Research Institute for the Evaluation of Public Policies



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## The impact of citizenship on intermarriages. Quasiexperimental evidence from two European Union Eastern Enlargements<sup>\*</sup>

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### Abstract

According to the assimilation theory, immigrants' acquisition of the citizenship of the destination country should increase the number of intermarriages as a result of immigrants' enhanced integration. Status exchange theory, instead, would predict a negative impact of citizenship acquisition, as the latter eliminates one of the possible 'rewards' that immigrants obtain in marrying a member of the native population. This paper provides a causal assessment of the impact of immigrants' citizenship acquisition on intermarriages exploiting the 2004 and 2007 European Union Eastern Enlargements, following which citizens of new EU member countries became EU citizens. The study focuses on intermarriages between Italian men and foreign women and applies the Synthetic Control Method to data of the Italian Register of Marriages. Our findings support the status exchange theory and are explained by the particularly difficult socioeconomic integration of immigrant women in Italy. Results point to the existence of heterogeneous effects of EU enlargement across immigrant groups, being larger for the least socioeconomically integrated groups.

**Keywords**: Assimilation; Citizenship; European Union Enlargement; Intermarriage; Quasi-experiment

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### **1. Introduction**

Marital unions between natives and immigrants (hereafter also referred to as 'intermarriages') are commonly seen as an indicator of increased societal integration and declining 'social boundaries' between natives and immigrants (Adserà and Ferrer, 2015). Beyond structural marriage market constraints, such as the size and the sex ratio within both the immigrant and the native populations (Kalmijn, 1998; Chiswick and Houseworth, 2011), also socioeconomic and cultural factors might obstacle the formation of intermarriages. Among these, an important role is played by different patterns of labor market inclusion, residential segregation, as well as individual preferences and persisting prejudices across groups (Becker, 1981; Lam, 1988; Kalmijn, 1998; Furtado, 2012; Potarca and Mills, 2015). A large number of studies have argued and documented that the more immigrants are socioeconomically and culturally assimilated, the more likely they are to entering marital unions with natives (Adserà and Ferrer, 2015).

In contrast to this 'assimilation hypothesis', it can be argued that the larger the socioeconomic distance between natives and immigrants, the higher the possibility that intermarriages occur as a result of an exchange between the native and the immigrant. The 'status exchange' hypothesis (Davis, 1941; Merton, 1941) has found some empirical support in recent studies on intermarriages in Australia and the U.S. (Choi et al., 2012), as well as in new immigration countries like Spain (Cortina Trilla et al., 2008) and Italy (Maffioli et al., 2014; Guetto and Azzolini, 2015). This hypothesis predicts that in a setting of weak socioeconomic integration for immigrants, the latter might be prone to 'trade' some of their valuable traits (e.g., young age and high education) by marrying 'lower rank' members of the native population (e.g., older and less educated individuals).

Which of these two theories works better to explain intermarriage formation? Is immigrant integration leading to more or less intermarriages? This study provides causal evidence on the integration/intermarriage relationship by exploiting an exogenous change in immigrants' legal status (such as the acquisition of citizenship). Depending on whether the assimilation or the status exchange hypothesis prevails, the acquisition of citizenship can exert opposite effects on intermarriages. In the assimilation perspective, it should increase immigrants' intermarriage chances, as citizenship enhances legal stability and discloses access to social networks and civic participation in the hosting society (Bloemraad, 2008). The status exchange hypothesis, instead, would predict that the acquisition of citizenship reduces immigrants' intermarriage propensity as it eliminates one of the possible 'rewards' that immigrants obtain in marrying a member of the native population. In broader terms, a negative effect of citizenship acquisition on immigrants' intermarriage propensity would cast doubts on a simplistic interpretation of intermarriages as a signal of increased integration of immigrants in a society (Adserà and Ferrer, 2015).

The empirical identification of the causal effect of citizenship acquisition on intermarriage is plagued by severe endogeneity issues, as citizenship is correlated with a long list of observable and unobservable factors that also affect intermarriage propensity. For example, immigrants in possession of the host-country citizenship are likely to have spent more years in the host country, to have acquired a higher language mastery as well as to have developed a wider network of acquaintances, relative to non-citizen immigrants. To the best of our knowledge, this paper is the first to assess the effect of citizenship on intermarriages within a counterfactual framework. We tackle the endogeneity issue exploiting two European Union Eastern Enlargements (hereafter, EUEEs) as quasi-experiments providing exogenous variation in the legal status of immigrants originating from new EU member countries of Eastern Europe, who, upon accession, became EU citizens. Previous studies have analyzed trends and patterns of intermarriages in the context of the European integration process (Haandrikman, 2014; Valk and Medrano, 2014), but without a focus on the causal impact of citizenship acquisition.

This paper assesses the impact of the 2004 and 2007 EUEEs on intermarriages between Italian men and foreign women originating from new EU member countries. Italy constitutes an interesting case study since it has received, since the early 2000s, significant and highly feminized flows of immigrants from Eastern European countries, who are characterized by a particularly difficult socioeconomic integration (Sciortino 2004; Reyneri and Fullin 2011). We apply a counterfactual technique for aggregate data (Synthetic Control Method) to census data from the Italian Register of Marriages. Of the two theoretical predictions outlined above, our empirical analysis points to the prevalence of the latter, reporting sizable negative impacts of EUEEs on intermarriages. This result can be accounted for by the particularly difficult socioeconomic integration of immigrant women in Italy, which is related to a high relevance of status exchange within intermarriages (Maffioli et al., 2014; Guetto and Azzolini, 2015). Furthermore, consistently with this hypothesis, our empirical analyses report stronger EUEEs negative effects when considering women originating from poorer Eastern European countries and experiencing worse socioeconomic conditions in the host country.

### 1.1 Citizenship acquisition and intermarriages

Building upon the rich literature on intermarriages (Adserà and Ferrer, 2015), we ask whether immigrants' acquisition of the citizenship of the destination country works as an incentive or a disincentive to intermarriages. Citizenship possession is associated with higher socioeconomic integration, such as a better inclusion in the labor market (Kogan, 2003; Corluy et al., 2011; Gathmann and Keller, 2014) and higher political participation (de Rooij, 2011). Hence, although the causality of the citizenship-integration relationship is difficult to evaluate in observational studies, it is reasonable to state that an exogenous intervention providing access to citizenship to immigrants in a given country increases their socioeconomic integration. However, when considering intermarriages as an outcome, instead of labor market inclusion or political participation, the effect of such an exogenous change is not straightforward. Empirical studies report positive (Sánchez-Domínguez et al., 2011) or nil effects (Engdahl, 2014) of citizenship possession on immigrants' chances of intermarriage, but these results are likely affected by endogeneity.

We argue that the sign of the effect depends on the mechanisms underlying the formation of intermarriages involving the specific immigrant group affected by the intervention.

If, consistently with an assimilation account, intermarriages are the result of reduced barriers between natives and immigrants (intermarriages as *a consequence* of immigrants' socioeconomic integration), then an exogenous positive shift in immigrants' legal status should increase the chances of intermarriage. Citizenship acquisition reduces many of the boundaries between immigrants and natives. From an economic point of view, citizenship gives the former a longer-term prospect of stability in the country and facilitates access to the labor market. From a sociocultural point of view, the possession of citizenship is expected to increase immigrants' likelihood to enter intimate contact with natives, as a consequence of increased sense of belonging to the host country. Therefore, it can be expected that *immigrants' exogenous acquisition of citizenship would increase intermarriages*.

However, intermarriages could be based on a status exchange mechanism (intermarriages as *a driver* of immigrants' socioeconomic integration). The prospect of obtaining citizenship through marriage could be an incentive for immigrants to entering unions with natives. If status exchange prevails, a sudden and unexpected positive shift in immigrants' legal status would eliminate part of their rationale for the exchange, and, thus, reduce intermarriages. Hence, we could expect that *immigrants' exogenous acquisition of citizenship would reduce intermarriages*.

To complement the theoretical arguments just exposed, three specifications are necessary. First, the two scenarios do not imply any contradiction at the individual level. The prevalence of status exchange does not exclude integration as a co-determinant of intermarriages. The latter always involve a certain degree of immigrants' integration, which is a necessary precondition for intermarriages. At the same time, even in the presence of higher immigrants' assimilation, marrying a native could still contribute to immigrants' socioeconomic integration through citizenship acquisition. Hence, at the individual level an exogenous change in legal status can have simultaneously positive and negative effects on intermarriage propensity. Whether, and to what extent, negative or positive effects on intermarriages prevail depends on the specific characteristics of the immigrant groups and the host country interested by the intervention. Establishing which of the two predictions prevails is at the core of the empirical analysis of this paper.

Second, it can be posited that the negative effects manifest quicker compared to positive ones. Negative effects materialize as a consequence of a sudden and drastic reduction of material gains obtainable via marriage. Instead, the channels through which citizenship exerts positive effects are related to 'slower' changes in integration prospects and sense of belonging to the host country, hence positive effects are likely to be more delayed. This implies that our estimates might be biased toward negative effects, which are more easily detectable than positive ones.

Finally, a negative impact of citizenship acquisition on intermarriages is expected to be highly heterogeneous across immigrant groups. The magnitude of the negative effect should be stronger, the worse the socioeconomic conditions of immigrants before the intervention, i.e. the more likely intermarriages were based on status exchange. The heterogeneity of the negative effect is possibly related to differences in the underlying mechanisms. On one hand, immigrants' exogenous acquisition of citizenship can hinder migrant/native couples formation, thus reducing the number of partnerships. On the other hand, pre-existing migrant/native couples might just choose to cohabit as a response to the intervention. In this case, the observed reduction of intermarriages would leave the actual number of partnerships largely unchanged after the intervention. While the latter mechanism is more likely independent from the level of immigrants' socioeconomic integration, intermarriages involving members of the most disadvantaged immigrant groups are more likely to decrease as a result of both mechanisms. In our empirical analyses we are able to estimate heterogeneous effects of citizenship acquisition, but the data at our disposal do not allow distinguishing between the two just mentioned mechanisms.

### 1.2 The EUEEs as exogenous positive shifts in immigrants' legal status

To assess the causal effect of citizenship status on intermarriages, we exploit the two EUEEs that took place in 2004 and 2007. These two enlargements involved ten East-European countries:<sup>1</sup>

- 8 EUEE-2004 countries: Poland, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Slovakia, Slovenia;
- 2 EUEE-2007 countries: Romania and Bulgaria.

In our framework, these ten East-European countries represent the 'treated units', because, upon EU accession, citizens of these countries became EU citizens and thus experienced a sudden and positive change in their legal status. Table 1 provides an overview of the timing of the EUEEs.<sup>2</sup> Table 1 shows that EUEEs did not occur without pre-announcement, opening up the possibility of anticipation effects. To take anticipation effects into account the dates of both EUEEs are set at the years of the EU Council decisions on the Enlargements.

<sup>&</sup>lt;sup>1</sup> In 2004 also Cyprus and Malta accessed the European Union. We do not consider these countries as they do not belong to Eastern Europe and because the too small numbers of intermarriages impede any reliable analysis.

 $<sup>^{2}</sup>$  The table also includes the 2013 EUEE, which involved Croatia. We could not analyze this last EUEE with our data because it occurred too recently.

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
			2004 EUE										
		EU Council Decision	Treaty Signature	Accession									
		13 Dec	16 Apr	1 May									
					20	07 EUE							
				EU Council		Treaty	Accession						
				Decision		Signature	Accession						
				16 Dec		25 Apr	1 Jan						
												2013 EUE	3
											EU Parlamen Decision and Treat Signature	t y e	Accession
											1 Dec		1 Jul

Table 1 Overview and timing of the last three EUEEs

EU citizenship may not be equivalent to national citizenship of the host country. For example, the former may not allow to vote at the national elections and the positive effects on a stronger sense of belonging to the host country could be reduced. Nonetheless, the EU citizenship ensures fundamental advantages relative to a non-EU citizenship. Citizens of new member countries are able to settle and look for a job in any other country within the EU without being subject to legal limitations. Although several EU countries maintained temporary restrictions to the free movement of immigrant workers from new member countries,<sup>3</sup> the EUEEs led to a sharp increase in the size of the immigrant population in EU. This higher presence of potential foreign partners could mechanically translate into an increased number of intermarriages. To handle this, our estimates are based on a weighted index of intermarriages that takes into account the size and the female ratio of each immigrant group (see section 2.2).

### 1.3 The Italian setting and research hypotheses

Italy is a new destination of international migration and has received, since the early 2000s, significant and highly feminized migration inflows, especially from East-European countries. At the same time, marriages involving at least one foreigner increased

<sup>&</sup>lt;sup>3</sup> For instance, in Italy, as far as the 2004 EUEE, restrictions remained until the first half of 2006, while as far as the 2007 EUEE restrictions were fully eliminated only at the beginning of 2012.

dramatically, rising from less than 5% of total celebrated marriages in 1996 to 14.8% in 2012 (Figure 1). Here as in the rest of the empirical analyses, immigrant status is defined considering individuals' citizenship and not country of birth.



Figure 1 Share of intermarriages and foreign-marriages out of total marriages (Italy, 1996-2012)

Source: Own elaboration based on data from the Italian Office of Statistics (ISTAT, www.demo.istat.it)

As Figure 1 shows, the large part of intermarriages in Italy occurs between native men and immigrant women (about 80% in 2012).<sup>4</sup> The mating patterns observed for this type of couple, compared with two-natives and two-immigrants unions, suggest that the growth of intermarriages did not occur randomly: a convergence of structural constraints and preferences makes the mating between low-educated, older Italian men and younger, high-educated immigrant women particularly likely (Maffioli et al., 2014; Guetto and Azzolini, 2015). On one hand, Italian men would face increasing difficulties in finding a (high-educated) native partner, so that immigrant women might represent a sort of 'secondary'

<sup>&</sup>lt;sup>4</sup> Beyond being quantitatively much less relevant, marriages between Italian women and foreign men differ also in the national composition of the foreign partners, since only one tenth involves Eastern European men, while among Italian men the corresponding share of East-European wives is nearly one third. For this reason we cannot implement analyses on marriages involving Italian women and foreign men.

marriage market for them. On the other hand, immigrant women might accept to marry down as a potential means of upward social mobility and increased stability in the host country.

Immigrant women's incentives to marry a native Italian man stem from their peculiar pattern of labor market inclusion. Many migrant women are employed in the household services' sector and often hold irregular status, which increases their risk of working in lowest-paid occupations and/or in the underground economy (Sciortino, 2004; Reyneri, 2008, 1998; Fullin and Reyneri, 2011; Reyneri and Fullin, 2011). The difficult socioeconomic integration of immigrants in Italy is also due to the strict eligibility rules for naturalization, which require 10 years of uninterrupted residence for non-EU migrants (Kosic and Triandafyllidou, 2003; Reyneri, 2008). The possibility to obtain Italian/EU citizenship through marriage is particularly relevant for immigrants and most women's naturalizations occur indeed via marriage with an Italian citizen.<sup>5</sup> Given that immigrants' poor socioeconomic integration might make status exchange an important mechanism underlying the growth of intermarriages in Italy, our first hypothesis can be summarized as follows:

### H1: The EUEEs have a negative impact on marriages between Italian men and immigrant women originating from Eastern European countries.

Furthermore, it can be argued that the EUEEs have heterogeneous effects depending on the level of socioeconomic integration of the immigrant groups considered. More precisely, the higher the potential material returns from intermarriage for immigrant women, the stronger the negative effect of the EUEEs. Women originating from poorer countries and experiencing lower levels of socioeconomic integration should be more responsive to a change in the expected material gains from intermarriage. Therefore, our second hypothesis can be:

# H2: The negative impact of EUEEs on marriages between Italian men and East-European immigrant women is stronger, the lower the level of socioeconomic integration of the immigrant group.

To assess if the impact of the EUEEs varies as a function of the national groups' s different degrees of socioeconomic integration, we produce separate estimates for all national groups affected by the policy. As far as the 2004 EUEE, we are forced to pool together some national

<sup>&</sup>lt;sup>5</sup> The entitlement to Italian citizenship via marriage with an Italian citizen is acquired after a period of residence in Italy after the marriage celebration. Before 2006, this period amounted to six months, while after 2006 it has been extended to twenty-four months.

groups due to small numbers of intermarriages and distinguish between three countrygroups: Poland; Czech Republic and Slovenia; and all other EUEE-2004 countries (Estonia, Hungary, Latvia, Lithuania, Slovakia). As far as the EUEE-2007, we analyze Romania and Bulgaria separately. In broad terms, we surmise the negative impact of EUEE to be stronger for EUEE-2007 countries compared to EUEE-2004 ones. Among the latter, a further distinction is hypothesized between Poland and the other EUEE-2004 countries, on one hand, and Czech Republic and Slovenia, on the other. In the following, we briefly discuss some arguments which justify such expectations.<sup>6</sup>

In the pre-enlargement period, Romania had one of the lowest GDP per capita among Eastern European countries. In the last fifteen years, Romanians have constantly been among the most represented foreign nationalities in Italy. In 2012, 20% of legally resident foreigners were Romanians and about 17% of all women married to an Italian man were Romanian. These figures suggest that Romanian women could have the highest potential returns from marrying an Italian man. This idea is reinforced by the consideration that, compared to the other Eastern European nationalities, Romanian women are overrepresented among those employed in the household services' sector (Barbagli, 2007). The arguments outlined for Romanian women should extend to Bulgarian women as well: Bulgaria's GDP per capita did not differ much from that of Romania and Bulgarian women's model of labor market inclusion is similar to that of Romanian ones (Fullin and Reyneri, 2011).

Among EUEE-2004 countries, Slovenia and Czech Republic exhibited a much higher GDP per capita in the pre-enlargement period as compared to other Eastern European countries. Hence, Poland and "Others" should hold an intermediate position between EUEE-2007 countries and Slovenia and Czech Republic. When it comes to immigrants' integration in the host country, although Polish and Romanian women face similar labor market conditions in Italy (Fullin and Reyneri, 2011), one might argue that Italian men perceive a larger cultural distance with the latter.<sup>7</sup> First, Italy and Poland share a common Catholic tradition (Guetto et al., 2015); second, in the media Romanians are often portrayed as

<sup>&</sup>lt;sup>6</sup> Unfortunately, detailed data on the economic, cultural and labor market conditions of each national group considered before EU accession are not available in Italy.

<sup>&</sup>lt;sup>7</sup> The same applies comparing Romania/Bulgaria and other EUEE-2004 countries. Opinion polls conducted between 2002 and 2007, on representative samples of the Italian population aged more than 15, show systematically lower levels of trust toward immigrants coming from the Balkans (ex-Yugoslavia, Albania, Romania and Bulgaria) compared to immigrants coming from other Eastern European countries (Demos & Pi, 2007).

belonging to the same ethnic group of Romanian Roma (Măndroane, 2012) and depicted as the most crime-prone minority in Italy (Popescu, 2008).

### **2. Empirical strategy**

### 2.1 The Synthetic Control Method

Obtaining sound causal estimates of the impact of the EUEE on intermarriages implies a comparison of the trend of intermarriages involving women from a new member country with a 'counterfactual trend', i.e. the trend that we would have observed if the country did not access the EU. Hence, the key point for retrieving causal estimates of EU accession on intermarriages is the construction of a credible control group for the new member country. To achieve this, we apply the Synthetic Control Method (SCM), developed by Abadie and Gardeazabal (2003) as a data-driven approach for assessing the impact of public policies that take place at an aggregate level and affect aggregate entities. Differently from previous SCM applications (e.g., Abadie and Gardeazabal, 2003; Abadie et al., 2010, 2014; Billmeier and Nannicini, 2013), in this paper SCM is not applied to administrative or political entities but to immigrant groups.

SCM allows to reproduce the outcome trajectory that the 'treated unit' would have experienced in the absence of the intervention or event of interest (Abadie, Diamond, and Hainmueller, 2010). This counterfactual trend is reproduced by a 'synthetic unit' which is built as a weighted combination of control units included in the 'donor pool'. To construct a synthetic unit that reproduces as closely as possible the level and trend of the outcome as well as relevant characteristics of the treated unit (t) in the pretreatment period, SCM assigns weights (w) to the control units included in the 'donor pool' (c). These weights are forced to be positive and sum up to one (for technical details, see Abadie et al., 2003; 2010). More precisely, w is chosen to minimize the following quantity

$$|\sum_{c=1}^{c} w_c X_c - X_t|, \qquad (1)$$

where  $X_t$  is defined as a vector of pretreatment variables for the treated units, and  $X_c$  is defined as the corresponding vector of these variables for the synthetic unit. If the SCM procedure is successful in building a synthetic unit that approximates the treated unit up to the treatment, it follows that the counterfactual unit is equivalent to the treated unit both in the observed and unobserved factors that determine the level and the trend in the outcome. The outcome trajectory of the synthetic unit in the post-treatment period represents what we would have observed for the treated unit if it had not received the treatment (hence, the counterfactual).

It is worth stressing that the identification of an optimal synthetic unit is not a granted nor an easily affordable result. To achieve this, an adequate pool of control units must be available, the pretreatment observation window should be long enough, and the relevant predictors included in X must be available for all units. These conditions make SCM a demanding but at the same time more rigorous method relative to more traditional approaches for the causal analysis of aggregate effects like panel regressions and Differencein-Differences (DiD). SCM can be seen as an extension of this class of methods. The key distinction is that, instead of requiring a 'parallel trend' condition as DiD, SCM allows for unit-specific trends and recover the parallel trend condition by exactly reproducing the counterfactual unit's levels and trend exploiting all available information in the pretreatment period.

Also, the SCM performs better than DiD when the treated units are few or even only one. This is true especially when considering that the estimated standard errors obtained from DiD regressions with very few treated units are not correct as they rely on asymptotic assumptions which do not hold with small number of units (Conley and Taber 2001). The approach used by SCM to perform inferential analysis of the results is based on placebo tests (Abadie, Diamond, and Hainmueller 2010). These tests consist in replicating the SCM analysis to every potential control unit in the donor pool as if each of them were affected by the intervention. This allows assessing whether the size of the effect estimated for the treated unit is large relative to the distribution of the effects estimated for the units not exposed to the intervention.

### 2.2 Data and variables

We use data from the Italian Register of Marriages (IRM). These data contains high-quality and rich information on all marriages celebrated yearly in Italy. Table 2 lists the 48 countries used for our analyses. Beside our treated units, represented by the countries that access the EU in 2004 (8) and those that entered in 2007 (2), we use 9 East-European countries that were never members of the EU during our time-span and 29 non-European countries as

controls. As already mentioned, because of too small numbers, we aggregated some EUEE-2004 countries by summing countries' number of marriages. Immigrant groups with less than 10 intermarriages per year, that would display too volatile results, as well as European countries which are always members of the EU are excluded from the analyses.

Treated countries (10)	Control countries (38)						
EUEE-2004	Other East-European countries						
SL/CZ	Albania	Macedonia	Croatia				
Slovenia	Ukraine	Moldova	Bosnia-Herzegovina				
Czech Republic	Russia	Belarus	Serbia-Kosovo-Montenegro				
Others		Other Non-	-EU countries				
Slovakia	Switzerland	Tunisia	Ethiopia				
Hungary	China	Canada	Morocco				
Estonia	Philippines	Cuba	Mauritius				
Latvia	Japan	Dominica	Nigeria				
Lithuania	Iran	Peru	Colombia				
	Thailand	El Salvador	Ecuador				
Poland	Turkey	Mexico	Dominican Republic				
	Algeria	USA	Venezuela				
EUEE-2007	Cape Verde	Argentina	Australia				
Bulgaria*	Chile	Brazil					
Romania*							

*Note*: In Italics countries that are included only in the additional analyses (available upon request) because, due to small numbers, information on the educational make-up of the couple is not available. Serbia, Kosovo and Montenegro are considered jointly as they formed a unique country until 2006. \*Bulgaria and Romania are included in the donor pool for EUEE-2004 treated countries.

Figure 2 shows the trends in the absolute number of intermarriages for the four groups of countries identified according to their 'treatment' status and geographical location. The dashed vertical line identifies the 2004 EUEE while the solid vertical line represents the 2007 EUEE. In both cases, as mentioned above, we allow for 'anticipation' effects: i.e., we set the 2004 EUEE on 31.12.2002 instead of 01.05.2004 and the 2007 EUEE on 31.12.2005 instead of 01.01.2007, because the EU Council enlargement decisions were taken two years before the actual access of the new member states. Figure 2 shows mere aggregated trends of intermarriages, but some patterns suggesting the existence of EUEE effects are worth being underlined. All groups, although with different intensity, show a growth in intermarriages in the period 1995-2002. Between 2002 and 2005, marriages between native-

Italian men and women from EUEE-2004 countries (the treated countries, in this period) experience a decrease. Marriages with women of non-European countries (bottom-right panel) also decrease after 2002 but then tend to increase again. Intermarriages with women from EUEE-2007 countries, instead, increase sharply in the 2002-2005 period and then suddenly and dramatically decrease after the 2007 EUEE.<sup>8</sup>



Figure 2 Number of intermarriages by group of countries of origin of the bride Note: Own elaboration based on IRM data. The dashed vertical line identifies the 2004 EUEE while the solid line represents the 2007 EUEE. EUEEs are anticipated relative to the actual access of the new member states to the date of the EU Council decision (see Table 1).

Although Figure 2 provides some hints of the existence of an EUEE negative impact on intermarriages, it must be acknowledged that the shown trends might reflect changes in the size of the immigrant population, which is somehow mechanically linked with intermarriages. For example, the growth in intermarriages detected for all groups before 2005 is clearly related to the large immigrant inflows from Eastern Europe occurred in those years. To account for variation in the structural constraints to intermarriage posed by

<sup>&</sup>lt;sup>8</sup> The sudden reduction of intermarriages occurred between 2008 and 2010 among non-EU countries (see also Figure 1) can be traced back to the introduction of art. 1, paragraph 15 of Law no. 94/2009. This law imposes to foreigners who want to marry in Italy to exhibit a regular stay permit, in addition to the traditional *nulla osta* (or certificate of legal capacity to marry).

marriage markets (Kalmijn, 1998; Chiswick and Houseworth, 2011), instead of using the absolute number of marriages we construct a weighted index that proxies the intermarriage 'propensity' of each national group. More precisely, we divide the yearly number of marriages celebrated between women belonging to the selected nationalities and Italian men by the product of the size and the female ratio of each specific national group and multiply the obtained indicator by 1,000. Beyond incorporating the main marriage market constraints identified in the theory, this index allows to control for the positive impact of EUEEs on the immigrant inflows.

Two official sources could be employed to measure the number of immigrants in Italy and the female ratio within each national group: the Municipality registers on regularly resident individuals and the Internal Affair Ministry records on foreigners with a regular stay permit. Both sources have pros and cons and neither of them is, *per se*, optimal to best estimate the actual size of the immigrant population.<sup>9</sup> However, the two series are highly correlated in our pooled sample (about .9) and we make use of both. First, to reduce noise in the data for small countries, especially in the years just before the next population census, we smooth the two series. Then, for the analysis of the 2004 EEUE, where we look at marriages celebrated from 1997 onwards, we only focus on stay permits data: information on legal residents is not available for all countries of origin before 2001 and, when available, is most likely of bad quality since we focus on the second half of the '90s (thus, close to the 2001 census). The observational window considered in the analysis of the 2007 EEUE spans from 2000 to 2008, thus information on residents tends to be complete and much more reliable and can be considered jointly with information on stay permits. Thus, in this case

<sup>&</sup>lt;sup>9</sup> A common, and unavoidable, shortcoming is that neither of the two sources contains information on irregular migrants. This is an issue since, before 2009, irregular migrants could marry an Italian man (see note 8). Municipality registers on residents have three main disadvantages. First, they are not frequently updated to account for geographical mobility, this possibly resulting in individuals being registered twice. Refreshments of the lists are made in coincidence with the population *censi*. This implies that data are closer to the 'true' number of migrants on the *census* year and progressively deteriorate. Second, there exist cases of legally present immigrants that are not registered in Municipality registers or are so only with some delay. Finally, before 2001, national data on the immigrant residents, disaggregated by citizenship and gender are available only for the 50 largest groups. Stay permits data would overcome many of these issues: they are complete and they do not suffer to the same extent from delayed registrations. Moreover, until 2008 these data did not include accompanied minors (less than 14 years). This slightly improves the Municipality data as minors do not constitute a real 'pool' of potential spouses. However, these data have three disadvantages as well. First, although the data include migrants with stay permits of at least three months, they might overestimate the potential pool of partners as they include individuals who do not register at the Municipalities because of short stay in the country. Second, immigrants might be counted more than once since there might be cases of multiple permits in special or transitional conditions. Finally, since 2007 citizens of new member countries are not included in the stay permits data, while they still have to register to Municipalities as all other residents.

we take the average of the two series but for the years 2007 and 2008, because starting from 2007 citizens of new UE member countries have been excluded from stay permits data.

To reproduce a synthetic unit for each treated unit, a set of time invariant and timevarying predictors has to be selected among those that are theoretically linked to our weighted index of intermarriages and its temporal variations. As the structural determinants of intermarriages are already included in the outcome variable (i.e., size of the immigrant population and female ratio in the immigrant group), the goal is identifying relevant socioeconomic predictors. Unfortunately, the unavailability of detailed indicators on immigrants residing in Italy in the pretreatment period strongly limited our choice. We include three socioeconomic variables measured as country-specific averages in the pretreatment period. First, a measure of couples' educational match-up (i.e., the percentage of couples in which the wife is more educated than the husband), as couple educational imbalance has been interpreted as an indicator of status exchange (Guetto and Azzolini, 2015). Then, we consider the Human Development Index (HDI) (a composite indicator of life expectancy, years of schooling and per-capita GDP) and the net migration rate (given by the difference of immigrants and emigrants of a country in a period of time, divided per 1,000 inhabitants) of the country of origin. If the status exchange theory holds, immigrant groups coming from countries scoring low on the HDI and characterized by high emigration rates should exhibit higher values of our intermarriage index.

As it happens for all complex social phenomena, country-specific intermarriage 'propensity' levels and trends are hardly predictable by observable factors only. Whereas a 'perfect', but obviously impossible, matching would be based on unobserved group characteristics, an optimal, and possible, solution is to include lagged measures (i.e., measured in the pretreatment period) of the outcome variable as they capture great part of the unobservable component that lies behind union formation. Given that our outcome variable already takes into account crucial structural determinants of intermarriages, the condition that the synthetic unit shows similar pretreatment levels and trends as the treated one is a rather strict one.

### 3. Empirical results

#### 3.1 SCM estimates

Figure 3 displays the trends of the weighted number of intermarriages observed for the 'real' treated units and the trends estimated through SCM for their respective 'synthetic' ones. SCM performed quite well as the real pretreatment trends of all the considered groups are precisely approximated by the synthetic unit ones. It should be stressed that the intermarriage index is fairly similar and stable across immigrant groups in the pretreatment period. This indicates that the growth in the absolute number of intermarriages observed up to 2005 (Figure 1) is mostly due to changes in the marriage market structure, rather than declining social boundaries between immigrants and natives.

Figure 3 makes clearly evident that EU access led to a marked drop in the number of marriages between Italian men and women from both EUEE-2004 and EUEE-2007 countries. The decision to allow for anticipation effects is empirically justified, since the intermarriage index starts to decline at the year of the EU Council decision and then flattens out two years after the treatment. At that stage (31.12.2007), real Romania dropped by 74% while its synthetic increased by 5%. Thus, the causal impact of EU access can be estimated in a 79% causal reduction in weighted intermarriages, a result which is almost identical to that of Bulgaria. Compared to the 2007 EUEE, the impact of the 2004 EUEE is less pronounced. Considering 31.12.2004, the magnitude of the negative effect is only slightly larger for Poland and 'Others' immigrant groups (with an estimated impact of about 40 and 50% respectively), compared to Slovenia and Czech Republic ones, for which the estimated negative impact is about 30%. Hence, EU access had a greater negative impact for women belonging to less affluent and integrated immigrant groups, thus providing support to the hypothesis that a sudden positive shock in the legal status reduces intermarriages the more, the larger the socioeconomic divide between the immigrant and the majority group and, hence, the more likely status exchange in the mating.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> As robustness checks (not shown here but available upon request), we replicated the SCM analyses using the data on stay permits and legal residents separately to estimate weighted intermarriages. For the 2004 EUEE we find qualitatively similar results on the impact of the EU access, although differences in the levels of intermarriages in the first years of the series (but data on legal residents for those years could only be extrapolated). For 2007, instead, results do not vary regardless of the data employed. That is, the difference in the impact of the EU access between 2004 and 2007 cannot be ascribed to differences in the operationalization of the weighted number of intermarriages.



Figure 3 Trends in the weighted number of intermarriages: real vs. synthetic groups Note: Own elaboration on IRM data.

The weights distribution of the countries included in the donor pool are shown in Table 3. SCM assigns weights mostly to low-income countries (only exception is Japan used for reproducing Bulgaria's synthetic trend) suggesting the existence of common intermarriage patterns in those countries. Due to unavailability of data on couples' educational make-up for 'small' countries in the first years of the series, some of the countries originally included in the donor pool were dropped (see Table 2). This does not harm noticeably our analysis, as we dropped countries whose trends in marriages are highly volatile. However, additional analyses employing all 38 countries of the original donor pool yield qualitatively the same results (available upon request).

	2004	2007 EUEE			
	SL/CZ	Others	Poland	Bulgaria	Romania
Albania		0.01		0.01	
Bulgaria		0.01			
Romania	0.38	0.01	0.57		
Switzerland		0.02		0.01	
Ukraine		0.01		0.01	
Russian Federation		0.02		0.06	0.17
Croatia		0.01		0.01	
Bosnia And Herzegovina		0.10		0.01	
Macedonia, Republic of		0.01			
Moldova				0.01	
Belarus		0.01		0.02	
Serbia-Kosovo-Monte		0.01		0.01	
China, People's Republic		0.01		0.01	
Philippines		0.02			
Japan		0.01		0.34	
Thailand		0.02		0.01	
Morocco		0.01		0.01	
Nigeria		0.06	0.02	0.03	
Cuba				0.01	
Dominican Republic		0.01		0.01	
Mexico	0.08	0.42		0.22	0.26
United States of America		0.01		0.01	
Argentine	0.48	0.02	0.40	0.01	
Brazil		0.01		0.04	0.43
Colombia	0.06		0.00	0.01	0.15
Ecuador		0.02		0.01	
Peru		0.01		0.01	
Venezuela		0.15		0.17	

Note: The sum of country weights might differ from 1.00 because of rounding.

Table 4 compares the pretreatment outcome and characteristics of the treated units with their respective synthetics and with a simple average of control units weighted by number of intermarriages in Italy. In both EUEEs and across all groups, the synthetic units recover almost identical values on the pretreatment lagged values of the outcome variable, which are notably different from donor pool weighted averages, especially for EUEE-2007 countries.

	EUEE 2004						
	SL/CZ	Synthetic SL/CZ	Others	Synthetic Others	Poland	Synthetic Poland	Donor pool (weighted average)
Wife more educated (%) (Pretreatment average)	21.49	30.32	27.96	31.21	28.58	30.37	27.03
Net migration rate 1995-2000	0.54	-1.58	-0.36	-0.52	-1.21	-1.78	-3.14
HDI 2000 Weighted number of marriages	0.81	0.72	0.77	0.68	0.78	0.72	0.68
1997	12.86	13.63	9.72	9.70	15.15	15.59	12.60
1998	14.31	13.42	9.83	9.82	15.44	14.82	11.50
1999	13.81	13.51	8.54	8.53	14.70	14.55	12.00
2000	13.09	13.22	10.47	10.46	13.31	13.73	13.70
2001	11.79	11.93	9.08	9.07	12.67	12.37	11.98
2002	12.25	12.68	9.31	11.02	10.98	12.77	10.37
				EUEE 200	)7		
	Bulgaria	Synthetic Bulgaria	Romania	Synthetic Romania	Donor pool (weighted average)	1	
Wife more educated (%) (Pretreatment average)	34.50	36.79	31.31	29.29	26.04	_	
Net migration rate 2000-2005	-2.12	-1.04	-0.47	-1.33	-3.61		
HDI 2000	0.71	0.74	0.71	0.69	0.67		
Weighted number of marriages							
2000	12.33	12.33	18.524	17.48	14.19		
2001	11.11	11.11	14.84	15.29	13.27		
2002	12.55	12.55	13.89	14.50	10.39		
2003	13.12	13.12	13.33	13.26	8.11		

Table 4 Predictors balance

When looking at the pretreatment average of the share of couples in which the wife is more educated, for the 2007 EUEE the synthetic units match quite good the treated ones. This is relevant here since values for Romania and especially Bulgaria are quite distant from the

13.96

13.19

12.69

13.09

6.97

6.90

11.93

11.09

11.93

10.34

2004

2005

donor pool average. Consistently with status exchange theory, marriages between Italian men and immigrant women from these low-income countries are more likely to involve a wife more educated than the husband (Guetto and Azzolini, 2015). Among EUEE-2004 immigrant groups, the SCM does not add much since values for Poland and 'Others' were already very similar to the donor pool average. In the case of Slovenia and Czech Republic, the share of couples in which the wife is more educated is much lower compared to their synthetic counterpart. This can be traced back to the fact that the latter is mostly based on Romanian and Argentinian immigrants, who show rather different educational levels and assortative mating patterns, relative to the treated countries. However, in the case of pretreatment averages of HDI and net migration rates of the countries of origin, in all analyzed countries the synthetic values are closer to the values recovered for the treated ones, compared to donor pool averages. Hence, our counterfactual analysis is based on the comparison of countries that, independently of their treatment status, are rather similar with respect to socioeconomic characteristics of the sending countries that constitute important predictors of intermarriage behaviors.

### 3.2 Significance tests

To assess the significance of the estimated causal impacts, we conduct a series of placebo tests. As described in section 3, these tests are accomplished by assigning the 'EUEE' treatment to each of the control countries as if they were treated as EUEE-2004 and EUEE-2007 countries. Figure 4 shows the results of these tests. More precisely, the black lines show the evolution of the gap estimated between the real and the synthetic units as derived from Figure 3, while the thinner grey lines show the same gaps estimated for the control units. Figure 4 shows that the 2007 EUEE had strongly significant effects on intermarriages celebrated between Italian men and Romanian and Bulgarian women. The significance of the effect is visibly high as the placebo gaps (grey lines) almost never overlap with the EUEE-2007 gap lines in the post-treatment period.



Figure 4 Estimated gaps between real and synthetic groups (bold black line) and placebo gaps in the control countries (grey lines) Note: Own elaboration on IRM data.

When looking at EUEE-2004 countries, the evidence of significant effects is slightly lower. In 2003, the probability of estimating a gap larger than the one estimated for Slovenia and Czech Republic is .21 (5/24), hence a higher level than the one typically adopted in conventional tests of statistical significance (i.e., .05), which would lead us to accept the null hypothesis that the effect is zero. However, in 2004 and 2005 the impact is significant at conventional levels for all treated units.<sup>11</sup>

### 4. Conclusions

The empirical findings show that the European Union Eastern Enlargements (EUEEs) led to a sharp drop in intermarriages between women originating from new EU member countries and Italian men. This points to the relevance of status exchange in the formation of intermarriages in a context like Italy, where immigrants' socioeconomic integration is poor and naturalization is quite difficult to obtain apart from marriage with a native citizen. In the Italian setting, the prospect of obtaining citizenship through marriage works as an important incentive for immigrants to entering unions with natives. The latter is the more true the worse immigrants' socioeconomic condition at the moment of marriage. As a further proof of this interpretation, we found heterogeneous effects of EU citizenship acquisition across immigrant groups characterized by different levels of socioeconomic integration. The exogenous reduction in the returns to intermarriage induced by the EUEE resulted in about 80% decrease in intermarriages for the economically weakest national groups, namely Bulgarians and Romanians. When looking at intermarriages involving women belonging to better-off Eastern European immigrant groups, as in the case of the 2004-EUEE, the impact was still significant, although much weaker. Also within this latter group, the impact of the EUEE happened to be dependent on the degree of socioeconomic integration of the national group of belonging of the women and ranged between 30 and 50%.

The evaluation of the impact of citizenship acquisition on intermarriages is proposed as an empirical test of the extent to which an assimilation account can be applied to the observed increase in the number of intermarriages. Taken together, our empirical findings imply that the growth of intermarriages cannot be considered *per se* as an indicator of higher immigrants' integration in the host countries (Song, 2009), especially when marriages

<sup>&</sup>lt;sup>11</sup> When analyzing the statistical significance of the 2004 EUEE, four placebo units were dropped, as usually done in the literature (Abadie et al., 2010), because of too large root mean squared prediction errors, indicating a poor performance of SCM in reproducing an adequate synthetic trend. For the same reason, two countries were dropped in the 2007 EUEE.

involve the most disadvantaged immigrant groups. On the contrary, lack of socioeconomic integration and uncertain prospects of stability in the destination countries are likely to operate as positive push factors towards intermarriage.

Although rather straightforward, our results do not come without limitations. First, the channels through which EUEEs exert their negative impact on intermarriages were not investigated. Intermarriages can decrease either because pre-existing couples have fewer incentives to marry and opt for cohabitation - leaving the actual number of partnerships unchanged – or because fewer migrant/native couples are formed due to reduced returns from the mating for immigrant women. We suggest that while the first mechanism might operate across all types of couples, the second, which more directly assumes status exchange at the basis of the mating, might be more common the poorer the socioeconomic condition of immigrants in the host country. That is, the stronger negative impact of EU access on intermarriages involving Romanian and Bulgarian women might be explained by a higher incidence of the second mechanism. Unfortunately, we could not disentangle these mechanisms since reliable data on migrant/native cohabitations are not available, especially up to the early 2000s. One might question the substantive relevance of the negative effect of EUEEs if the latter did not influence the actual number of partnerships, but only couples' marital status. However, marriage implies a longer-term commitment than cohabitation, so that the decision to marrying vs. cohabiting still represents a relevant outcome. Entering a marital union with a member of the native population is likely to increase immigrants' prospects of staying in the country of destination for several reasons, not the least the direct and indirect costs of divorce, which is also a time consuming process (Härkönen and Dronkers, 2006).

To assess whether EUEEs have had a direct impact on migrant/native couple formation, it would have been interesting to analyze the effects of EU accession on the separation/divorce propensities of intermarriages involving women from new EU member countries. If the negative effect of EUEEs on intermarriages really concerned the number of partnerships, one could expect an increase in separations and divorces as well. Unfortunately, Italian register data on separations and divorces contain information on the citizenship and the country of origin of the spouses in very broad categories (e.g., Former Soviet Union, EU Europe and other European countries), thus impeding us from carrying out the kind of analysis implemented in this paper. Our results are focused on a specific case study, Italy, which is characterized by overall weak socioeconomic integration of immigrants, uncertain prospects of legal stability and strict conditions for naturalization. Hence, our results are likely to extend to those countries which share a similar context and migration in-flows, such as Southern European ones. Further research comparing the EUEEs impact on intermarriages and separation/divorce propensities in old and new immigration countries would increase our understanding of the effects of legal status on the immigrants' family choices and socioeconomic integration in Europe.

### References

- Abadie, A., and J. Gardeazabal, 2003. The Economic Costs of Conflict: A Case Study of the Basque Country. *American Economic Review* 93,113–132.
- Abadie, A., A. Diamond, and J. Hainmueller. 2010. Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program. *Journal of American Statistical Association* 105, 493–505.
- Abadie, A., A. Diamond, and J. Hainmueller. 2015. Comparative politics and the synthetic control method. *American Journal of Political Science* 59 (2),495-510.
- Adserà, A., and A. Ferrer. 2015. Immigrants and Demography: Marriage, Divorce, and Fertility. In Handbook of the Economics of International Migration, 1A, edited by Barry R. Chiswick and Paul W. Miller, 315–374. Amsterdam: Elsevier.
- Barbagli, M. 2007. 1° Rapporto sugli immigrati in Italia, Ministero dell'Interno, December 2007.
- Becker, G. 1981. A Treatise on the Family. Harvard: Harvard University Press.
- Bloemraad, I., A. Korteweg, and G. Yurdakul. 2008. Citizenship and Immigration: Multiculturalism, Assimilation, and Challenges to the Nation-state. *Sociology* 34 (1): 153–179.
- Billmeier, A. and T. Nannicini. 2013. Assessing Economic Liberalization Episodes: A Synthetic Control Approach, *The Review of Economics and Statistics* 95 (3), 983-1001.
- Chiswick, B.R., and C. Houseworth. 2011. Ethnic Intermarriage among Immigrants: Human Capital and Assortative Mating. *Review of Economics of the Household* 9 (2): 149–180. doi:10.1007/s11150-010-9099-9.
- Choi, K. H., M. Tienda, D. Cobb-Clark, and M. Sinning. 2012. Immigration and Status Exchange in Australia and the United States. *Research on Social Stratification and Mobility* 30 (1): 49–62. doi:10.1016/j.rssm.2011.08.002.
- Conley, T. G, and C. R. Taber. 2011. Inference with "difference in differences" with a small number of policy changes. *The Review of Economics and Statistics* 93 (1):113-25.
- Corluy, V., I. Marx, and G. Verbist. 2011. Employment chances and changes of immigrants in Belgium: The impact of citizenship. *International Journal of Comparative Sociology* 52 (4): 350-368.
- Cortina Trilla, C., A. Esteve, and A. Domingo. 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. doi:10.1111/j.1747-7379.2008.00151.x.
- Davis, K. 1941. Intermarriage in Caste Societies. American Anthropologist 43: 376–395.doi:10.1525/aa.1941.43.3.02a00030.
- Demos&Pi. 2007. Gli Italiani e l'immigrazione. Rapporto Aprile 2007. See: http://www.demos.it/a00020.php.
- De Rooij, E. A. 2012. Patterns of Immigrant Political Participation: Explaining Differences in Types of Political Participation between Immigrants and the Majority Population in Western Europe. *European Sociological Review* 28 (4): 455-481. doi:10.1093/esr/jcr010.
- Engdahl, M. 2014. Naturalizations and the economic and social integration of immigrants. *Uppsala Center for Labor Studies Working paper* 2014: 6.
- Fullin, G., and E. Reyneri. 2011. Low unemployment and bad jobs for new immigrants in Italy. *International Migration* 49 (1):118-47.
- Gathmann, C. and Keller N. 2014. Returns to Citizenship? Evidence from Germany's Recent Immigration Reforms. *SOEP papers* 656-2015.
- Gordon, M. 1964. Assimilation in American Life. New York: Oxford University Press.
- Guetto, R. and S. Luijkx, and S. Scherer. 2015. Religiosity, Gender Attitudes and Women's Labour Market Participation and Fertility Decisions in Europe. *Acta Sociologica* 58 (2): 155-172.

- Guetto, R. and Azzolini, D. 2015. An Empirical Study of Status Exchange through Migrant/Native Marriages in Italy. *Journal of Ethnic and Migration Studies* 41(13): 2149-2172. DOI: 10.1080/1369183X.2015.1037725
- Haandrikman, K. 2014. Binational Marriages in Sweden: Is There an EU Effect? *Population, Space and Place* 20 (2): 177–199. doi:10.1002/psp.1770.
- Härkönen, J. and J. Dronkers .2006. Stability and change in the educational gradient of divorce. A comparison of seventeen countries. *European Sociological Review* 22 (5): 501-17.
- Kalmijn, M. 1998. Intermarriage and Homogamy: Causes, Patterns, Trends. Annual Review of Sociology 24: 395–421. doi:10.1146/annurev.soc.24.1.395.
- Kogan, I. 2003. Ex-Yugoslavs in the Austrian and Swedish labour markets: The significance of the period of migration and the effect of citizenship acquisition. *Journal of Ethnic and Migration Studies* 29 (4): 595-622. doi: 10.1080/1369183032000123413.
- Kosic, A., and A. Triandafyllidou. 2003. Albanian Immigrants in Italy: Policy Implementation, Coping Strategies and Identity Issues. *Journal of Ethnic and Migration Studies* 29 (6): 997– 1014. doi:10.1080/1369183032000171339.
- 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. doi:10.2307/145809
- Maffioli, D., A. Paterno, and G. Gabrielli. 2014. International married and unmarried unions in Italy: Criteria of mate selection. *International Migration* 52 (3):160-76.
- Măndroane, I. D. 2012. Roma, Romanian, European: A Media Framed Battle over Identity. *Critical Approaches to Discourse Analysis across Disciplines* 5 (2): 102 119.
- Merton, R.K. 1941. Intermarriage and the Social Structure: Fact and Theory. Psychiatry 4: 361–374.
- Popescu, T. 2008. Immigration Discourses: The Case of Romanian Immigrants In Italy. *The Journal* of Linguistic and Intercultural Education 1: 31-43.
- Potârcă G., and M. Mills. 2015. Racial Preferences in Online Dating across European Countries. *European Sociological Review* 31 (3): 326-341 first published online January 5, 2015 doi:10.1093/esr/jcu093.
- Reyneri, E. 1998. The role of the underground economy in irregular migration to Italy: Cause or effect? *Journal of Ethnic and Migration Studies* 24 (2): 313 331.
- Reyneri, E. 2008. Italy. In Honekopp E., Mattila H. Permanent or circular migration? Policy choices to address demographic decline and labour shortages in Europe. p. 109-148, IOM, Budapest.
- Reyneri, E., and G. Fullin. 2011. Labour Market Penalties of New Immigrants in New and Old Receiving West European Countries. *International Migration* 49 (1): 31–57. doi:10.1111/j.1468-2435.2009.00593.x.
- Sánchez-Domínguez, M., de Valk H., Reher, D. 2011. Marriage Strategies Among Immigrants In Spain. *Revista Internacional de Sociologia* 1: 139–166.
- Sciortino, G. 2004. Immigration in a Mediterranean Welfare State: The Italian Experience in Comparative Perspective. *Journal of Comparative Policy Analysis: Research and Practice* 6 (2): 111–129. doi:10.1080/1387698042000273442.
- Song, M. 2009. Is Intermarriage a Good Indicator of Integration? *Journal of Ethnic and Migration Studies* 35 (2): 331–348. doi:10.1080/13691830802586476.
- Valk, H. AG, and J. D. Medrano. 2014. Guest editorial on meeting and mating across borders: Union formation in the European Union single market. *Population, Space and Place* 20 (2):103-9.