Will We All Hunker Down? The Impact of Immigration and Diversity on Local Communities in Spain

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ABSTRACT *This article engages with the scholarly debate on the supposed negative effect of immigration and diversity, and analyses its effect on two different forms of trust —community trust and generalized trust —in Spain. Our contribution is twofold. Firstly, with census section level data of representative samples of all the Spanish municipalities, we test the propositions that relate greater ethnic diversity to social trust. Secondly, we address the limitations intrinsic to the crude measurement of diversity of the Herfindahl index with a systematic consideration of multiple alternative indicators of immigration-related diversity. We find evidence of a negative effect of diversity on community trust but none on generalized trust. Hence, our findings lend some support to the recent scholarship that questions that increasing diversity has a ‘hunkering down’ effect.*

KEYWORDS: Immigration, diversity, local communities, social trust, Spain

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Does the diversity that results from increasing migration inflows hinder social trust? Do citizens ‘hunker down’, and retreat from the public sphere as a result, when their communities become ethnically more heterogeneous? These questions have occupied social scientists for the past decade — especially since the publication of Putnam’s (2007) piece — in a heated debate with notorious policy-making implications.¹ Politicians and pundits alike are increasingly and visibly concerned about the potential disruption to local communities and public life that a growing and diverse immigrant population might bring along. But, is there enough evidence to support these concerns?

In this article, we contribute to this scholarship with an analysis of the effect of immigrant-related diversity on generalized and localized or community trust. As we will illustrate, Spain is a very interesting case study for testing the main theoretical propositions that relate diversity to decreasing levels of trust, and especially for testing whether these effects are visible in the short-term, as has been suggested by Putnam. In just a decade, the immigrant population multiplied by five, and many local communities became ethnically diverse. The rapidity and magnitude of this social change leads us to expect visible effects.

Our contribution is twofold. Firstly, by analysing the effect of immigration-related diversity at the smallest level of aggregation possible in Spain — the census section level — we are able to adequately test the propositions that relate greater

ethnic diversity to residents' social trust. Secondly, we overcome the limitations intrinsic to the crude measurement of diversity of the Herfindahl index with a systematic consideration of multiple alternative indicators of immigration-related diversity that examine the effects of the national origin, linguistic, and racial diversity that has changed the social face of Spanish local communities throughout the country. With this thorough examination of diversity in an interesting and little-known case, we find no effect of diversity on generalized trust, and a negative impact on community trust. We also find that considering multiple dimensions of immigration-related diversity is a worthwhile pursuit, as our results suggest that certain types of immigrants engender a more negative reaction than others.

The article proceeds as follows. In the next section we summarize the key issues discussed in the scholarly literature around this topic and we outline the empirical expectations that are derived from it. This is followed by a brief description of the Spanish case and of its relevance for the research questions addressed. The third section presents the data, variables and methods used. After that, we present the empirical results, and we conclude with a discussion of the main findings and implications.

Trust, Immigration and Diversity

Several studies suggest that ethnic and racial diversity reduce social cohesion and cooperation in various forms, most prominently social trust, but also other cooperative attitudes and behaviours. As discussed at greater length in the Introduction to this

special issue, the argument that has been put forward is that ‘inhabitants of diverse communities tend to withdraw from collective life’ and ‘hunker down’: they are less trusting of their neighbours and of their co-ethnics and, critically for democratic politics, they also exhibit less civic engagement, lower political confidence, lower political efficacy, and lower frequency of registering to vote (Putnam 2007: 149-150).

Although Putnam’s arguments are more wide-ranging, much of the recent scholarship has focussed on the analysis of the effects of diversity on social trust. Social trust, particularly its generalized version, is key to a well-functioning democracy, to the extent that it facilitates the solution of collective problems and ensures greater social harmony among law-abiding citizens. In this regard, the ‘conflict’ and ‘constrict’ hypotheses — as presented by Putnam (2007) — lead to the expectation and prediction that higher levels of ethnic diversity (often due to immigration) will result in lower levels of social trust and therefore in citizens becoming less inclined to cooperate in the production of public goods and get involved in the public sphere. In reaction to Putnam’s findings, we assess the effect that immigration-related diversity has on residents’ social trust across local communities in Spain.

We pay special attention to the distinction between different forms of trust: generalized trust and community trust. Many scholars have shown that these variants of trust do not operate in the same way, nor do they have the same consequences for social cooperation (Uslaner 2002, 2008a; Naef and Schupp 2009; Wollebæk, Lundåsen, and Trägårdh 2012). Several assessments of the effect of immigration-related diversity focus primarily on community trust — particularly trust in people in

the neighbourhood, also referred to as localized trust (Leigh 2006). Putnam's (2007) study singles out trust in people in the neighbourhood as the main illustrative indicator that reflects how people 'hunker down' when they reside in ethnically diverse areas.

There is some debate as to whether trust in people who live in the neighbourhood should be regarded as a form of generalized or particularized trust. Some scholars consider it an indicator of particularized trust (Freitag and Traunmüller 2009; Naef and Schupp 2009; Sturgis and Smith 2010; Sturgis et al. 2011). However, this is clearly not a perfect indicator of particularized trust, as neighbours often do not all know each other and, in any case, the usual question asked does not make reference to particular neighbours but rather to the community as a whole (Veenstra 2002; Wollebæk, Lundåsen, and Trägårdh 2012). Not surprisingly, therefore, trust in neighbours and trust in people living in the neighbourhood tend to load on multiple dimensions of trust indicators (Uslaner 2002; Newton and Zmerli 2011). Other scholars have regarded it as a locally-bounded form of generalized or abstract social trust (Putnam 2007). Amidst this debate, Wollebæk, Lundåsen, and Trägårdh (2012) usefully propose to regard this indicator as a separate component or type of trust (see also, Wallman Lundåsen and Wollebæk in this issue). Their analysis shows, for the Swedish case, that trust in people in the neighbourhood correlates more strongly with other forms of 'localized' or community trust than with other forms of particularized trust. As we do not have comparable data for Spain to check the empirical dimensionality, for terminological consistency in this special issue, we use the term 'community trust' to refer to trust in people living in the neighbourhood.

Beyond the classification problem, there is also some debate as to which form of trust should be of most interest or relevance (Sturgis et al. 2011). Uslaner (2002) argues that civic engagement and other forms of cooperation are partly driven by generalized trust and not by its particularized forms, and there is disagreement around the empirical association between particularized and generalized trust (Newton and Zmerli 2011). While some argue that both forms of trust are sometimes incompatible (Uslaner 2008a), others believe that one does not necessarily lead to the other (Hooghe 2008), and others are of the view that they are perfectly compatible or mutually reinforcing (Freitag and Traunmüller 2009). Recently, Wollebæk, Lundåsen, and Trägårdh (2012) have argued that community trust is of greater relevance in terms of its behavioural consequences, given that — they suggest — most trust-based cooperation takes place in the local context, community trust will be the main lubricant for this cooperation.

This is, ultimately, an empirical question. In our view, because generalized forms of trust have been shown to be more strongly related to engagement in public affairs than particularized ones or than community trust, a negative relation between diversity and generalized trust is likely to be more consequential for political behaviour. However, it is probably not wise to make generalizations in this regard either, as the empirical relation between different forms of trust and various forms of political behaviour is bound to vary from nation to nation. In fact, the limited cross-national evidence available from the World Values Surveys (2005-2008) suggests that, on the one hand, the correlation between generalized trust and community trust differs considerably across countries and, on the other hand, that the patterns of correlation between generalized and community trust with various forms of political

participation also vary substantially.² In most of the western democracies considered, generalized trust shows a higher correlation with membership in politically-oriented organisations³ and with normalized protest⁴ than that observed for community trust, whereas the opposite is more common for voting. Therefore, it is important to weigh up carefully how immigration and diversity might affect each of these without assuming that one or the other is irrelevant.

This leads us to the careful consideration of the concept and measurement of diversity. One of the limitations of some of the existing scholarship is related precisely to the measurement of ethnic diversity. The reliance on the Herfindahl and Fractionalisation indices originates in the theoretical expectation that the in-group vs out-group distinction is the only relevant one for social interaction and cohesion (see the Introduction to this special issue). Yet, the exclusive consideration of these indicators is highly problematic (Fearon 2003; Laurence and Heath 2008), as they fail to capture conflict and polarisation adequately and mask the internal composition of the ethnic populations, treating all types of diversity as identical. Implicitly, using the Herfindahl index implies assuming that all out-groups drive down trust. Yet, there is already sufficient scholarship to suggest that certain types of diversity are likely to result in more negative reactions, as the cultural, linguistic, racial and economic backgrounds of different groups do not trigger the same ‘threat’ mechanisms (Citrin et al. 1997; Dixon 2006). Indeed, various authors have shown or argued that a more subtle consideration of the multiple ‘variants’ of diversity is needed (Letki 2008; Lancee and Dronkers 2011). The underlying logic is that the causal mechanisms by which diversity has an effect on trust or social capital are likely to be different depending on the type of diversity we are considering. As Schaeffer (2013 (in press))

splendidly outlines, some forms of conceiving of diversity suggest that the causal mechanism is primarily one of cognitive or interaction biases (fractionalization, polarization or racial diversity indices), whereas other forms point to differences in normative and preference distributions (cultural and income distance indices) or coordination problems (linguistic diversity or distance indices).

Multiple measures of diversity thus allow us to explore various mechanisms connecting diversity and its effect. If we want to examine whether, indeed, some specific out-groups are perceived more as a threat, then we need to include indicators that identify specific immigrant groups. If we want, instead, to consider whether the capacity to communicate with out-groups is what drives down interaction and trust, then we need to consider an indicator of linguistic diversity. If we think that prejudice is the main driver, an indicator that captures racial or phenotypic differences will be more appropriate. Finally, if we think that patterns of residential concentration or segregation are at the origin of the negative effects of diversity, more elaborate typologies are needed to capture this.

Several scholars have already started to tackle this more complex relation between diversity and various outcomes. Linguistic diversity has been shown to be a relevant correlate of trust and social capital in various settings, and sometimes even more so than ethnic diversity (Leigh 2006)⁵, but not in others (Lancee and Dronkers 2011; Schaeffer 2013 (in press)). And others have examined other dimensions, such as racial and religious diversity as well (Stolle, Soroka, and Johnston 2008; Lancee and Dronkers 2011). One important limitation in many European societies is that multiple measures of diversity are highly correlated among each other and with

simple immigrant concentration indicators (Gijsberts, van der Meer, and Dagevos 2012), so it is a context-dependent empirical issue whether there is something to gain in each case from considering a greater range of indicators (Schaeffer 2013 (in press)).

One of the main contributions of this article is that we make an effort to overcome simplistic operationalisations of diversity by simultaneously taking into consideration multiple ways of conceiving and measuring immigration-related diversity. Because the notion of diversity encompasses multiple dimensions along which immigrant-origin populations can be viewed as different, we employ six alternative measures of diversity that provide a truly encompassing view of the racial, ethnic, linguistic and cultural heterogeneity that a sudden and considerable migration inflow brings to a previously relatively homogeneous country like Spain. Our choice of indicators is guided by previous scholarship in this field and we discuss their rationale and measurement in the Data and Methods section.

Immigration to Spain

International migration flows to Spain have been very intense in the last years: the percentage of foreign-born population increased from 3% in 1998 to 11% in 2006, stabilising around 16% by 2010.⁶ The increase in the immigrant population in Spain rapidly accelerated since the turn of the century and multiplied by five in less than a decade, with an average entry of around half a million individuals per year. Only

Ireland provides a comparable case in Europe in recent times, and in the United States only the massive inflows of the early 20th century were of equivalent magnitude.

The threat and constrict hypotheses outlined before posit that rapid changes in the composition of the population can have additional disruptive effects. High rates of population turnover and residential mobility weaken social organisation and control (Sampson, Raudenbush, and Earls 1997: 919), if only because forging social ties takes time. Moreover, rapid change induced by sudden inflows of migration is likely to be conducive to native populations more easily realizing the magnitude of the inflow in their daily interactions, facilitating the politicisation of anti-immigrant sentiments (Hopkins 2010), and contributing to natives perceiving greater ‘threat’ from the newcomers — particularly in relation to the use of public resources, housing and employment — thus, presumably, decreasing social trust (Hooghe et al. 2009). Thus, the Spanish case is a useful one to assess the hypotheses that relate increasing ethnic diversity to a ‘hunkering down’ effect.

Most of the foreign-born are economic migrants from Latin America,⁷ the Maghreb and Eastern Europe, attracted by the expansion of the demand for cheap labour in low-skilled services. However, there is also a sizeable proportion of older migrants from wealthy EU countries whose characteristics radically differ from their non-EU counterparts, and who tend to concentrate in coastal areas. Nevertheless, EU inflows have increased at a much slower pace than those of third-country nationals, with the only exception of the large inflow of Romanians and Bulgarians.

In summary, immigration to Spain in the past decade has been (i) sudden, (ii) massive, (iii) very heterogeneous in its composition, and (iv) geographically concentrated. In a single decade, Spain experienced very rapid social change that transformed the country from a society that traditionally sent emigrants to one of the largest net receivers in Europe and the world (OECD 2009). Although the immigrant population has recently spread all over the country, its geographical distribution remains highly unequal (Figure 1).

Figure 1. Spatial evolution of the concentration of immigration in Spain, 1998-2008.

Source: Own elaboration from local register statistics provided by the Spanish National Statistics Institute (INE).

A further advantage of studying the Spanish case is the availability of good official statistics since 1996 on the resident population by nationality — and, frequently, also country of birth — for all municipalities⁸ and census sections;⁹ which can be matched to survey data collected by the most important public polling institute in Spain (*Centro de Investigaciones Sociológicas*, CIS).

Moreover, Spain is an interesting case for theory-testing because, unlike some other European and Western democracies (Putnam 2000; Hall 1999; Uslaner 2002), there is no evidence of a decline in levels of social capital. In fact, social capital levels seem to be increasing in Spain since the 1980s. Trust has been gradually and moderately increasing over the years and associational membership has increased from around 30% to around 40%; there has been no decline in citizen engagement in the past decades (Morales 2005).

So, at least at the aggregate level, there is no evidence that the sudden and massive increase in immigration-related diversity has resulted in Spaniards hunkering down. Yet, it might be that aggregate results are masking conflicting micro-level processes and relations, if residents who live in primarily homogeneous areas are disproportionately accumulating social capital, whilst those in high immigration density areas are much less trusting (see also Wallman Lundåsen and Wollebæk in this issue). Hence, individual-level data are needed to properly address these questions.

Data and Methods

We employ and combine two different datasets: individual-level public opinion surveys, and contextual data from official statistics. The individual-level data come from two surveys designed and conducted in 2006 by the Spanish public polling institute CIS. The statistics were collected by the Spanish National Statistics Institute (*Instituto Nacional de Estadística*, INE) and also refer to 2006.

Unfortunately, there is no recent Spanish survey that includes both measures of trust at once and also includes geocodes to match the sampled individuals with their places of residence, and hence we have no other choice but to analyse two separately: study number 2632 (n=3,192) and study number 2634 (n=8,265). Once weighted, both surveys are representative of the overall national population of Spain, and both employed exactly the same survey administration and sampling procedures: face-to-face interviews in the respondents households, and multistage random sampling procedures, with municipalities as primary sampling units, census sections as secondary sampling units¹⁰, and individuals within households as final units (selected using random routes with gender and age quotas).¹¹

The two samples do not differ in their coverage of the Spanish geography except for their difference in size, which entails that some smaller provinces were randomly not included in the smaller sample. As Table 1 in the Appendix shows, both samples include a good coverage of municipalities of all sizes. An important difference between the two surveys is that study 2634 covers and identifies all immigrants, whereas study 2632 only targeted Spanish citizens and hence only includes (without identifying them with a question on country of birth) immigrants

who have already obtained Spanish nationality, who were estimated to be around 20% of all immigrants residing in Spain in 2007 (INE, 2011). The analyses we report for both surveys include the immigrant respondents included in each survey in order to provide the most complete picture possible. For the model on community trust we are able to estimate specific coefficients on the main effect of foreign birth and foreign nationality, but not so for generalized trust.¹² However, for community trust, we have run the models with and without immigrants and the conclusions do not differ in any meaningful way¹³, hence allowing a comparison with the results for generalized trust even if the immigrant resident population included in both surveys is slightly different.

Dependent Variables

As discussed in previous sections, our analyses focus on two indicators of trust: trust in people in the neighbourhood — a form of localized or neighbourhood-based trust to which we will refer as ‘community’ trust (see Wallman Lundåsen and Wollebæk in this issue) — and generalized social or ‘moral’ trust. Community trust is measured with an ordinal variable with four values that measure how much respondents agreed that people in their residential areas can be trusted.¹⁴ Generalized social trust is measured with an 11-point scale that ranges from 0 (“you can’t be too careful”) to 10 (“most people can be trusted”).¹⁵

In Spain both forms of trust follow very different distributions in the population. Around 80% of Spaniards trust their neighbours (see Table A1 in the Appendix), whereas only around 35% are generally trusting of strangers (Echazarra

and Morales 2012). Although the two surveys we primarily employ in this article do not allow us to look at the association between both forms of trust because they were not included simultaneously in either survey, the Spanish sample of the 2005-2008 World Values Survey¹⁶ indicates that the relation between them is only mildly positive (Pearson's correlation of 0.09, see Table 4 in the [Online Supplement](#)). Whereas, 78% of the respondents who trust people in their neighbourhood have a negative view of strangers, only 16% of those who trust strangers say they do not trust people in their neighbourhood. Additionally, community trust and generalized trust are driven by different socio-demographic factors.

Measuring Immigration-Related Diversity

In order to measure immigration-related diversity, we have used population statistics at the census section level to compute a set of six indicators that reflect different and complementary understandings of the underlying mechanisms that might connect diversity with a reduced inclination to cooperate. All indicators use the country of birth to allocate the population into categories.

Our first indicator is the commonly used Herfindahl-Hirschman index of ethnic homogeneity, for which we distinguish thirteen groups: (1) Spain (2) the remaining EU-15 countries, Norway, Iceland, Switzerland and the five European microstates (hereon, EU-15+); (3) Poland, Romania and Bulgaria; (4) other European countries; (5) Morocco; (6) other North-African countries; (7) Sub-Saharan African countries; (8) Andean Latin American countries (Bolivia, Colombia, Ecuador and Peru), (9) other Latin American countries; (10) China; (11) Bangladesh, India, Pakistan and the Philippines; (12) other Asian countries; and (13) all other countries.

Our selection of groups is based, firstly, on ethnic, socio-economic and racial closeness within the groups identified,¹⁷ but secondly — and critically — also on the perceptions that Spaniards hold of distinctiveness across immigrant groups. For this we have relied on the results of other surveys conducted by the CIS. When asked in 2008 (study 2773) what groups came to their mind when speaking of immigrants coming to live in Spain, 33% mentioned Moroccans — also Maghrebis, Arabs or, the pejorative, ‘Moors’ —, 23% mentioned Latin Americans — with an additional 8% naming separately Ecuadorians, 4% Colombians, and 5% other nationalities —, 20%

named Romanians — an additional 5% said East Europeans — , and 18% mentioned Sub-Saharan Africans — with an extra 6% responding a vague “Black people”. Other groups are less readily named: 3% mentioned the Chinese, 1% named other Asian groups, and only 1% said “Muslims”. Hence, our classification of groups for the Herfindahl index captures simultaneously the ethnic diversity stemming from immigration that exists in Spain and the one that citizens perceive as more salient. Reducing diversity to 13 categories strikes the right balance between acknowledging the complexity of such diversity and bearing in mind that people — natives and immigrants alike — hold simplistic stereotypes about immigrants and lump together groups that are much more heterogeneous than they realize.¹⁸

We employ three additional indicators of diversity that aim at capturing several of the dimensions of Vertovec’s (2007) conceptual notion of super-diversity: national origin, language, and racial diversity. Super-diversity is thought to pose greater challenges for integration and policy-making in relation to immigration than more homogeneous immigration flows. In order to capture the fragmentation implicit in the concept of super-diversity, we first calculate the ‘effective number of national groups’ (ENNG) as indicated by the country of birth, using the same formula Laakso and Taagepera (1979) used to count political parties (Equation 1). Every country of birth is considered a separate group for the calculation.

Secondly, we calculate an index of linguistic diversity (ILD) or fragmentation based on a simplified version of Fearon’s (2003) and Laitin’s (2000) logic of linguistic structural distances as a proxy for cultural distance. We use the Ethnologue (2009) classification in family trees of languages to assign each language a distance

value depending on how far removed they were in linguistic ‘tree branches’ in relation to Spanish, and the CIA World Factbook (2010) to assign languages to countries. Following the tree hierarchies in the Ethnologue, we used six values that intend to approximate linguistic distance to Spanish, assigned depending on the dominant language(s) in any given country: 0 for all Spanish-speaking, 0.25 for Portuguese-speaking, 0.375 for French and Italian-speaking, 0.5 for Romanian and other Eastern Romance languages, 0.75 for all other Indo-European languages, and 1 for all other languages.¹⁹ In many cases the CIA World Factbook does not provide percentages of the population who speak a given language, and we relied on the designated official languages. These distance values were then used as weighting factors of the percentage of immigrants coming from each country and the index is calculated with Equation 2.

Third, we have created an indicator of the relative presence of ‘visible’ minorities to approximate racial diversity (VIS). This indicator takes into account that sometimes an ordinal ‘skin colour hierarchy’ structures social and political relations (Hochschild 2005). The notion of visible minorities is a demographic statistical category first used in Canada to identify individuals and groups who are non-Caucasian in race or non-white in skin colour. We borrow this notion because we expect that phenotypical traits and, particularly, skin colour will make certain types of diversity more salient or visible to natives. We use a similar approach to the one described for the ILD, using the CIA World Factbook to determine the racial and ethnic mix in each country, and assigning a weighting value for predominant skin colour by country of birth. We assign a 0 value to all countries with predominantly white/Caucasian populations, 0.5 to those with predominantly non-white but non-

black populations, and 1 for predominantly black populations. Several Latin American countries — including all Andean countries — with predominantly *mestizo*, creole or indigenous populations fall within the second category and are assigned a value of 0.5. The proxy indicator is then calculated with Equation 2.

$$ENNG = \frac{1}{\sum_{i=1}^I p_i^2} \quad (\text{Equation 1})$$

where I is the total number of countries for which there are immigrants in any given census section, and p_i is the proportion of immigrants of country i over the total population of a given census tract.

$$ILD = \sum_{i=1}^I w_i * p_i \quad (\text{Equation 2})$$

where I is the total number of countries for which there are immigrants in any given census section, w_i is the weighting value (for language distance or racial distance) and p_i is the proportion of immigrants of country i over the total population of a given census tract.

A fourth set of indicators follows a strategy commonly pursued in the scholarship on urban segregation of ethnic minorities (Johnston, Forrest, and Poulsen 2002) and more recently adopted in studies of diversity and social cohesion in Britain (Laurence and Heath 2008; Laurence 2011; Bécares et al. 2011). We employ a multi-group classification scheme that identifies a number of thresholds of the percentage of foreign population of various country/world area origins, informed by the results of a cluster analysis performed with all Spanish census sections in 2006. The cluster analyses included: (1) the overall percentage of the foreign born; the percentage over the total foreign-born population of residents born in: (2) EU-15+ countries, (3) Bulgaria, Romania and Poland (4) Morocco, (5) other African countries, (6) Andean

countries (Bolivia, Colombia, Ecuador and Peru), and (7) Asian countries.²⁰ With this approach we find a cluster of census sections with few foreign nationals (less than 3%), a set of mixed minority areas with moderate (between 3 and 6%), moderate to high (between 6 and 15%), or high (more than 15%) percentages of foreign population, and several clusters with both substantial foreign populations and high concentrations of specific national groups, primarily of Bulgarians/Polish/Romanians, of EU-15+ nationals, of Moroccans, and of Andeans, respectively.

Based on these results, the following classification of census sections was produced:

- (1) Homogeneous: with a foreign population (FP) between 0 and 3%;
- (2) Non-isolated host communities with low concentration: FP between 3 and 6%;
- (3) Moderately diverse mixed areas: FP between 6 and 15% and no national group with more than 35% of the total FP;
- (4) Highly diverse mixed areas: FP of more than 15% and no national group with more than 35% of the total FP.

If the FP is more than 6%, and citizens from each of the respective groups below represent more than 35% of the total FP and no other foreign group represents more than 20%, or any of these groups represent 50% or more of the FP, the section is classified as:

- (5) EU-15+ enclave;
- (6) East-European enclave;
- (7) Moroccan enclave; and
- (8) Andean enclave.

Although our classification above unpacks the complexities of various types of diversity ‘mixes’, it might be, however, that natives only react negatively to very specific groups of migrants. In 2008 (CIS study 2773), 21% of Spaniards said they had some antipathy or dislike for Moroccans (plus ‘Arabs’ or ‘Moors’), and 19% mentioned Romanians and East Europeans. In contrast, Latin Americans were only named by 5%, and all other groups were below 2%. Given these highly targeted negative views of immigrants, we have added five separate variables for some of the largest non-EU-15+ national groups in Spain in 2006: Moroccans (605,961 individuals and 1.4% of the total population), Ecuadorians (456,641 and 1%), Romanians (397,270 and 0.9%), Chinese (104,789 and 0.2%), and Bulgarians (100,763 and 0.2%). Table 1 provides the descriptives for all our indicators of diversity for the whole set of Spanish census sections and for the two surveys, confirming that both surveys cover well the range of diversity that existed in Spain in 2006.²¹

Table 1. Descriptives of the main diversity indicators employed (census sections)

	All Spain (2006 population register)	CIS survey no. 2632	CIS survey no. 2634
<i>Census sections</i>			
Total population	1,306 / 1,257 [10; 21,645]	1,474 / 1,424 [239; 3,925]	1,524 / 1,450 [119; 8,711]
% foreign-born population	9.64 / 7.17 [0.07; 91.6]	9.35 / 6.74 [0.14; 52.8]	10.23 / 7.72 [0.20; 80.9]
Herfindahl index	0.86 / 0.89 [0.31; 1.00]	0.86 / 0.90 [0.32; 1.00]	0.85 / 0.88 [0.35; 1.00]
Effective number of national groups (ENNG)	1.26 / 1.16 [1.00; 13.76]	1.25 / 1.15 [1.00; 4.08]	1.29 / 1.17 [1.00; 6.81]
Index of language diversity (ILD)	0.04 / 0.03 [0.00; 0.66]	0.04 / 0.03 [0.00; 0.32]	0.04 / 0.03 [0.00; 0.50]
Index of visible minorities (VIS)	0.03 / 0.02 [0.00; 0.41]	0.03 / 0.02 [0.00; 0.20]	0.03 / 0.02 [0.00; 0.25]
% Morocco	1.18 / 0.71 [0.00; 30.4]	1.12 / 0.43 [0.00; 20.6]	1.19 / 0.51 [0.00; 20.9]
% Ecuador	0.95 / 0.41 [0.00; 17.2]	0.99 / 0.25 [0.00; 13.0]	0.93 / 0.25 [0.00; 9.3]
% Romania	0.83 / 0.31 [0.00; 35.4]	0.79 / 0.25 [0.00; 17.3]	1.00 / 0.25 [0.00; 31.0]
% China	0.22 / 0.13 [0.00; 14.7]	0.26 / 0.00 [0.00; 4.8]	0.20 / 0.00 [0.00; 3.6]
% Bulgaria	0.24 / 0.07 [0.00; 48.2]	0.20 / 0.00 [0.00; 5.4]	0.24 / 0.00 [0.00; 8.8]
<i>Classification of census sections (percentage in each category)</i>			
Homogeneous (0-3% of FP)	20.0	21.4	16.2
Low concentration (3-6% of FP)	22.5	21.6	23.7
Moderately diverse mixed areas	23.1	25.8	23.6
Highly diverse mixed areas	9.0	9.0	11.0
EU-15+ enclaves	6.6	6.1	6.7
East European enclaves	4.2	3.3	5.0
Moroccan enclaves	3.4	1.4	3.5
Andean Latin American enclaves	11.2	11.3	10.2
Total number of sections	34,143	427	948

Legend: Mean /median [min; max]

Note: Figures for Spain are for all census sections in the country giving equal weight to all sections, while the figures for the two survey studies refer to the values for the individuals sampled and thus are determined by the distribution of the population across different sections, and by the survey weights applied.

Modelling and Higher-Level Control Variables

The two sources of information — surveys and population statistics — were matched through the geocodes. The data were modelled with three-level — individual, census

section and municipality — hierarchical models estimated with Stata.²² The four-point scale of trust in neighbours was modelled as an ordinal variable with ordinal logit, and the eleven-point indicator of generalized trust was, for simplicity, modelled as a continuous variable with a linear model.

In addition to the individual-level control variables, we introduced controls at the census section and municipality levels. At the census section, we control for a number of properties measured either with the 2006 local population register or the 2001 census.²³ With data from 2006 we include: population size, percentage of residents who are 65 or older, percentage of females, and percentage born in the municipality (as a proxy for population turnover). With data from 2001 we include: percentage of residents who said there was crime and vandalism in the area, percentage of residents who are illiterate or had no formal studies, percentage unemployed, average commuting time in minutes, an index of the state of buildings in the area (as a proxy for area deprivation), and the average size of rooms in square meters of the flats/houses in the section (as a proxy for the quality of accommodation).²⁴ At the municipality level, we control for the population size in 2006 and whether the municipality is part of the metropolitan area of a large city.²⁵

Results

We examine the relationship between immigration related diversity and both forms of trust separately, with multivariate multilevel models that take into account possibly

confounding factors and with multiple measures of diversity. We have modelled community trust with an ordinal three-level (individual, census section and municipality) regression, and generalized trust with a linear three-level regression. For both outcome variables, we have estimated six different multilevel models that examine the effects of the different measures of immigration-related diversity separately.

Tables 2 and 3 show the coefficients for all the diversity measures when the models include no controls, only individual level controls, and controls at the three levels of interest. The full models are available in Tables 1 and 2 in the [Online Supplement](#). The results highlight that, no matter how we measure diversity, its effect diverges considerably for both forms of trust. Overall, we find that immigration-related diversity is negatively associated to community trust. The results for the Herfindahl index show that individuals who live in more homogeneous census sections are much more likely to trust people in their neighbourhoods, and two of the three indicators related to Vertovec's super-diversity notion — linguistic and racial fragmentation — indicate that greater diversity is related to less trust in neighbourhood residents. In contrast, the results obtained for generalized trust are substantially different, sometimes even the opposite. The link between diversity and trusting anonymous others is tenuous and sometimes the relation is positive — though for the most part insignificant or in the boundaries of statistical significance.

Table 2. The effects of diversity on community trust (summary of ordinal logit models)

Diversity Measures	No controls		Individual controls only		Full model	
	Coefficient	S.E.	Coefficient	S.E.	Coefficient	S.E.
FOR ALL MODELS: No. individuals / No. census sections / No. municipalities	7,119 / 920 / 547		7,119 / 920 / 547		7,119 / 920 / 547	
Model I. Herfindahl Index of homogeneity	3.135**	0.577	3.113**	0.583	1.762**	0.581
Model II. Effective number of national groups (ENNG)	-0.674**	0.181	-0.664**	0.183	-0.235	0.169
Model III. Index of Linguistic Diversity (ILD)	-5.388**	1.235	-5.392**	1.223	-2.766*	1.146
Model IV. Visible minorities index (VIS)	-13.228**	2.008	-12.907**	2.024	-6.604**	1.934
Model V. Clusters (ref: Homogeneous sections)						
Low concentration	-0.244	0.156	-0.233	0.153	-0.082	0.154
Moderately diverse mixed areas	-0.433*	0.173	-0.424*	0.168	-0.174	0.172
Highly diverse mixed areas	-0.831*	0.341	-0.823*	0.341	-0.257	0.301
EU-15+ enclave	-0.085	0.210	-0.147	0.203	0.035	0.214
Rom/Bul/Pol enclaves	-0.613**	0.216	-0.666**	0.213	-0.539*	0.221
Moroccan enclaves	-0.851**	0.272	-0.849**	0.267	-0.588*	0.292
Andean enclaves	-0.674**	0.196	-0.637**	0.198	-0.349	0.192
Model VI. Country of birth (ref: Spanish)						
Bulgaria (%)	0.063	0.056	0.051	0.054	0.030	0.058
Romania (%)	-0.075**	0.016	-0.076**	0.016	-0.068**	0.018
Morocco (%)	-0.069**	0.020	-0.067**	0.021	-0.025	0.023
Ecuador (%)	-0.119**	0.029	-0.112**	0.029	-0.079**	0.027
China (%)	-0.268**	0.072	-0.250**	0.071	-0.126	0.072
Other foreign-born (%)	-0.011	0.009	-0.012	0.009	-0.001	0.008

* Significant at the 0.05 level; ** Significant at the 0.01 level.

Note: The table provides the regression coefficients for six different models in which only the measurement of diversity changed. Individual level controls include gender, age (and age squared), education, employment situation, whether individual lives with a partner/spouse, length of residence in local community, home ownership, income, ideology, religiosity, origin (Spanish native, naturalized foreign-born, foreign-national) and associational membership. Also, measured at the individual level but relative to the areas where respondents live, we control for the type of area where they reside: neighbourhood, gated community, village or other. Census section level controls include: percentage of elderly population, percentage of female population, percentage born in the municipality, population size (log), percentage who perceive there is crime and vandalism in the area, percentage with higher education, percentage unemployed, average commuting time to work, an indicator of the condition of the dwelling, and an indicator on the average size of homes. At the municipality level, controls include: population size (log), and whether the municipality is part of the metropolitan area of a large city. The full models are shown in Table 1 of the [Online Supplement: XXXXXXXXXX](#).

Table 3. The effects of diversity on generalized trust (summary of linear models)

Diversity Measures	No controls		Individual controls only		Full model	
	Coefficient	S.Error	Coefficient	S.Error	Coefficient	S.Error
FOR ALL MODELS: No. individuals / No. census sections / No. municipalities	2,612 / 411 / 280		2,612 / 411 / 280		2,612 / 411 / 280	
Model I. Herfindahl Index of homogeneity	-1.156*	0.490	-1.111*	0.486	-0.940	0.648
Model II. Effective number of national groups (ENNG)	0.314	0.190	0.349	0.206	0.299	0.222
Model III. Index of Linguistic Diversity (ILD)	2.652*	1.285	3.113*	1.359	3.169*	1.548
Model IV. Visible minorities index (VIS)	4.086*	1.882	4.169*	1.820	3.944	2.582
Model V. Clusters (ref: Homogeneous sections)						
Low concentration	-0.075	0.160	-0.144	0.157	-0.261	0.157
Moderately diverse mixed areas	0.258	0.179	0.121	0.179	-0.019	0.187
Highly diverse mixed areas	0.472*	0.217	0.376	0.210	0.294	0.242
EU-15+ enclave	0.490	0.291	0.488	0.287	0.389	0.281
Rom/Bul/Pol enclaves	0.130	0.287	0.182	0.270	-0.008	0.294
Moroccan enclaves	0.720	0.422	0.610	0.410	0.558	0.418
Andean enclaves	0.312	0.191	0.252	0.193	0.125	0.237
Model VI. Country of birth (ref: Spanish)						
Bulgaria (%)	0.050	0.151	0.069	0.153	-0.003	0.147
Romania (%)	0.012	0.047	0.032	0.047	0.024	0.048
Morocco (%)	0.036	0.027	0.040	0.028	0.041	0.026
Ecuador (%)	-0.022	0.021	-0.012	0.021	-0.016	0.025
China (%)	-0.012	0.096	0.001	0.108	0.013	0.114
Other foreign-born (%)	0.019	0.011	0.013	0.011	0.014	0.012

* Significant at the 0.05 level; ** Significant at the 0.01 level.

Note: The table provides the regression coefficients for six different models in which only the measurement of diversity changed. Individual level controls include gender, age (and age squared), education, employment situation, whether individual lives with a partner/spouse, length of residence in local community, income, free time available, sociability, optimism, ideology, religiosity, and associational membership. Census section level controls include: percentage of elderly population, percentage of female population, percentage born in the municipality, population size (log), percentage who perceive there is crime and vandalism in the area, percentage with higher education, percentage unemployed, average commuting time to work, an indicator of the condition of the dwelling, and an indicator on the average size of homes. At the municipality level, controls include: population size (log), and whether the municipality is part of the metropolitan area of a large city. The full models for each outcome variable are shown in Table 2 of the [Online Supplement: XXXXXXXXXX](#).

Additional indicators of diversity — using the classification of census sections derived from the cluster analysis as well as the results of the variables with the percentage of given immigrant groups — provide a more detailed view of how specific groups of migrants are more likely to prompt negative reactions. Our findings suggest that diversity *per se* does not hamper community trust, once we control for other socio-demographic contextual factors. The full models indicate that census sections that are either moderately or highly diverse but contain no ‘dominant’ immigrant group are no different from homogeneous census sections in their levels of community trust. Equally, areas that can be described as EU-15+ enclaves also show similar levels of community trust to those populated only or almost exclusively by Spaniards. In contrast, the areas with high concentrations of East European, Moroccan and Latin American Andean immigrants show significantly lower levels of community trust. Interestingly, this is not just related to negative reactions or prejudice against certain immigrant groups, as we find that the coefficient for the percentage of Moroccan-origin immigrants in the full model is not statistically significant, and previous survey evidence showed that Ecuadorians (and Latin Americans in general) are not subject to strong negative reactions. This suggests that it is the combination of moderate to high levels of immigrant concentration (6% or more of FP) *and* high levels of concentration of a specific immigrant group that might drive down community trust. Thus, patterns of concentration and segregation seem to be more consequential than diversity.

We find no such negative effects for generalized trust. Indeed we find no negative relation between any of our diversity indicators and generalized trust. In fact,

the opposite is true for the Herfindahl and visible minorities indices before controlling for other contextual variables, and for the linguistic diversity index even in the full model. Equally, none of the types of area or the national concentration variables suggest any negative effect of immigration-related diversity and generalized trust.

We also find important differences in the extent to which each form of trust varies at the smaller area level. In the case of community trust, variation at the census section accounts for a greater proportion of the overall variance than variation at the municipality level, which confirms that focussing on the census section level is critical. In contrast, for generalized trust the variance at the section level is smaller and very similar to the variance at the municipality level, suggesting that generalized trust is barely driven by neighbourhood conditions. Moreover, the individual-level portion of the model (shown in the [Online Supplement](#)) confirms that only a few socio-demographics are significantly related to community trust: older people are more trusting, and so are the wealthier and the foreigners, whereas conservative individuals are somewhat less trusting than left-wing leaning ones. The findings are quite different for generalized trust. Women are less likely to trust strangers, highly educated respondents are more trusting, age shows no effect and income is not significantly related to this form of trust once area characteristics are controlled for. In contrast to community trust — and as predicted by Uslaner (2002, 2008a) — associational membership is significantly related to generalized trust, and more sociable individuals with more free time available are also more likely to trust — but not so the optimists, as Uslaner would expect.²⁶ Overall, these findings indicate that generalized trust is more often found in types of people that are substantially different to those who tend to trust people in their neighbourhoods.

Equally, there are striking differences in terms of neighbourhood effects for generalized and localized trust. First of all, whereas local conditions are barely associated with generalized trust, they are substantially related to community trust. People who reside in residential or “gated” communities, small towns or villages are more trusting of people in their neighbourhood than those who live in more impersonal or inner-city neighbourhoods. Clearly, the greater the chances of personally knowing your neighbours, the more likely you are to trust them. The socio-demographic composition and deprivation of the area is also quite important, as people who live in areas with higher unemployment and higher perceived levels of crime show lower levels of community trust, whereas those who live in areas with a larger elderly population are more trusting. The latter result partly reflects the fact that the elderly are more trusting, but is also related to the fact that areas with a higher density of older people are generally quieter and less trouble-ridden. The nature of the municipality is also relevant, as people living in larger municipalities tend to show less community trust, whereas those living in metropolitan areas are slightly more trusting. The latter finding seems to contradict the negative effect of the size of the municipality but, in fact, it is consistent with the result about residential areas previously mentioned: once we control for the negative effect of the size of the municipality, living in a metropolitan area increases the likelihood of trusting because you are more likely to reside in suburban residential areas populated by upper-middle and wealthier residents. In sharp contrast, the size of the municipality does not seem to matter for generalized trust. The age composition of the section and perceived levels of crime seem irrelevant for generalized trust, but in areas with higher levels of unemployment, residents are less trusting of strangers. Finally, in contrast to

community trust, individuals living in municipalities of metropolitan areas are less trusting of strangers.

In summary, whereas certain forms of diversity or immigrant concentration in Spain seem to debilitate community trust, immigration-related diversity has no impact on generalized trust. More generally, community and generalized trust are driven by different individual and area-level factors, and only unemployment is equally harmful for both.

Discussion and Conclusions

This article has tested some of the core theoretical propositions that link immigrant-related diversity to negative outcomes for public engagement with novel and rich data from an understudied case. The magnitude and suddenness of the immigration flows to Spain makes it an interesting case to examine the impact of diversity on citizens' inclination to trust others.

Our findings, however, do not fully support a gloomy view of the consequences of increasing diversity for, even if there is a more frequent negative effect of certain forms of diversity on community trust, these are not pervasive to all indicators of diversity — e.g. not for the indicator of super-diversity of national origins or for moderately or highly diverse areas with no dominant immigrant group — and the results for generalized trust show either no significant effects of diversity, or positive ones.

It is important to highlight that the scholarly debate we are addressing is not concerned with community trust *per se* — in its value as a collective good — or with its impact on the social organisation and collective efficacy of local communities. Instead, the current debate (at least from a political science perspective) is first and foremost concerned with the potential consequences that low levels of trust — whether that is community trust or generalized trust — might have on public spiritedness, cooperative behaviour and engagement in the broader public sphere. The results we have shown here — as well as other results we have published elsewhere (Echazarra and Morales 2012) that also consider the effects of diversity on interest in politics, political discussion, associational membership and participation in demonstrations — suggest that there is little cause for concern in that regard, as community trust — at least in Spain, but also in many other countries²⁷ — bears very little connection to those attitudes and behaviours about which we are truly concerned.

In this regard, our conclusions are in line with those provided for the British case by Sturgis et al. (2011) and emphasize the need to nuance the current debate about the alleged negative effects of diversity on cooperation and public spiritedness by having a more profound discussion about the attitudes, norms and behaviours on which the effects are predicated. Whereas the negative effect on localized or community trust seems to hold across a number of case studies (including, partly, our own analysis of the Spanish case), there is little evidence across different contexts to support that this negative association holds for generalized forms of trust or for broader and non-neighbourhood based cooperative norms and behaviours (Van Der Meer and Tolsma 2013).

Finally, our study suggests that there is much to gain in progressing this debate by carefully considering how we measure diversity and which aspects of diversity are taken into account. As we have shown, using multiple measurements of immigration-related diversity allows us to gain a more nuanced understanding of which aspects of immigration might be driving community trust down. To this extent, our results support previous work that suggest that patterns of residential concentration or segregation might be much more consequential than diversity per se (Uslaner 2012).

Appendix A: Additional information on the surveys

Table A1. Description of the surveys employed and of the individual-level variables

	CIS no. 2632	CIS no. 2634
<i>Sample design</i>		
Sample size	3,192	8,265
Target population	Spanish nationals, 18 years-old or over	Spanish residents, 16 years-old or over
Number of provinces	44	50
Number of municipalities, total	288	560
Up to 6,000 inhabitants	69	157
6,001 to 15,000 inhabitants	57	115
15,001 to 50,000 inhabitants	75	157
50,001 to 100,000 inhabitants	37	66
100,001 to 300,000 inhabitants	36	46
Over 300,000 inhabitants	13	13
Number of census sections	427	948
<i>Estimates of access to and cooperation from target respondents</i>		
Number of visits where access not possible	Mean=10 Median=6 Stand. Dev=13.7	Mean=10 Median=5 Stand. Dev=14.1
Number of visits with refusal	Mean=2.9 Median=1 Stand. Dev=5.4	Mean=4.6 Median=2 Stand. Dev=8.8
Number of visits where quota not met	Mean=7.1 Median=3 Stand. Dev=7.4	Mean=5.9 Median=2 Stand. Dev=10.6
<i>Dependent variables</i>		
Community trust: Trust in people living in the neighbourhood/area, percentage agreement that they can be trusted Very much agree Mostly agree Mostly disagree Completely disagree		11 70 17 2
Generalized trust: 0-10 scale, mean (standard deviation)	4.9 (2.1)	
<i>Main control variables</i>		
Proportion female	0.51	0.51
Age, mean (standard deviation)	46.2 (18.3)	45.1 (18.4)
Proportion without Spanish citizenship	(not asked)	0.06
Level of education, median category	Primary completed	Primary completed
Household income, median category	1,201-1,800€	1,201-1,800€
Proportion employed	0.51	0.56

Note: Both samples are weighted to correct for different probabilities of selection due to sample design.

References

- Bécares, Laia, Mai Stafford, James Laurence, and James Nazroo. 2011. "Composition, Concentration and Deprivation: Exploring their Association with Social Cohesion among Different Ethnic Groups in the UK." *Urban Studies* no. 48 (13):2771-2787.
- Burchianti, Flora, and Ricard Zapata-Barrero. 2012. Intolerant discourses about migrants in Catalan politics. In *Accept Pluralism Project Country Reports*. Florence: EUI.
- CIA. 2010. *The CIA World Factbook* 2010 [cited 5 July 2010]. Available from <https://http://www.cia.gov/library/publications/the-world-factbook/>.
- Citrin, Jack, Donald P. Green, Christopher Muste, and Cara Wong. 1997. "Public Opinion Toward Immigration Reform: The Role of Economic Motivations." *The Journal of Politics* no. 59 (3):858-881.
- Desmet, Klaus, Shlomo Weber, and Ignacio Ortuño-Ortín. 2009. "Linguistic diversity and redistribution." *Journal of the European Economic Association* no. 7 (6):1291-1318.
- Dinesen, Peter Thisted, and Marc Hooghe. 2010. "When in Rome, Do as the Romans Do: The Acculturation of Generalized Trust among Immigrants in Western Europe." *International Migration Review* no. 44 (3):697-727.
- Dixon, Jeffrey C. 2006. "The Ties That Bind and Those That Don't: Toward Reconciling Group Threat and Contact Theories of Prejudice." *Social Forces* no. 84 (4):2179-2204.
- Echazarra, Alfonso, and Laura Morales. 2012. "El efecto de la diversidad en la cultura cívica en España a examen." *Revista Española de Sociología* no. 17:133-149.

- Ethnologue. 2010. *Languages of the World* 2009 [cited 10 July 2010]. Available from <http://www.ethnologue.com/web.asp>.
- Fearon, James D. 2003. "Ethnic and cultural diversity by country." *Journal of Economic Growth* no. 8:195-222.
- Freitag, Markus, and Richard Traunmüller. 2009. "Spheres of trust: An empirical analysis of the foundations of particularised and generalised trust." *European Journal of Political Research* no. 48 (6):782-803.
- Gijsberts, Mérove, Tom van der Meer, and Jaco Dagevos. 2012. "'Hunkering Down' in Multi-Ethnic Neighbourhoods? The Effects of Ethnic Diversity on Dimensions of Social Cohesion." *European Sociological Review* no. 28 (4):527-537.
- Hall, Peter A. 1999. "Social Capital in Britain." *British Journal of Political Science* no. 29:417-461.
- Harell, Allison, and Dietlind Stolle. 2010. "Diversity and Democratic Politics: An Introduction." *Canadian Journal of Political Science/Revue canadienne de science politique* no. 43 (02):235-256.
- Hochschild, Jennifer L. 2005. "From nominal to ordinal: reconceiving racial and ethnic hierarchy in the United States." In *The politics of democratic inclusion*, edited by Rodney E. Hero and Christina Wolbrecht, 19-44. Philadelphia: Temple University Press.
- Hooghe, Marc. 2008. "Associations and socialization." In *The Handbook of Social Capital*, edited by Dario Castiglione, Jan W. Van Deth and Guglielmo Wolleb, 568-593. Oxford: Oxford University Press.

- Hooghe, Marc, Tim Reeskens, Dietlind Stolle, and Ann Trappers. 2009. "Ethnic Diversity and Generalized Trust in Europe. A Cross-National Multilevel Study." *Comparative Political Studies* no. 42:198-223.
- Hopkins, Daniel J. 2010. "Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition." *American Political Science Review* no. 104 (1):40-60.
- Johnston, Ron, James Forrest, and Michael Poulsen. 2002. "The ethnic geography of EthniCities." *Ethnicities* no. 2 (2):209-235.
- Laakso, Markku, and Rein Taagepera. 1979. "'Effective' number of parties. A measure with application to West Europe." *Comparative Political Studies* no. 12:3-27.
- Laitin, David D. 2000. "What is a language community?" *American Journal of Political Science* no. 44 (1):142-155.
- Lancee, Bram, and Jaap Dronkers. 2011. "Ethnic, Religious and Economic Diversity in Dutch Neighbourhoods: Explaining Quality of Contact with Neighbours, Trust in the Neighbourhood and Inter-ethnic Trust." *Journal of Ethnic and Migration Studies* no. 37 (4):597-618.
- Laurence, James. 2011. "The Effect of Ethnic Diversity and Community Disadvantage on Social Cohesion: A Multi-Level Analysis of Social Capital and Interethnic Relations in UK Communities." *European Sociological Review* no. 27 (1):70-89.
- Laurence, James, and Anthony Heath. 2008. Predictors of Community Cohesion: Multilevel Modelling of the 2005 Citizenship Survey. edited by Department for Communities and Local Government. London: Department for Communities and Local Government.

- Leigh, Andrew. 2006. "Trust, Inequality, and Ethnic Heterogeneity." *The Economic Record* no. 82 (258):268-280.
- Letki, Natalia. 2008. "Does Diversity Erode Social Cohesion? Social Capital and Race in British Neighbourhoods." *Political Studies* no. 56:99-126.
- Morales, Laura. 2005. "¿Existe una crisis participativa? La evolución de la participación política y el asociacionismo en España." *Revista Española de Ciencia Política* no. 13:51-87.
- Morales, Laura, Eva Anduiza, Elisa Rodríguez, and Josep San Martín. 2008. "Capital social, pautas identitarias y actitudes hacia 'los otros': la incorporación cívica de la población de origen inmigrante en Barcelona y Madrid." *Panorama Social* no. 8:119-142.
- Naef, Michael, and Jürgen Schupp. 2009. Measuring Trust: Experiments and Surveys in Contrast and Combination. *SOEP Papers on Multidisciplinary Panel Data Research* 167, http://www.diw.de/documents/publikationen/73/96389/diw_sp0167.pdf.
- Newton, Ken, and Sonja Zmerli. 2011. "Three forms of trust and their association." *European Political Science Review* no. 3 (02):169-200.
- OECD. *Stat Extracts: International Migration Database* 2009.
- Portes, Alejandro, and Erik Vickstrom. 2011. "Diversity, Social Capital, and Cohesion." *Annual Review of Sociology* no. 37 (1):461-479.
- Putnam, Robert. 2000. *Bowling Alone. The Collapse and Revival of American Community*. New York: Simon and Schuster.
- . 2007. "E Pluribus Unum: Diversity and Community in the Twenty-first Century The 2006 Johan Skytte Prize Lecture." *Scandinavian Political Studies* no. 30:137-174.

- Rosero-Bixby, Luis, Teresa Castro-Martín, David S. Reher, and María Sánchez-Domínguez. 2011. "Estimating the Number of Immigrants in Spain: An Indirect Method Based on Births and Fertility Rates." *Population, English Edition* no. 65 (3-4):543-560.
- Sampson, Robert J., Stephen W. Raudenbush, and Felton Earls. 1997. "Neighborhood and Violent Crime: A Multilevel Study of Collective Efficacy." *Science* no. 277 (5328):918-924.
- Schaeffer, Merlin. 2013 (in press). "Can competing diversity indices inform us about why ethnic diversity erodes social cohesion? A test of five diversity indices in Germany." *Social Science Research*.
- Stolle, Dietlind, Stuart N. Soroka, and Richard Johnston. 2008. "When Does Diversity Erode Trust? Neighborhood Diversity, Interpersonal Trust and the Mediating Effect of Social Interactions." *Political Studies* no. 56:57-75.
- Sturgis, Patrick, Iain Brunton-Smith, Read S., and Nick Allum. 2011. "Does ethnic diversity erode trust?: Putnam's 'hunkering-down' thesis reconsidered." *British Journal of Political Science* no. 41 (1):57-82.
- Sturgis, Patrick, and Patten Smith. 2010. "Assessing the Validity of Generalized Trust Questions: What Kind of Trust Are We Measuring?" *International Journal of Public Opinion Research* no. 22 (1):74-92.
- Uslaner, Eric M. 2002. *The Moral Foundations of Trust*. Cambridge: Cambridge University Press.
- . 2008a. "Trust as a moral value." In *The Handbook of Social Capital*, edited by Dario Castiglione, Jan W. van Deth and Guglielmo Wolleb, 101-121. Oxford: Oxford University Press.

- . 2008b. "Where you Stand Depends upon where your Grandparents Sat. The Inheritability of Generalized Trust." *Public Opinion Quarterly* no. 72 (4):725-740.
- . 2011. "Measuring Generalized Trust: In Defense of the 'Standard' Question " In *Handbook of Research Methods on Trust*, edited by Fergus Lyon, Guido Möllering and Mark Saunders. Cheltenham: Edward Elgar Publishers.
- . 2012. *Segregation and mistrust. Diversity, isolation and social cohesion*. New York: Cambridge University Press.
- Van Der Meer, Tom, and Jochen Tolsma. 2013. Unity in diversity. Ethnic diversity and its supposed detrimental effects on social cohesion, a review of 56 empirical studies. Unpublished manuscript (under journal review).
- Veenstra, Gerry. 2002. "Explicating social capital: Trust and participation in the civil space." *Canadian Journal of Sociology/Cahiers canadiens de sociologie* no. 27 (4):547-572.
- Vertovec, Steven. 2007. "Super-diversity and its implications." *Ethnic and Racial Studies* no. 30 (6):1024 - 1054.
- Wollebæk, Dag, Susanne Wallman Lundåsen, and Lars Trägårdh. 2012. "Three Forms of Interpersonal Trust: Evidence from Swedish Municipalities." *Scandinavian Political Studies* no. 35 (4):319-346.
- Zmerli, Sonja, Kenneth Newton, and José Ramón Montero. 2007. "Trust in People, confidence in political institutions and satisfaction with democracy." In *Citizenship and Involvement in European Democracies: A Comparative Analysis*, edited by Jan W. van Deth, José Ramón Montero and Anders Westholm, 35-65. London: Routledge.

Acknowledgements

The research reported in this paper has been possible thanks to the support of the Institute for Social Change at the University of Manchester, and the *Centro de Investigaciones Sociológicas*' 2009 Research Support Call that made the datasets available with the geocodes disclosed at the municipality and census section levels. We want to thank both institutions for this support. Previous versions of this article were presented at the research seminar series on 'The Political Representation of Ethnic Minorities in the UK in Comparative Perspective' funded by the ESRC (grant number ES/H000836/1) and at the ECPR General Conferences in Potsdam and Reykjavik. We thank the participants in all these events, as well as the anonymous reviewers for their helpful comments.

Notes

¹ For a summary see Portes and Vickstrom (2011), Harell and Stolle (2010), van der

² The results are available in Table 1 in the [Online Supplement: doi.XXXXXXX](#)

³ Political parties, environmental organisations, charities and humanitarian organisations, and consumer organisations.

⁴ Signing petitions and attending peaceful demonstrations.

⁵ See also Desmet, Weber, and Ortuño-Ortín (2009) on the effects of linguistic diversity on redistribution and the null findings for ethnic diversity.

⁶ The source is the municipal population register (*Padrón*), in which most unauthorized immigrants are included (Rosero-Bixby et al. 2011: 544). Their legal status is irrelevant for registration and they have strong incentives to register, as it is required to access public health and schools and has been used in past regularisation processes (Burchianti and Zapata-Barrero 2012: 2).

⁷ Latin American migrants are not the majority in Spain: they constitute around 30-40% of all foreign residents.

⁸ Municipalities are administrative and political divisions. There were, as of January 2006, 8,111 municipalities in Spain with an average size of 11,000 inhabitants.

⁹ Census sections are nested within municipalities with no overlaps and can be either full municipalities — typically in rural areas — or subdivisions within them. Their sizes range from around 250 inhabitants to around 3,000 in the capital cities where a section will roughly be equivalent to a neighbourhood or a portion of it (sometimes as small as a block of buildings).

¹⁰ Census sections in Spain can be either full municipalities – when it is a small locality – or subdivisions within municipalities. Sizes can vary from really small sections for the very small municipalities (e.g. 250 inhabitants), to larger sections in the main capital cities (Madrid and Barcelona) of around 1,000-3,000 inhabitants. Yet, in the largest city in the country (Madrid) the average section is of around 1,500 residents, with the largest section being around 3,300 people. Hence, even for the largest cities, in most cases a section will roughly be equivalent to a neighbourhood or a portion of it.

¹¹ The data producers (CIS) do not provide information about response rates due to the use of random routes with quotas. All the technical documentation relating to the surveys is found on

http://www.cis.es/cis/opencm/ES/1_encuestas/estudios/ver.jsp?estudio=5777&cuestionario=6450&muestra=11163 and

http://www.cis.es/cis/opencm/ES/1_encuestas/estudios/ver.jsp?estudio=5577&cuestionario=6230&muestra=10723. However, some estimates of response behaviour are available, and these are provided in Table A1 in the Appendix.

¹² See Tables 1 and 2 in the **Online Supplement**.

¹³ The foreign-nationals are only 6% of the sample of study 2634 (see Table A1 in the Appendix) and all our analyses suggest they are not driving the effects of the diversity indicators in any meaningful way (see Table 3 in the **Online Supplement**).

¹⁴ The wording is: “Tell me if you ‘very much agree, mostly agree, mostly disagree or completely disagree’ with the following statement: ‘People in this [area] can be trusted’.” The word ‘area’ was substituted by neighbourhood, urbanisation, town or village depending on the label that the respondent chose in a previous question in the

survey to describe the area within 15 minutes walking distance. This wording is very similar to the one used in the survey employed by Putnam (2007).

¹⁵ The wording is: “Would you say that, in general terms, most people can be trusted or that you can never be too careful? Please place yourself in this 0 to 10 scale where 0 means that ‘you can never be too careful’ and 10 means that ‘most people can be trusted’.” This scale has been shown to better capture the variance across individuals and to be a better predictor of associational membership than the traditional dichotomous indicator (Zmerli, Newton, and Montero 2007: 46ff.), but for counterevidence see Uslaner (2011).

¹⁶ The Spanish sample was conducted in 2007 by ASEP, includes 1,200 individuals and was designed to be representative of the whole Spanish population (see <http://www.worldvaluessurvey.org/>). This survey is not geocoded at the census section level and cannot be used for the core analyses in this paper.

¹⁷ Clearly, any grouping will simplify and bundle heterogeneity within the groups. However, when social heterogeneity is examined with the large Labour Participation Survey (*Encuesta de Población Activa*, EPA) that includes 100,000+ respondents for 2006 (of which 5,000 were immigrants), our classification in 12 groups reduces the variance in key socio-demographics such as age, working situation and education around half as much as the complete list of 80 countries covered by the survey.

¹⁸ Some may argue that treating immigrants from the same category as similar may be making a major mistake if they bring some of their trust, common norms or other cooperative inclination with them from their countries of origin, as suggested by Uslaner (2008b). However, given the nature of the samples we use, our analyses are mostly dealing with the effect on trust among the native Spanish population (as they are 90% or more of our samples), so this is not much of an issue for our results.

Additionally, we have checked how much this might be the case with the data available. For community trust, using CIS survey 2634, the mean values for each of the twelve groups of immigrant origin we distinguish in the Herfindahl index are not significantly different to those of the Spanish natives, and the variance found within those categories is similar or smaller than that found for Spaniards. For generalized trust, other studies show that, within Spain, immigrants' levels of trust tend to adapt to prevailing local levels of trust (Morales et al. 2008), and that levels of generalized trust in the same immigrant groups (e.g. Ecuadorians, Moroccans and Turks) across different European settings tend to approach the levels of trust prevalent in the native population (see Dinesen and Hooghe (2010) for similar conclusions).

¹⁹ The values assigned are intended as an approximation to relative linguistic distance to Spanish, without us assigning a 'strong' meaning to the exact values in a metric sense, as alternative scores could be attributed for equivalent approximation purposes. Portuguese belongs to the same family of West-Iberian languages and is only one tree-branch removed from Spanish, hence the closest value for this language (0.25). French and Italian are the next closest Romance languages, just three tree-branches away from Spanish as part of the Gallo-Iberian family (hence the score of 0.375). Romanian and other Eastern Romance languages are six tree-branches away from Spanish but still part of the same Romance family of languages (hence the score of 0.5). Other Indo-European languages (e.g. belonging to the Slavic, Greek, Germanic, Celtic, etc. families) are eight tree-branches removed from Spanish and are not part of the Italic language family to which all Romance families belong (hence the score of 0.75 to all of them). We regard all non-Indo-European languages as equally and maximally distant to Spanish, and we have attributed a score of 1 to these. The reader

can find the trees on the Ethnologue website:

<http://www.ethnologue.com/browse/families>

²⁰ Different configurations were tested, but the Ward method with squared Euclidean distances for solutions between 6 and 8 clusters were retained.

²¹ The section with 21,645 inhabitants is an outlier in the coastal municipality of Orihuela (Alicante), where many EU-15+ residents live. The next largest section contains 11,941 inhabitants, and only 68 sections in the country have a population larger than 4,000.

²² We used the Gllamm command for all models.

²³ There are no problems of multi-collinearity between the census section level control variables or between these and the diversity measures.

²⁴ We have considered adding a measure of the increase rate of diversity, but the models gain too much in complexity and would require a detailed technical discussion that is not possible within the scope of this article.

²⁵ We do not add diversity measures at the municipality level, as the results point to complex patterns that cannot be adequately summarized within the scope of this article.

²⁶ Excluding sociability, optimism and availability of free time from the models does not alter the findings in any meaningful way.

²⁷ See Table 1 in the **Online** Supplement.