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#### Title:

Ethnic diversity and its effects on social cohesion

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#### **Abstract**

Recent years have seen a sharp increase in empirical studies on the constrict claim, the hypothesized detrimental effect of ethnic diversity on most if not all aspects of social cohesion. Studies scrutinized effects of different measures of ethnic heterogeneity in different geographical areas on different forms of social cohesion. The result has been a cacophony of empirical findings. We explicate mechanisms likely to underlie the negative relationship between ethnic heterogeneity and social cohesion: the homophily principle, feelings of anomie, group threat, and social disorganization. Guided by a clear conceptual framework, we structure the empirical results of 90 recent studies and observe three patterns. We find consistent support for the constrict claim for aspects of social cohesion that are spatially bounded to neighborhoods; support for the constrict claim is more common in the US than in other countries; and ethnic diversity is not related to less interethnic social cohesion. We discuss the implications of these patterns.

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# Keywords

Ethnic heterogeneity, social capital, neighborhood effects, constrict theory, ethnic threat, anomie

#### 1. Introduction

As cross-national immigration increased sharply after the 1960s, advanced western societies became ever more diverse. Aiming to deal with migration, policy makers frequently refer to the potential consequences of ethnic diversity for the cohesiveness of society. There is, however, little scholarly agreement on the relationship between the ethnic composition of communities and the social cohesion within them. The research that investigates the diversity-cohesion relationship was initially dominated by economists (e.g. Knack & Keefer 1997; Alesina & LaFerrara 2000; Costa & Kahn 2003). The scholarly interest of sociologists and political scientists boomed more recently after a presentation of findings on the relationship between ethnic diversity and social cohesion by Robert Putnam at Uppsala University in Sweden in 2006 (Putnam 2007).

Putnam's findings were widely interpreted as cause for concern. He argued that living in an ethnically heterogeneous environment was harmful to interpersonal trust and undermined social connections between *and* within ethnic groups. Faced with ethnic diversity, people would tend "to hunker down - that is to pull in like a turtle" (Putnam 2007: 149), or in common language, to retreat from social life. This claim came to be known as the constrict proposition. If it were true, ongoing immigration would erode social cohesion. Putnam's conclusion received wide attention in the media and amongst policy makers, serving as input to public policy debates in various countries (cf. Hallberg & Lund 2005; Cheong et al. 2007).

Scholars rushed forward to test whether the constrict proposition held in a broad range of countries using many different indicators of social cohesion. In the six years since the publication of Putnam's *E Pluribus Unum* over 65 new empirical studies have been published and many more are underway. Yet empirical findings on the effects of ethnic diversity are themselves highly diverse. Some studies confirm that ethnic diversity undermines social cohesion; others reject the claim altogether or find a positive

relationship between the two phenomena (cf. Portes & Vickstrom 2011). Although the cacophony of empirical findings has led to heated scholarly debates, one fundamental question has remained unanswered: Is ethnic diversity harmful to social cohesion?

The lack of consensus in the scientific community is rooted in the fundamental problem that the constrict proposition lacks theoretical substantiation. The mechanisms through which the ethnic composition of one's surroundings affects social connections have not been fleshed out. There are also serious discrepancies as to how the two core concepts ('ethnic heterogeneity' and 'social cohesion') are understood and operationalized using available data. There are similar discrepancies on what constitutes a relevant social environment within which to expect diversity effects. To steer away from the current theoretical dead end, we will not perform yet another empirical analysis in yet another geographical setting. Rather, after deriving theoretical ideas about the mechanisms that might underlie negative diversity effects, we undertake a review of relevant empirical studies guided by three basic questions,

- To what extent does ethnic heterogeneity affect different indicators of social cohesion differently?
- 2. To what extent do **different indicators of ethnic heterogeneity** affect aspects of social cohesion differently?
- 3. To what extent does ethnic heterogeneity in **different geographic areas** affect aspects of social cohesion differently?

## 2. The phenomena under consideration

Social cohesion

Social cohesion may be regarded as the degree of interconnectedness between individuals that is both a result and cause of public and civic life. It encompasses feelings of commitment and trust and norms of reciprocity and is demonstrated by participation in networks and civic organizations (cf. Chan et al. 2006). We use the label social cohesion and not social capital, because it is a more neutral and less convoluted concept. Social capital has been fundamentally redefined by consecutive authors as the resources that individuals extract from their networks (Bourdieu 1987), the number and density of social ties within a community (Coleman 1990), and as a public good (Putnam 1994), leading to radically different definitions and operationalizations (Fischer 2005; Portes & Vickstrom 2011). Social cohesion defined as interconnectedness remains an overly broad and obscure concept, just like the concept social capital. For a better empirical underpinning, we break down social cohesion into four dimensions: formality, mode, target, and geographic scope.<sup>1</sup>

First, a common distinction in the field is the one between formal and informal social cohesion, based on the level of institutionalization of social relationships. Pichler and Wallace (2007: 424), for instance, distinguish between participation in "formally constituted organizations or activities" and informal bonds "[that are] particularistic, tied to particular people and social groups". Second, the interconnectedness or ties between individuals may be formed by at least two modes: attitudinal (i.e. dislike, trust and fear) and behavioral (i.e. contact, association). Hooghe (2007: 712), recognizing this distinction, argues that "[...] increasing dissimilarities within society will render it more difficult to

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<sup>&</sup>lt;sup>1</sup> These four dimensions are not the only possible relevant dimensions. However, we are unable to classify papers based on other dimensions, such as bridging or bonding social cohesion (Putnam 2000) or strong and weak ties (Granovetter 1973).

<sup>&</sup>lt;sup>2</sup> Unlike Pichler and Wallace we do not see generalized trust as an indicator of formal social cohesion, as it is not institutionalized.

<sup>&</sup>lt;sup>3</sup> Our attitudinal indicators encompass cognitional aspects (e.g. stereotypes) and meta-attitudes (e.g. perceived trustworthiness).

develop trusting relations [i.e., attitude] (Macedo, 1999), but the same cannot be said about other, more structural components of social capital [i.e., behavior]" (brackets added by authors).

Third, social cohesion can be distinguished by its target – the 'alters' or the (group of) person(s) with whom the respondent ('ego') is connected. We distinguish three targets: the ingroup (people with the same ethnic background as ego), the outgroup (people with a different ethnic background than ego), and the general population. In the constrict proposition of Putnam (2007: 148), diversity not only erodes positive bonds between ethnic groups but also within one's own group. Finally, geographic scope refers to the geographical boundaries within which social ties are bound. Many forms of social cohesion may cross neighborhood, municipality or even country boundaries whereas others are explicitly confined to specific geographic areas (i.e., contact with neighbors, perceptions of shared norms in one's municipality, or trust in fellow countrymen). Wallman, Lundåsen and Wollebaek (2013) stress that a spatial dimension should complement the commonly used generalized-particularized continuum of trust.

In short, the question of social cohesion is not the traditional 'Who is connected?', or even 'Who is connected to whom?' Rather, social cohesion fundamentally concerns the question: 'Who is connected to whom, where and how?' Lacking clear theoretical underlying mechanisms that link ethnic heterogeneity to social cohesion, scholars generally have not attempted to derive specific hypotheses about the relationships between ethnic heterogeneity and various indicators of social cohesion. Most have simply considered one specific aspect of social cohesion, commonly generalized social trust, which they regard as the key indicator of social cohesion (e.g. Alesina& LaFerrara 2002; Hooghe et al. 2009; Dinesen &Sonderskov 2012). Others have combined very different indicators of social cohesion to form one common scale with the aim of increasing measurement reliability and boosting statistical power in order to find corroborative evidence (e.g. Hero 2003; Lancee & Dronkers 2011); but this is problematic because indicators of social cohesion generally correlate rather weakly with each other and because it clouds

theoretical and conceptual differences between the indicators. Finally, scholars have tested the constrict hypothesis using a range of indicators of social cohesion, but without making convincing arguments about why relationships are to be expected (e.g. Costa & Kahn 2003; Gesthuizen et al. 2009; Gijsberts et al. 2012). Here we investigate to what extent inconsistent results are due to the different indicators of social cohesion investigated.

Given that we define social cohesion as ties between individuals, we do not incorporate studies that (solely) relate ethnic diversity to relationships with organizations or policies – such as political participation, public goods provision, institutional trust and cross-national trust. We also do not discuss studies that exclusively focus on interethnic relations or neighborhood disorder. Both lines of research are so extensive that they would dominate our analyses.

# Ethnic heterogeneity

The ethnic composition of a geographical area can be characterized in many different ways. In the constrict literature ethnic diversity is most commonly assessed by measures such as the fractionalization index (which is equivalent to the complement of the Hirschman-Herfindahl index). This measure can be interpreted as the chance that two randomly picked individuals living in the same geographical area have a different ethnic background. The main alternative approach is the use of relative ethnic group size, such as the percentage of migrants or minority group members. Research on the link between ethnic heterogeneity and interethnic relations has favored such outgroup measures. Finally, the ethnic composition of a locality can be described by its level of segregation. The index of dissimilarity has been the conventional measure of segregation (Massey & Denton 1988). Henceforth, we use ethnic heterogeneity as the overarching term to refer to diversity, relative group size, and segregation.

To date, theory has not specified whether the ethnic composition of the locality affects social cohesion through ethnic diversity, ethnic group size, segregation or various combinations thereof. But the impact of ethnic diversity and relative group size differs theoretically. A community with 80% whites and 20% blacks is as ethnically diverse as a community with 80% blacks and 20% whites. However, for individual community members, the outgroup size differs strongly in these two communities. It is exactly for this color blindness of ethnic diversity that some scholars favor relative group size as indicator for the ethnic composition (cf. Laurence & Heath 2009). It may also matter whether within the same geographic area groups intermingle or live in segregated spatial units (Rothwell 2012).

The conception of ethnic heterogeneity depends on the level of detail at which ethnic categories are categorized. Ethnic categories may form a dichotomy (e.g. black versus white, native versus foreign) or they may be distinguished at a more detailed level (e.g. specific ethnic groups by generational status). Although we routinely speak of ethnic heterogeneity, over the years scholars have defined ethnic-racial groups based on combinations of very different criteria, including race, ethnicity, ancestry, citizenship, migration status, and distinctiveness (e.g. color, religion or language). Which criteria are chosen seems to depend more on data availability and country idiosyncrasies than theory. This review exclusively covers studies that have used objective measures rather than individual perceptions of heterogeneity. Subjective evaluations of heterogeneity are likely to be influenced by out-group attitudes and hence introduce endogeneity problems.

### Geographic area

Authors scrutinizing Putnam's constrict proposition have used countries, regions, municipalities and neighborhoods to define the geographic areas within which cohesion is hypothesized to be affected. However, there are few convincing arguments on what constitutes a relevant geographical context. On the

one hand, most daily activity takes place within relatively small geographic areas and residents are more likely to be aware of the level of ethnic heterogeneity in their immediate social context. This argument drove many scholars to focus on relatively small geographical contexts such as neighborhoods and municipalities. On the other hand, selective residential mobility – frequently mentioned as a possible reason why no detrimental effects of ethnic diversity are observed – is less likely to occur between larger geographical units. The latter argument has driven some authors to opt for regions or countries as their unit of analyses. However, whereas some localities (most notably countries) have clear physical, social and administrative boundaries, others do not (most notably neighborhoods defined by blocks, tracts, or zipcodes). This 'boundary problem' and more generally the 'modifiable areal unit problem' means that analytical results are sensitive to the definition of the geographic unit (Fotheringham & Wong 1991), leading some scholars to use 'egohoods' as an alternative definition of individuals' social environment (e.g., Hipp & Boessen 2013; Dinesen & Sonderskov 2013). Egohoods are defined as overlapping concentric circles with the (residence of each) survey respondent in the center of their own geographic space.

We will categorize study results based on the geographic scale of the higher level unit(s). We distinguish country-level studies from studies with localities larger than municipalities, municipality-level studies and studies with localities smaller than the municipality.<sup>4</sup> We limit ourselves to ethnic heterogeneity effects of geographic localities and do not cover functional environments, as they invoke different constraints and different self-selection mechanisms. Studies on possible detrimental effects of ethnic diversity within classrooms, the working place or within associations remain beyond the scope of this review.

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<sup>&</sup>lt;sup>4</sup> We recognize that the equivalence of these levels across countries, regions and even studies within the same country and/or region is questionable.

### 3. The one size fits all model

With these building blocks now in place, we aim to assess why ethnic heterogeneity might undermine social cohesion between and within ethnic groups. This constrict claim was introduced as a logical, empirical possibility but lacked extensive theoretical motivation (cf. Lee 2008). We construct a 'one size fits all model' in which different pathways explain how diversity, relative group size, and segregation at different geographical levels may cause different indicators of social cohesion to erode.

The first pathway relates conflict theory (e.g. Blumer 1958; Blalock 1967; Bobo & Hutchings 1996) to social disorganization theory (Shaw & McKay 1942; Sampson & Groves 1989).<sup>5</sup> In this approach, trust in ethnically dissimilar others (or its opposite ethnic hostility) plays a pivotal role. According to conflict theory, the ethnic outgroup size within a geographical locality affects actual or perceived competition between ethnic groups over 'scarce' material and immaterial resources such as jobs, housing, power, safety, morality, and identity. This (perceived) ethnic group competition increases feelings of threat that undermine interethnic relations. Interethnic distrust may subsequently lead to general distrust, by mechanisms specified in social disorganization theory. Due to distrust in ethnic others, interethnic contact is avoided and as a consequence of this retreat from social life, contact among coethnic residents decreases as well, with less social control, more general distrust, and fear of crime as a result.

The second pathway relates feelings of anomie – individual anxiety about the existence of shared societal norms and moral values – to social disorganization of the environment. According to this line of reasoning, ethnic diversity within one's social environment and concurrent linguistic diversity and diversity in social norms induce feelings of anomie. Blocked communication and a lack of reliable knowledge about shared social norms stimulate feelings of exclusion and aimlessness (Seeman 1959;

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<sup>&</sup>lt;sup>5</sup> We use the label conflict theory freely to encompass group threat theory (Quillian 1995, 1996), ethnic competition theory (Scheepers et al. 2002) and integrated threat theory (Stephan & Stephan 2000)

Smith & Bohm 2008). As Lewicki and Bunker (1996: 123) put it: "Identification-based trust develops as one both knows and predicts the other's needs, choices, and preferences and also shares some of those same needs, choices, and preferences as one's own.". Once people experience anomie and no longer know how to behave in public, they are hesitant to meet and mingle with others, regardless of the ethnicity of their co-residents. Once again, as a consequence of less contact, social control will decrease, feeding general distrust, anxiety and fear of crime.

Both mechanisms implicitly assume the homophily principle that people prefer to interact with others similar to themselves, even without a dislike for ethnic others (Lazarsfeld & Merton 1954; McPherson et al. 2001). "There is some consensus on the hypothesis that trust is developed more easily between actors resembling one another, who are familiar with one another and who have abundant access to information about the other's previous track record or about the other's trustworthiness" (Hooghe 2007: 717). However, the two mechanisms follow different pathways. In the threat mechanism, rising relative outgroup and decreasing ingroup sizes primarily stimulate feelings of ethnic group threat. Feelings of anomie find their origin in diverse environments; the anomie mechanism stresses the lack of common language, identities, and values regardless of the size of the ingroup itself.

Despite repeated references to the group threat mechanism in the constrict literature, there are reasons to be skeptical. Although several scholars have shown that interethnic relations deteriorate with outgroup size (especially within relatively large geographic areas), perceptions of outgroup size, and feelings of ethnic competitive threat (e.g. Quillian, 1995, 1996; Scheepers et al. 2002; Semyonov et al. 2004), studies have failed to demonstrate convincingly the crucial link between outgroup size and ethnic

threat (e.g. Wagner et al. 2006; Schlueter & Scheepers 2010; Savelkoul et al. 2011, but see Schlueter & Wagner 2008).<sup>6</sup>

Concurrently, interethnic contact increases with larger outgroup sizes both for minority and majority populations (Martinović, 2013). Given that interethnic contact is negatively related to perceptions of ethnic threat (Schlueter & Wagner 2008; Pettigrew et al. 2010; Savelkoul et al. 2011) and positively to interethnic trust (Allport 1954; Pettigrew & Tropp 2006), the threat and the anomie mechanisms are more likely to operate when there are fewer interethnic contact opportunities and it is here that residential segregation becomes relevant (Stolle et al. 2013, see also Laurence 2011). It is precisely the level of segregation that affects contact opportunities; in segregated communities ties between ethnic groups are eroded (Uslaner 2011a; Rothwell 2012). Segregation might thus moderate the relationship between heterogeneity, anomie, and threat. Segregation may also directly impact feelings of threat as "segregation markedly enhances the visibility of a group; it makes it seem larger and more menacing than it is" (Allport 1954: 269). Finally, according to Massey & Denton (1993: 138), segregation induces behaviors "that violate norms that are widely shared – by both blacks and whites – about what constitutes a good and desirable neighbourhood", so that "residents modify their routines and increasingly stay indoors".

Figure 1 graphically depicts this theoretical model.

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<sup>&</sup>lt;sup>6</sup>The second 'crucial link' in the competitive threat model between (worsening) economic macro conditions and perceptions of ethnic threat has met more consistent support.

Also note that ethnic competition theory, which integrates conflict theory with social identity theory (Tajfel and Turner 1979), links ethnic heterogeneity not only to negative outgroup bias (e.g. interethnic distrust) but also to positive ingroup bias (e.g. ingroup solidarity). This already goes against the constrict proposition.

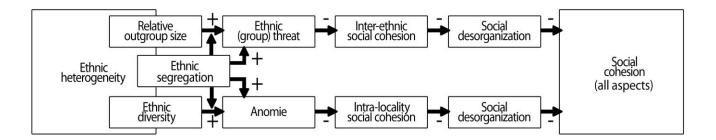


Figure 1. A graphical summary of the one size fits all model

The level of segregation is not the only likely moderator of the heterogeneity effect. The more members of ethnic outgroups are conceived to be different, the more they will be regarded as a threat to the dominant culture and the more uncertain residents will be how to interact with them. Hence, ethnic heterogeneity may be especially harmful if ethnic cleavages are deep, for instance when they are cemented by an overlap with other, socio-economic cleavages (cf. Finseraas & Jakobsson 2013). Concurrently, interethnic contact between groups of differing status will reduce prejudice and increase interethnic trust less than contact between equal status groups (Allport 1954). Admittedly, ethnic inequality may not only catalyze heterogeneity effects but also dampen them: according to the conflict literature, economic ethnic threat will be most severe between groups competing for the same resources.

## 4. Setting up the review

In testing the validity of the constrict proposition, we restrict ourselves to articles written in English. We also exclude articles that we considered to be earlier versions of a later article. To deal with possible publication bias, we included (publically available) unpublished conference papers (6), other working papers (3), reports (3), and book chapters (1). Most of the conference papers over the last few years that we were aware of got published or are in press. The nine working papers support and reject the constrict

claim at equal rates. Hence there is no indication for a file drawer problem. All in all we were able to collect 90 unique studies.

Drawing on these studies, we assessed which indicators of social cohesion and heterogeneity were studied and at which geographic level the analysis was specified. In our scheme, studies provide *support* for the claim that heterogeneity hinders social cohesion when all indicators of ethnic heterogeneity in all investigated localities are significantly and negatively related to all scrutinized indicators of social cohesion. Conversely, studies in which ethnic heterogeneity is consistently not significantly and negatively related to any of the investigated indicators of social cohesion uniformly falsify the central claim and are labeled as *reject*. We label studies as *mixed* when findings are inconclusive, that is, when the overall conclusions vary with different indicators of social cohesion and/or ethnic heterogeneity and/or at different localities. Studies are also labeled as mixed when conclusions vary for different subgroups within the population.<sup>7</sup> An overview of the information of all studies is available as online material (as are all tables belonging to the analyses we report below). Follow the Supplemental Material link in the online version of this article or at http://www.annualreviews.org/.

### 5. First results: diverse studies, diverse outcomes

The left panel of Figure 2 considers literature that encompasses cross-national as well as within-country studies. Although research on the constrict proposition began mainly in the United States, by now at least one within-country study has been performed in 16 different countries. Research has been most prolific

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<sup>&</sup>lt;sup>7</sup> We base our classification on the most rigorous models presented. We follow the significance criteria of the original publications. We do not categorize tests that were not presented in tables. If interaction effects with heterogeneity were not significant, or when the significance of the diversity effect for each specific subgroup could not be determined, the classification of results is based on models without these cross-level interactions. When multiple heterogeneity measures were included in the same analysis, we base our conclusions on models in which they were included separately (if available) to avoid collinearity issues. We disregard interaction effects between macro-level variables (e.g. the diversity effect under different multicultural policies). All articles have been coded by authors and codings have been checked by three research assistants.

on the United States (18 studies), the United Kingdom (11), the Netherlands (10) and Canada (7), and on comparisons of countries (21). The right panel of Figure 2 shows how the literature boomed following the seminal works of Alesina & La Ferrara (2000, 2002) and Putnam (2007). More importantly, Figure 2 demonstrates the cacophony of empirical findings. For almost every study that finds uniform support for the constrict claim (26 in total), there is one that consistently rejects it (25 studies in total). Moreover, a plurality of the studies (39) finds mixed effects. The lack of consensus on the heterogeneity effects is thus staggering.

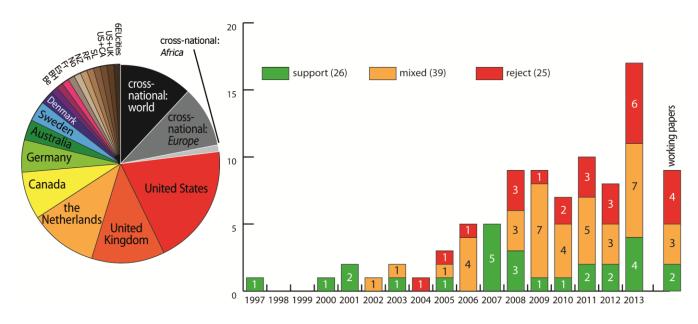


Figure 2. Site of study and degree of support for the heterogeneity claim, by year of publication<sup>8</sup>

## The relevance of methodological rigor

Studies that control for ethnicity at the individual level, for alternative economic explanations at the macro-level and take the nested structure of their data into account offer the most rigorous tests of the

<sup>8</sup>Three studies used two different data sources. For the construction of Figure 2 we used the overall conclusion. In the remainder, we disaggregate tests of the constrict claim by data source.

constrict claim. It is important to control for respondents' ethnicity, of course, as ethnic minority groups and immigrants are generally less likely to trust others and less likely to participate in formal organizations than ethnic majority groups and native populations (Putnam 2007). Communities with a larger share of ethnic minorities will on average show lower levels of trust and participation and higher levels of informal contact, even if the ethnic composition of the community itself has no effect on the pro-social attitudes and behaviors of its residents.

In addition, high levels of ethnic heterogeneity often go hand in hand with economic inequality and low levels of economic prosperity (Letki 2008; Phan 2008). As economic deprivation and inequality may mediate the observed relationships between ethnic heterogeneity and social cohesion, studies in which economic characteristics are included into the explanatory model can make a firmer claim they are not reporting spurious effects of heterogeneity. Finally, individual level studies that take the nested data structure (individuals living in geographic areas) into account are able to deal, at least to some extent, with spatial autocorrelation. Two common alternatives fail to estimate the heterogeneity effect correctly: aggregate level studies cannot pull the individual effect of ethnicity and the contextual effect of ethnic heterogeneity apart, whereas individual level studies without cluster corrections underestimate the standard error of the heterogeneity effect.

In light of these methodological considerations, we compared the most rigorous studies to those that failed to meet at least one of our criteria. The percentage of studies that find supportive evidence is indeed substantially and significantly lower among those studies with a more rigorous methodological design (44% versus 18%). Nevertheless, even among the methodologically most rigorous studies, there is

<sup>&</sup>lt;sup>9</sup> Admittedly, if ethnic heterogeneity is causally prior to economic poverty (because entrepreneurs leave heterogeneous localities) or income inequality (because immigrants with low incomes try to settle in affluent localities) studies underestimate the heterogeneity effect.

little consistency in the evidence (18% support, 24% reject, 58% mixed). Hence, it remains relevant to continue decomposing the evidence from a more theoretical perspective.

#### 6. Results

Most studies, especially more recent ones, do not rely on one single indicator of social cohesion, one single measure of heterogeneity, one single contextual level of analysis, or even on one data source. Instead, many studies contain multiple tests of the constrict proposition. In the following section we decompose study results based on the three crucial concepts we introduced above; cohesion, heterogeneity, and geographic area.<sup>10</sup>

## Different indicators of social cohesion

We start by disaggregating studies based on the formality of the indicators used to measure social cohesion (Table 1). Alesina & LaFerrara (2000) were the first to investigate the relationship between diversity and formal aspects of social cohesion in their analysis of involvement in voluntary associations. The only subsequent study unequivocally supporting these findings is the one by Healy (2007), who assessed the link between diversity and volunteering in Melbourne, Australia. All other studies on the relationship between heterogeneity and formal social cohesion were either labeled as mixed (N=8) or as reject (N=12). No fewer than 82 studies analyzed informal indicators of social cohesion. Corroborative evidence is found in half of these studies, although this figure drops to just over 20 percent if we exclude studies that did not meet all our methodological criteria. The overall conclusion seems to be that formal aspects of social

<sup>&</sup>lt;sup>10</sup> Some studies cannot be categorized along all dimensions, for instance when they use an alternative diversity measure (such as the Theill Entropy Index), a different locality (such as chiefdoms), or a social capital index (such as those that combine behavioural and attitudinal aspects).

cohesion are less likely to be undermined by the level heterogeneity of one's residential environment than informal aspects.

Next, we turn to the mode dimension. In line with the expectation of Hooghe (2007), heterogeneity negatively affects behavioral aspects of cohesion (14%) significantly less often than attitudinal aspects (36%). Note, however, that the behavioral indicators overlap considerably with the formal indicators: all indicators of formal social cohesion are behavioral. Formal and behavioral aspects of cohesion may be less sensitive to changes in the ethnic composition of one's living environment or simply less malleable in general. However, even for attitudinal aspects of cohesion the evidence is far from convincing; just as many studies support the claim as reject the claim.

The third dimension refers to the target of social cohesion. Although an important innovation of the constrict claim lies in the suggestion that heterogeneity erodes the bonds between and within ethnic groups, only five studies included indicators of intra-ethnic social cohesion. These studies provide insufficient information to draw firm conclusions: evidence both in favor and against the constrict claim is weak. On the one hand, the scarce supportive evidence is based on one working paper using bivariate statistics. Although Putnam (2007) also presented a negative bivariate relationship between ethnic homogeneity of US communities and intra-racial trust, and claimed that this effect "passes this same stringent multivariate, multilevel test" (page 153, Italics in original), this supportive evidence of the constrict claim is not included in Table 1 because our coding scheme focuses on the most rigorous tables presented in each manuscript. Even if we include Putnam's study, however, the amount and frequency of corroborative evidence is very weak.

On the other hand, three of the four studies that did not find consistent support focused on intraethnic contact. Huijts et al. (2013a; 2013b) and Vervoort et al. (2011) demonstrate that higher levels of heterogeneity are related to less intra-ethnic contact among majority groups and to more intra-ethnic contact among minority groups. For minority (majority) members higher levels of heterogeneity generally imply more (less) opportunities to have contact with ingroup members. Apparently, these contact opportunities are more important explanations of intra-ethnic contact than the threat and anomie mechanisms, although we cannot rule out the simultaneous existence of the latter. Finally, in the fourth study that did not find consistent support (the German lost letter field experiment of Koopmans and Veit (2013)), the ethnicity of possible egos was unknown. They tested whether lost letters were more likely to be returned in homogeneous or heterogeneous neighborhoods and whether this depended on the ethnicity of the target (the addressee). However, the nature of the experiment precluded assessing the ethnicity of the retriever, or of the ones who decided to let it lie on the streets.

Eleven studies investigated heterogeneity effects on interethnic social cohesion. In general, the level of ethnic heterogeneity is not related to less interethnic social cohesion. Only one (aggregate and bivariate) study finds support for this part of the constrict claim. Six studies uniformly reject the constrict claim, four of which even demonstrate an inverse effect: heterogeneity stimulates interethnic cohesion. These findings are very much in line with the wider literature on interethnic relations that commonly established positive relationships between outgroup size and interethnic attitudes and interethnic contact (Pettigrew & Tropp 2006; Wagner et al. 2006) and demonstrate that for interethnic social cohesion – just as for intra-ethnic social cohesion – contact opportunities trump the threat and anomie mechanisms.

The final dimension of social cohesion summarized in Table 1 is geographic scope. Effectively, along this dimension we can only classify studies that investigated indicators of social cohesion that are inherently bound to neighborhoods – that is contact with neighbors, trust in neighbors, and a wider feeling of shared norms and identity within the neighborhood – and compare them to studies of indicators of social cohesion that are not restricted to specific geographical areas. We find that intra-neighborhood social cohesion is most consistently negatively affected by ethnic heterogeneity. Studies on intra-

neighborhood indicators of cohesion find considerable support (50%) and very few rejects (9%) for the constrict claim. The support rates are hardly affected by controls for methodological rigor. Moreover, they are significantly different from studies on indicators of social cohesion that are not bound to the neighborhood, on which we find merely 19% support and 43% reject.

Our findings on intra-neighborhood social cohesion tend to explain some earlier puzzles. First, the relatively strong support with respect to informal indicators of social cohesion can be traced back to their overlap with intra-neighborhood social cohesion: the category of informal social cohesion encompasses all intra-neighborhood measures in our study. Second, the scholarly disagreement (differential findings) within the UK and the Netherlands is to a large extent explained by the coverage of intra-neighborhood social cohesion in the analyses (cf. Gijsberts et al. 2012). Studies in the United Kingdom, especially, now paint a very consistent picture. Letki (2008) concludes that in the United Kingdom ethnic heterogeneity is only harmful to neighborhood attitudes, and not to non-neighborhood indicators of social cohesion (i.e., sociability, organizational involvement, and informal help relations). Nearly all other British studies focused exclusively on intra-neighborhood indicators of social cohesion found supportive evidence (Andrews 2009; Twigg et al. 2010; Bailey et al. 2012; Finney & Jivraj 2013; but see Pennant 2005), at least among one ethnic group (Fieldhouse &Cutts 2010), on one indicator of ethnic heterogeneity (Becares et al. 2011; Laurence & Heath 2009), or conditional on interethnic contacts (Laurence 2011).

Table 1 Support for the constrict claim, by dimension of social cohesion

<b>C</b>	C	D	N/	N1.2.1.1.	TIC	A	E					
Conc lusio	Cou ntr	Reg ion	Munic ipality	Neighb ourhoo	US	Au, Ca,	Europ e	cros s-	cross			
n	y		- <b>F</b> :: <b>-10</b>	d		NZ		nati	national: Europe			
								onal	Luit	pc		
								wo				
								rld				
Supp	27,3	37,5	21,4%	31,9%	50,	16,7	25,6%	36,4	11,19	<b>%</b>		
ort	%	%			0%	%		%	ĺ			

Mixe	18,2	43,8	35,7%	46,8%	30,	50,0	59,0%	18,2	22,2%
d	%	%			0%	%		%	,
Rejec	54,5	18,8	42,9%	21,3%	20,	33,3	15,4%	45,5	66,7%
t	%	%			0%	%		%	,
numb	22	16	14	47	20	12	39	11	9
er <b>of</b>									
stud									
ies									

<sup>\*</sup> p<.05; \*\* p<.01; \*\*\* p<.001

To what extent does ethnic heterogeneity affect **different indicators of social cohesion** differently? Ethnic heterogeneity most consistently negatively affects intra-neighborhood cohesion. Heterogeneity is not negatively related to interethnic cohesion.

## Different indicators of ethnic heterogeneity

Although ethnic diversity, group sizes and segregation are theoretically very different concepts and may trigger distinct theoretical pathways, relative group sizes often cannot be pulled apart empirically from diversity (Hooghe et al. 2009; Uslaner 2011b; Gijsberts et al. 2012). This strong empirical relationship between diversity and group size may explain why we do not observe substantial differences in support for the constrict claim (see Table 2). Surprisingly, however, scholars who performed tests with different operationalizations of the ethnic composition on the same data, same dependent variable(s), same units of analysis also reveal results that are not very robust, despite the (presumably) high correlations between them. Gustavsson and Jordhal (2008), Hooghe et al. (2009), and Hou and Wo (2009) find no negative effects of ethnic diversity but do find such effects when relative group sizes are used instead.

We cover three studies that included an effect of segregation, two of which find corroborative evidence that segregation directly harms social cohesion. Unfortunately, Koopmans & Veit (2013; labeled as reject) and Rothwell (2012; labeled as support) do not report the impact of segregation without simultaneously controlling for ethnic diversity. Uslaner (2011a, labeled as support) only shows bivariate

relationships between segregation and cohesion indicators. All in all, studies that include main effects of segregation into their explanatory models are rare.<sup>11</sup>

Table 2 Support for the constrict claim, by measure of heterogeneity

Conclu	Coun	Regi	Municip	Neighbo	Neighbour		Au,	Europ	cross-national:		cross-n	ational:	
sion	try	on	ality	hood			Ca,	е	world		Europe		
							NZ						
Support	27,3	37,5	21,4%	31,9%		50,0%	16,7%	25,6%	36,4%		11,1%		
	%	%											
Mixed	18,2	43,8	35,7%	46,8%		30,0%	50,0%	59,0%	18,2%		22,2%		
	%	%											
Reject	54,5	18,8	42,9%	21,3%		20,0%	33,3%	15,4%	45,5%		66,7%		
	%	%											
number	22	16	14	47		20	12	39	11		9		
of													
studies													

<sup>\*</sup> p<.05; \*\* p<.01; \*\*\* p<.001

To what extent do **different indicators of ethnic heterogeneity** affect aspects of social cohesion differently? Effects of ethnic diversity and the size of specific ethnic groups are empirically hard to pull apart. An answer requires data in which these measures are less entangled. Even so, results are not very robust to how heterogeneity is operationalized.

### Different geographic areas

The geographic level at which heterogeneity is measured is neither significantly nor consistently linked to support for the constrict claim (Table 3). Support is not more common the more closely we zoom in on the locality. In general, the greatest support is found at the regional level (38%) and the neighborhood level (32%), whereas most rejections are at the country level (55%) and the municipality level (43%), though these differences are not significant. Nonetheless, it is interesting that all of the cross-national

<sup>&</sup>lt;sup>11</sup> We did not include the studies of Uslaner (2011b, 2013) because we were not able to determine the main effect of segregation.

studies that do find consistent support for the constrict claim fail to meet our criteria for methodological rigor. If selective residential mobility hinders the discovery of heterogeneity effects within relatively small geographic units, the presumed absence of selective residential mobility at the country level does not help discovering such effects. Support in these cross-national studies does not depend on the set of countries or the survey included.

Finally, we grouped the within-country studies and find tentative evidence for American exceptionalism (Table 3), though the number of studies gets rather small in many countries. Support for the constrict proposition is more common in the United States (50%) than in other Anglo-Saxon countries (17%) and in Europe (26%). This pattern remains largely unaffected once we focus on the methodologically robust studies (respectively 36%, 0% and 16% support). As we saw above, most evidence for the constrict claim is found using measures of intra-neighborhood social cohesion. However, in the United States, consistent support for the constrict claim is also found in two of the five studies (40%) that focused on elements of cohesion not bound to the neighborhood. By contrast, there is less consistent support for the constrict claim on indicators of social cohesion that are not bound to the neighborhood in other old immigration countries such as Canada, Australia and New Zealand (20%) and in Europe (14%).

Table 3 Support for the constrict claim, by locality and site

Co	Country				Region			Munici		Neigh	b	US	Au,	Euro	cross-		cross-	-
ncl								pality		ourho	0		Ca,	pe	national: nationa		nal:	
usi										d			NZ		world		Europ	e
on				24.0	_	4.												
Sup	27,	37	21,4	31,9	5	16,	25	3	11									
por	3	,5	%	%	0,	7	,6	6,	,1									
t	%	%			0 %	%	%	4 %	%									
Mix	18,	43	35,7	46,8	3	50,	59	1	22									
ed	2	,8	33,7 %	40,8 %	0,	0,	,0	8,	,2									
cu	%	,o %	/0	/0	0,	%	,0 %	2	, <u>~</u> %									
	/0	/0			%	/0	/0	%	70									
Rej	54,	18	42,9	21,3	2	33,	15	4	66									
ect	5	,8	%	%	0,	3	,4	5,	,7									
	%	%				%	%		%									

					0 %			5 %	
nu mb er of stu dies	22	16	14	47	2 0	12	39	1 1	9

\* p<.05; \*\* p<.01; \*\*\* p<.001

To what extent does ethnic heterogeneity in **different localities** affect aspects of social cohesion differently? Even though neighborhood heterogeneity erodes intra-neighborhood cohesion, we observe no significant differences between various levels of analysis. Ethnic heterogeneity erodes intra-neighborhood social cohesion across the globe. There is some indication that heterogeneity affects other indicators of social cohesion – most notably generalized trust – in the US but not elsewhere.

## 7. Summing up

In 2011, Alejandro Portes and Erik Vickstrom deliberately refrained from a detailed analysis of contradictory findings on the social effects of ethnic diversity, and instead asked the more fundamental question: What is the fuss really about? They concluded (2011: 477): "Although cries of alarm about declining social capital in the face of diversity have undoubtedly struck a chord, it is doubtful that the vast research program spawned by such fears has made American society any better or its public policies any more effective.". Since their review, dozens of new studies on the relationship between ethnic diversity and social cohesion have been published. Yet, a lack of theoretical substantiation on the mechanisms behind that supposed relationship hasonly increased the cacophony of seemingly contrary empirical findings. In this review, we set out to identify the trees within the forest of empirical results using a theoretical model and clear definitions of the core concepts as our guides.

Three patterns structure the seemingly inconsistent findings observed across 90 empirical studies. First, ethnic heterogeneity is not consistently negatively related to interethnic cohesion. This finding goes

against the first theoretical mechanism proposed under the threat hypothesis, but is in line with empirical findings derived from both contact theory (cf. Pettigrew & Tropp 2006) and conflict theory. Increased interethnic contact opportunities stimulate interethnic contact (Martinović 2013), while interethnic contacts stimulate outgroup trust directly and ingroup trust and trust in neighbors indirectly via perceived threat (Schmid et al. 2013). Although ethnic threat itself leads to interethnic distrust, feelings of ethnic threat do certainly not always originate from living in heterogeneous environments (Stolle et al. 2013).

The second empirical regularity is that intra-neighborhood cohesion is quite consistently eroded by the level of ethnic heterogeneity in neighborhoods. However, these negative heterogeneity effects on trust in and contact with neighbors do not consistently spill over to other forms of social cohesion not bound to neighborhoods. There is "[...] considerable lack of clarity on the causal mechanism regarding the way in which experiences with people one knows or with whom one is familiar can be transferred to people one does not know or with whom one is unfamiliar." (Marschall & Stolle 2004: 128).

The third regularity is the exceptional case made up by the United States. Across all countries we found strong support for the constrict claim on intra-neighborhood social cohesion, but in the United States most consistently so. Moreover, there are hardly any negative effects of ethnic heterogeneity in Australia, Canada, New Zealand, and Europe on indicators of social cohesion other than intra-neighborhood social cohesion. In the United States, however, we found some evidence that heterogeneity also erodes other aspects of social cohesion. This seems to be a case of American exceptionalism that is commonly suggested in the social capital literature.

### 8. Back to the theoretical drawing board

Threat and anomie

We began this review by raising the question of whether ethnic diversity is harmful to social cohesion. The answer appears to be yes, but only under very specific conditions. Constrict effects occur on intraneighborhood social cohesion but otherwise they are highly context dependent. There is little evidence for them outside the United States. The group threat mechanism appears to be an unlikely explanation for the constrict claim, as ties between ethnic groups are generally stronger, not weaker, in ethnically heterogeneous environments. The main alternative mechanism we proposed – that heterogeneity harms social cohesion by creating feelings of anomie – seems to support the constrict claim with respect to intraneighborhood social cohesion and may account for the lack of spill-over effects outside the neighborhood. Uncertainty about how to behave and who to trust in the neighborhood need not be extrapolated to general behavior or attitudes: "Most people are able to distinguish between how they conceive their immediate surroundings and how they regard the world as such." (Wallman Lundåsen & Wollebaek 2013: 303). Any retreat from (social) life in the neighborhood may even be compensated by affirming ties outside the neighborhood (Aizlewood & Pendakur 2005).

Nevertheless, there are at least two rivaling explanations besides the anomie explanation as to why more support is found with respect to intra-neighborhood social cohesion. Recall that social cohesion is a relational concept, fundamentally about ego (the respondent in a survey) and alters (his or her neighbors). Consequently, there are no less than four possible effects that have to do with ethnicity: (1) the ethnicity of ego, (2) the ethnicity of alter, (3) the ethnic combination of the dyad constituted by ego-alter (which is mixed or homogeneous) and (4) the ethnic composition of the locality in which ego and alter are situated. Only the fourth is theoretically linked to the constrict claim, the other three basically indicate composition effects. The studies in our review only cover the first (ethnicity of ego) and the fourth (ethnic composition of the locality) effect. Yet, in ethnically diverse localities one's neighbors are more likely to have a different ethnic background. Because to date studies have ignored the ethnicity of neighbors and the degree

of overlap in neighbors' ethnic backgrounds, and thereby the homophily principle, the studies we considered were biased towards finding negative effects of ethnic diversity on intra-neighborhood social cohesion. An important venue for future research is the inclusion of these two alternative mechanisms in our analyses.<sup>12</sup> More fundamentally, the literature calls for a focus on mechanisms in our empirical models.

Changing geographic areas: white flight and non-linear effects

Advocates of the constrict claim argue that most research is biased against finding corroborative evidence for the threat mechanism owing to 'white flight' (Putnam 2007): residents who are dissatisfied with the ethnic composition of their local environment are hypothesized to move to more homogeneous settings. Consequently, even if ethnic heterogeneity were to have a harmful effect on interethnic social cohesion, this relationship may not be observed because people have left the environments in which they had lost connections to ethnic others. White flight is at best an incomplete counter-argument. Although it assumes that *increasing* heterogeneity in one's neighborhood erodes social cohesion and prompts those with the most adverse attitudes to move, *decreasing* heterogeneity (either due to a changing composition of one's neighborhood or due to a change of neighborhood) would presumably not stimulate social cohesion.

Several authors have tried to assess the validity of the selective residential mobility argument indirectly, by controlling for residential mobility at the geographic locality under investigation and by assuming that selective residential mobility is more likely among its affluent residents (and hence that negative effects of heterogeneity are more likely among the poor) (e.g., Tolsma et al. 2009). Results have not been very convincing, however. Ultimately, we need panel data on residents who change

<sup>&</sup>lt;sup>12</sup> Such network approaches have been previously applied in school contexts (cf Quillian & Campbell 2003; Tolsma et al. 2013).

neighborhoods and on residents within changing neighborhoods to assess to what extent both positive and negative changes in heterogeneity affect levels of cohesion.

In essence, the constrict claim is dynamic by nature: increasing heterogeneity would lead to a deteriorating of cohesion. Yet, few authors deal with this dynamic nature by investigating the effects of dynamic measures of heterogeneity (migration rates) or of longitudinal changes in heterogeneity (for exceptions see, amongst others, Hooghe et al. 2009; Gesthuizen et al. 2009; Kesler & Bloemraad 2010; Dinesen & Sonderskov 2012). Threat and anomie are likely to be triggered by recent, substantial increases rather than by stable levels of heterogeneity. The impact of stagnant heterogeneity is likely to flatten out due to 'familiarization'. It is doubtful that the impact of (changing) ethnic heterogeneity should be linear anyway. 13 Threshold effects are likely (cf. Wagner et al. 2006). A small increase in the size of the outgroup would not necessarily constitute a threat or lead to feelings of anomie. The resulting hypothesized s-shaped heterogeneity effect has implications for both the operationalization of heterogeneity, and for the sampling of the higher-level units. Representative samples would be unlikely to detect heterogeneity effects in most countries, as many localities will be rather homogenous, dominated by natives or the largest ethnic group.

Changing ethnic heterogeneity: ethnic distinctions and cross-cutting cleavages

Not only do social environments change over time, even the nature of ethnic heterogeneity itself changes. In contemporary studies on the United States it hardly makes sense to distinguish between, among others, Italian-Americans, Irish-Americans, and Polish-Americans. Rather, US-based studies tend to emphasize the racial boundaries (increasingly including the Latin category) that form a relevant societal cleavage nowadays. Similarly, studies in the United Kingdom generally distinguish Pakistani and Indians as ethnic groups but not the Welsh and the Scots. Canadian studies often focus on 'visible minorities'. Dutch

<sup>&</sup>lt;sup>13</sup> Some authors have investigated non-linear effects by including a quadratic term (Dincer 2011; Reeskens & Hooghe 2009).

Statistics offers an 'ethnic' classification that separates first and second generation immigrants from Morocco, Turkey, Suriname and the Antilles, but not the equally large groups from western countries (Belgium, Germany, UK, US), let alone native minority groups such as the Frysians. More generally, most studies tend to rely on classifications of ethnic groups along criteria that are socially relevant, i.e., from which the strongest, negative heterogeneity effects are expected. That makes the lack of consistent support for the constrict claim even more staggering. Recent studies picked up this problem (e.g. Finseraas & Jakobsson 2012; Morales & Echezzara 2013). The cross-national study of Finseraas and Jakobsson (2012) is especially intriguing. They find that ethnic heterogeneity is only harmful to generalized trust if ethnolinguistic and religious distinctions overlap, that is, if there are cross-cutting cleavages.

## American exceptionalism? Multiculturalism and segregation

What can account for the remarkable distinction between the United States on the one hand and other (western) countries – including neighboring Canada – on the other hand? In the US the public reacts most negatively to diversity. Although the US is a traditional immigration country, no similar consistent link is observed in other traditional countries of immigration such as Australia, Canada, and New Zealand (cf. Hagendoorn 2009). Thus we have little reason to expect that recent migration countries, such as those in Europe, will necessarily experience a similar setback in social cohesion at some point in the future.

American exceptionalism may be due to unique historical forces. The racial divide and racial mixing have a different connotation in the United States than ethnicity and ethnic diversity have in many other countries. The salience and nature of race in the US is contingent on its legacy of slavery until the late 19<sup>th</sup> century, and the subsequent Jim Crow-laws that effectively barred some racial groups from exercising their social and political rights until the 1960s. Such tentative historical explanations should, however, be framed in a wider theoretical framework to be tested in other environments.

Various scholars have explored whether cross-national differences in heterogeneity effects may be linked to multicultural policies (e.g. Lupo 2010; Reeskens 2010; Zimdars & Tampubolon 2012). Kesler and Bloemraad (2010) show that the constrict effect is moderated by 'institutional structures and state policies': heterogeneity is more likely to have a negative effect on associational membership in countries without multicultural policies. These moderating effects of multiculturalist policies may be due to the interethnic contact opportunities they induce, which induce broader interethnic trust under such a favorable canopy (Allport 1954). This brings us back to the moderating effect of segregation and ethnic inequality. Given relative group sizes, segregation and ethnic inequality undermine favorable contact opportunities. American exceptionalism may be linked to relatively high levels of heterogeneity combined with the pronounced segregation of cities in the United States in comparison to other western countries (Johnston et al. 2007) and the persistence of ethnic inequalities. It is unlikely that heterogeneity alone will erode (all elements of) cohesion, neither in the short, nor the long run. Rather, policy makers should aim to prevent the potentially explosive mix of heterogeneity, segregation and inequality.

## *Implications*

This review has implications beyond the constrict literature. Conceptually, it is striking that scholars have been unaware that there was far less disagreement than apparent at first sight. The major obstacle has been the use of broad concepts, such as social capital, social cohesion and social trust, to denote widely different empirical phenomena. Because the research object was presented as a monolithic block, differences between indicators were obscured. Evidently, this problem was exacerbated by the lack of theoretical refinement: all aspects of social cohesion were supposed to be negatively affected by ethnic diversity.

Especially after the publication of Robert Putnam's *E Pluribus Unum* there was widespread attention in national media for the supposed negative social consequences of ethnic heterogeneity and

immigration. We found that the claim holds true, but only to a very limited extent. Heterogeneity merely undermines intra-neighborhood social cohesion: people in ethnically heterogeneous environments are less likely to trust their neighbors or to have contact with them. However, this does not spill over to generalized trust, to informal help and voluntary work, or to other forms of pro-social behavior and attitudes, at least not in Europe. Rather, heterogeneity is positively related to interethnic contact and (consequently to) interethnic trust. Given the speed with which apocalyptic claims were embraced by journalists and policy makers, these conclusions are by themselves rather sobering.

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## **Annotated references**

Kesler&Bloemraad 2010.

A dynamic study. Cross-national changes in diversity are not (everywhere) accompanied by reductions in collective-mindedness.

Letki 2008.

It demonstrates via SEM that geographic scope is a distinct cohesion dimension.

Putnam 2007.

Putnam's constrict claim – that heterogeneity erodes in-group and out-group solidarity – reinvigorated the debate.

Stolle et al. 2013

Inter-ethnic neighborhood contact cushions negative effects of neighborhood heterogeneity on generalized and out-group trust.