Verdier (Eds), *Cultural Integration of Immigrants in Europe*. Oxford University Press, Oxford: 260–84.
- Gerstel, N., and K. McGonagle
1999 "Job leaves and the limits of the family and medical leave act: The effects of gender, race, and family", *Work and Occupations*, 26: 510–534.
- Gonzalez, A.
2013 *Reform Without justice: Latino Migrant Politics and the Homeland Security State*, Oxford University Press, Oxford.
- Gratton, B.
2007 "Ecuadorians in the United States and Spain: History, Gender and Niche Formation", *Journal of Ethnic Migration and Studies*, 33: 581–599.
- Green, C., P. Ker, and G. Leevess
2007 "Immigrant overeducation: Evidence from recent arrivals to Australia", *Journal of Economic Studies*, 37: 179–193.
- Green, J.
2009 "Romance Languages", in Bernard Comrie (Ed.), *World's Major Languages*, Routledge, Abingdon: 164–171.
- Hierro, M.
2013 "Latin American Migration to Spain: Reasons and Future Perspectives", *International Migration*, 54(1): 64–83.
- Hoffmann, F., and T. Lemieux
2013 "Unemployment in the Great Recession: A Comparison of Germany, Canada, and the United States". University of British Columbia.
- Hondagneu-Sotelo, P.
2007 *Domestica: Immigrant Workers Cleaning and Caring in the Shadows of Affluence*, Berkeley: University of California Press.
- Huntington, S.
2004 *Who Are We? Challenges to America's National Identity*, Norton, New York.
- Ibañez, M.
2010 "Fertility, Female Participation in Employment, and Reconciliation Policies in Spain." REC-WP 13/2010.

- Iglesias Martínez, J., G. Moreno Márquez, Me Fernández García, J.A. Oleaga, and de Vega la Cuadra F.
2015 “La población de origen ecuatoriano en España. Características, necesidades y expectativas en tiempo de crisis”. IKUSPEGI, 2015.
- Instituto Nacional de Estadística
2014a “Censo de población y viviendas 2011”, Instituto Nacional de Estadística. http://www.ine.es/produser/micro_censopv.htm.
- 2014b “Fenómenos demográficos. Movimiento Natural de la Población”, Instituto Nacional de Estadística, <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=/t20/e304/&file=inebase>.
- 2014c “Padrón”, Instituto Nacional de Estadística, <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft20%2Fe260&file=inebase&L=0>.
- Instituto Nacional de Estadísticas y Censos
2012 *Anuario de estadísticas vitales 2011: Nacimientos y defunciones*, Instituto Nacional de Estadísticas y Censos, <http://www.ecuadorencifras.gob.ec/anuarios-estadisticos/>
- 2013 *Anuario estadístico 2012*, Instituto Nacional de Estadísticas y Censos. <http://www.ecuadorencifras.gob.ec/anuarios-estadisticos/>
- Kahn, J.R.
1994 “Immigrant and native fertility during the 1980s: adaptation and expectations for the future.” *International Migration Review*, 28: 501–19.
- Kasarda, J.D., J.O.G. Billy, and K. West
1986 *Status Enhancement and Fertility: Reproductive Responses to Social Mobility and Educational Opportunity*. Academic Press, Petaluma, CA.
- Kohler, H.P., F.C. Billari, and J. Ortega
2002 “The Emergence of Lowest-Low Fertility in Europe during the 1990s”, *Population and Development Review*, 28: 641–680.
- Kravdal, O., and R.R. Rindfuss
2008 “Changing Relationships between Education and Fertility: A Study of Women and Men Born 1940 to 1964”, *American Sociological Review*, 73: 854–873.
- Landale, N.S., and R.S. Oropesa
2007 “Hispanic Families: Stability and Change”, *Annual Review of Sociology*, 33: 381–405.
- Lichter, D.T., K.M. Johnson, R.N. Turner, and A. Churilla
2012 “Hispanic Assimilation and Fertility in New U.S. Destinations”, *International Migration Review*, 46: 767–791.
- Marini, M., and M.C. Brinton
1982 “Sex typing in occupational socialization”. in Barbara Reskin (Ed.), *Sex Segregation in The Workplace: Trends, Explanations, Remedies*, Natl. Academy Press, Washington D.C.: 192–233.
- Mayer, J., and R.T. Riphahn
2000 “Fertility Assimilation, of Immigrants: Evidence from Count Data Models”, *Journal of Population Economics*, 13: 241–261.
- Milewski, N.
2010 *Fertility of Immigrants: A two-generational Approach in Germany*, Springer, Berlin.
- Mincer, J., and S. Polachek
1974 “Family Investments in Human Capital: Earnings of Women”, *Journal of Political Economy*, 82: 76–108.
- Myers, G.C., and E.W. Morris
1966 “Migration and Fertility in Puerto Rico”, *Population Studies*, 20: 85–96.
- Nickell, S.
1997 “Unemployment and Labour Market rigidities: Europe versus North America”, *Journal of Economic Perspectives*, 11: 55–74.
- Okun, B.S., and S. Kagya
2012 “Fertility Change among Post 1989 Immigrants to Israel from the Former Soviet Union”, *International Migration Review*, 46: 792–827.
- Pabón Lopez, M.
2007 “Immigration Law Spanish-Style: a Study of Spain’s Normalization of Undocumented Workers”, *Georgetown Law Review*, 21: 571–93.

- Parella, S., A. Petroff, and C. Solé
 2013 “The Upward Occupational Mobility of Immigrant Women in Spain”, *Journal of Ethnic Studies*, 39: 1365–1382.
- Parrado, E.A., and S.P. Morgan
 2008 “Intergenerational Fertility Among Hispanic Women: New Evidence of Immigrant Assimilation”, *Demography*, 45: 651–671.
- Pettit, B., and J.L. Hook
 2009 *Gendered Tradeoffs: Family, Social Policy, and Economic Inequality in Twenty-One Countries*. Russell Sage Foundation, New York.
- Prats, J.
 2013 “La Crisis Ahuyenta a la Cigüeña” *El País* June 18
- Retis, J., and P. García
 2010 “Jóvenes Inmigrantes Latinoamericanos en la Prensa Española: Narrativas Mediáticas de la Alteridad: el Caso de las Violencias Urbanas”, *Revista Mexicana de Ciencias Políticas y Sociales*, 52: 135–160.
- Rodríguez, C., E. Regidor, and J.L. Gutiérrez-Fisca
 1995 “Low Birth Weight in Spain Associated with Sociodemographic Factors”, *Journal of Epidemiology and Community Health*, 49: 38–42.
- Roig Vila, M., and T. Castro Martín
 2007 “*Immigrant Mothers, Spanish Babies: Childbearing Patterns of Foreign Women in Spain.*” Bilbao: Fundacion BBVA.
- Rosero-Bixby, L., T. Castro-Martín, D. Reher, and M. Sánchez-Domínguez
 2011 “Estimating the Number of Immigrants in Spain: An Indirect Method Based on Births and Fertility Rates”, *Population*, 3–4: 543–560.
- Sobotka, T.
 2008 “The Rising Importance of Migrants for Childbearing in Europe”, *Demographic Research*, 19: 225–48.
- Sobotka, T., V. Skirbekk, and D. Philipov
 2011 “Economic Recession and Fertility in the Developed World”, *Population and Development Review*, 37: 267–306.
- Statistical Office of the European Communities
 2014 “*Eurostat Regional Yearbook, 2014*”. Eurostat Statistical Books. Luxembourg, Eurostat.
- United States Census Bureau
 2014a “American Community Survey: Public Use Microdata Sample (PUMS)”, United States Census Bureau, http://www.census.gov/acs/www/data_documentation/public_use_microdata_sample/
 2014b “Current Population Survey (CPS)”, United States Census Bureau, <http://www.census.gov/cps/data/>
 2012 “Most Children Younger than Age 1 are Minorities.” US Bureau of the Census News Release. Suitland, Maryland.
- Vega, W.A.
 1995 “The study of Latino families”, in Ruth Zambrana (Ed.), *Understanding Latino Families: Scholarship, Policy and Practice*. Sage, Thousand Oaks: 3–17.

APPENDIX

TABLE A1

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF WOMEN 15-49 IN SPAIN AND THE UNITED STATES, 2011

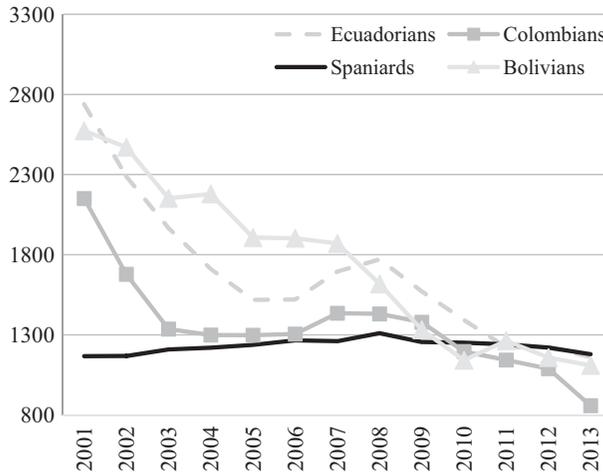
	Spain			United States		
	Ecuadorians in Spain (a)	Spanish citizens (b)	Ratio a/b	Mexicans in U.S. (c)	U.S. Citizens (d)	Ratio c/d
Age (average)	31.3	33.2	0.9	27.6	28.0	1.0
Age structure						
15-25	23.9	20.4	1.2	18.5	30.1	0.6
25-34	33.1	28.9	1.1	34.5	27.1	1.3
35-44	32.1	34.1	0.9	35.6	27.3	1.3
45 and +	11.0	16.6	0.7	11.4	15.5	0.7
Educative level						
Less than high school (%)	52.4	35.8	1.5	58.2	16.4	3.6
Less than college (%)	39.8	34.4	1.2	35.6	48.3	0.7
College or more (%)	7.8	29.8	0.3	6.2	35.3	0.2
Unemployment rate	38.6	32.0	1.2	9.0	8.2	1.1
Home ownership	42.3	82.1	0.5	35.7	61.6	0.6

TABLE A2

WOMEN ENROLLED IN EDUCATION BY TYPE OF EDUCATION

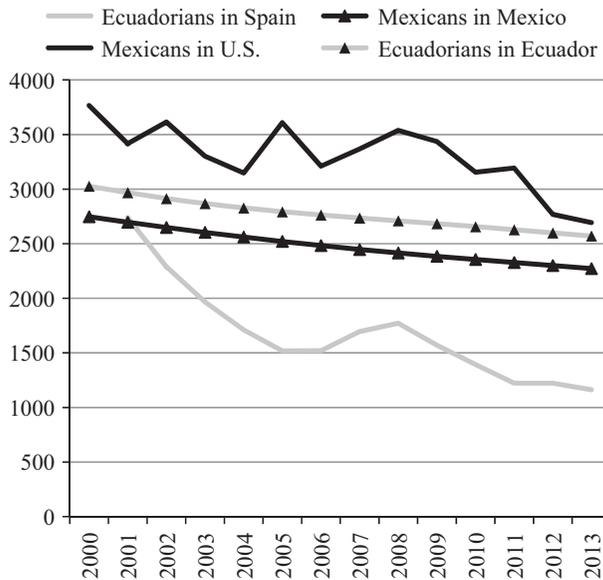
	MiUS	EiS
Regular school	34.99	39.11
College	47.86	6.41
Vocational, technical, trade and correspondence courses	17.15	54.47

FIGURE A1
TOTAL FERTILITY RATE OF BOLIVIANS, COLOMBIANS, ECUADORIANS AND SPANIARDS IN SPAIN, 2001-2013



Source: Authors' calculations with data from INE 2015

FIGURE A2
TOTAL FERTILITY RATES OF ECUADORIAN AND MEXICAN CITIZENS IN THEIR COUNTRY OF ORIGIN AND HOSTING COUNTRY, 2000-2013



Note: TFR of Mexicans in Mexico and Ecuadorians in Ecuador are from United Nations (2015). These values have been multiplied by 1,000 to make them comparable with the TFRs displayed in Figure 1.