

Cross-Country Performance in Social Integration of Older Migrants. A European Perspective

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Cross-Country Performance in Social Integration of Older Migrants – A European Perspective

Caroline Berchet,^{ab*}, Nicolas Sirven^b

Abstract

This paper provides new empirical evidence on the relationship between migration and social integration. It explores the hypothesis that migrants essentially differ from non-migrants with regard to the length of residence in the country – which is a proxy of migrants' social distance to natives. The determinants of social participation and interpersonal trust are examined at both the individual and institutional level. Using SHARE data and macroeconomic series, we first analyse the influence of immigrant length of stay in the host country on social integration indicators. We then examine the role institutional characteristics play on cross-country differences in speed of social integration (i.e. immigrants' propensity to social participation according to their length of stay in the host country). As expected, the immigrant population presents a lower likelihood than the native population to get involved in social activities and to trust other people. Nevertheless, the more immigrants have spent time in the host country, the more they take part in social activities. The analysis also reveals significant cross-country differences in immigrants' speed of social integration. Macroeconomic series like the GINI coefficient of income inequality and the Corruption perceived index could explain these differences. From a public policy perspective, our results suggest that immigrants' social integration is more rapidly achieved in "fair" countries – i.e. those with a more favourable social environment – where the levels of income inequality and perceived corruption are lower.

Keywords: Social capital, Ageing, Income inequality, Multilevel models.

JEL Codes: F220, O520, C310.

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Résumé

Une perspective européenne des performances d'intégration sociale des migrants âgés

L'objet de cette étude est d'analyser les relations entre la migration et l'intégration sociale. Notre analyse se propose d'étudier l'hypothèse selon laquelle l'intégration sociale des immigrés diffère essentiellement de celle des natifs en raison de la durée de résidence dans le pays d'accueil, facteur qui constitue dans notre analyse un indicateur de la distance sociale des migrants aux natifs. Les déterminants de la participation sociale et de la confiance interpersonnelle sont analysés au niveau individuel et institutionnel. À partir des données de l'enquête SHARE, complétées par des séries macroéconomiques, nous analysons dans un premier temps l'influence de la durée de résidence dans le pays d'accueil des immigrés sur les deux indicateurs d'intégration sociale. Nous étudions ensuite le rôle joué par les caractéristiques institutionnelles sur les différences de vitesse d'intégration entre les pays européens (i.e. la probabilité d'un immigré d'être intégré selon sa durée de résidence dans le pays d'accueil). Les résultats indiquent que la population immigrée présente une plus faible probabilité que la population native de participer à des activités collectives et d'avoir confiance en autrui. Cependant, l'intégration sociale des immigrés s'accroît avec la durée de résidence dans le pays d'accueil mais l'analyse révèle, par ailleurs, des différences de vitesse d'intégration entre les pays européens. Ces différences sont expliquées par les séries macroéconomiques telles que le coefficient de GINI et l'indice de corruption. D'un point de vue des politiques publiques, nos résultats suggèrent que l'intégration sociale des immigrés est plus rapide dans les sociétés caractérisées par un environnement social favorable, où les niveaux d'inégalité de revenu et de corruption sont faibles.

Mots-clefs : capital social, vieillissement, inégalités de revenu, indice de corruption, modèle multiniveaux

JEL Classification : F220, O520, C310.

1. Introduction

Successful integration strategies of migrants within the European Union rely on the one hand, on labour market policies such as antidiscrimination and migrant entrepreneurship promotion, and on the other hand, on social participation and social cohesion by promoting equal access to services (European Commission, 2005). They are in line with the broader policy of promoting social inclusion that is one of the five key areas of the Europe 2020 strategy (European Commission, 2009). Social inclusion is indeed “the process from which individuals participate to society through professional activity, [...] interaction with others, participation to collective institutions” (Schnapper, 2008).

The literature on “social capital” provides some interesting highlights on the factors that promote social inclusion. Empirical studies focusing on cultural and structural aspects of social capital (Grootaert & Van Bastelaer, 2002) respectively indicate that migrants report lower levels of generalised trust and have a lower propensity to take part in social activities (Kazemipur, 2004; Breton, 2003, Aleksynska, 2011). One obvious reason is that migrants tend to face the usual social disadvantages that hamper social capital – significant gaps persist between this group and the majority population in terms of poverty, income, health, unemployment, education and early school-leaving (Berchet & Jusot, 2009).

Nevertheless, recent researches (Aleksynska, 2011; Aslund *et al.*, 2009; De Palo *et al.*, 2007) indicate that migrants’ economic and social conditions (social relationship, education, employment and household status) improve with the length of stay in the host country. Another effect of the length of stay could be that the longer migrants dwell in the country, the more they become familiar with the country’s formal (system, administration, law, etc.) and informal (norms, values) institutions, thus facilitating participation in social activities and enhanced generalised trust. Such a process of embeddedness can be seen as a reduction in the “social distance” between migrants and natives that fosters social connectedness (Akerlof, 1997; Van der Vegt, 2002). In both cases, the length of stay in the host country is often used to capture immigrant social assimilation (Aleksynska, 2011); a process that supposes a change in migrants’ behaviour over time.

In addition to the individual characteristics, country specific cultural and historical backgrounds, levels of economic development, and expenditure on social services are often cited to explain cross-country differences in individual decisions of involvement in voluntary activities (GHK, 2010) and generalised trust. Although institutional features of the country of origin are found to play a role on migrants’ social inclusion, few evidence is available when it comes to the influence of macroeconomic determinants of the host country on migrants’ social assimilation process (Aleksynska, 2011).

One hypothesis to be tested could be that some countries in Europe perform better than others in terms of social participation and generalized trust – with equal levels of migrants’ “length of residence” – because of national systems characteristics. Put differently, some countries with different levels of migrant’s “length of residence” may experience similar levels of migrants’ social capital. This being empirically verified, the question would be why some European countries have different “speed of integration”? Focus on cross-country national features would then shed light on this issue.

Data from the Survey of Health, Ageing, and Retirement in Europe (SHARE) combined with macro-economic series meet the requirements to test this assumption. These databases allow combining individual socio-economic data with macro series of the socio-economic

context and the features of welfare state regimes in multilevel models. SHARE data cover 14 countries in wave 2 (2006-07) and provide individual retrospective information on migrants' year of arrival in the country of residence. SHARE focus on respondents aged 50 and over provides enough time depth to analyse the influence of migrant's length of residence on the usual variables of social capital. This population may be more influenced by the socio-economic environment of the host country since they have been imbedded in for several years. In the case of a dynamic process of social integration, it is also interesting to focus on long term effects of macroeconomic conditions.

The set of individual and context variables to be included in the models are discussed in the next section on the basis of the existing empirical literature of the determinants of social capital. Section three presents the data sources and some descriptive statistics of the main variables of interest. Econometric models and models estimates are respectively discussed in sections four and five. Summary and policy implications are drawn in the conclusion.

2. Survey of the Literature

2.1. Individuals determinants of social capital

The usual individual determinants of social capital to be found in the literature remain the same for each population of immigrants and natives. By and large, socio-demographic characteristics – such as marital status and age – are found to have more ambivalent effects on social participation and trust (see for instance Alesina & La Ferrara, 2000; Glaeser *et al.*, 2002) than education and economic variables. Higher education provides access to social network, increases opportunities for social participation, fosters communication skills and develops values or moral norms which promote interpersonal trust (Coleman, 1988; Brehm & Rahn, 1997; Glaeser *et al.*, 2002; Aleksynska, 2011). Income and occupational status shape individual resources and time (Brehm & Rahn, 1997; Glaeser *et al.*, 2002; Alesina & La Ferrara, 2000; Rupasingha *et al.*, 2006). There is evidence of a strong positive relationship between income level and participation (Glaeser *et al.*, 2002; Aleksynska, 2011) while deprived or unemployed people are likely to develop sentiments of stigmatization or discrimination, which undermine incentives to participate in social activity and leads to distrust others.

Under this premise, immigrant population under-investment in social participation – with regard to the native population – can partly be explained by the fact that the former face more social disadvantages than the latter on average (Berchet & Jusot, 2009). Another interpretation of this gap in social participation could be due to the “social distance” between the two populations. The assumption is that social distance between migrants and natives tends to decrease as migrants' length of residency in the host country increases. The literature suggests that higher length of stay in the destination country fosters immigrant assimilation because it enables to learn more about the formal or informal institutions which increase opportunities for social participation (Aleksynska, 2011). Nevertheless, immigrants with longer stay of residence have a significant lower propensity of trusting than native born population, while newly arriving immigrant are no different from native born regarding trust in other people. On interpretation is that migrants' positive outlook dampens with time due to disillusion or barriers that immigrants may face (Aleksynska & Algan, 2010). This double-edged effect of the length of stay in the host country on the different aspects of social capital requires focusing on other determinants at the institutional level.

2.2. Institutional features matter

Although most of the empirical literature on the determinants of social capital stresses the important role of the economic, political, and social context, only few institutional measures have been used to explain migrants' investment in social capital. For instance, immigrants residing in countries with higher GDP per capita tend to have higher chances to take part in social activities (Aleksynska, 2011). However, measures of democratic institutions do not seem to have any significant influence on immigrant population (Aleksynska, 2011) although these features of society encourage the formation of social participation and trust for general population (Muller & Seligson, 1994 ; Sides, 1999; Knack & Zack, 2001; Rosthein & Stolle, 2003; Paxton, 2002; Fidrmuc & Gerxhani, 2005). Among the institutional determinants of social capital unexplored for the migrant population, some light should be shed on three main areas:

- **social heterogeneity** measured by ethnic fractionalisation appears to discourage individual investment in social capital (Sides, 1999; Alenisa & Ferrara, 2000; Kervin & Kline, 2002; Rupasingha *et al.*, 2006; D'Hombres *et al.*, 2010). Sides (1999) argues that ethnic fractionalisation may reflect a conflicted society which in turn decreases both social participation and trust. This last hypothesis suggests a preference for homogeneity; individuals prefer to interact with people that are similar to themselves (Alenisa & Ferrara, 2000).
- **non-egalitarian or corrupted societies** present a significantly lower level of individual social participation and interpersonal trust (Sides, 1999; Alenisa & Ferrara, 2000; Knack, 2002; D'Hombres *et al.*, 2010). Immigrants' hopes and attempt to integrate are likely to vanish in unfair societies with greater level of income inequality or greater level of corruption. They may encounter even more difficulties than the native population to take part in the social life because the social environment appears not to be receptive, decreasing their sense of cooperation or their wish to integrate in the society (Breton, 2003).
- **welfare states regimes** play a significant role in shaping a country's social capital (Scheepers *et al.*, 2002; Oorschot, 2003; Salamon & Sokolowski, 2003; Rosthein & Stolle, 2003; Oorschot & Arts, 2005; Kumlin & Rosthein, 2005). The well established debate on whether they are complementary or substitute to civil society is also relevant for the migrant population. On the one hand, welfare state institutions may imply moral hazard if they lower the cost of assimilation in the host country (Nannestad, 2007). This hypothesis suggests that the generosity of welfare states is negatively correlated with migrant social participation and generalized trust (crowding out effect). On the other hand, if welfare state institutions foster migrant generalized trust and encourage them to take part in civil society through social participation, then the "cooperation" model (crowding in effect) is more relevant.

3. Data

3.1. Sources

The analysis of the individual determinants of social engagement and interpersonal trust is based on data from the second wave of the Survey of Health, Ageing, and Retirement in Europe (SHARE, www.share-project.org). SHARE is a multidisciplinary and cross-national cohort of individual data on health, socio-economic status and social and family relationships of individuals aged 50 and over (Börsch-Supan & Jürges, 2005). They are a balanced representation of the various regions in Europe, ranging from Scandinavia (Denmark and Sweden) through Central Europe (Austria, France, Germany, Switzerland, Belgium, the Netherlands, and Ireland) and Eastern Europe (Poland, The Czech Republic), to the Mediterranean (Spain, Italy and Greece). The second wave (2006-2007) consists of individuals surveyed in 14 countries and provides information on health, socio-economic status, social and family networks. Analyses are based on a sample of 31,852 non institutionalised individuals aged 50 and over with non-missing observations for the variables retained in the analysis (full rank data matrix).

Institutional variables describing the socio-economic context and the generosity of welfare state regimes are taken from different sources. The OECD database (<http://stats.oecd.org/>) provides comparative statistics and offers an overview of recent economic trends through the presentation of a wide range of short-term economic indicators not only for the OECD member countries but also for non-member countries. Additional macro-series are taken from Transparency International and Alesina *et al.* (2003).

3.2. Variables

- Dependant variables: Indexes of social capital

Two dichotomous dependant variables are considered to measure social integration: involvement in social activities and interpersonal trust. Involvement in social activities is derived from the participation to any of the six social activities (voluntary/charity work; providing help to family, friends or neighbours; educational/training courses; sport/social club; religious organisation; and political activities). The variable takes the value 1 if the respondent claims to take part in at least one of these activities and 0 if he does take part in none of them mentioned. The scope of activities is rather large in order to best capture the idea of social integration. Different combinations of the items have been tested and the six social activities retained here are associated with the best scale reliability coefficient ($\alpha = 0.469$) than any other combination of a lesser number of items. To measure interpersonal trust, respondent are asked to state on a scale from 0 to 10 where 0 means that one can't be too careful in dealing with people and 10 means that people can be trusted. The variable is then dichotomised, taking the value 1 if respondents provide a score that is higher than five and 0 if the level of trust ranges between 0 and 5.

- Migration related measures

The respondent's country of birth and age at migration are used in our analysis to construct migration related measures. SHARE respondents are asked whether or not they were born in the country of interview which enables the sample to be divided into

two categories: the native-born population and the immigrant population. In addition, immigrants were asked to report their years of migration into the country, which enables to create a proxy of length of residence using their age at migration (which is equal to years of migration minus years of birth).

The acknowledged positive consequences (OECD 2011) on social mobility, job market participation, and access to social right, make the “citizenship” criterion a potential additional candidate for our analysis. Nonetheless, in most OECD countries an immigrant needs to be resident in the host country for a number of years before being eligible to the national citizenship (OECD, 2010). As a consequence, immigrant naturalisation is highly correlated with immigrant length of stay in the host country or with their age at migration (OCDE, 2011). In addition, we believe that the length of stay (measured here through age at migration for older people) captures more accurately the long-term dynamic of the process of immigrant assimilation. The last reason not to consider extensively the citizenship variable lies in the fact that interaction terms between migrant and citizenship lead to severe sample size reduction. In spite of all that flaws, the citizenship variable has not been totally discarded of the analysis since it will eventually be discussed in the descriptive statistics and in the robustness checks.

- Other individual covariates

Following previous studies we consider usual individual characteristics. We first consider demographic characteristics like age (continuous) and gender. Education is divided into three different levels: primary level of education, secondary level and tertiary level of education. Marital status is a dichotomous indicator which indicates whether (or not) respondents are married and finally, the labour market status enables to distinguish between employed from unemployed, retired or inactive. Descriptive statistics of these covariates are given in Table A1 in the appendix.

- Context variables

In line with the empirical literature, we employ institutional variables describing the socio-economic context and the generosity of welfare state regimes. We have been limited by the number of macroeconomics variable because the small number of European countries considered in the analysis lead to a dramatic lack of variance. For instance, civil liberties and political rights indicators display the same maximal scores for most country¹. Finally, the following five indicators are considered in the analysis²:

-The annual growth of the Gross Domestic Product (GDP) reflects changes in the volume of production for the 14 European countries in 2005. We retained the real annual growth of GDP to remove the variation in GDP caused inflation.

-The GINI coefficient of income inequalities is based on equivalent household disposable income after taxes and transfers for the 2005 year. Its value ranges between 0 which indicates a perfect equality and 1 in the case of perfect inequality (when all income goes to the individual with the highest income).

- *The Corruption Perception Index (CPI)*, computed by Transparency International,

1 http://www.freedomhouse.org/images/File/fiw/FIW_2011_Booklet.pdf

2 The annual growth of GDP, the GINI coefficient of income inequality and the Total public expenditure indicators are taken from the OECD database while the Corruption perception index and the ethnic fractionalisation index are taken from respectively from the transparency international (http://www.transparency.org/policy_research/surveys_indices/cpi) and from Alberto Alenisa own calculation (http://www.anderson.ucla.edu/faculty_pages/romain.wacziarg/papersum.html).

measures the perceived level of public sector corruption. The CPI ranges between 0 indicating a highly clean and not corrupted country and 1 meaning that the country is highly corrupted.

- *The ethnic, linguistic and religious fractionalisation Indexes*, derived from Alesina *et al.* (2003) measure various forms of social heterogeneity in each country. These indexes reflect the probability that two randomly selected individuals from a population belonged respectively to a different ethnic, linguistic or religious group.

- *The total public expenditure as a percentage of GDP* measures the total amount of public expenditures that is devoted to different social programs such as old age, incapacity, health, family, active labour market program, unemployment, housing and other social programs. It includes cash benefits and benefits in kind for 2005. We then considered separately several type of social program (unemployment, old age, health and incapacity³) in order to explore a different effect of national public spending by type of expenditures.

Descriptive statistics of these macroeconomic series are given in Table A3 in the appendix. Among the 14 European countries, Sweden and Denmark are the most income egalitarian countries while Italy and Poland appear to be the less egalitarian with GINI coefficients equal to 0.35 and 0.37 respectively. Figures concerning the corruption perception index indicate that Sweden and Denmark are the lowest perceived corrupted countries while Greece, Czech Republic and Poland appear to be the most perceived corrupted countries. The Czech Republic and Ireland display the highest rate of GDP growth in 2005 whereas their total public expenditure seems to be the lowest among the 14 European countries. Finally, the most ethnically and linguistically diverse countries are Belgium and Switzerland with an ethnic fractionalised index of 0.555 and 0.532 respectively and a linguistic fractionalised index of 0.541 and 0.544 respectively. Conversely, Sweden and Denmark are the less ethnically diverse countries while Greece and Ireland are the less heterogeneous in term of linguistic and religious disparity.

3.3. Social Capital of Older Migrants at a Glance

Table 1 displays some raw descriptive statistics of the sample. It is made of 6.7% of migrants, ranging from around 15% in the main “recipient” countries for immigration (Germany, Switzerland and France), to less than 5% in Mediterranean countries (Spain, Greece, Italy) and post-communist countries (Poland, the Czech Republic) that can be seen as “sending” countries. Due to potential sample selection, these descriptive statistics are not directly comparable with national statistics. According to OECD (2010) statistics, the share of immigrant population in our sample is underestimated in Austria, Sweden, Netherland, Spain, Italy, Denmark, Greece, Switzerland, Belgium, Czech Republic and Ireland while it is overestimated in Germany, France, Poland. The same evidence can be found regarding age at migration. In SHARE, migrants generally arrive rather young in the host country (22 years old on average) while the average age at migration according to Eurostat is 28 for women and 32 for men in 2008 (Eurostat, 2008). Notice that disparities in immigrant response rate across countries may explain the above differences. Nevertheless, adjusting for individual characteristics in the statistical models usually corrects such a bias⁴.

3 Data not reported but available upon request.

4 The use of individual calibrated weights already reduced such differences

Table 1
Description of the Sample

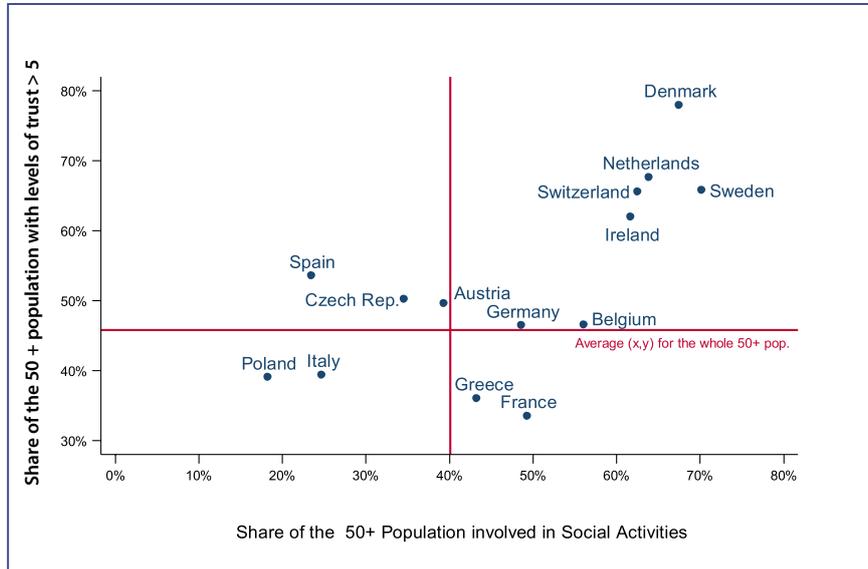
Country	N. Obs.	Share of migrants			Age at migration	
		Raw	Weighted	OECD data	Average	Median
Austria	1 270	0.075	0.072	0.150	18.3	19
Germany	2 405	0.164	0.163	0.128	21.7	18
Sweden	2 568	0.089	0.095	0.134	24.4	23
Netherlands	2 465	0.053	0.058	0.107	25.0	23
Spain	2 038	0.026	0.028	0.135	36.4	44
Italy	2 853	0.012	0.011	0.039	23.7	25
France	2 580	0.145	0.132	0.113	20.5	21
Denmark	2 409	0.033	0.034	0.069	23.3	24
Greece	2 901	0.022	0.020	0.103	21.9	24
Switzerland	1 381	0.157	0.154	0.249	24.5	23
Belgium	2 961	0.071	0.075	0.130	20.8	21
Czechia	2 630	0.044	0.043	0.062	15.8	16
Poland	2 340	0.026	0.023	0.020	9.0	6
Ireland	1 051	0.069	0.069	0.157	31.1	31
Total	31 852	0.067	0.081	0.114	22.1	21

Source: SHARE wave2 (release 2.3.0) and OECD (2010).

Note: Figures presenting national statistics are taken from OECD (2010); data cover the year 2007 for most countries, while data for Poland are only available for 2001, and 2002 for Italy and Greece.

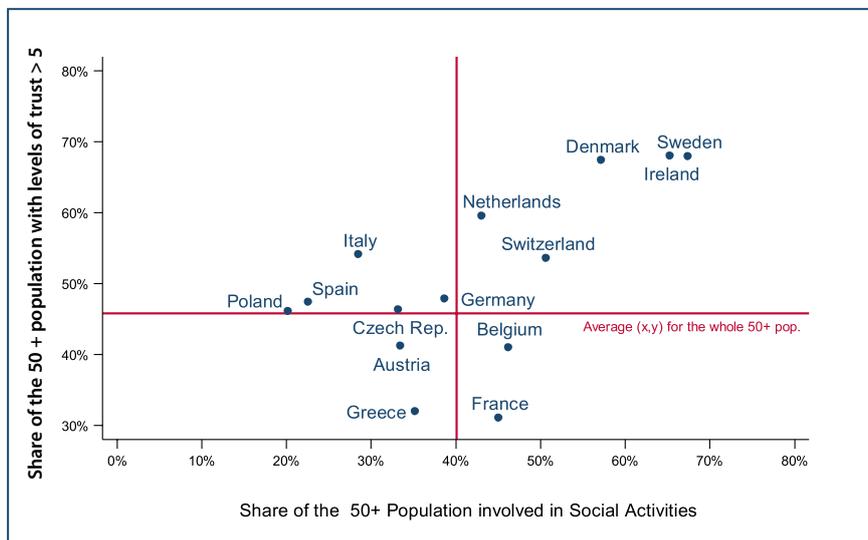
Descriptive statistics (see Table A2 in the appendix) provide a cross-country overview of the composition of older Europeans' social capital in its cultural and structural dimensions. On average, 45.8% have high levels of generalised trust (weighted), and 40.1% of the population aged 50 and over are involved in social activities (weighted). This last figure is higher than the ones recorded by the Eurobarometer because our measure includes more diverse items. By and large, it seems that the two dimensions of social capital are complementary since countries with high proportion of their older population involved in social activities, also have the highest rate of people trusting each other. Not surprisingly, there is a north-south gradient in social capital – where northern countries like Sweden, Netherland or Denmark have the highest level of social capital.

Figure 1.1.
Profile of Social Capital Among *Natives Only*



Note : Weighted Statistics (average weights for Ireland)

Figure 1.2.
Profile of Social Capital Among *Migrants Only*



Note : Weighted Statistics (average weights for Ireland)

Figures 1.1 and 1.2 suggest that this main scheme remains true between the migrant population and the natives. However, consistently with previous research on immigrant social capital⁵ (Breton, 2003; De Palo *et al.*, 2007; Aleksynska, 2011), the migrant population seem to systematically under-invest in social capital. From this perspective, international migration is considered as disturbing for population because it implies an adaption into a new environment. Immigrant population should, for instance, adjust their cultural habits, their social bonds and their institutional knowledge and skills (Breton, 2003). As the descriptive statistics indicate, such transformations may reduce opportunities to participate in society and may be obstacle to social integration.

4. Method

4.1. Overview

The analysis of the determinants of social capital follows a two-step multilevel strategy. In the first step, individual determinants of social engagement and of interpersonal trust are analysed – with special attention to the influence of the length of residence in the host country. In the second step, we intend to explain cross-country differences in the speed of integration, i.e. which institutional variables describe best the previous relationship between migration statuses and social capital. Since this last concept is approached here by two variables, we computed two-stage equations of social participation and trust. Considering that involvement in social activities and interpersonal trust are correlated with each other (Brehm & Rahn, 1997), the two stage equation strategy enables to estimate simultaneously both equations which gives not only more efficient measure of the coefficients but also gives more accurate standard-errors. More specifically, the first step of the analysis aims at studying the influence of migrants' length of residence on the probability to get involved in social activity and to trust in other people.

4.2. Individual level models

Model 1 thereafter helps investigate the first assumption that, *ceteris paribus*, migrants differ from the native population by their length of residence in the host country (H1). Formally:

$$y_{ki}^* = \alpha_k N_i + \mu_k A_i + X_i \beta_k + \sum_{j=1}^{13} \gamma_j d_{ij} + \varepsilon_{ki} \quad \text{with } k=1, 2. \quad [1]$$

where y_{1i}^* and y_{2i}^* are latent variables representing respectively individual i 's social participation and interpersonal trust, and A_i stands for age at migration. Respondents' age, gender, marital status, education, labour market status and self-assessed health status and the constant are inserted in X_i . Finally, d_{ij} represents the $J-1=13$ country dummies ($\forall j = 1, \dots, 14$) and ε_{1i} and ε_{2i} are the error terms that are assumed to be normally distributed. Model 1 thus consists of a system of two Probit equations (also Bivariate Probit) – with the same independent variables –, so that coefficients $\alpha_1, \beta_1, \gamma_1$ and $\alpha_2, \beta_2, \gamma_2$ can be simultaneously estimated with Maximum Likelihood. Notice that the correlation coefficient of the error terms ε_1 and ε_2 will be denoted ρ (rho) thereafter⁶.

5 Apart from Poland and Italy, but the low rates of migrants in these countries suggest that there may be some statistical imprecision about the previously mentioned rates.

6 Notice that various specifications for Model 1 have been tested. For instance, we explored the possibility that the length of residence could actually conceal some generational effects. Distinction of the length of residence for people who migrated before and after 1970 was considered and no generational effects was revealed. All models specification and statistical programs (.do) available upon request.

Model 2 would determine whether the effect of the length of residence on social capital varies by country (H2). To test this assumption, we have created interaction terms between coefficients associated to the 14 country dummies and the one associated with age at migration. The third model is simply estimated from the following expression:

$$y_{ki}^* = \alpha_k N_i + \sum_{j=1}^{13} \mu_{kj} (d_j \times A_{ij}) + X_i \beta_k + \varepsilon_{ki} \quad \text{with } k=1, 2. \quad [2]$$

Notice that the standard specification of equation [2] would supplement the interaction term $A_{ij} \times d_j$ with both of its components A_{ij} and d_j in order to isolate the peculiar effect of each term. Notice that N_i plays the same role A_{ij} would play in model [2] since both variables have by construction the same variance. However, the small sample size prevent us from such an approach since the high number of country dummies would capture most of the inter-country variance. As a stopgap solution, we propose to specify a country-clustered type of variance-covariance estimator that would produce robust standard-errors in the case of such a misspecification. This robust estimator allows for intragroup correlation, relaxing the usual requirement that the observations be independent. In other words, the observations are independent across countries but not necessarily within countries. Such a specification is systematically applied to models 1 and 2.

4.3. Country level regressions

Estimations from Model 2 will be used to explain differences across countries in immigrant speed of social integration. In order to explain these differences, we will use the coefficients associated to the interaction terms as a new dependant variable that will be regressed on a set of country institutional variables. In this last step, we test for the impact of the economic and social context (measured by the growth of GDP, the GINI coefficient of income inequality, the Corruption perceived index and the Fractionalised indexes) and the impact of the resources devoted to welfare programs (measured by social expenditure as a percentage of GDP) on countries performance in “speed of integration” (H3). Formally:

$$\mu_{kj} = a_k + b_k Z_j + e_k \quad \text{with } k=1, 2. \quad [3]$$

where μ_{1j} and μ_{2j} are the vectors of the coefficients previously estimated in Model 2. They represent cross-country disparities in “speed of social integration” (i.e. the correlation between social capital variables and immigrants’ length of residence). Our concept of “speed of social integration” attempts to highlight differences between countries in the necessary length of stay to achieve social integration of immigrant through social participation and interpersonal trust. Model 3 analyses the respective influence of each institutional variables (Z_j) at a time to explain these differences. For each country, five Z_j specifications are retained: the 2005 growth in GDP, the 2005 value of the GINI coefficient, the 2005 corruption perception index, the fractionalisation index (for language, ethnicity and religion respectively) and finally the 2005 social expenditure as a percentage of GDP. Notice that equations for μ_{1j} and μ_{2j} in Model 3 are not estimated simultaneously. Since μ_{1j} and μ_{2j} are linear, coefficients a_1 , b_1 and a_2 , b_2 in Model 3 are simply estimated using Ordinary Least Squares.

5. Results

5.1. Individual level model estimates concur with findings in previous studies

Table 2 displays the results for Models 1 and 2. Notice that the correlation coefficient (ρ) is significantly different from zero at 1% level, which confirms the need to estimate simultaneously both equations. Estimations of baseline Model 1 concur with previous empirical studies on the individual determinants of social participation and interpersonal trust. The coefficients are significant – apart from gender – and they display the expected coefficients. Notice that results from Model 2 are similar to Model 1 with regards to the effect of age, gender, educational level, marital status, market labour status and self assessed health status.

Table 2
Individual Determinants of Social Capital

Dependant var.	MODEL 1			
	Social Participation		Generalised Trust	
Indep. var.	Coef.	Robust S.E.	Coef.	Robust S.E.
Socio-Demo.				
Migrant				
Non-migrant (Native)	-0.031	0.052	0.115**	0.051
Age at migration	-0.011***	0.002	0.001	0.002
Age (years)	-0.015***	0.001	0.001	0.001
Gender (1=man)	0.02	0.015	-0.026*	0.015
Married or couple (1=yes)	-0.063***	0.018	0.044**	0.018
Education				
Primary	Ref.	Ref.	Ref.	Ref.
Secondary	0.199***	0.019	0.136***	0.018
Tertiary	0.464***	0.021	0.318***	0.02
Employment status				
Occupied	-0.130***	0.021	0.098***	0.02
Other	Ref.	Ref.	Ref.	Ref.
Self-assessed Health				
Excellent or very good	0.202***	0.018	0.220***	0.017
Other	Ref.	Ref.	Ref.	Ref.
Country dummies				
FR-France	Ref.	Ref.	Ref.	Ref.
AT-Austria	-0.308***	0.044	0.332***	0.044
DE-Germany	-0.109***	0.037	0.274***	0.037
SE-Sweden	0.546***	0.037	0.749***	0.037
NL-Netherlands	0.353***	0.036	0.861***	0.037
ES-Spain	-0.636***	0.041	0.558***	0.038
IT-Italy	-0.589***	0.036	0.167***	0.036
DK-Denmrk	0.344***	0.037	1.054***	0.039
GR-Greece	-0.190***	0.035	0.014	0.035
SW-Switzerland	0.261***	0.043	0.695***	0.044
BE-Belgium	0.152***	0.034	0.292***	0.035
CZ-Czech Rep.	-0.417***	0.036	0.452***	0.036
PL-Poland	-0.914***	0.04	0.186***	0.037
IE-Ireland	0.206***	0.048	0.599***	0.048
Constant	0.877***	0.09	-0.791***	0.088
Rho	0.107***	0.01		
Obs.		31853		

Source: SHARE wave2 (release 2.3.0). Legend: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

**Table 2 (cont'd):
Individual Determinants of Social Capital**

Dependant var.	MODEL 2			
	Social Participation		Generalised Trust	
Indep. var.	Coef.	Robust S.E.	Coef.	Robust S.E.
Socio-Demo.				
Age (years)	-0.008**	0.004	0.004**	0.002
Gender (1=man)	-0.002	0.046	-0.037	0.023
Education				
Primary	Ref.	Ref.	Ref.	Ref.
Secondary	0.237***	0.086	0.148**	0.066
Tertiary	0.592***	0.085	0.375***	0.069
Employment status				
Occupied	0.003	0.076	0.168***	0.055
Other	Ref.	Ref.	Ref.	Ref.
Self-assessed Health				
Excellent or very good	0.351***	0.063	0.296***	0.063
Other	Ref.	Ref.	Ref.	Ref.
Migration				
Non-migrant (Native)	-0.007	0.104	0.269***	0.104
Interaction terms				
Age at migration X FR-France	Ref.	Ref.	Ref.	Ref.
Age at migration X AT-Austria	-0.015***	0.002	0.004	0.004
Age at migration X DE-Germany	-0.011***	0.002	0.004	0.003
Age at migration X SE-Sweden	0.014***	0.002	0.016***	0.004
Age at migration X NL-Netherlands	-0.003*	0.002	0.017***	0.003
Age at migration X ES-Spain	-0.024***	0.002	-0.002	0.003
Age at migration X IT-Italy	-0.010***	0.002	0.013***	0.003
Age at migration X DK-Denmark	0.001	0.002	0.013***	0.004
Age at migration X GR-Greece	-0.027***	0.002	-0.002	0.004
Age at migration X SW-Switzerland	-0.001	0.002	0.009**	0.004
Age at migration X BE-Belgium	-0.002	0.002	0.003	0.004
Age at migration X CZ-Czech Rep.	-0.014***	0.003	0.020***	0.005
Age at migration X PL-Poland	-0.025***	0.005	0.032***	0.007
Age at migration X IE-Ireland	-0.002	0.002	0.011***	0.003
Constant	0.183	0.255	-0.791***	0.17
Rho	0.160***	0.03		
Obs.		31852		

Source: SHARE wave2 (release 2.3.0). Legend: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$.

As expected in the case of the social participation equations, age is a decreasing factor while higher educational level is one of the most important drivers of social participation. Excellent/very good self-assessed health status also improves the likelihood to get involved in social activities. However, being married/living as a couple is a decreasing factor of social participation, just like being in employment. One reason could be the individual time constraints reduce the leisure time that social participation requires.

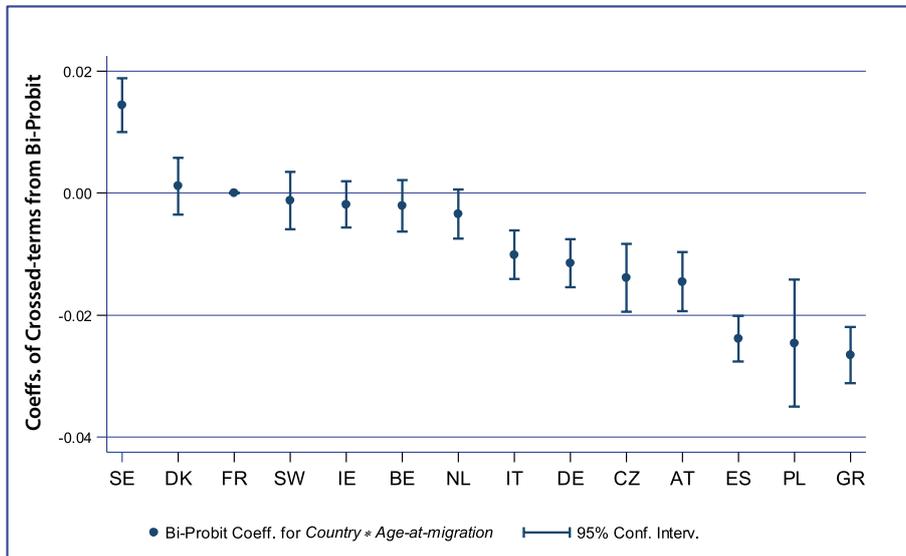
Country dummies corroborate the existence of a north-south gradient in participation in social activities that already appeared in descriptive statistic.

In the case of the equations for generalised trust, age does not appear to have any significant influence on the probability to report high level of trust. Notice that there is a significant gender difference in favour of women with regards to generalised trust. A high level of education, being married, and being in employment, also increases the probability to report a high level of trust. Reporting excellent/very good self assessed health status is associated with a higher likelihood to trust other people. Finally, coefficients associated with country dummies indicate that living in France greatly decreases the probability to trust other people. Previous researches having established a similar result have argued that the shortage of trust in France may result from extensive corporatism and State control (Algan & Cahuc, 2007).

5.2. Differences in migrants' social capital are associated with the length of residence

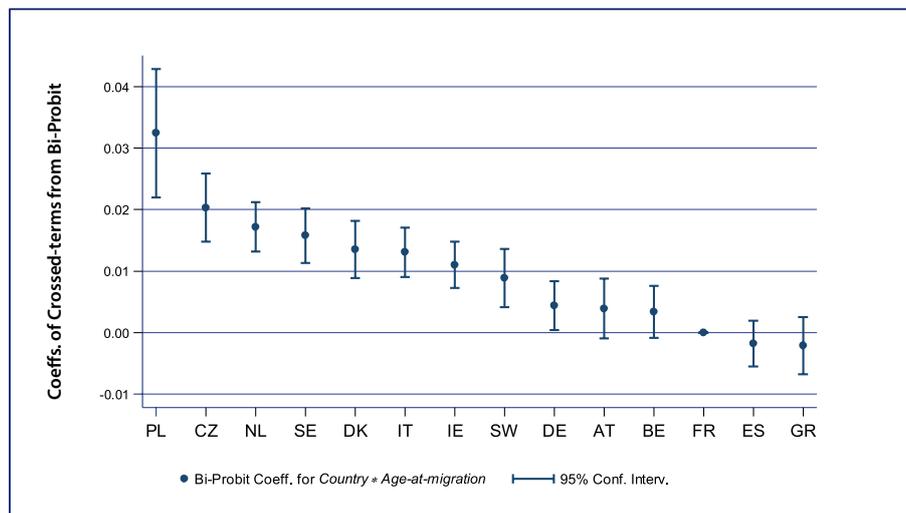
In line with previous studies (Aleksynska, 2011), we suspect a different influence of migration on social integration according to the length of residence in the host country. The equation for social participation in Model 1 confirms our intuition: people having migrated at older ages present a lower likelihood to get involved in social activities. As predicted by the assimilation process, the longer is the length of residence in the host country, the higher is the probability for immigrant to get involve in social activity. Looking at Model 1 equation for generalised trust, age at migration does not seem to be significantly associated with the probability to report higher levels of trust. Therefore, we do not confirm a different influence of migration on trust according to the immigrant length of residence in the host country. Nevertheless, being a migrant is significantly associated with interpersonal trust so that the native-born population presents a higher probability to trust other people, but this difference is not due to the length of residence and should therefore be investigated elsewhere. In this later perspective, it may be that some country specific effects are competing so that the overall coefficient for the pool of European countries may be nil. It is the purpose of Models 2 and 3 to explore this issue.

Figure 2.1.
Cross-Country Differences in Speed of Social Integration
(Social Participation Equation)



Note: Fixed effects controlled for a set of individual variables. Reference is FR (France)

Figure 2.2
Cross-Country Differences in Speed of Social Integration
(Generalised Trust Equation)



Note: Fixed effects controlled for a set of individual variables. Reference is FR (France)

With the aim to analyse more specifically the effect of length of residence in each country, we inserted interaction terms between age at migration and country dummies in Model 3 to explore differences in immigrant social integration through European countries. Figure 2.1 and 2.2 display the associated coefficients of Table 2 (model 3) with the 95% confidence intervals. Estimates from the social participation and the

generalised trust equations confirm – all other things being equal – that there are cross-countries differences in the speed of social integration: Scandinavian countries (Sweden and Denmark) have high rates of speed of social integration, while most Mediterranean countries (Spain and Greece) have the lowest rates.

5. 3. “Speed of integration” is higher in “fair societies”

Results displayed in Table 3, show that neither GDP per capita, nor the level of social expenditure (as % of GDP), nor any of the fractionalisation indexes seem to explain differences in speed of social integration across countries – whether through social participation or through generalised trust. With regard to the latter dimension, one may notice that the concept of interpersonal trust is largely disputed. Although no difference in the interpretation of the generalized trust construct is to be found between natives and immigrants (Dinensen, 2011), Eloi (2009) warns that it suffers from a lack of international reliability. Some researchers (Alesina & La Ferrara, 2000), have even guarded about interpretations that result from the analysis of interpersonal trust in an international comparison.

Table 3
Cross-country Determinants of «Speed of Integration»

MODEL 3						
Dependant var.	Social Participation			Generalised Trust		
Indep. var.	Coef.	S.E.	R ²	Coef.	S.E.	R ²
GINI Index	-0.190***	0.059	0.463	0.031	0.067	0.018
GDP per capita	0.000	0.002	0.005	0.002	0.002	0.123
Social Expenditures	0.001	0.001	0.144	-0.001	0.001	0.060
Corruption Index	-0.040***	0.012	0.499	-0.014	0.013	0.087
Ethnic Fractionalisation	-0.007	0.020	0.010	-0.015	0.016	0.075
Language Fractionalisation	0.012	0.017	0.037	-0.005	0.014	0.011
Religious Fractionalisation	0.000	0.016	0.000	-0.001	0.014	0.000
Obs.	14			14		

*Source: SHARE wave2 (release 2.3.0) and Macroeconomic series. Legend: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$*

Figures 3.1
Speed of Social Integration and Income Inequality
(Social Participation Equation)

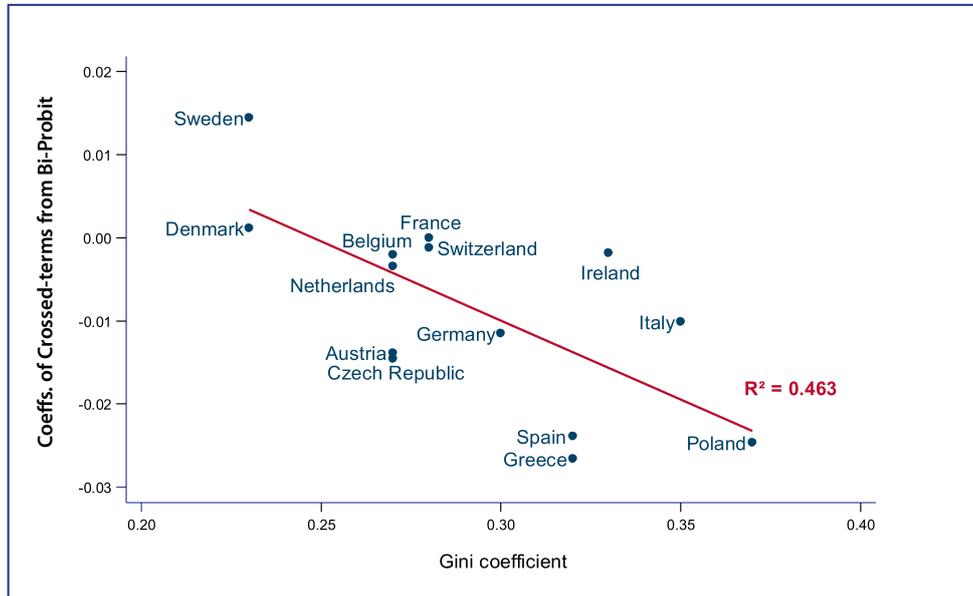
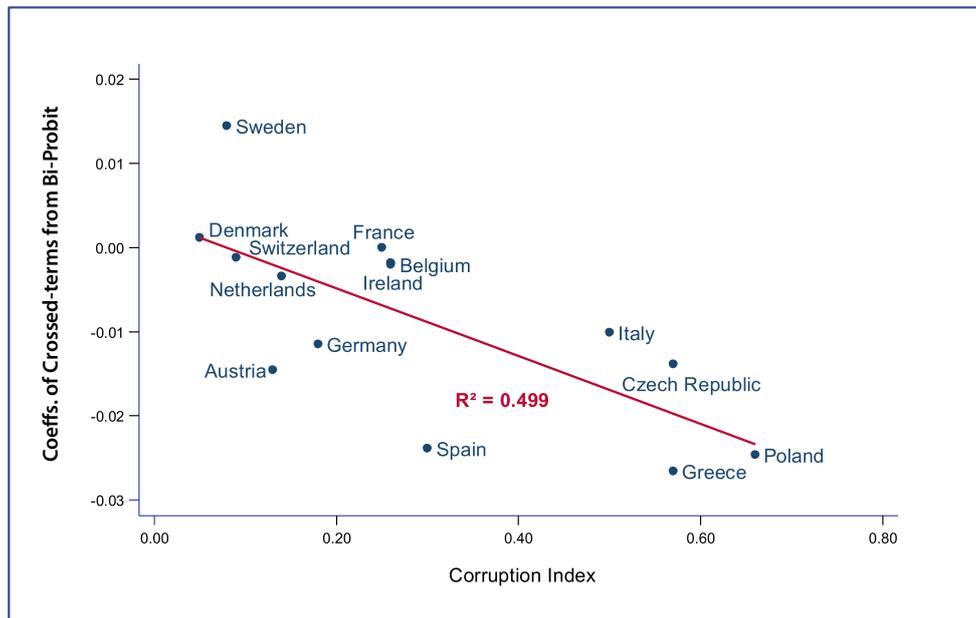


Figure 3.2
Speed of Social Integration and Perceived Corruption
(Social Participation Equation)



Nevertheless, in the case of social participation, estimates for the GINI coefficient and the corruption index are both negative and significant. Figures 3.1 and 3.2 show that both models nicely fit the data, despite the scarce number of observations. These results are necessarily explanatory since the small number of countries in the analysis does not provide extensive statistical power. The negative slope indicates a decreasing relationship between crossed effects and both macroeconomic indicators. Accordingly, immigrants in more egalitarian countries have a higher propensity to get involved in social activity when one immigrates at older ages. Put differently, results indicate that the necessary length of stay to achieve immigrant social integration through social participation would be lower in more egalitarian countries. Similarly, immigrants residing in more corrupted country have a lower propensity to get involved in social activity when one immigrates at older age. This latter result also suggests that immigrant social integration through social participation would be more likely to be achieved in countries where perceived corruption is lower.

In this respect, income inequality and state level perceived corruption appear to exert a deleterious effect on immigrants' speed of social integration in the host country. One interpretation could be that unequal environments increase relative deprivation of immigrant, reduce their wish or their opportunity to take part in society. In line with Rawls (1971) theory of justice, in a fair society each person should benefit from equal basic rights and liberties so that each person has the same right, freedom and capacity to access services and resources (see also Sen, 2000). Societies characterised by low level of income inequalities or low level of perceived corruption may thus be considered as "fair society" in providing a suitable environment to foster immigrant social integration.

5.4. Robustness checks

With the aim to gain confidence from the results, different specifications for Model 2 have been tested – though restricted to the social participation equation only. We modified the population of interest to check whether the influence of macroeconomic variables remains significant in considering different sub-populations: (i) men versus women, and (ii) citizen versus non-citizen.

Table 4
Robustness Checks for «Speed of Integration» with Subsamples

MODEL 3				
Dependant var.	Social Participation			
Indep. var. \ Subsamples	Citizen	Non-Citizen	Men	Women
GINI Index	-0.166*	0.203	-0.052	-0.244**
GDP per capita	0.002	-0.008	-0.002	0.001
Social Expenditures	0.000	0.002	0.001	0.001
Corruption Index	-0.045**	0.023	-0.022	-0.052***
Ethnic Fractionalisation	-0.012	-0.042	-0.013	-0.009
Language Fractionalisation	0.004	-0.027	0.002	0.010
Religious Fractionalisation	-0.005	-0.028	-0.021	0.007
Obs.	14	14	14	14

Source: SHARE wave2 (release 2.3.0) and Macroeconomic series.

*Legend: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$*

Table 4 indicates that the influence of the GINI coefficient and the perceived corruption index remain significant in the social participation equation only in the sub-samples of women and

citizens. Additional results for other macroeconomic variables concur with previous results since no effect of GDP, social expenditures, and any of the fractionalisation indexes are found to be significant. Notice that non-significant results in the case for men and non-citizens may be due to the lack of statistical power. Nevertheless, the opportunity to interpret more in the details the above results should be taken with great care; the interpretation below are just given as to illustrate of possible future research paths.

In the case of social participation, (i) women's speed of integration is more influenced by a change in income inequality (coeff. = -0.244) than the total population of migrants (coeff. = -0.190); and (ii) citizen's speed of integration is less influenced by a change in income inequality (coeff. = -0.166) than the total population of migrants (coeff. = -0.190). Put differently, for a given level of income inequality, the speed of social integration in a country will therefore be higher for migrant who benefit from the citizenship of the host country, suggesting that citizenship is a substitute for reduction in income inequality. The same reasoning applies to results for the perceived corruption index that remains significant with the expected sign in the case of women and citizen subsamples. A decrease in the level of the perceived corruption index would lead to higher speed of social integration for women (coeff. = -0.052) and citizen (coeff. = -0.046) than for the total population of migrants (coeff. = -0.040), meaning that state level of corruption exerts a more deleterious effect on women and citizen immigrant.

6. Conclusion

This paper provides new empirical evidence on the relationship between migration and social integration. It explores the hypothesis that migrants essentially differ from non-migrants with regard to the length of residence in the country. This time difference is argued to be a proxy of migrants' social distance to natives. In order to capture the important time-depth dimension that is required here, the study makes use of data from the wave 2 of SHARE (2006-07) on individuals aged 50 or more in 14 European countries. Focus on older people helps investigate the influence of respondents' migratory status and their age at migration on two aspects of social integration: participation in social activities and high levels of generalised trust.

Although age at migration does not seem to have any significant influence on generalised trust, social participation increases with migrants' length of stay in the host country, suggesting that migrant's social behaviour becomes over time similar to that of natives. In other words, social integration of immigrant in Europe generally takes time to be effective. The analysis based on crossed effect between age at migration and country dummy reveals some differences in the "speed of social integration" across European countries that follow a North-South gradient. Scandinavian countries seem more able to incorporate rapidly migrants; while Mediterranean countries seem to perform much worse. Institutional determinants were further considered in the analysis in order to investigate these cross-country differences in the "speed of social integration". It appears that the social integration of migrants is much faster in "fair" countries with lower levels of income inequality and lower levels of corruption.

From a public policy perspective, our results suggest that mainstreaming migrants' social integration could be more difficult to achieve in countries with higher levels of income inequality and corruption. For a given level of migratory influx, countries' ability to social absorption is more important as the level of income inequality and corruption is low. May this result be confirmed in further research, it would suggest that some of the potential negative externalities of migration – due to some social distance between migrants and natives – are more likely to be downsized (i.e. compensated or internalised) as societies grow more equal and more free.

Appendix

Table A1
Descriptive Statistics of the Covariates in the Analysis

Country	Age			Education		Living as a couple	At work	SAH (excellent/very good)
	Mean	Median	Gender (men)	Secondary	Tertiary			
Austria	67.0	66.1	0.413	0.461	0.225	0.631	0.146	0.282
Germany	65.0	64.5	0.469	0.551	0.294	0.810	0.282	0.218
Sweden	66.3	64.8	0.470	0.182	0.313	0.779	0.379	0.407
Netherlands	64.0	62.1	0.461	0.239	0.234	0.805	0.312	0.282
Spain	66.6	66.0	0.457	0.082	0.083	0.785	0.204	0.140
Italy	65.6	65.2	0.460	0.182	0.088	0.816	0.181	0.199
France	65.1	63.5	0.439	0.312	0.205	0.704	0.288	0.203
Denmark	64.3	62.6	0.462	0.403	0.373	0.751	0.412	0.527
Greece	65.0	63.3	0.458	0.202	0.178	0.724	0.289	0.357
Switzerland	65.0	63.3	0.453	0.356	0.295	0.707	0.408	0.455
Belgium	65.2	63.3	0.466	0.260	0.248	0.743	0.240	0.284
Czechia	64.3	62.6	0.432	0.305	0.120	0.700	0.287	0.183
Poland	64.1	62.1	0.443	0.398	0.125	0.754	0.164	0.074
Ireland	64.5	62.6	0.460	0.100	0.492	0.681	0.347	0.507
Total	65.1	63.7	0.454	0.286	0.220	0.750	0.279	0.281

Source: SHARE wave2 (release 2.3.0). Note: all statistics as share of the sample, unless specified.

Table A2
Cross-Country Composition of Social Capital

Country	Social Participation		Generalised Trust	
	Non weighted	Weighted	Non weighted	Weighted
Austria	0.388	0.389	0.481	0.490
Germany	0.470	0.470	0.470	0.467
Sweden	0.695	0.699	0.656	0.660
Netherlands	0.627	0.626	0.679	0.672
Spain	0.216	0.235	0.526	0.534
Italy	0.249	0.248	0.384	0.395
France	0.480	0.488	0.341	0.332
Denmark	0.673	0.671	0.782	0.776
Greece	0.414	0.431	0.353	0.360
Switzerland	0.609	0.607	0.645	0.638
Belgium	0.554	0.554	0.462	0.462
Czechia	0.320	0.345	0.504	0.501
Poland	0.176	0.183	0.393	0.392
Ireland	0.619	0.619	0.624	0.624
Total	0.457	0.401	0.509	0.458

Source: SHARE wave2 (release 2.3.0).

Note: average weights for Ireland.

Table A3
Macroeconomic Series

Country	Gini (a)	GDP per capita (a)	Social exp. as %GDP (a)	Corruption Index (b)	Ethnic fractionalisation (c)	Linguistic fractionalisation (c)	Religious fractionalisation (c)
Austria	0.27	2.46	27.36	0.130	0.107	0.152	0.415
Germany	0.30	0.75	27.23	0.180	0.168	0.164	0.657
Sweden	0.23	3.16	29.08	0.080	0.060	0.197	0.234
Netherlands	0.27	2.05	20.71	0.140	0.105	0.514	0.722
Spain	0.32	3.61	21.41	0.300	0.416	0.413	0.451
Italy	0.35	0.66	24.98	0.500	0.115	0.115	0.303
France	0.28	1.90	28.97	0.250	0.103	0.122	0.403
Denmark	0.23	2.45	27.21	0.050	0.082	0.105	0.233
Greece	0.32	2.28	20.96	0.570	0.158	0.030	0.153
Switzerland	0.28	2.64	20.19	0.090	0.531	0.544	0.608
Belgium	0.27	1.71	26.45	0.260	0.555	0.541	0.213
Czechia	0.27	6.32	19.53	0.570	0.322	0.323	0.659
Poland	0.37	3.62	21.28	0.660	0.118	0.047	0.171
Ireland	0.33	6.02	15.76	0.260	0.121	0.031	0.155
Total	0.29	2.83	23.65	0.364	0.210	0.236	0.384

Source: (a) OECD. (b) http://www.anderson.ucla.edu/faculty_pages/romain.wacziarg/papersum.html. CPI Score relates to perceptions of the degree of corruption as seen by business people and country analysts; coded here between 0 (highly clean) to 1 (highly corrupt). (c) Alesina et al. (2003).

References

- Akerlof G.A. (1997). Social Distance and Social Decisions. *Econometrica*, 65(5), pp. 1005-1028.
- Aleksynska M. (2011). Civic participation of immigrants in Europe: assimilation, origin, and destination country effects. *European Journal of Political Economy*, 27(3), pp. 566–585.
- Aleksynska & Algan (2010). Economic and cultural assimilation and integration of immigrant in Europe. CEPII, Working Paper 2010-29.
- Alesina A., Devleeschauwer A., Easterly W., Kurlat S., Wacziarg R. (2003). Fractionalization. *Journal of Economic Growth*, 8, pp. 155-194.
- Alesina A., La Ferrara E. (2000). Participation in heterogeneous Communities. *The Quarterly Journal of Economics*, 115(3), pp. 847-904.
- Algan Y & Cahuc P. (2007). La société de défiance: Comment le modèle social français s'autodétruit. Éditions Rue d'Ulm/Presses de l'École normale supérieure, Paris (France). Collection du CEPREMAP.
- Aslund O., Bohlmark A., Nordstrom Skans O. (2009). Age at migration and social integration. IZA, discussion paper n°4263.
- Berchet C., Jusot F. (2009). Inégalités de santé liées à l'immigration et capital social : Une analyse en décomposition. *Économie publique/Public economics*, 24-25-2009/1-2, pp. 73-100.
- Börsch-Supan A. & Jürges H. (2005) Eds. The Survey of Health, Aging, and Retirement in Europe-Methodology. Mannheim Research Institute for the Economics of Ageing (Germany).
- Brehm J, Rahn W. (1997). Individual-Level Evidence for the Causes and Consequences of Social Capital. *American Journal of Political Science*, 41, pp. 999-1023.
- Breton R. (2003). Social Capital and the Civic Participation of Immigrants and Members of Ethno-Cultural Groups. Paper presented at the conference on: the opportunities and challenges of diversity: A role for social capital?, Montreal November 2003.
- Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94, pp. 95-120.
- D'Hombres B., Rocco L., Suhrcke M., McKee M. (2010). Does social capital determine health: Evidence from eight transition countries. *Health Economics*, 19(1), pp. 56-77.
- De Palo D., Faini R., Venturini A. (2007). The Social Assimilation of Immigrants. SP discussion paper n°0101 – The World Bank.
- Dinesen P.T. (2011). A Note on the Measurement of Generalized Trust of Immigrants and Natives. *Social Indicators Research*, 103(1), pp. 169-177.
- Eloi L. (2009). Peut-on se fier à la confiance?. *Revue de l'OFCE*, n°108.
- European Commission (2005). A Common Agenda for Integration: Framework for the Integration of Third-Country Nationals in the European Union. COM(2005) 389.
- European Commission (2009). Poverty and social exclusion, Special Eurobarometer 321, Brussels.
- Eurostat (2008). http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-08-098/EN/KS-SF-08-098-EN.PDF
- Fidrmuc J., Gerxhani K. (2005). Formation of social capital in Central and Eastern Europe : Understanding the gap vis à vis developed countries. CEPR Discussion Papers, n°5068.
- GHK (2010). Volunteering in the European Union. Final Report, Brussels.
- Glaeser, E.L., Laibson D., Sacerdote B. (2002). The economic approach to social capital. *Economic Journal*, 112, 437-458.

- Grootaert C. & Van Bastelaer T. (2002). *The Role of Social Capital in Development*. Cambridge: Cambridge University Press.
- Kazemipur A., (2004). Social Capital of immigrants in Canada. PCERII working paper series n°04-04.
- Kervin K.C., Kline P. (2002). Relational costs and the production of social capital : evidence from carpooling. NBER working paper, n° 9041.
- Knack S. (2002). Social Capital and the quality of government: Evidence from the states. *American Journal of Political Science*, vol 46, n°4, pp. 772-785.
- Knack S., Zack P.J. (2001). Building trust: public policy, interpersonal trust and economic development. MPRA working paper, n°25055.
- Kumlin S., Rosthein B. (2005). Making and Breaking Social Capital: The impact of welfare State Institutions. *Comparatives political studies*, vol 38, n°4, pp. 339-365.
- Muller N., Seligson M.A. (1994). Civic culture and Democracy: the question of causal relationship. *The American Political Science Review*, vol 88, n°3, pp. 635-652.
- Nannestad P. (2007). Immigration and welfare states: A survey of 15 years of research. *European Journal of Political Economy*, Volume 23(2), pp. 512-532.
- OCDE (2011). La naturalisation: un passeport pour une meilleure intégration des immigrants ?. Éditions OCDE. <http://dx.doi.org/10.1787/9789264099623-fr>
- OECD (2010). *International Migration Outlook 2010*. OECD code: 812010101P1
- Oorschot .W.V, Arts W. (2005). The social capital of European welfare states: the crowding out hypothesis revisited. *Journal of European Social policy*, vol 15(1), pp. 05-26.
- Oorschot W.V. (2003). Different welfare states; different social commitments? Evidence from the 1999/2000 European Value Study. Paper presented at 1st Annual Conference of ESPAnet, the network for European Social Policy Analysis, Copenhagen.
- Paxton P. (2002). Social Capital and democracy : An interdependent relationship. *American Sociological Review*, vol 67, n°2, pp. 254-277.
- Rawls, J. (1971). *Theory of justice*. Harvard University Press, Cambridge, MA.
- Rosthein B., Stolle D. (2003). “Social capital, impartiality and the welfare state: an Institutional approach” in M. Hooghe and D. Stolle (eds). *Generating Social Capital: civil society and institutions in comparative perspective*, pp. 191-209, New York: Palgrave/Macmillan.
- Rupasingha A., Goetz S., Freshwater D. (2006). The production of social capital in US counties. *The journal of socio-economics*, n°35, pp. 83-101.
- Salamon L.M., Sokolowski W. (2003). Institutional roots of volunteering, toward a macro-structural theory of individual voluntary action, in P. Dekker and L. Halman (eds), *The values of volunteering: cross cultural perspectives*, pp. 71-90. New York: Kluwer Publishers.
- Scheepers P., Grotenhuis M.T., Gelissen J. (2002). Welfare states and dimensions of social capital, Cross-national comparisons of social contacts in European countries. *European Societies*, 4(2), pp. 185-207.
- Schnapper D. (2008). Intégration nationale et intégration des migrants : un enjeu Européen. *Fondation Robert Schuman, Question d'Europe* n°90.
- Sen A. (2000). Social justice and the distribution of income. Chapter 1, *Handbook of Income Distribution*, Volume 1. Edited by A. B. Atkinson and E Bourguignon.
- Sides J. (1999). It takes two: The reciprocal relationship between social capital and democracy. *Departement of Political Science, University of California, Berkeley, Working Paper* 99-11.
- Van der Vegt G.S. (2002). Effects of attitude dissimilarity and time on social integration: A longitudinal panel study. *Journal of Occupational and Organizational Psychology*, 75(4): 439–452.

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Cross-Country Performance in Social Integration of Older Migrants. A European Perspective

Caroline Berchet (LEDa-Legos-Université Paris-Dauphine, Irdes), Nicolas Sirven (Irdes)

This paper provides new empirical evidence on the relationship between migration and social integration. It explores the hypothesis that migrants essentially differ from non-migrants with regard to the length of residence in the country – which is a proxy of migrants’ social distance to natives. The determinants of social participation and interpersonal trust are examined at both the individual and institutional level. Using SHARE data and macroeconomic series, we first analyse the influence of immigrant length of stay in the host country on social integration indicators. We then examine the role institutional characteristics play on cross-country differences in speed of social integration (i.e. immigrants’ propensity to social participation according to their length of stay in the host country). As expected, the immigrant population presents a lower likelihood than the native population to get involved in social activities and to trust other people. Nevertheless, the more immigrants have spent time in the host country, the more they take part in social activities. The analysis also reveals significant cross-country differences in immigrants’ speed of social integration. Macroeconomic series like the GINI coefficient of income inequality and the Corruption perceived index could explain these differences. From a public policy perspective, our results suggest that immigrants’ social integration is more rapidly achieved in “fair” countries – i.e. those with a more favourable social environment – where the levels of income inequality and perceived corruption are lower.

Une perspective européenne des performances d’intégration sociale des migrants âgés

Caroline Berchet (LEDa-Legos-Université Paris-Dauphine, Irdes), Nicolas Sirven (Irdes)

L’objet de cette étude est d’analyser les relations entre la migration et l’intégration sociale. Notre analyse se propose d’étudier l’hypothèse selon laquelle l’intégration sociale des immigrés diffère essentiellement de celle des natifs en raison de la durée de résidence dans le pays d’accueil, facteur qui constitue dans notre analyse un indicateur de la distance sociale des migrants aux natifs. Les déterminants de la participation sociale et de la confiance interpersonnelle sont analysés au niveau individuel et institutionnel. À partir des données de l’enquête SHARE, complétées par des séries macroéconomiques, nous analysons dans un premier temps l’influence de la durée de résidence dans le pays d’accueil des immigrés sur les deux indicateurs d’intégration sociale. Nous étudions ensuite le rôle joué par les caractéristiques institutionnelles sur les différences de vitesse d’intégration entre les pays européens (i.e. la probabilité d’un immigré d’être intégré selon sa durée de résidence dans le pays d’accueil). Les résultats indiquent que la population immigrée présente une plus faible probabilité que la population native de participer à des activités collectives et d’avoir confiance en autrui. Cependant, l’intégration sociale des immigrés s’accroît avec la durée de résidence dans le pays d’accueil mais l’analyse révèle, par ailleurs, des différences de vitesse d’intégration entre les pays européens. Ces différences sont expliquées par les séries macroéconomiques telles que le coefficient de GINI et l’indice de corruption. D’un point de vue des politiques publiques, nos résultats suggèrent que l’intégration sociale des immigrés est plus rapide dans les sociétés caractérisées par un environnement social favorable, où les niveaux d’inégalité de revenu et de corruption sont faibles.

