# Is Immigration Detrimental for Social Trust in the European Union? A Three-Level Model of Cultural Heterogeneity and Citizenship Regime as Social Capital Predictors<sup>\*</sup>

Giampiero LUPO\*\*

# ABSTRACT

This paper deals with the effects of citizenship regimes on the relationship between immigration and social capital, in the European Union. The study questions previous researches that reported a negative effect of immigration on social capital without taking into account contextual factors, like citizenship regimes, that may affect the interconnections between the two variables. The implementation of a Three-level Model, analyzing Eurobarometer and Eurostat datasets and crossing individual, national and citizenship regime's levels of analysis, permits to report two notable results: first, immigration is not always detrimental for social trust; second, more integrative citizenship regimes alleviate the negative effects of immigration on social trust. These findings suggest that creating a legislative environment that facilitates the inclusion of different ethnic groups into the society in order to avoid the worst consequences of ethnic heterogeneity, like isolation, clashes and a decline in social trust should be of great importance to policy-makers.

# Keywords: Citizenship research, immigration, social capital, interpersonal trust, European Union.

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<sup>\*\*</sup> University of Siena.

# The Three-level Model of Citizenship Regime, Immigration and Social Capital

The arrival of masses of immigrant workers from North Africa, Eastern Europe and China within the European Union bourders represents a phenomena that strongly impacts the economy and politics of Member States. In Europe, since 2002, the immigration flow oscillated from 1,5 to 2 millions of migrants, influencing the European labour market, the immigration policy that Member States enacted and the political positions of Europeans who share a common urban space with the newly arrived (in a study conducted in 2000 on a sample of the Italian population, Sniderman, de Figueiredo, Peri & Piazza concluded that the increase of immigration in the Italian borders influenced Italians' ideological stand encouraging more conservative positions).

This paper's objective is to analyze the impact of immigration trends, in the European Union, more on cultural and social processes than economical and political ones and it deals with the hypothesis of a detrimental role of immigration on countries' social capital endowments. Social capital is a resource resulting from social interactions as defined, in Putnam's (1993) words, "features of social organization, such as trust, norms and networks, that can improve the efficiency of society by facilitating coordinated actions" (Putnam, 1993, p. 167).

The importance of studying the impact of immigration on social capital lies in the fact that the majority of scholars consider social capital an influential factor for desired outcomes at the institutional (Cartocci, 2007; Putnam, 1993) and economic level (Fukuyama, 1995; Knack & Keefer, 1997). If social capital makes institutions work better (Cartocci, 2007; Cusack, 1997; Putnam, 1993), than it is important to know which factors can make or break it. Regarding immigration as a social capital predictor, scholars (Alesina & La Ferrara, 2000; Knack & Keefer, 1997; Putnam, 2007) have shown a negative influence of ethnic heterogeneity on social capital. Cultural diversity may foster feelings of "us versus others", encouraging, from one side, within-groups social trust, networks and reciprocity and limiting, from the other side, more inclusive forms of networks, social trust and feelings of obligation. This study will try to demonstrate that precedent analyses of the relationship between international immigration and social capital contribute a reductive picture of the argument, because they did not take into account a factor that may affect how immigration raises costs of associating and participating in the society, that is the "citizenship regime". Citizenship regime indicates the set of rules that in a given country regulate the foreigners' citizenship acquisition. This study will focus on the idea that a country's citizenship regime, by facilitating or impeding forms of integration and assimilation in the natives' social networks, influences the relationship between international immigration and social capital.

The main research questions at the base of this study are: does immigration have a negative impact on social trust? What is the role of citizenship regime in the relationship between immigration and social trust?

As the research questions suggest, in order to operationalize social capital, this study focused on its main component, that is social trust. Interpersonal or social trust (here defined: generic expectation about the others' cooperative behaviour) is the "hearth of social capital" (Rothstein & Stolle, 2002, p. 2) because it is at the base of inclusive and tolerant attitudes toward the others, thus bringing about cooperation and desired institutional (Putnam, 1993) and economic (Fukuyama, 1995) outputs. Moreover, social trust is at the base of the regeneration of social capital, thus being responsible for the creation of networks and at the same time, being social networks originator of trust (the "Theoretical framework" chapter will cover the issue of the appropriateness of using social trust as a social capital proxy).

This study analyzed the interactions between citizenship regime, immigration and social capital in the European Union, through a Hierarchical Linear Model that connects three levels of analysis: 1. The micro-individual level at which social trust is measured. 2. The macronational level at which the immigration trends' data are gathered. 3. The third level of the three "citizenship regime" clusters that derive by grouping the EU Member States considered on the base of their traditional legal requirements for citizenship (the clusters are created by following Greenfeld's argumentation of 1997 and Weldon's successive classification of 2006 of citizenship regimes that distinguished three types: the collectivisticethnic, the collectivistic-civic and the individualistic-civic). As far as the micro-level data on social trust are concerned, this study utilized the Eurobarometer 62.2 (European Commission Public Opinion, 2004), a public opinion survey administered in the European Union that addressed topics such as interpersonal trust, associationism, education, etc. Data at the macro national level, that refer to immigration and a set of control variables (GDP, Unemployment, Balance etc.) are gathered from the Eurostat trend files (European Commission Eurostat, 2004). Considering that this study is based on the 2004 Eurobarometer dataset, the quantitative analysis implemented took into account only 25 member states of the 2004 enlargement process. The third-level variable citizenship regime is created by assigning to each regime's profile, a score depending on its hypothetical capacity of integrating ethnic groups. The scores assigned comply with Weldon's (2006) argument on citizenship regimes' integrative capacity that derives from Castles' (1995) and Greenfeld's (1998) discussion of several citizenship laws. The Hierarchical Linear Model implemented had two main goals: 1. To test the hypothesis that international immigration has a negative impact on social trust by enhancing the cultural heterogeneity of European societies (H 1, Fig. A1 in the Appendix); 2. To test the hypothesis that the individualistic-civic citizenship regime, softens the negative impact of immigration on social capital, more than the other two types because it is based on the acceptance of ethnic and cultural differences (H 2, Fig. A1 in the Appendix).

The next chapter focuses on the theoretical framework concerning the dependent variable, that is social trust, the independent variable that is international immigration and the intervening variable that is citizenship regime. The section on social trust deals with the importance of social trust in the trust-networks-reciprocity triad, evidencing its role in fostering processes of social capital's reproduction. The following section deals with the main contributions in the literature on the relationship between immigration and social capital. Finally, the theoretical framework's chapter includes a section on the role of citizenship regime in determining the effect of immigration on social capital. The methodological chapter gives details of the Hierarchical Linear Model implemented, coping with data, operationalization of variables and analytical strategy. The "Findings" chapter shows and discusses the main results of the Three-level Analysis that reports the importance of citizenship regimes in influencing the relationship between international immigration and social trust.

# **Theoretical Framework**

## Social Capital and Interpersonal Trust

Social capital is a multidimensional concept that holds a multiplicity of factors such as interpersonal trust, reciprocity and networks. The multiplicity of dimensions that compose it and the fact that different social sciences concentrated on social capital in order to explain a set of outcomes at the economic (Milgrom, Douglass, & Barry, 1990), social (Baum, 1997) and institutional level (Cartocci, 2007; Cusack, 1997; Putnam, 1993) contributed to a vague conceptualization of the variable which is also not extensively shared (Mota, 2008). Also in order to avoid a dependent variable's conceptualization too oriented to "facilitate" desired findings, this study focused on the dimension that many scholars consider the principal essence

of social capital, that is interpersonal trust (Herreros, 2004; Rothstein & Stolle, 2002).

The majority of studies that dealt with social capital from various disciplinary perspectives, all drew on the analyses of two sociologists, Pierre Bordieu and James Samuel Coleman. Both scholars focused on social capital with an utilitaristic approach, considering it a resource belonging to the society. Bordieu (1985) defined social capital a resource constituted by social connections, durable networks of reciprocity and acquaintances. For the sociologist, social capital together with the other typologies of capitals (human or physical capital) permits to implement given actions like the subscription of a contract between economic actors (Bordieu, 1980).

Also Coleman (1988) considered social capital a resource that individuals can use to reach given goals. Coleman concentrated on social capital from the perspective of the link between the macro level of the structure of networks and the micro level of the individuals that utilize the resource (Almagisti, 2006). Nevertheless, Coleman (1990), differently from Bordieu, anticipated a discourse that is at the base of the conceptualization of social capital mainly applied in social sciences nowadays, that regards the "externalities" that networks produce in terms of shared values and information. Relationships and networks, when reiterated, diffuse expectations and information on the actors' future behaviour. Norms of behaviour and information facilitate the actors' solution of problems of coordinated action and the implementation of cooperative behaviours. As it happens in the prisoners' dilemma, when communication is not possible actors perceive "free riding" as a best strategy, while, when the game is repeated, the flux of information between the actors and the institutionalization of norms of behaviour is encouraged, cooperation is possible and it brings about desired outcomes (Morrow, 1994; Herreros, 2004).

When Putnam (1993) applied the social capital concept to the study of the Italian regional institutions' performances, he focused not only on networks, but also on two other dimensions more related to values, that is trust and norms of reciprocity. Trust and reciprocity (feeling of obligation toward the others and toward the society), together with civic engagement, solidarity and democratic attitude, form what Putnam calls the "civic community", a social capital component that does not represent a resource as networks, but an obligation or a "bond" (Cartocci, 2007, p. 54). The "civic community" obligations create expectations on the others' behaviour, while they oblige us not to enact particularistic and self-interested actions, like double-parking.

The three components of social capital (networks, norms of reciprocity and trust) that Putnam (1993) introduced, are self-reinforcing; networks and, in particular, the horizontal associations (like any type of club, sport association, non governmental associations, etc.) for their characteristic of linking people of different social extractions, foster trust and feelings of reciprocity/solidarity in the entire community; in the same time, norms of reciprocity and, above all, trust is at the base of further networking, thus closing the cycle that connects the three social capital's components. Putnam (1993) made his form of social capital distinguishable from the other forms of "capital" by including, in its multidimensional conceptualization, the two new dimensions of trust and reciprocity. Social capital, another way from the human and economic capital is not a scarce resource and does not "deteriorate" utilizing it. Differently, the more individuals use it the more it regenerates itself. Meaning that the more people create networks, utilizing their stock of trust and reciprocity, the more they put the basis for further diffusion in the community of generalized trust and of norms of cooperative behaviour. For Putnam (1993), the characteristic of social capital's components of being strictly linked may cause also the reproduction of vicious cycles that impede social capital's build up (the absence of trust may limit the creation of networks and so on). As it happens in the South of Italy analyzed by the scholar, which is not able to overcome its gap in terms of social capital diffusion and, consequently, in terms of economic and institutional performances. This discourse does not exclude the possibility that exogenous factors, like education or international immigration in the case of this paper, can affect one or all the social capital components, starting processes of degeneration or regeneration.

As previously anticipated, even though this study is based on Putnam's multidimensional conceptualization of social capital, it focused only on social trust as the main dependent variable for a set of reasons. Putnam (1993, 1995) and the others social capital scholars have dedicated special attention to interpersonal trust considering it the "heart of social capital" (Rothstein and Stolle, 2002, p. 2). For Putnam (1993, 1995), in particular, trust is fundamental to enact coordinated actions, and it is at the base of networks' creation, for instance through the participation in horizontal type associations. Almond and Verba (1970) in their comparative study of United States, Great Britain, Germany, Italy and Mexico, focusing on the political culture of the five states, concluded that interpersonal trust influences positively people's political participation and, consequentially, affects the quality of the democratic system in which they live. Moreover, Fukuyama (1995) dealt with the importance of the diffusion of social trust for economic prosperity and proliferation. As these examples tell, trust is at the base of typical cooperative behaviour like participating in the civil society or completing an economic transaction. The explanation for this, on a rational choice perspective, relies on the importance of trust for overcoming problems of coordinated actions. Indeed, trust reduces the perceived costs of transaction by creating expectations on the others' behaviour, assuring that cooperation will not result in a sub-optimal effect, through a partner's free riding.

Until now, the argumentation regarded "generalized" trust that is an attitude oriented toward the others in general, even though people's trust can regard only an inner circle of people (family, ethnic group etc.). Putnam (1995) distinguished between trust oriented toward everyone defined "thin trust" and trust oriented toward little groups constituted by few persons related by strict links, defined "thick trust". Even though "thick trust" can influence positively the creation of "thin trust" (Mota, 2008), by "bridging" heterogeneous groups, it is only the generalized trust that translates in desiderated outcomes at the economic, social, political level. Mixing Putnam's argumentation about the two different types of trust and Boix and Poisner's (1996) distinction between associations producers of private or public goods, it is possible to argue that generalized trust and "thick trust" are products of two distinct typologies of "networking" and associationism. From one side, the associationism oriented toward the creation of private goods produces "thick trust" (a sentiment of trust that regards only those who participate) which fosters the strengthening of the links inside the group and creates isolation, more than cooperative attitudes ("thick trust" is usually associated to a sort of dark side of social capital, like the one that links components of a Mafia family as Della Porta has demonstrated, in his study of 2000). From the other side, associationism oriented toward the creation of public goods is the main responsible of the production of "thin trust", the most useful for society because it diffuses trust, cooperative and reciprocity attitudes not only to those who participate in associations, but to the entire society by spreading examples of cooperative behaviour and by connecting people from different social class (Putnam, 1995). The discourse on the distinction between dense trust and generalized trust and between associations producers of public or private goods is important in order to interpret the results of the empirical analysis. These show an effect of immigration on the way citizens associate and, consequently, on the way they contribute to the creation of "thick" or "thin" trust.

## The Relationship Between Immigration and Social Capital

The studies that dealt with the relationship between immigration and social capital focused principally on the effects of ethnic heterogeneity that is a

consequence of high levels of immigration fluxes, on social capital. The arrival of masses of immigrants characterized by cultures that differentiate each immigrants' group, and that present different peculiarities from the dominant culture of the country of arrival, reduces the cultural homogeneity of the receiving society and the natives' will of participating in associations "producers" of social trust. Indeed, the composition of society in groups, culturally different from each other, increases the possibility that these groups will strengthen the ties at their internal and will isolate themselves from the others, thus contributing to reduce cooperative attitudes. Moreover, the fear of diversity often overstated by several political groups that ride the wave of diffidence toward the new arrived (the Italian case of the diffusion of conservative positions following up the raise of immigration is well described by Sniderman et al. in their study of 2000), may further reduce people's trust toward the "generalized other" (Putnam, 2000, p. 141).

Knack and Keefer's (1997) cross-country analysis has shown that ethnic heterogeneity is negatively correlated with social trust and civic norms of behaviour. By using bivariate and multivariate regression analysis, the two authors tested the effects of several factors, like economic performances and income inequalities, on social trust and on the norms of civic behaviour. The authors claimed that while economic performance fosters social capital, cultural heterogeneity reduces social capital's diffusion. According to Knack and Keefer (1997, p. 1278), networks, in culturally heterogeneous society, "will form along ethnic lines". Ethnic heterogeneity fosters the creation of homogeneous associations and networks that strengthen trust and cooperation within ethnic groups, while it reduces opportunities of interaction between ethnic groups. By limiting the creation of links between people belonging to different cultures and social extractions, ethnic heterogeneity may contribute to social trust's decline.

Alesina and La Ferrara (2000) have studied the relationship between ethnic heterogeneity and participation in associational life more in the specific, by focusing on individual level surveys mainly focused on the associational activity in United States. The relationship between ethnic heterogeneity and participation was tested in a probit model, by relating the two indexes of race fragmentation (race defined by census classification, like black, white, etc.) and ethnic fragmentation (classification by ancestry, like Italian, Irish, etc.) with an index of associational participation. The results reported a negative influence of ethnic heterogeneity reduces participation in groups characterized by high levels of interaction and low levels of excludability like churches, sports club, hobby clubs (Alesina & La Ferrara, 2000, p. 886). Moreover, from a geographical perspective, the two authors have shown

that where ethnic fragmentation is higher, like in the southeast of United States, participation is lower; differently, where fragmentation is lower, participation in associational activities is higher, like in the North East of United States.

More recently, Putnam (2007) in a study on ethnic heterogeneity in United States corroborated the "conflict theory" that suggests that "for various reasons – but above all, contention over limited resources – diversity fosters out-group distrust and in-group solidarity" (Putnam, 2007, p. 142). The use of bivariate and multivariate analysis allowed the scholar to show a negative relationship between ethnic heterogeneity and social capital, both considering the municipal level and the individual level. In particular, the scholar claimed that where the ethnic composition of United States' municipalities is more heterogeneous, social trust is lower.

However, the Putnam's study fails to take into account the multilevel nature of the relationship he considered. In fact, while social trust is a variable belonging to the individual level, ethnic heterogeneity refers to the community level, thus the joint study of the two factors needs the inclusion of the two levels of analysis in the same model, through a Hierarchical Linear Model. Moreover, his findings refer only to United States and it is not certain that the same negative relationship between ethnic heterogeneity and social capital works in other contexts such as the European one. Also the Knack and Keefer's (1997) cross-country study and the Alesina and La Ferrara's (2000) case-study of United States, do not take into account remarkable exceptions that may unhinge the thesis of a negative relationship between immigration and social capital. Roothstein and Eek (2009) have pointed out that not always ethnic heterogeneity is connected with lower levels of social capital: ethnically homogeneous countries such as Portugal are also characterized by lower levels of social capital's diffusion. Moreover, in Scandinavian countries the increment of migration fluxes since 1980, that fostered ethnical fragmentation, did not corrupt Scandinavian social structure and did not translate in lower social capital (Larsen, 2006). The Tolsma, van der Meer and Gesthuizen's (2009) study on municipalities in Netherlands did not find a direct negative relationship between ethnic heterogeneous composition of communities and social capital. These arguments suggest that the analysis of the relationship between immigration and social capital may not fail to consider the contextual factors that may influence the immigration-social capital interconnection. This study has the task of acknowledging the importance of the contextual factor "citizenship regime" in affecting how immigration reduces or fosters social trust and associational participation. The results of the multilevel analysis will report that citizenship regimes that are more capable of integrating foreign ethnic groups, may limit the negative effects of immigration on social capital.

# The Interconnections Between Citizenship Regime, Immigration and Social Trust

As previously introduced, the hypothesis of an interaction between citizenship regime and the relationship between immigration and social trust, derives from the consideration that different citizenship laws can foster or limit the integration of foreign groups into the national society. Consequently, a citizenship law that facilitates the integration of nonnationals' groups, may reduce the opportunities of isolation and clashing, thus limiting the negative effects of the intensification of immigration and ethnic heterogeneity on social trust.

The analysis of the influence of citizenship regimes on the relationship between immigration and social capital took into account the classification of citizenship laws that Weldon (2006) implemented focusing on the studies of Castles (1995) and Greenfeld (1997). A classification that distinguishes between three types of citizenship regime each endowed with different capacity of integrating non-nationals' groups: the collectivistic-ethnic, the collectivistic-civic and the individualistic-civic citizenship regime. This argumentation is important because Weldon's (2006) classification of three distinct regimes (based on Castles' and Greenfeld's studies respectively of 1995 and 1997) is the base for the creation of a "citizenship regime" independent variable by assigning different scores on the base of each citizenship law's "integrative capacity" (see next chapter on Methods).

The collectivistic-ethnic regime is based on the "*jus sanguinis*", that is, in order to obtain citizenship it is fundamental to belong to the same bloodline as the native population. Germany, Austria, Luxembourg, and Switzerland are the typical examples of collectivistic-ethnic regimes (see Table A1 in the Appendix). This regime's profile is based on the concept that national identities follow ethnic lines, so that citizenship is not a matter of being part of a political community, but a matter of being part of an ethnic group. The higher difficulties for foreigners that want to acquire citizenship of a country in which the collectivistic-ethnic regime is in force, render this kind of law the weakest for "integrative capacity" (Castles, 1995).

The Collectivistic-ethnic	The Collectivistic-civic	The Individualistic-civic			
Austria	Denmark	Finland			
Belgium	France	Ireland			
Cyprus	Greece	Italy			
Czech Republic	Portugal	Netherlands			
Estonia		Spain			
Germany		Sweden			
Hungary		United Kingdom			
Latvia					
Lithuania					
Luxembourg					
Malta					
Poland					
Slovakia					
Slovenia					
Note: The citizenship regimes' profile by country. 25 Member States of 2004					
enlargement. Sources for classification: Castles (1995), Greenfeld (1997), Weldon					
(2006).					

Table A1. The Citizenship Regimes' Profile

The collectivistic-civic regime (that is in force, for instance, in France and United States; see Table A1 in the Appendix) is based on the idea that being part of a nation-state means being part of a political community and not of an ethnic group. Indeed, for a foreigner, in order to acquire citizenship in a country in which the collectivistic-civic regime is in force, it is not compulsory to be of the same bloodline of the dominant ethnic group, but it is necessary only to demonstrate loyalty to the political community. Moreover, given the fact that nationality is not related to ethnicity, the cultural differences are denied in the public life and the foreigner is "forced" to integrate with the dominant group through education and the use of the dominant language (Weldon, 2006). The collectivistic-civic regime, for its "integrative capacity" reported by the studies of Castles (1995), Greenfeld (1997) and Weldon (2006) can be positioned in the middle between the other two regime's profiles. In fact, even though the acquisition of citizenship is easier with the collectivistic-civic regime, comparatively to the collectivisticethnic, the denial of the cultural differences in the public life, implies that they will reappear in the private life, thus translating in clashes, isolation, discrimination and racism.

The individualistic-civic regime is based on the "*jus soli*" and on the acceptance of cultural differences. The ethnic and cultural characteristics are not to be denied in public life, but usually are protected and safeguarded.

The individualistic-civic regime, that is in force, for instance, in Spain and Italy, does not require to the applicants for citizenship to renounce to their cultures' peculiarities, but often guarantees some rights even before the citizenship is obtained, like the right to vote in municipal elections in Sweden (Castles, 1995). For its particularity of respecting the cultural diversity of immigrants' groups, and of guaranteeing their access to public life, in respect to their culture, the individualistic-civic regime can be considered the regime's profile characterized by the highest "integrative capacity".

Citizenship regimes have been already analyzed with the focus on their effects on social factors. For instance, the already quoted Weldon (2006) dealt with the links between citizenship regime's profiles and social tolerance, thus demonstrating a positive relationship between more integrative regimes like the individualistic-civic and social tolerance. This study tries to enrich the literature on citizenship regimes dealing with an aspect little studied that is the relationship between citizenship acquisition and social capital. As anticipated, the purpose of the Hierarchical Linear Model presented in the next chapters, will be to test if the citizenship regimes and their different "integrative capacity" influence the effect of immigration on social trust.

#### **Methods of Analysis**

#### The Hierarchical Linear Model: Methods and Data Gathering

The empirical analysis of our hypotheses (see Fig. A1 in the Appendix) consisted of the implementation of a Multilevel Model that tested the effect of immigration on social trust against a set of control independent variables at the micro and macro level. Moreover, through the addition of a third level by clustering the 25 EU Member States considered in three groups on the base of their citizenship law (collectivistic-ethnic, collectivistic-civic and individualistic-civic group), the Hierarchical Linear Model tested the crosslevel interaction of citizenship regime with the relationship between immigration and social trust (citizenship regime's operationalization consisted in assigning to each regime's profile a score on the base of their "integrative capacity"). Indeed, the Multilevel Analysis allows not only to test the influence of independent variables, at the macro level, on the micro level dependent variable, but it also allows to analyze cross-level interactions between macro level independent variables and the effects of micro level independent factors on the dependent variable, in this case, social trust (Snijders & Bosker, 1999).

The Multilevel Analysis implemented, proceeded in four successive steps. First, a baseline model with the inclusion of only micro-level independent variables (Model 1) was analyzed. In this case, all measurements were at the individual level and consisted of questions from Eurobarometer 62.2 (European Commission Public Opinion, 2004). Second, the Multilevel Analysis proceeded by adding the macro-level independent variables allowed to influence only the intercept of the dependent variable (Model 2). Macro level independent variables were measured at the national level of the 25 European states considered. They included immigration and a set of control variables (GDP, Unemployment, Balance etc.) and all macro measurements derived from the Eurostat trend files (European Commission Eurostat, 2004). Third, the analysis focused on cross-level interactions, in particular in terms of influence of national-level variables on the effects of micro-level independent variables on the dependent variable (Model 3). Fourth and, finally, the analysis concluded by examining the influence of "citizenship regime" (third level) on the effect of immigration on social trust (Model 4). In this case, as anticipated, the countries considered were clustered in three groups following their citizenship law. In the "Findings" chapter, a set of measurements as the variance components, the deviance and the AIC test will be reported for each model (AIC test stands for Akaike Information Criteria, which is based on the deviance of each Hierarchical Model, but that balance the natural reduction of deviance following the addition of parameters; AIC= Deviance+2p; Snijders & Bosker, 1999). These are indexes that test if every successive model improves the model's fit on the real data.

#### **Operationalization of the Variables**

This section introduces the operationalization of the variables included in the Multilevel Analysis at the micro and macro-national level, plus at the level of citizenship regime. The dependent variable, social trust, is measured by focusing on the Eurobarometer's question (European Commission Public Opinion 62.2, 2004) that asks respondents: *"Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?"* (for a resume of the questions of the survey utilized in this study see Table A2 in the Appendix). Respondents could choose between three possible answers (1 You can't be too careful; 2 It depends; 3 Most people can be trusted) forming a scale "from 1 to 3" that measures the respondent's level of interpersonal trust. In attempts to make the "trust scale" close to a continuous variable, it has been rescaled from "1 to 3" to "0 to 10 (the formula used is the following: Xn = (Xi – Xmin)/(Xmax – Xmin)\*10; Corbetta, Gasperoni & Pisati, 2001). "Interpersonal trust" was not considered a dichotomous variable (0 No trust, 1 Trust) so as not to leave out those who answered "it depends" (that is the 12% of the sample), avoiding the loss of information on those who are in the middle between trusting and being careful.

The Multilevel Analysis implemented that analyzed the interconnections between citizenship regime, immigration and social trust, foresaw the inclusion of a set of micro and macro-level control variables, comprised in the model on the base of the main literature on social capital's predictors. The micro-level independent variables derive from Eurobarometer survey 62.2 (European Commission Public Opinion, 2004; for more in-dept information on the operationalization of Eurobarometer 62.2 variables see Table A2 in the Appendix). These are "Satisfaction with social life" (SATISF), "Satisfaction with how democracy work" (SATIDEM), "Frequency of political discussion" (POLFREQ), "Present reciprocity" (PRESRECY), "Past reciprocity" (PASTRECY), "Associationism" (ASSOC), "Married" (MARR) and "Education" (EDUC). SATISF stands for a "1 to 4" scale of "Satisfaction with social life". The inclusion of this variable tested the importance of having a satisfactory social life for interpersonal trust; as previously introduced, networking in social life is at the base of the diffusion of trust attitudes (Brehm & Rahn, 1997; Putnam, 1993). "Satisfaction with how democracy works" (SATIDEM) is a "1 to 4" scale that operationalizes democratic attitude and is included in the model on the base of Putnam's (1993) claim that democratic attitude is an important "piece" of the civic community and is positively correlated to a spirit of inclusiveness, tolerance and, consequentially, trust in others. "Frequency of political discussion" (POLFREQ) is a 7 point scale that operationalizes political attention. The variable's inclusion is based on Putnam's (1993) and Cartocci's (2007) conclusions that social trust is positively related to the people's attention toward the social and political life of their community. "Present reciprocity" (PRESRECY) is an index that measures the respondents' reliance on social networks for a set of situations in which help is needed, like "household tasks" or "personal care" that goes from "0 to 10". "Past reciprocity" (PASTRECY) measures on a ten point scale respondents' availability in situations in which friends or neighbours request help. The last two independent variables, PRESRECY and PASTRECY, are two indicators of the respondents' sense of reciprocity because they measure not only the respondents' feelings of obligation toward the people in their networks, but also the sense of obligation that friends, colleagues and relatives have toward them. As introduced, reciprocity is a component of social capital, following Putnam's (1993) definition, and is strictly and positively connected to interpersonal trust. "Associationism" (ASSOC) is an index based on the questions that ask respondents if they participate, simply donate money or are members of a set of voluntary organizations. The positive answers relative to each association have been added up, but

assigning a different score if a person participates (score: 3), is a member of (score: 2), or donates money (score: 1) to the associations in the list (see Table A2 in the Appendix); the index has been rescaled "0 to 10". The different scoring relative to diverse type of activity is based on the consideration that it is important to distinguish between more intense and less involving forms of associational activity. Moreover, the associational activity, following what the main literature on social capital has shown (Boix & Posner, 1996; Cartocci, 2007; Putnam, 1993), is positively related to interpersonal trust. That is, the more people participate in associations, in this case the more intensively, the more people trust the others. "Married" (MARR) is a dummy variable indicating if the respondent is or is not married. As Brehm and Rahn (1997) claimed, the marriage enlarges the range of people's networks, by bringing together friends and parents of each consort and this has a positive influence on interpersonal trust. "Education" (EDUC) measures the educational level of the respondents calculated on a "1 to 9" scale. The inclusion of the variable tested if education has a positive influence on social trust, by reducing the costs of interaction, as the main literature has shown (Brehm & Rahn, 1997; Putnam, 1995).

Question n.	Question	Code	Answers	Operationalization
v222	"Are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with your social life?"	Satisf	1 Very satisfied; 2 Fairly satisfied; 3 Not very satisfied; 4 Not at all satisfied	Inversion of semantic direction. 1 to 4 scale of satisfaction for social life.
v231	"Are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the way democracy work?"		1 Very satisfied; 2 Fairly satisfied; 3 Not very satisfied; 4 Not at all satisfied	Inversion of semantic direction. 1 to 4 scale of satisfaction for social life.
v331	"In general, how often do you discuss politics and current affairs?"	Polfreq	1 Never; 2 Less than once a month; 3 Once a month; 4 Several times a month; 5 Once a week; 6 Several times a week; 7 Every day.	1-7 scale of interest for political issues.
v255- v262	"In which of the following situations would you be able to rely on friends, work colleagues, neighbours or acquaintances to receive help or support?"		1 Household tasks; 2 Help household members; 3 Personal care; 4 Paperwork help; 5 Discuss problems; 6 Borrow money; 7 Borrow goods; 8 Help if threatened."	Addition of positive answers and rescale 0-10.
v265- v272	"And in which of the following situations did you, yourself, help or support friends, work colleagues, neighbours or other acquaintances in the past twelve months?"	PASTRECY	1 Household tasks; 2 Help household members; 3 Personal care; 4 Paperwork help; 5 Discuss problems; 6 Borrow money; 7 Borrow goods; 8 Help if threatened."	Addition of positive answers and rescale 0-10.
v276- v321	"Now, I would like you to look carefully at the following list of organisations and activities. Please, say in which, if any, you are a member, you donate money or you participate."	Assoc	1 Recreational; 2 Cultural; 3 Unions; 4 Professional; 5 Consumers; 6 International; 7 Environmental; 8 Charity; 9 Elderly leisure; 10 Elderly rights; 11 Religious; 12 Political; Patient/disable; 13 other associations.	Assigned value 1 if respondent donates money, 2 if respondent is member, 3 if participates. Addition of the scores for each activity, for each respondent. Rescale 0- 10.
v467	"Could you give me the letter which corresponds best to your own current situation?"	MARR	1 Married; 2 Remarried; 3 Unmarried, currently living with partner; 4 Unmarried, having never lived with a partner; 5 Unmarried, having previously lived with a partner, but now on my own; 6 Divorced; 7 Separated; 8 Widowed.	Rescaled to dichotomous variable. 1 Married, 0 No married.
v469	"How old were you when you stopped full-time education?"		1 Up to 14 years; 2 15 years; 3 16 years; 4 17 years; 5 18 years; 6 19 years; 7 20 years; 8 21 years; 9 22 years and older; 10 Still studying.	1-10 Scale of Education.
			utilized. Operationalization of t tadata retrieved from http://zac	

Table A2. Eurobarometer Questions Utilized and Operationalization

The macro-national level independent variables included in the model are "Non nationals" (NNAT), "Net migration" (NETMIG), "Balance of public administration" (BALAN), "Unemployment" (U), "Inflation" (I), "Gross domestic product" (GDP) and "Institutional performance" (IP; for aggregate measures of the national-level variables see Table A3 in the Appendix). "Non nationals" (NNAT) and "Net migration" (NETMIG) are two measures of immigration levels, included in the model in order to test the first hypothesis of this study that immigration influences negatively social trust. "Non nationals" (NNAT) measures the number of non-nationals present in the national territory divided per 1000. Differently, "Net migration" is calculated with the formula immigration minus emigration (values divided per 1000). NETMIG, a standardized measure of migration fluxes, is a proxy of immigration less related to societal heterogeneity than "Non nationals". However, it is included in the model on the base of the consideration that also the prospect of more immigrants in the national territory (i.e. higher ethnic heterogeneity) may have an influence on social trust. Indeed, the feeling that higher fluxes of immigration will raise the heterogeneity of society can affect natives' will to associate and trust. "Balance of public administration" (BALAN), "Unemployment" (U), "Inflation" (I) and "Gross domestic product" (GDP) are all measures of national economic performances. As Mota (2008) claimed, economic performance is an important cue for interpersonal trust. Economic modernization translates to higher educational levels and higher incomes, in turn reducing people's costs of participating in social life (Mota, 2008). The last macro-level control variable is "Institutional performance" (IP) whose index was created by adding up the scores of the four economic indicators (BALAN, U, I, GDP) and a fifth indicator, "waste landed" (the index measures the annual weight per capita of the waste landed as an indirect measure of environmental performances of national governments; the waste landed is an indirect indicator of waste recycled; the overall index has been rescaled "0 to 10"). Scholars as Levi (1996) and Rothstein and Stolle (2002) have shown the positive influence of institutional performance on interpersonal trust. In particular, Rothstein and Stolle (2002) claimed that if institutions are corrupted or don't act impartially, people's mistrust in institutions translates also to other people. Moreover, if institutions guarantee the fair application of the rules and contracts, enforce rights and rules and punish lawbreakers, citizens think that others have strong incentive not to act in a treacherous way (Levi, 1996). Our indicator of institutional performance, IP, focuses mainly on the policy outputs of national institutions, replicating Bok's (1997) operationalization of the variable. In his study of the institutional performances of North-American governments, Bok (1997) focused on measures of economic (inflation, growth) and environmental performances (levels of pollution).

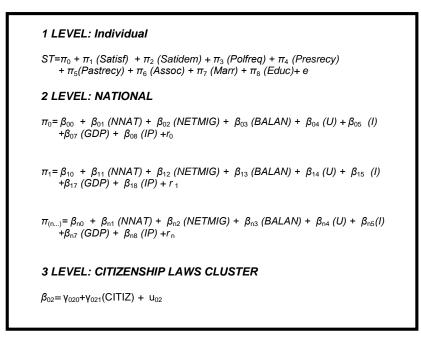
	Non- Nationals NNAT	Net Migration NETMIG	Balance BALAN	Inflation I	Unemployment U
Austria	765,30	61,7	-4,40	1,2	1,4
Belgium	860,00	35,3	-0,20	1,5	4,1
Cyprus	65,00	15,7	-4,10	3,3	1,2
Czech Republic	195,39	18,6	-3,00	8	4,2
Denmark	271,21	5,0	2,00	2	1,2
Estonia	274,50	- 0,2	1,70	9,3	5
Finland	107,00	6,8	2,40	1,2	2,1
France	3263,19	100,2	-3,60	1,3	3,8
Germany	7342,00	81,8	-3,80	1,5	5,5
Greece	891,20	34,3	-7,50	5,4	5,6
Hungary	130,11	18,2	-6,40	18,5	2,7
Ireland	215,00	47,9	1,40	1,3	1,6
Italy	1990,16	558,2	-3,50	1,9	4
Latvia	33,34	- 1,1	-1,00	8,1	4,6
Lithuania	34,44	- 9,7	-1,50	10,3	5,8
Luxembourg	174,20	1,5	-1,20	1,4	1
Malta	11,00	1,8	-4,70	3,9	3,4
Netherlands	702,19	- 9,9	-1,70	1,9	1,6
Poland	700,33	- 9,4	-5,70	15	10,3
Portugal	238,75	47,3	-3,40	1,9	3
Slovakia	30,00	2,8	-2,30	6	11,8
Slovenia	45,29	1,8	-2,20	8,3	3,2
Spain	2772,20	610,1	-0,30	1,9	3,4
Sweden	476,08	25,3	0,80	1,8	1,2
United Kingdom	2941,40	201,8	-3,40	1,8	1

Table A3. Aggregate Measures of National-Level Variables

Note: Aggregate measures of immigration, and economic performances of the 25 Member States of 2004 enlargement. Data retrieved from Eurostat trendfile (2004).

Finally, as introduced, the Multilevel Analysis implemented foresaw the inclusion of a third level in the model, created by clustering the 25 EU Member States considered in three groups following their citizenship law (the collectivistic-ethnic, the collectivistic-civic and the individualistic-civic group). Moreover, a third-level variable has been created by assigning to each citizenship regime a score based on the regimes' "integrative capacity" gathered from the literature's argumentations on the subject (Castles, 1995; Greenfeld, 1997; Weldon, 2006). A score of "10" has been assigned to the individualistic-civic regime, the most efficient in terms of "integrative capacity". A score of "0" has been assigned to the less "integrative" regime, the collectivistic-ethnic. It has been assigned a score of "5" to the regime in the middle between the two, for its "integrative capacity". The index "citizenship regime" is close to a "0 to 10" continuous variable (See Table A1 in the Appendix for countries' clustering).

Figure 1, shows the three equations of the model, one for each level. The final Multilevel Model discussed in the next chapter, will look slightly different from the one shown in Fig. 1 because, as a rule of thumb and in order to respect the principle of parsimony, the macro-level variables are included in the model only if they satisfy two conditions: improved overall fit of the model and significance (not significant macro-level variables are included only if this improves the model fit; Aiken & West, 1991; Kreft & De Leeuw, 1998). This consideration does not mean that the analysis did not take into account the influence on social trust of some macro-level control variables, but that their inclusion in the model did not improve the model fit, meaning that it did not contribute to the explanation of social trust's variance or the variance of the slopes of the micro-level relationships.



Note: ST= Social Trust;  $\pi_0$ =social trust's intercept, individual level;  $\beta_0$ = within group ST intercept; e= 1<sup>st</sup> level error term; r=2<sup>nd</sup> level error term; u =3<sup>rd</sup> level error term. 1<sup>st</sup> level predictors: Satisf= Satisfaction for social life, Satidem= Satisfaction for how democracy work, Polfreq= Political interest, Presrecy= Present reciprocity, Pastrecy= Past Reciprocity, Assoc= Associationism, Marr= Civil status, Educ=Education. 2<sup>nd</sup> level predictors: NNAT= Nonnationals, NETMIG= Net migration, BALAN= Balance, U= Unemployment, I= Inflation, GDP= Gross Domestic Product, IP= Institutional performance. 3<sup>rd</sup> level predictors: CITIZ= Citizenship regime.

**Figure 1.** The multilevel model. Mathematical formula of the three-level model of social trust.

#### Main Findings of the Three-Level Model

The findings of the Multilevel model specify the relationships between citizenship regime, immigration and social trust. Multilevel analysis, as a rule of thumb (Snijders & Bosker, 1999; Raudenbush & Bryk, 2000), foresees the analysis of successive models and it needs to be implemented by including, in every step, cross-level interactions between macro and micro levels. In Table 1, the unstandardized coefficients, the variance components, the deviance and the AIC test for the Multilevel Analysis of social trust are reported. The analysis of the within-group variance and of the between-group variance confirms that a multilevel analysis of the variable social trust

is appropriated. In fact, the ICC (intraclass correlation coefficient) indicates that the 9% of social trust's variance has to be explained at the second level (Snijders & Bosker, 1999).

# Model 1

The implementation of model 1, that consists of the inclusion of only individual level independent variables, confirmed the relationships between predictors and social trust that the main literature has shown. Satisfaction for social life (SATISF), satisfaction for how democracy work (SATIDEM) and attention toward political issues (POLFREQ) are all significant and positively related to social trust. This confirms Boix and Posner's (1996), Cartocci's (2007) and Putnam's (1993) conclusions that networking, democratic attitude and political attention influence positively social trust. The coefficients of the two reciprocity's indicators (i.e. PRESRECY and PASTRECY) show a contrasting result. The variable that indicates the level of support that respondents believe they can receive from their networks (PRESRECY) is positively related to social trust. The more people rely on their networks the more they trust the others. Differently, PASTRECY the indicator that measures the level of support that networks received from respondents in the past is negatively related to social trust, with a not significant coefficient. This result apparently connects Bordieu's (1985) and Coleman's (1990) utilitaristic approach on social capital, with Putnam's (1993) focus on values and trust. This finding acknowledges that people use networks for utilitaristic reasons (for instance to borrow some cash or to get some help when they find themselves in troubles) and this has a positive effect on interpersonal trust, by increasing their sense of obligation toward the others. Differently, when our friends or relatives rely too much on us, by using and "consuming" our sense of obligation, consume and reduce also our social trust. The ASSOC's positive and significant coefficient demonstrates that networks created through horizontal associationism (Putnam, 1993) have a positive influence on interpersonal trust. Considering the fact that both ASSOC and social trust are two indicators scaled "0 to 10", the unstandardized coefficient acknowledges that for a 10% increase in associationism there is a 4% increase in social trust. Finally, the EDUC's positive and significant coefficient confirms the Brehm and Rahn's (1997) argument that education is one of the strongest predictor of social trust.

#### Model 2

Model 2 foresees the inclusion of macro-national level variables and the examination of their influence on social trust's micro-level intercept ( $\pi_0$  in

figure 1). As stated beforehand, macro-level predictors are included in the model only if they are significant and improve model fit (not significant macro-level variables are included if model fit, indicated by AIC and the Level 2 intercept variance, improves). In table 1, the AIC and the Level 2 intercept variance decline, thus indicating that the inclusion of the macrolevel intercept's predictors BALAN, U, IP and NETMIG improved the model fit. The intercept's variance indicates the amount of variance at the individual level still unexplained, thus its reduction denotes an improvement of the explanatory capacity of the model. Moreover, the inclusion of the macro-level variables did not translate in any considerable change of the individual level coefficients. Before starting to examine model 2's results, it is important to underline that the variable NNAT (non nationals present in the national territory /1000) was not incorporated in the model because it was not significant and it did not improve the model fit. NNAT is the more realistic indicator of immigration and ethnic heterogeneity between the variables utilized. This result anticipates the findings described in the following lines, which disconfirm the hypothesis of a negative relationship between immigration and social trust.

H 1. Immigration in Europe, fostering ethnic heterogeneity, has a negative impact on social trust.

**1<sup>st</sup> Lev.**  $St=\pi_0 + ...$ **2<sup>nd</sup> Lev.**  $\pi_0 = \beta_{00} - \beta_{01} (Im) + r_0$ 

H 2. Citizenship regime profile influences how immigration impacts on social trust.

 $3^{rd}$  Lev.  $\beta_{01} = \gamma_{010} + \gamma_{011}(CR) + u_{01}$ 

Note: St=social trust; Im= immigration; CR= citizenship regime;  $\pi_0$ =social capital intercept, individual level;  $\beta_0$  = within group St intercept;  $\beta_1$ =Immigration coefficient of St intercept;  $r_0$ =2<sup>nd</sup> level error term;  $\gamma_{00}$ = intra-3<sup>rd</sup>-level groups intercept of Im slope;  $\gamma_{01}$ = CR slope of Im effect on St intercept; u =3<sup>rd</sup> level error term. Mathematical representation of the two hypotheses tested, for the formulas of the three-level model see Fig. 1 in the text.

Figure A1. The Main Hypotheses Tested.

Also the coefficients of the national levels' control variables confirmed some of the findings regarding the relationship between social capital and its predictors that the main literature on social capital acknowledged. Among the four macro-level variables included in model 2, two are indicators of economic performance, that is BALAN (public administration budget) and U (unemployment). The BALAN coefficient shows that countries with sound administrative budget (i.e. countries that closed the 2004 financial year in profit) have higher levels of social trust. Unemployment's coefficient is negative and significant and indicates that for each one point increase in unemployment, interpersonal trust declines of 5% circa. The two "economic" variables' coefficients confirm the main literature's argumentation that economic development and proliferation brings about higher levels of education, incomes and associationism, thus improving social trust (Mota, 2008). Moreover, the negative influence of unemployment confirms Alesina and La Ferrara's (2000) discourse on the effects of socio-economic heterogeneity, that unemployment may foster, on social trust. According to Alesina and La Ferrara (2000), unemployment divides society in those who participates actively in the economy and those who do not, thus raising the in-group trust and networking, but limiting the between-groups links and social trust (Alesina & La Ferrara, 2000). The institutional performance's (IP) indicator has a significant and positive influence on social trust, thus substantiating Rothstein and Stolle's (2002) and Levi's (1996) analyses of social trust's predictors. Nevertheless, its effect on social trust is weak: a one point increase in institutional performance raises social trust of the 0,03% (both IP and social trust are indicators scaled "0 to 10").

The most interesting finding regards the NETMIG's coefficient which disconfirms the hypothesis of a negative effect of immigration on social trust. This result is corroborated from the fact that NNAT (presence of non nationals in national territory) is not significant and its inclusion did not improve model fit. Nevertheless, NETMIG's coefficient substantiates that there is a positive effect of immigration on social trust and it indicates that for a 10.000 increase of immigration fluxes, social trust increases of 0,3%. Indeed, this is not a huge effect, but still it indicates that immigration and social trust are not negatively related, but positively. Two potential explanations are plausible.

1. The positive relationship between immigration and social trust may acknowledge that migration fluxes are principally directed to countries characterized by high levels of economic and institutional modernization and, consequentially, characterized by high levels of social trust (like France, United Kingdom or Germany, see Table A3 in the Appendix). The arrival of immigrants and the consequential diffusion of ethnic heterogeneity do not upset the social structure of the receiving country and do not contribute to reduce the national "stocks" of interpersonal trust. 2. The arrival of immigrants in the national territory raises issues related to migration like integration, human rights, insertion of migrants in labour market, lodgings in public opinion's discourses. This may increase people's sensitivity for "migration's public policy" issues, so that they may feel encouraged to participate into the civil society, in human rights associations for instance. The greater participation of citizens in horizontal associations may have a positive effect on social trust.

#### Model 3

In model 3, the inclusion of cross-level interactions between macro-level variables and micro-level independent variables' coefficients allows to examine more in depth the positive influence of immigration on social trust that model 2 has shown. Indeed, the only macro-level variable included in the model and allowed to influence a micro-level coefficient is NETMIG, which affects positively ASSOC's effect on trust. This finding indicates that in countries with high immigration levels the positive effect of associationism on social trust is stronger. NETMIG cross-level interaction coefficient (p < p.005) indicates that an increase of immigration of 10.000 unities increase the effect of associationism on social trust of 6,6%. This finding show that the "black box" of the positive relationship between immigration and social trust may be explained by taking into account the effect of international migration on associationism. The interconnection between immigration, associationism and trust is better understandable by focusing on the Boix and Posner's (1996) distinction between associations "private goods producers" and associations "public goods producers". In countries with high levels of immigration, public attention toward "migration policies" fosters citizens' participation in associational activities "migration related" that are typically oriented to the production of public goods, thus contributing to increase participants' and national stocks of "thin" social trust. As Putnam (1995) claimed, the production of "thin trust" by participating in associations does not involve only who participate, but the entire society, because associationism contribute to the diffusion of civic norms of behaviour and reciprocity. The inclusion of the cross-level interactions, in model 3, did improve the model (see AIC and intercept variance relative to model 3 in Fig. 2). Moreover, the inclusion of the crosslevel interactions, in model 3, did not change remarkably the micro-level coefficients.

### Model 4

Model 4 examines the influence of CITIZ (citizenship regime) on the effect of immigration on social trust. The inclusion of the variable CITIZ in model 4 improves the model fit and clarifies the relationship between immigration and social trust. In model 4, NETMIG's coefficient becomes negative, while the CITIZ's coefficient is positive. This result indicates that in more integrative citizenships regimes, such as the individualistic-civic, immigration and ethnic heterogeneity affects less strongly and negatively national social trust. Differently, in countries where a stricter regime as the collectivistic-ethnic is in force, the negative influence of immigration on interpersonal trust is stronger. The finding corroborates my hypothesis that more integrative regimes mitigate the negative influence of immigration on social trust. Citizenship regimes such as the individualistic-civic are based on greater tolerance for cultural differences, thus fostering the creation of links (bridges) between culturally different groups and the diffusion of cooperative attitudes and social trust. Differently, regimes like the collectivistic-ethnic do not tolerate the manifestation of ethnic peculiarities in public life and contribute to the transfer of cultural clashes in the private environment, thus fostering isolation, intra-group trust and, consequentially, a decline in social trust.

Finally, it is important to underline that model 4 does not report a contrasting result with precedent models. Indeed, even though the inclusion in the model of the CITIZ's variable, made NETMIG coefficient to switch from positive to negative, the cross-level interaction between NETMIG and the effect of associationism on social trust remained positive. This corroborates what model 3 has already reported, that immigration can have positive effects on national social capital through associationism, by reactivating peoples' will to participate in associations and in civil society and to trust.

	Model 1	Model 2	Model 3	Model 4
Fixed Effects L-1	Mouel I	mouel 2	mouerd	mouel I
Intercept (B0)	4,591**	3,999**	4,093**	3,760**
Satisf	0,262***	0,258*	0,263*	0,263*
Satidem	0,515**	0,519**	0,518**	0,522**
Polfreq	0,145**	0,145**	0,144**	0,146**
Presrecy	0,088**	0,088**	0,087**	0,086**
Pastrecy	-0,043	0,042	-0,042	-0,041
Assoc	0,361**	0,342**	0,211***	0,207***
NETMIG			0.001.4**	0.001.4**
(cross-lev. interaction)			0,0014**	0,0014**
Marr	0,075	0,081	0,082	0,084
Educ	0,157**	0,158**	0,158**	0,158**
Fixed Effects L-2				
BALAN		0.114***	0,118***	0,069
U		-0,544**	-0,524**	-0,477**
IP		0,003**	0,003**	0,004**
NETMIG		0,003**	0,0011	-0,017***
CITIZ				0,0017***
(Cross-lev. interaction)				
Random Effects				
(Variance Components)				
Intercept L2(R0)	1,98	1,45	1,02	0,74
Intercept L 1 (e)	17,70	17,69	17,69	17,69
Intercept L 3 (u)	0,36	0,00009	0,00019	0,00008
Model Fit				
Deviance	68838,59	68810,26	68802,02	68798,26
AIC	68890,59	68870,26	68864,02	68862,26
Notes: Three-level model of Interpersonal trust. Unstandardized coefficients,				
variance components and model fit indicators. $p < .010$ ; $p < .005$ ; $p < .050$ .				

Table 1. Multilevel Model of Interpersonal Trust

### Conclusions

This paper had the scope of investigating the relationship between immigration and social trust by taking into account "citizenship regime", a factor that the literature did not consider previously. Two results are worth mentioning. First, the hypothesis that immigration negatively affects social trust, by fostering ethnic heterogeneity, has not been completely confirmed. The multilevel analysis has shown that the presence of non-nationals does not have a negative and significant influence on social trust. The second indicator of immigration included in the analysis, net migration, has a significant and negative influence on social trust, but principally in countries where a stricter citizenship regime is in power. Moreover, the multilevel model has shown that immigration may have a positive effect on social trust by strengthening the influence of associational participation on trust. This result suggests that immigration raises people's attention toward the issues and problems of immigrants, fostering participation in associations and groups that deal with these issues, which are typically "producers" of social capital.

Second, data confirm the hypothesis that citizenship regime influences the interaction between immigration and social capital. The more integrative a regime is, the less negative is the impact of immigration on social capital. Regimes endowed with greater integrative capacity as the individualistic-civic, foster tolerance and facilitate the creation of links between heterogeneous groups. Differently, regimes that does not favour integration as the collectivistic-ethnic, contribute to the isolation of groups and limit social trust's diffusion. In particular, this last result represents a suggestion for policy-makers that may consider the impact of the rules that disciplines foreigners's citizenship acquisition on immigration's effects. Policy-makers may consider citizenship laws as a lever that may limit the potential negative externalities of immigration such as isolation, racism and clashes.

A potential future development of this study should clarify more in depth the relationship between immigration and social capital, by using immigration's indicators less colour-blind. Interesting results may be obtained if in a future analysis I will consider the "distance" of migration, by distinguishing between immigration groups on the base of their country of origin (the ethnic composition of a country principally affected by Arab countries' immigration is highly heterogeneous compared to a country affected mainly by intra-European immigrations); an analysis that goes beyond the principal goals of this paper.

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