Does Regional Autonomy Improve Local Public Services in More Diverse Regions?

Andrea Filippetti

1 Introduction

This chapter examines the relationship between diversity, access to local public services and regional autonomy. It starts from a common belief that the presence of marked diversity in communities might impair the functioning of the welfare state. By looking at the satisfaction of citizens about local public services – school, health and local policy – in European regions, this chapter shows empirically that citizens tend to be less satisfied about public services in regions characterised by higher diversity. This can question the access to public services in heterogenous places. In a second step, we examine whether regional autonomy can mediate this problem by relying on fiscal federalism theory, which argues that in the presence of heterogeneity across jurisdictions, a decentralised management of public services is more efficient. We find that in diverse regions, regional autonomy improves the satisfaction of citizens concerning local public services. This suggests that regional autonomy can represent a possible solution to guarantee equal access to public services in heterogenous societies.

The next ‘Europe of regions’ will profoundly differ from the present one. In fact, one of the most pressing challenges in many European countries stems from a relentless increase in the heterogeneity of population. This is the result of intra-European Union (EU) mobility, and migration from outside the EU. While some countries – such as France and the United Kingdom – have already experienced such differences within their borders due to their relationships with former colonies, and others – such as Germany – have experienced more recent flows related to job opportunities, for most European countries and regions this will be a new phenomenon for public policy to cope with.¹

1 Gregory B. Christainsen, “Biology, Immigration, and Public Policy,” *Kyklos* 65, no. 2 (2012), 164–178; James Dennison and Andrew Geddes, “Brexit and the Perils of ‘Europeanised’ Migration,” *Journal of European Public Policy* 25, no. 8 (2018), 1–17.

One of the consequences of this process is the increasing pressure on the welfare states, particularly regarding the provision of local basic services, such as health, public housing, local policy and education. Alesina and Glaeser argue that ‘one natural implication of our conclusion that fractionalization reduces redistribution is that if Europe becomes more heterogeneous due to immigration, ethnic divisions will be used to challenge the generous welfare state.’² As such, they raise a concern about a trade-off between a generous immigration policy and a generous welfare state. This is crucial for the European Union, since mobility of people represents one of its cornerstones. In the words of Britain’s ambassador to Berlin, Sir Sebastian Wood, ‘it is freedom of movement for workers, and not freedom of movement for ‘welfare shopping’’.³ This problem has been restated recently in a commentary by Branko Milanovic, a leading expert on global inequality, who argues that welfare states attract a lot of unskilled migrants.⁴

Since in most cases local public services are either provided or managed at the regional or local level, the regions – and the regional governments – are expected to play an increasing role in managing this process. This issue has been addressed at the subnational level by research limited to the United States, precisely because public spending at the state level is of a different kind than at the country level.⁵ This chapter aims to inform this debate by looking at the issue of diversity and the provision of local public services in European regions.

Several studies have enquired whether the presence of a highly heterogeneous population reduces the quality of local public policies. The answer is positive in most cases,⁶ although much of the research has addressed ethnic diversity and has been carried out either in the United States or in developing countries, in which these ethnic differences are considerable.⁷

2 Alberto Alesina and Edward Ludwig Glaeser, *Fighting Poverty in the US and Europe: A World of Difference* (Oxford: Oxford University Press, 2004), 11.

3 Tom Barfield, “UK asks for German help to stop ‘welfare shopping,’” *The Local*, 18 February 2016, <https://www.thelocal.de/20160218/uk-asks-german-help-to-stop-welfare-shopping>.

4 Branko Milanovic, “Migration Vs. the Welfare State?,” *the Globalist*, 16 May 2017, <https://www.theglobalist.com/migration-vs-the-welfare-state/>.

5 David M. Cutler, Douglas W. Elmendorf and Richard J. Zeckhauser, “Demographic Characteristics and the Public Bundle,” *National Bureau of Economic Research NBER Working Paper*, no. 4283 (February 1993), 1–18, <https://doi.org/10.3386/w4283>.

6 For a recent review see Holger Stichnoth and Karine van der Straeten, “Ethnic Diversity, Public Spending, and Individual Support for The Welfare State: A Review of the Empirical Literature,” *Journal of Economic Surveys* 27, no. 2 (2013), 364–389, <https://doi.org/10.1016/j.j467-6419.2011.00711.x>.

7 See for example Tom Clark, Robert D. Putnam and Edward Fieldhouse, *The Age of Obama: The Changing Place of Minorities in British and American Society* (Oxford: Oxford

Decentralisation and regional autonomy have often been seen as an effective institutional setting to provide local public services efficiently and effectively, particularly in the presence of heterogeneity of the population. It is not by chance that the United States, Canada and Australia, countries that have their roots in migration, are among the most decentralised countries in the world, being in fact federal states. This is quite a common fact: countries where there are ethnic or linguistic minorities tend to be either federal or highly decentralised, such as for instance Canada, India, Nigeria and South Africa, to name a few. This is also evident in unitary countries – taking the form of asymmetric federalism – where there are minorities whose regional governments benefit from specific augmented forms of autonomy, as is the case in the United Kingdom, Spain, and Italy.⁸

Federalism, fiscal devolution and political decentralisation have been the major institutional reforms that have been carried out with the aim of reducing the gap, perceived as increasingly larger by citizens, between the government and territories.⁹ For these reasons, over the past decades, several countries have carried out reforms that go in the direction of ‘bringing the government closer to the people’.¹⁰ We can mention major constitutional reforms in Italy and Spain, as well as recent reforms in France; but also a stronger ‘voice’ rising from the bottom, through which regions claim greater autonomy, as the cases of the referendums in Scotland, Cataluña, and those recently experienced in two regions in the North of Italy, suggest.

This chapter brings together these two streams of research, both of which have addressed the provision of local public service and public policies, but from a different angle. The former has addressed the relationship between diversity and local public policies; the latter has dealt with the role of decentralisation and regional authority in the provision of local public services.

University Press, 2013); Edward Miguel and Mary Kay Gugerty, “Ethnic Diversity, Social Sanctions, and Public Goods in Kenya,” *Journal of Public Economics* 89, no. 11 (2005), 2325–2368; Andreas P. Kyriacou, “Ethnic Segregation and the Quality of Government: The Importance of Regional Diversity,” *Constitutional Political Economy* 23, no. 2 (2012), 78–101.

8 Roger D. Congleton, Andreas Kyriacou and Jordi Bacaria, “A Theory of Menu Federalism: Decentralization by Political Agreement,” *Constitutional Political Economy* 14, no. 3 (2003), 167–190.

9 Jorge Martinez-Vazquez, Santiago Lago-Peñas and Agnese Sacchi, “The Impact of Fiscal Decentralization: A Survey,” *Journal of Economic Surveys* 31, no. 4 (2016), 1095–1129, <https://doi.org/10.1111/joes.12182>; Luis Diaz-Serrano and Andrés Rodríguez-Pose, “Decentralization, Subjective Well-Being, and the Perception of Institutions,” *Kyklos* 65, no. 2 (2012), 179–193, <https://doi.org/10.1111/j.1467-6435.2012.00533.x>.

10 Gary Marks, Liesbet Hooghe and Arjan H. Schakel, “Measuring Regional Authority,” *Regional and Federal Studies* 18, no. 2–3 (2008), 167–181.

More particularly, we investigate the relationship between diversity and the provision of local public service for European regions, exploring the following two research questions: *i. Does diversity affect the provision of local public services?* *ii. Is regional autonomy a moderator between diversity and the provision of local public services?* We do not look specifically at ethnic diversity, but we rather address the issue of national diversity; this allows us to extend the research to a wide sample of regions hence addressing a broader phenomenon which is relevant for EU policy.

The empirical analysis is based on 167 European regions. In order to measure the provision of local public goods at the regional level we employ the composite indicator developed by *The Quality of Government (QoG Institute)* based on the citizens' perception about local public services.¹¹ Hence, in this chapter the provision of local public services is measured in terms of citizens' satisfaction. On the one hand, as a subjective measure it does not assure a perfect overlap with the real functioning of public services. On the other hand, when it comes to policy, the perception of citizens is relevant, in that it drives their decisions. As far as the level of regional autonomy is concerned, we employ the *Regional Authority Index* developed by Hooghe, Gary and Schakel;¹² these two indicators have a number of strengths and have been increasingly employed in this type of studies.¹³ Finally, a variable taking into account the diverse composition of the population – a *diversity index* – is developed following other studies;¹⁴ the index is based on the census of 2011 and considers three types of residents: native citizens, foreign EU residents, and foreign non-EU residents.

- 11 Quality of Government Institute of the University of Gothenborg, "Measuring the Quality of Government and Subnational Variation," *Report for the European Commission Directorate-General Regional Policy Directorate Policy Development* (December 2010), 1–48, https://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/2010_government_1.pdf; Nicholas Charron and Victor Lapuente, "Why Do Some Regions in Europe Have Higher Quality of Government?," *QoG Working Paper Series*, no. 1 (January 2011), 1–38, https://www.pol.gu.se/digitalAssets/1357/1357846_2011_1_charron_lapuente.pdf.
- 12 Liesbet Hooghe, Gary Marks and Arjan H. Schakel, "Operationalizing Regional Authority: A Coding Scheme for 42 Countries, 1950–2006," *Regional and Federal Studies* 18, no. 2–3 (2008), 123–142.
- 13 See for example Nicholas Charron, Lewis Dijkstra, and Victor Lapuente, "Regional Governance Matters: Quality of Government within European Union Member States," *Regional Studies* 48, no. 1 (2014), 68–90; Roberto Ezcurra and Andrés Rodríguez-Pose, "Political Decentralization, Economic Growth and Regional Disparities in the OECD," *Regional Studies* 47, no. 3 (2012), 1–14, <https://doi.org/10.1080/00343404.2012.731046>.
- 14 Alberto Alesina and Ekaterina Zhuravskaya, "Segregation and the Quality of Government in a Cross Section of Countries," *The American Economic Review* 101, no. 5 (2011), 1872–1911; Kyriacou, "Ethnic Segregation and the Quality of Government," 166–180; Ceren Ozgen, Peter Nijkamp and Jacques Poot, "The Impact of Cultural Diversity on Firm

We find evidence that the presence of a heterogeneous population composition in the region is associated to a relatively worse performance in the provision of local public goods; regional autonomy can act, only partially, as a moderating mechanism between diversity and local public services.

The chapter is organised as follows. In the following section we put forward two hypotheses on the grounds of research on diversity and public policies, and research on fiscal federalism; section three presents our measures of public services, regional authority and diversity. Section four presents the empirical strategy and the results, while section five discusses them and concludes.

2 Local Public Services, Diversity and Regional Autonomy: Two Hypotheses to Be Tested

This chapter aims to bridge two different streams of research. The first deals with the impact of diversity on the provision of local public services.¹⁵ The second deals with the role of federalism and regional autonomy, as a desirable institutional setting to deliver local public policies in the presence of heterogeneous communities. In what follows we derive two hypotheses regarding these two strands of research which will be tested in the empirical part.

2.1 *Diversity, Local Public Goods and Local Public Policies*

The provision of local public policies seems to become more problematic in the presence of a heterogeneous population. Alesina and Glaeser, for instance, foresee a reduction of the size of the welfare state in Europe as a result of increased immigration and fractionalisation.¹⁶ Empirical research finds that social spending, such as expenditure for public schools, government transfers, health spending etc. tend to be all negatively correlated with diversity.¹⁷ Several studies have addressed the phenomenon of ethnic diversity and the provision of public goods provision, particularly in developing countries where this phenomenon is more acute, suggesting several theoretical mechanisms and

Innovation: Evidence from Dutch Micro-Data," *IZA Journal of Migration* 2, no. 1 (2013), 1–18, <https://doi.org/10.1186/2193-9039-2-18>; Ceren Ozgen et al., "Does Cultural Diversity of Migrant Employees Affect Innovation?," *International Migration Review* 48, no. 1 (September 2014), 377–416, <https://doi.org/10.1111/imre.12138>.

15 In the remainder of the chapter the provision of local public services means the citizens' satisfaction about them.

16 Alesina and Glaeser, *Fighting Poverty*.

17 Stichnoth and van der Straeten, "Ethnic Diversity, Public Spending, and Individual Support for The Welfare State," 364–389.

finding empirical evidence that ethnic diversity tends to undermine local public policies, e.g. education and health.¹⁸ Alesina, Baqir and Easterly find that the shares of spending on productive public goods in US cities are inversely related to the city's ethnic fragmentation, even after controlling for other socio-economic and demographic determinants.¹⁹ Cross-country studies tend to confirm these results.²⁰

Two main possible arguments have been suggested to explain this finding. The first is an economic argument, and it foresees an increase in the demand of public welfare as a result of a more heterogeneous population. This is particularly true when migrants are relatively poorer than domestic citizens, which brings about an increase in the competition for local public goods. This will lead to – *ceteris paribus* – a deterioration in the provision of public services. Further, greater inequalities between groups have been found to undermine institutions and reduce government quality.²¹

The second argument is more sociological in nature. As Stichnoth and van der Straeten explain, '[i]f citizens are more supportive of redistribution when people from their own ethnic group benefit from it, ethnic diversity will reduce the support for redistribution, which in turn will tend to decrease the actual level of redistribution'.²² Communities comprising of different ethnic or social groups can also lead to lower interaction, trust and social cohesion,²³ relying

-
- 18 See for example James Habyarimana et al., "Why Does Ethnic Diversity Undermine Public Goods Provision?," *American Political Science Review* 101, no. 4 (2007), 709–725, <https://doi.org/10.1017/S0003055407070499>; Miguel and Gugerty, "Ethnic Diversity,"
 - 19 Alberto Alesina, Reza Baqir and William Easterly, "Public Goods and Ethnic Divisions," *The Quarterly Journal of Economics* 114, no. 4 (1999), 1243–1284, <https://doi.org/10.1162/003355399556269>.
 - 20 Alberto Alesina and Eliana La Ferrara, "Ethnic Diversity and Economic Performance," *Journal of Economic Literature* 43, no. 3 (September 2005), 762–800, <https://doi.org/10.1257/002205105774431243>; Stichnoth and van der Straeten, "Ethnic Diversity, Public Spending, and Individual Support for The Welfare State," 364–389.
 - 21 Andreas P. Kyriacou, "Ethnic Group Inequalities and Governance: Evidence from Developing Countries," *Kyklos* 6, no. 1 (2013), 78–101, <https://doi.org/10.1111/kykl.12012>.
 - 22 Stichnoth and van der Straeten, "Ethnic Diversity, Public Spending, and Individual Support for The Welfare State," 370.
 - 23 See for example Dietlind Stolle, Stuart Soroka and Richard Johnston, "When Does Diversity Erode Trust? Neighborhood Diversity, Interpersonal Trust and the Mediating Effect of Social Interactions," *Political Studies* 56, no. 1 (2008), 57–75; Melissa J. Marschall and Dietlind Stolle, "Race and the City: Neighborhood Context and the Development of Generalized Trust," *Political Behavior* 26, no. 2 (2004), 125–153; Silvia Camussi, Anna Laura Mancini and Pietro Tommasino, "Does Trust Influence Social Expenditures? Evidence from Local Governments," *Kyklos* 71, no. 1 (2018), 59–85, <https://doi.org/10.1111/kykl.12162>; Henning Finseraas and Niklas Jakobsson, "Trust and Ethnic Fractionalization: The

on the idea that an individual's behaviour and engagement are affected by the characteristics of her neighbours:

People (both natives and immigrants) generally prefer to live among people with the same background and are less likely to be willing to share resources with those who they perceive as different from themselves. They prefer to interact socially with others who share the same ethnic heritage, the same socioeconomic status, the same lifestyle, and who therefore share common interests, experiences and tastes or, put simply, people they have more to talk about with.²⁴

This has been recently documented not only in the urban areas of the United States, but also in several European countries.²⁵

For the reasons outlined above we derive the following hypothesis #1:

Hip#1: the higher the level of diversity in a region, the lower the performance in the provision of local public services.

2.2 *Regional Autonomy, Diversity and Public Services*

A central mechanism which connects diversity with dysfunctionality in public policy is the heterogeneity of preferences, in that heterogeneous tastes across ethnic groups are the channel through which diversity affects collective action.²⁶ In their study on ethnic diversity and public goods in Kenya, Miguel and Gugerty discuss the implications of decentralisation of local public goods in communities characterised by high heterogeneity, and they raise two important arguments against the centralisation of public services in these cases.²⁷ Firstly, in many less developed countries, central governments underprovide recurrent expenses. Secondly, centralisation of funding could lead to more regional and ethnic favouritism in the allocation of national government funds.

Importance of Religion as a Cross-Cutting Dimension," *Kyklos* 65, no. 3 (July 2012), 327–339, <https://doi.org/10.1111/j.1467-6435.2012.00541.x>.

24 Vassilis Tselios, Philip McCann and Jouke van Dijk, "Understanding the Gap between Reality and Expectation: Local Social Engagement and Ethnic Concentration," *Urban Studies* 54, no. 11 (August 2017), 2592–2612, <https://doi.org/10.1177/0042098016650395>.

25 Stichnoth and van der Straeten, "Ethnic Diversity, Public Spending, and Individual Support for The Welfare State," 364–389.

26 Alesina, Baqir and Easterly, "Public Goods and Ethnic Divisions," 1243–1284.

27 Miguel and Gugerty, "Ethnic Diversity," 1–11.

If diversity affects economic choices and the outcome of public policies by directly entering individual preferences,²⁸ then decentralisation and regional autonomy are natural candidates as effective institutional arrangements which can address the provision of local public services in the presence of diversity. Theories on fiscal federalism and decentralisation claim that regional autonomy improves the quality of local governments, both in terms of the efficiency and the level in the provision of public goods,²⁹ accountability to citizens' preferences,³⁰ and control of the public expenditure.³¹ By making the government closer to the people, regional autonomy is expected to provide local policies that are better able to respond to the differentiated needs arising in highly diverse regions; hence, regional authority is considered an effective solution to cope with the presence of high heterogeneous preferences at the regional/local level.³²

When it comes to the rationale for decentralisation and regional autonomy, local public services play a prominent role. As Serrano and Rodríguez-Pose put it, the primary aim of decentralisation has never been about delivering greater economic growth, reducing inequality or increasing social capital; rather, 'the original aim of decentralization is fundamentally to improve the delivering of public goods and services to individuals and, consequently, the level of satisfaction of the population with government'.³³

Several counter arguments have been raised. Local governments can be less efficient than central governments; the provision of public services can benefit from economies of scale in the case of a central provision; issues of capture and corruption of local policy makers are easier to observe in a number of countries.³⁴ Empirical research shows that countries with centralised governments

28 Alesina and La Ferrara, "Ethnic Diversity and Economic Performance," 762–800.

29 Mancur Olson, "Dictatorship, Democracy, and Development," *American Political Science Review* 87, no. 3 (1993), 567–576; Charles M. Tiebout, "A Pure Theory of Local Expenditures," *Journal of Political Economy* 64, no. 5 (1956), 416–424; Andrea Filippetti and Agnese Sacchi, "Decentralisation and Economic Growth Reconsidered: The Role of Regional Authority," *Environment and Planning C: Government and Policy* 34, no. 8 (2016), 1793–1824.

30 Wallace E. Oates, *Fiscal Federalism* (New York: Harcourt Brace Jonanovitch, 1972).

31 Geoffrey Brennan and James M. Buchanan, *The Power to Tax: Analytic Foundations of a Fiscal Constitution* (Cambridge: Cambridge University Press, 1980).

32 Tiebout, "A Pure Theory of Local Expenditures," 416–424.

33 Luis Diaz-Serrano and Andrés Rodríguez-Pose, "Decentralization, Happiness and the Perception of Institutions," *IZA Discussion Paper*, no. 5647 (April 2011), 2, 1–28, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1812532; emphasis by the author of this chapter.

34 See for example Thushyanthan Baskaran and Lars P. Feld, "Fiscal Decentralization and Economic Growth in OECD Countries: Is There a Relationship?," *Public Finance Review* 41, no. 4 (July 2013), 421–445, <https://doi.org/10.1177/1091142112463726>; Vito Tanzi, "Pitfalls

can also deliver *local* public services as efficiently as decentralised countries do.³⁵ However, these criticisms are not directed towards the claim that regional authority works better in heterogeneous population.

Following on these lines of reasoning, we put forward the second hypothesis:

Hip#2: regional autonomy is expected to moderate between diversity and the performance of local public services. [Put differently, for any given level of diversity, a higher level of regional autonomy is expected to be associated to a higher performance of local public services].

3 Data: Measuring the Quality of Local Public Services and the Level of Regional Autonomy

3.1 *The Provision of Local Public Services*

The organisation for the provision of local public services differs across countries depending primarily upon formal provisions at the level of the constitution. According to these, the type of state can be grouped in three broad categories: federal states, regionalised states, and unitary states. Firstly, we need to distinguish between exclusive competences attributed to the regional and local governments, and competences that are instead shared between the central government and the regional and local governments. Secondly, competences can be divided into legislative and administrative; typically, in unitary states the legislative competences belong to the central government, while the administrative competences can be attributed to different levels of subnational governments. In decentralised settings, such as federal or regionalised countries, both the legislative competences and the administrative competences of some local services can be attributed to the regional (and local) level. The revenue system for local public services also varies considerably across countries: in federal or regionalised states, regional governments often have some taxation power; by contrast, in unitary states local services tend to be financed through a mechanism of transfers from the central government. As a result, one can observe a great deal of heterogeneity when it comes to the regional

on the Road to Fiscal Decentralization," *Working Papers*, no. 19 (April 2001), 1–41, <https://carnegieendowment.org/files/19Tanzi.pdf>.

35 Andrea Filippetti and Giovanni Cerulli, "Are Local Public Services Better Delivered in More Autonomous Regions? Evidence from European Regions Using a Dose-Response Approach," *Papers in Regional Science* 97, no. 3 (January 2017), 801–826, <https://doi.org/10.1111/pirs.12283>.

competences across countries regarding the provision of public services, even when they are local services, such as for instance in the cases of education, public transport, health or local police.³⁶ There are countries such as Bulgaria, Estonia, Lithuania, the Netherlands, Slovenia and Sweden where regions have no specific competences on their own; federal countries like Belgium, in which regional governments have no competences on education, or like Germany, in which instead the *Länder* have competences over a large number of services. Similar patterns can be found for other local public services (e.g. health).³⁷

This chapter employs a composite indicator of the performance of local public services provided by the *Quality of Government Survey* based on the citizens' perception of three local public services: education, health and law enforcement.³⁸ These are also those public services that are usually investigated in decentralisation studies.³⁹ The indicator is a perception-based indicator built from a 34,000-respondent survey from 172 regions within eighteen EU member states; to date, this constitutes one of the most comprehensive surveys about the quality of local public goods at the subnational level.⁴⁰ The survey was undertaken between 15 December 2009, and 1 February 2010, and consisted of 34 questions to the approximately 200 respondents per region. Respondents were asked about three general public services in their regions – education, health care and law enforcement. In focusing on these three services, respondents were asked to rate their public services with respect to three related concepts, namely the *quality*, *impartiality* and an inverse measure of the level of *corruption* of these services.⁴¹ The Survey also provides a single

36 European Institute of Public Administration (EIPA), "Division of Powers between the European Union, the Member States and Regional and Local Authorities," December 2012, https://cor.europa.eu/en/engage/studies/Documents/division_of_powers/division_of_powers.pdf.

37 A comprehensive report on this issue can be consulted here: <https://www.ifo.de/>.

38 Charron, Dijkstra and Lapuente, "Regional Governance Matters," Quality of Government Institute of the University of Gothenborg, "Measuring the Quality of Government and Subnational Variation," 1–85.

39 Agnese Sacchi and Simone Salotti, "A Comprehensive Analysis of Expenditure Decentralization and of the Composition of Local Public Spending," *Regional Studies* 50, no. 1 (2014), 1–17, <https://doi.org/10.1080/00343404.2014.893387>.

40 Note that the authors call this index 'quality of government index' since they use the provision of local public goods as a proxy for the quality of regional government. Our focus here is instead on the quality of local public services themselves, exploiting the heterogeneity in their organisational structure across regions.

41 The complete questionnaire can be found in Quality of Government Institute of the University of Gothenborg, "Measuring the Quality of Government and Subnational Variation," appendix.

QoG index for each region obtained by averaging the three pillars – quality, impartiality and (lack of) corruption, each weighted one third. In our analysis we will use both the overall *qog index* performance as well as the three pillars.⁴² The data have been standardised such that the EU regional mean is ‘0’ and has a standard deviation of ‘1’. A series of extensive sensitivity tests were carried out to see whether changes in the model alter the final data. The results show that ‘data constructed here are highly robust to multiple changes in weighting and aggregation schemes, the removal of individual questions or alterations in the demographic make-up of the respondents’.⁴³

The Report suggests the presence of a significant within-country variation from country to country. As explained by Charron and Lapuente, the data show that the indicator of *QoG* is either equally or more important than a variation between EU countries themselves.⁴⁴ For example, some regions in Italy and Belgium perform like those in the best performing countries, while others rank similarly to low-performing regions in Hungary and Greece. This supports the case for an analysis at the regional level.

3.2 *The Degree of Regional Autonomy*

We employ a comprehensive measure of regional autonomy, the *Regional Authority Index (RAI)*,⁴⁵ which includes fiscal, political, and administrative measures of the authority of a regional government. This index has been used in these types of studies replacing measures of fiscal expenditures as proxy of decentralisation.⁴⁶ The *RAI* measures the authority of regional governments in 42 democracies or quasi-democracies on an annual basis over the period 1950–2016. The countries included are twenty-nine OECD countries, the 27 countries that are members of the European Union, as well as Albania, Bosnia and Herzegovina, Croatia, Macedonia, Russia, and Serbia and Montenegro.

42 In the chapter we will refer to overall performance to refer to the overall index, and to quality to refer to the single pillar ‘quality’.

43 Quality of Government Institute of the University of Gothenborg, “Measuring the Quality of Government and Subnational Variation,”

44 Charron and Lapuente, “Why Do Some Regions in Europe Have Higher Quality of Government?,” 567–582.

45 Hooghe, Marks and Schakel, “Operationalizing Regional Authority,” 123–142; Marks, Hooghe and Schakel, “Measuring Regional Authority,” 111–121.

46 See for example Ezcurra and Rodríguez-Pose, “Political Decentralization, Economic Growth and Regional Disparities,” 1–14.

The RAI is composed of two pillars, which respectively capture the degree of authority exerted by a regional government over its territory (*self-rule*) and over the whole country (*shared-rule*). Self-rule regards the degree of independence of the regional government from the influence of central authorities and the scope of regional decision-making. In turn, shared-rule measures the capacity of the regional government to determine central decision-making.⁴⁷ It is worth stressing that despite the name of the indicator, the RAI refers not only to administrative decentralisation but also encompasses measures of political and fiscal decentralisation. As such, it is possibly the most comprehensive indicator of regional autonomy that has been developed so far.

3.3 *A Measure of National Diversity*

We calculated our measure of diversity by taking data from the census of 2011,⁴⁸ which considers for each region the following categories of citizens: native citizens, foreign EU residents, and foreign non-EU residents (including stateless). A typical measure of diversity can be obtained by subtracting the *Herfindal index* of the variable of interest from 1. In our case, this becomes $(1 - \text{Herfindal index of nationality shares})$, an approach also followed by others, e.g. Ozgen et al.⁴⁹ A cursory look at the diversity indicators reveals a normal-shaped distribution with a tail on the right side that reflects the metropolitan areas of London, Brussels, and Vienna. Data are reported in Table 5.1.

47 Gary Marks, Liesbet Hooghe, and Arjan H. Schakel, "Patterns of Regional Authority," *Regional and Federal Studies* 18, no. 2–3 (2008), 167–181.

48 The data can be found here: <https://ec.europa.eu/CensusHub2/query.do?step=selectHyperCube&qhc=false>.

49 Ozgen, Nijkamp and Poot, "The Impact of Cultural Diversity on Firm Innovation,"; Ozgen et al., "Does Cultural Diversity of Migrant Employees Affect Innovation?," 377–416.

TABLE 5.1 List of the regions and the three indicators

Region	Index of public services	Diversity index	Regional authority index
AT_Burgenland	1.274	0.114	18
AT_Lower Austria	1.160	0.134	18
AT_Vienna	0.993	0.362	18
AT_Carinthia	0.880	0.136	18
AT_Styria	0.848	0.132	18
AT_Upper Austria	1.139	0.156	18
AT_Salzburg	0.907	0.228	18
AT_Tyrol	1.015	0.202	18
AT_Vorarlberg	1.069	0.238	18
BE_Brussels-Capital Region	-0.369	0.491	18
BE_Flemish Region	0.942	0.179	20
BE_Walloon Region	-0.008	0.175	18
BG_Severozapaden	-2.566	0.006	1
BG_Severen tsentralen	-2.061	0.009	1
BG_Severoiztochen	-0.915	0.013	1
BG_Yugoiztochen	-2.141	0.010	1
BG_Yugozapaden	-1.830	0.014	1
BG_Yuzhen tsentralen	-1.088	0.008	1
CZ_Prague	-0.903	0.256	7
CZ_Central Bohemian Region	-0.224	0.094	7
CZ_Jihozápad (Southwest)	-0.009	0.076	7
CZ_Severozápad (Northwest)	-0.909	0.091	7
CZ_Severovýchod (Northeast)	-0.110	0.063	7
CZ_Jihovýchod (Southeast)	-0.441	0.059	7
CZ_Stední Morava (Central Moravia)	-0.534	0.031	7
CZ_Moravian-Silesian Region	-0.361	0.038	7
DK_Hovedstaden	1.306	0.176	10
DK_Sjælland	1.448	0.080	10
DK_Syddanmark	1.440	0.100	10
DK_Midtjylland	1.687	0.099	10
DK_Nordjylland	1.317	0.080	10
DE_Baden-Württemberg	0.981	0.205	21
DE_Bavaria	0.712	0.184	21
DE_Berlin	0.981	0.205	21

TABLE 5.1 List of the regions and the three indicators (*cont.*)

Region	Index of public services	Diversity index	Regional authority index
DE_Brandenburg	0.979	0.032	21
DE_Bremen	0.953	0.196	21
DE_Hamburg	0.961	0.219	21
DE_Hessen	0.630	0.202	21
DE_Mecklenburg-Vorpommern	0.937	0.174	21
DE_Lower Saxony	0.949	0.142	21
DE_North Rhine-Westphalia	0.714	0.037	21
DE_Rhineland-Palatinate	0.827	0.037	21
DE_Saarland	1.051	0.141	21
DE_Saxony	1.096	0.141	21
DE_Saxony-Anhalt	0.866	0.141	21
DE_Schleswig-Holstein	1.273	0.059	21
DE_Thuringia	1.336	0.051	21
FR_Île-de-France	0.547	0.226	8
FR_Champagne-Ardenne	0.185	0.074	8
FR_Picardie	0.471	0.064	8
FR_Haute-Normandie	0.123	0.056	8
FR_Centre	0.613	0.081	8
FR_Basse-Normandie	0.502	0.039	8
FR_Bourgogne	0.485	0.076	8
FR_Nord-Pas-de-Calais	0.544	0.063	8
FR_Lorraine	0.244	0.099	8
FR_Alsace	0.475	0.143	8
FR_Franche-Comté	0.494	0.086	8
FR_Pays de la Loire	0.357	0.040	8
FR_Bretagne	1.043	0.039	8
FR_Poitou-Charentes	0.768	0.054	8
FR_Aquitaine	0.820	0.083	8
FR_Midi-Pyrénées	0.394	0.089	8
FR_Limousin	0.727	0.085	8
FR_Rhone-Alpes	0.800	0.122	8
FR_Auvergne	0.563	0.063	8
FR_Languedoc-Roussillon	0.536	0.110	8
FR_Provence-Alpes-Cote d'Azur	0.215	0.119	8

TABLE 5.1 List of the regions and the three indicators (*cont.*)

Region	Index of public services	Diversity index	Regional authority index
FR_Corse	0.123	0.159	8
GR_Voreia Ellada	-1.389	0.118	10
GR_Kentriki Ellada	-1.069	0.118	10
GR_Attica	-0.261	0.193	10
GR_Nisia Aigaiou, Kriti	-0.912	0.208	10
HU_Central Hungary	-1.018	0.049	10
HU_Transdanubia	-0.320	0.025	10
HU_Great Plain and North	-0.439	0.017	10
IT_Piemonte	-0.118	0.154	13
IT_Valle d'Aosta	0.696	0.126	17
IT_Liguria	-0.507	0.133	13
IT_Lombardia	-0.638	0.179	13
IT_Trentino-Alto Adige (Bolzano)	0.832	0.147	17
IT_Trentino-Alto Adige (Trento)	0.538	0.162	15
IT_Veneto	-0.462	0.174	13
IT_Friuli-Venezia Giulia	0.199	0.149	17
IT_Emia-Romagna	-0.341	0.190	13
IT_Toscana	-0.550	0.163	13
IT_Umbria	-0.190	0.183	13
IT_Marche	-0.460	0.161	13
IT_Lazio	-1.267	0.146	13
IT_Abruzzo	-0.908	0.100	13
IT_Molise	-1.236	0.050	13
IT_Campania	-2.318	0.050	13
IT_Puglia	-1.735	0.040	13
IT_Basilicata	-1.259	0.044	13
IT_Calabria	-2.189	0.065	13
IT_Sicilia	-1.828	0.049	17
IT_Sardegna	-0.887	0.037	17
NL_Northern Netherlands	1.625	0.075	15
NL_Eastern Netherlands	1.179	0.036	15
NL_Western Netherlands	1.273	0.053	15
NL_Southern Netherlands	1.077	0.123	15
PL_Lodzkie	-0.846	0.005	8

TABLE 5.1 List of the regions and the three indicators (*cont.*)

Region	Index of public services	Diversity index	Regional authority index
PL_Mazowieckie	-0.996	0.010	8
PL_Malopolskie	-0.875	0.004	8
PL_Slaskie	-1.115	0.003	8
PL_Lubelskie	-0.904	0.004	8
PL_Podkarpackie	-0.852	0.003	8
PL_Swietokrzyskie	-0.804	0.002	8
PL_Podlaskie	-0.962	0.006	8
PL_Wielkopolskie	-0.999	0.003	8
PL_Zachodniopomorskie	-0.867	0.005	8
PL_Lubuskie	-0.929	0.006	8
PL_Dolnoslaskie	-1.116	0.006	8
PL_Opolskie	-0.611	0.005	8
PL_Kujawsko-Pomorskie	-0.949	0.003	8
PL_Warminsko-Mazurskie	-0.668	0.003	8
PL_Pomorskie	-0.858	0.004	8
PT_Norte	-0.322	0.028	1
PT_Algarve	0.208	0.211	1
PT_Centro	-0.029	0.046	1
PT_Lisboa	0.141	0.135	1
PT_Alentejo	0.738	0.061	1
PT_Azores	0.512	0.027	16
PT_Madeira	0.280	0.041	16
RO_North-West	-1.135	0.004	4
RO_Centru	-1.581	0.002	4
RO_North-East	-2.014	0.003	4
RO_South-East	-2.035	0.002	4
RO_South-Muntenia	-1.774	0.001	4
RO_Bucharest-Ilfov	-2.964	0.011	4
RO_South-West Oltenia	-1.478	0.001	4
RO_West	-2.250	0.005	4
SK_Bratislava Region	-0.572	0.095	4
SK_Western Slovakia	-0.863	0.128	4
SK_Central Slovakia	-0.766	0.166	4
SK_Eastern Slovakia	-0.769	0.182	4

TABLE 5.1 List of the regions and the three indicators (*cont.*)

Region	Index of public services	Diversity index	Regional authority index
ES_Galicia	0.574	0.073	15
ES_Asturias	0.512	0.086	15
ES_Basque Community	0.665	0.123	16
ES_Navarre	0.173	0.188	16
ES_La Rioja	0.243	0.246	15
ES_Aragon	0.320	0.223	15
ES_Madrid	-0.098	0.261	15
ES_Castile-Leon	-0.055	0.122	15
ES_Castile-La Mancha	0.208	0.189	15
ES_Extremadura	0.416	0.068	15
ES_Catalonia	-0.464	0.264	15
ES_Valencian Community	0.154	0.268	15
ES_Balearic Islands	0.109	0.342	15
ES_Andalusia	0.284	0.148	15
ES_Region of Murcia	-0.036	0.270	15
ES_Canarias	0.272	0.239	15
SE_East Sweden	1.376	0.185	10
SE_South Sweden	1.453	0.114	10
SE_North Sweden	1.260	0.097	10
UK_North East. England	0.919	0.045	4
UK_North West. England	1.040	0.067	4
UK_Yorkshire and the Humber. Eng.	0.652	0.099	4
UK_East Midlands. England	1.245	0.131	4
UK_West Midlands. England	0.800	0.067	4
UK_East of England	0.763	0.075	4
UK_London. England	0.484	0.362	9
UK_South East. England	1.082	0.124	4
UK_South West. England	1.091	0.117	4
UK_Wales	0.806	0.067	12
UK_Scotland	1.277	0.090	17
UK_Northern Ireland	0.933	0.361	10

4 Analysis and Results

4.1 Estimation Strategy

In order to test our hypotheses, we estimate a cross-section model of 167 regions in Europe employing ordinary least squares (OLS) method, with standard errors clustered around the region (see Table 5.2 for pairwise correlations). The models look as follows:

$$Services_i = \alpha + \beta_1 diversity_i + \beta_2 controls_i + \varepsilon_i \quad (1)$$

$$Services_i = \alpha + \beta_1 controls_i + \beta_2 reg_autonomy_i + \beta_3 diversity_i + \beta_4 reg_autonomy_i * diversity_i + \varepsilon_i \quad (2)$$

Eq. 1 tests the first hypothesis (coefficient β_1), while eq. 2, which includes an interaction effect between regional autonomy and diversity (coefficient β_4), tests the second hypothesis.

Several control variables at the region level are included, namely: income per capita (here measured in PPP); three dummy variables controlling for i) bilingual region; ii) autonomous region;⁵⁰ iii) capital region; the (log of) population. A customary variable which is taken into account in political economy studies is the presence of strong and independent media, since they are considered an important channel through which citizens can monitor the local policy makers. For this reason, we have included the variable '*independent media*' which reflects 'the strength and effectiveness of the media in the region to expose corruption' and is part of the same QoG Survey. We also employ the share of citizens with tertiary education, as an overall proxy of the level of education of the people living in the region. Finally, we introduce our measure of diversity – the *diversity index*. Eq. 2 includes the same control variables, but it further includes our measure of *regional autonomy* jointly with the *diversity index*.

4.2 Local Public Services, Diversity and Regional Autonomy

Table 5.3 reports the results of our estimates of the model above (1). Column (1) reports the results for the overall index of local services, while the others report the results for each of the indicators: impartiality (2), corruption (3) and quality of services (4). The coefficients of the control variables are in line with what was expected. Income per capita predicts high scores in the provision of local services. Autonomous regions seem to be negatively correlated with public services, although the coefficients are never significant. Being a

⁵⁰ While this variable is clearly correlated with our measure of regional authority (rate of correlation equal to 0.20), autonomous regions often tend to receive considerable transfer from central states, thus it is important to control for this specific status.

TABLE 5.2 Pairwise correlation and descriptive statistics

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 Quality of government	1									1			
2 Diversity index	0.36	1								1.63	2.27		
3 Income per capita (log)	0.72	0.62	1							1.06	1.19	1.33	
4 Bilingual region	0.14	0.31	0.18	1						1.01	1.26	1.50	1.74
5 Autonomous region	0.08	0.06	0.11	0.51	1					1.03	1.26	1.49	1.72
6 Capital region	-0.06	0.28	0.22	-0.03	-0.10	1				0.60	0.71	0.82	0.93
7 Population of the region (log)	-0.01	-0.04	0.06	-0.07	-0.21	0.15	1			0.57	0.68	0.80	0.91
8 Independent media	0.33	0.22	0.46	0.13	0.18	-0.04	-0.02	1		0.38	0.41	0.43	0.45
9 Share of population tertiary education	-0.04	0.12	0.06	0.05	0.13	0.12	-0.80	0.07	1	0.27	0.31	0.35	0.39

TABLE 5.3 Impartiality, regional autonomy and diversity

	(1)	(2)	(3)	(4)
	Overall	Impartiality	Corruption	Quality
Diversity index	-1.615** (0.799)	1.559 (1.186)	-1.609* (0.929)	-3.473*** (0.842)
Income per capita	1.453*** (0.108)	0.522*** (0.159)	1.155*** (0.122)	0.865*** (0.170)
Bilingual region	0.200 (0.188)	0.506 (0.314)	0.481*** (0.170)	0.326 (0.265)
Autonomous region	-0.266 (0.230)	-0.149 (0.227)	-0.233 (0.177)	-0.121 (0.259)
Capital region	-0.433* (0.220)	-0.409 (0.259)	-0.516* (0.276)	-0.130 (0.187)
Population of the region	-0.414*** (0.129)	-0.211 (0.157)	-0.277** (0.120)	-0.0911 (0.148)
Independent media	-0.0402 (0.0602)	0.216*** (0.0690)	0.176*** (0.0662)	0.483*** (0.0661)
Population with tertiary education	-0.409*** (0.126)	-0.246 (0.167)	-0.289** (0.129)	-0.172 (0.147)
Constant	-12.47*** (1.154)	-4.576** (1.768)	-10.15*** (1.220)	-8.096*** (1.842)
Observations	167	167	167	167
R ²	0.621	0.365	0.567	0.592

capital region, along with the size of the region (as measured by population), are negatively correlated with services; this might depend on the presence of congestion effects. The presence of independent media is positively correlated with services, while the level of education is instead negatively correlated with the dependent variable (we discuss this further below).

By focussing on the explanatory variable – our measure of diversity – the related coefficient is negative and significant for the overall provision of public services (significant at 5 %), corruption (significant at 10 %), and their quality (significant at 1 %). This supports our hypothesis no. 1.

In this second set of estimates we interact our measure of diversity with two variables, namely the *presence of independent media* and the *level of education*. Table 5.4 reports the same estimates as for Table 5.3, but with the inclusion of

FIGURE 5.1 The effect of diversity on the provision of local services when independent media changes

the following interaction term: *presence of independent media#diversity* (column 1), and the *level of education#diversity* (column 2). The rationale is that both independent media and the level of education should mitigate the presence of bias in perception, if present. More independent media will provide more impartial information for citizens, whilst more educated people should be better equipped to process public information objectively. By looking at the results, only the presence of independent media seems to moderate the negative effect of diversity on services. As the chart in Figure 5.1 shows, the negative effect of diversity on services approaches zero and then turns positive (although not statistically significant) as long as the variable independent media grows. This suggests the presence of some misperception in the functioning of local public services which are attenuated when there are independent media in the region.

We now turn to our second hypothesis, which states that the presence of regional autonomy is expected to moderate between diversity and the performance of local public services. In order to test the moderating effect of regional authority we include the variable *diversity#regional autonomy*. Table 5.5 reports the estimate of the model as in eq. 2, for the main index of services and the three pillars – impartiality, corruption and quality. The coefficient of the joint effect of diversity and regional autonomy is positive and significant (at 5 %)

TABLE 5.4 Testing education and the presence of independent media

	(1)	(2)
	Quality of government	Quality of government
<i>Diversity index # Population with tertiary education</i>	<i>-0.315 (0.701)</i>	
Diversity index	-2.699 (2.766)	-1.786** (0.752)
Independent media	-0.0377 (0.0604)	-0.236** (0.115)
Population with tertiary education	-0.371** (0.172)	-0.413*** (0.123)
<i>Diversity index # Independent media</i>		<i>1.613** (0.752)</i>
<i>All controls included as for Table 1</i>		
Constant	-12.29*** (1.802)	-12.94*** (1.801)
Observations	167	167
R ²	0.622	0.632

limited to the case of the quality of services (column 4). By looking at Figure 5.2 reporting the average marginal effect of diversity along the levels of regional autonomy, it can be seen that the negative correlation of diversity with the quality of local public services moves closer to zero for high levels of regional autonomy. In regions in which regional autonomy is quite high (higher than 18.5), the marginal effect of diversity is still moderately negative but no longer significant. This suggests the presence of some moderating effect of regional autonomy on the relationship between diversity and the quality of local public services, although limited to their quality, in that the only significant coefficient regards the estimates of quality (column 4 of Table 5.5).

5 Discussion and Conclusion

Dealing with diversity in the European regions has become imperative in European and national policy agendas. Internal mobility is a cornerstone of

FIGURE 5.2 The effect of diversity on the provision of local services when regional autonomy changes

TABLE 5.5 Testing the moderating effect of regional authority

	(1)	(2)	(3)	(4)
	Overall	Impartiality	Corruption	Quality
Diversity index	-1.620 (1.832)	2.704 (2.457)	-2.605 (2.301)	-6.647*** (1.765)
Regional autonomy	-0.00415 (0.0203)	0.0785*** (0.0267)	-0.00374 (0.0180)	-0.0637*** (0.0166)
<i>Diversity index # Regional autonomy</i>	<i>0.0007</i> <i>(0.136)</i>	<i>-0.141</i> <i>(0.192)</i>	<i>0.0721</i> <i>(0.140)</i>	<i>0.270**</i> <i>(0.118)</i>
<i>All controls included as Table 1</i>				
Constant	-12.48*** (1.196)	-2.406 (1.661)	-10.26*** (1.272)	-9.872*** (1.751)
Observations	167	167	167	167
R ²	0.621	0.446	0.568	0.621

the EU policy, and the more new members join the EU, the more migration within the EU is bound to grow. Additionally, migration from outside the EU borders is also expected to grow considerably. Empirical studies carried out mostly in the United States and in some developing countries have by and large found that when ethnic diversity grows, the welfare state, the provision of public goods, and income redistribution tend to become more problematic. For European countries and regions, this will be one of the most relevant issues to deal with in the coming years.

This chapter provides evidence that *i*) the presence of a heterogeneous composition of population in the European regions is associated to a relatively worse public perception of the provision of local public goods; and *ii*) regional autonomy (to some extent) can act as a moderating mechanism between diversity and local public services.

The first result is in line with theories about diversity and public policy, and with several empirical studies that detected a negative correlation between diversity and the provision of public goods. As a matter of fact, most of this research has been carried out in cities and countries with a high presence of ethnic heterogeneity, as for instance in some American cities, and in some developing countries; to our knowledge this is the first attempt carried out across a large sample of European regions.

Another difference of this study is that our measure of diversity does not take into account ethnicity or socio-economic status but is limited to nationality. On the one hand this has some clear limitations, in that ethnic diversity is a remarkable source of heterogeneity. However, our broader measure of diversity allows us to address one of the cornerstones of European integration, that of the internal mobility of the labour force. Internal mobility has often been identified by policy makers as a fundamental driver of reciprocal learning, a carrier of knowledge, as well as a great means to make the labour market work more efficiently, by reducing disparities in the rates of unemployment across European countries. As such, the internal mobility of citizens is regarded as a pillar of social cohesion in Europe. However, recent debates have redirected attention to a number of problems that internal migration can create on the sustainability of the welfare states of recipient countries. Within this context, our evidence raises an issue for policy makers. This will be further exacerbated by the fact that since our data refer to 2011, it is more than likely that diversity has increased since, both because of an increase in mobility within Europe since the financial crisis in 2008, and due to the recent surge in migration from outside the EU. This calls for future research with updated census data.

It is also possible that our data underestimates the pressure of illegal immigrants on the welfare state; they are not captured by data on foreign residents,

but can, however, benefit from some local public services, particularly public health. Finally, we do not take into account within-country mobility which can in some cases be an additional source of diversity and pressure on local welfare.

Our second piece of evidence shows that regional authority can have a moderating effect between diversity and the provision of local services. This partially confirms one of the main claims of fiscal federalism theory, according to which bringing political authority and administration closer to the people is effective, particularly when there are heterogeneous local communities which are likely to be reflected in heterogeneous preferences. In these cases, regional authority should be more effective than centralisation in making local public policies more responsive to the heterogeneous preferences. There are counter arguments that are worth mentioning. Firstly, local governments can be more easily captured, as well as corrupted, by local constituencies. Secondly, in times of crisis and budget constraints, regional governments can have fewer resources to devote to welfare. Hence, it is possible that central governments are more effective than regional governments in dealing with a swift increase in the demand for local public services, to the extent that they are able to mobilise a larger amount of resources. Further, more centralised governments can be better equipped in managing migration flows than more decentralised ones, for example by being better able to redistribute immigrants, thus avoiding excessive concentrations in some regions. These are open questions that remain to be explored at greater lengths and with more recent data.

Bibliography

- Alesina, Alberto, Reza Baqir and William Easterly. "Public Goods and Ethnic Divisions." *The Quarterly Journal of Economics* 114, no. 4 (1999): 1243–1284. <https://doi.org/10.1162/003355399556269>.
- Alesina, Alberto, and Eliana La Ferrara. "Ethnic Diversity and Economic Performance." *Journal of Economic Literature* 43, no. 3 (September 2005): 762–800. <https://doi.org/10.1257/002205105774431243>.
- Alesina, Alberto, and Edward Ludwig Glaeser. *Fighting Poverty in the US and Europe: A World of Difference*. Oxford: Oxford University Press, 2004.
- Alesina, Alberto, and Ekaterina Zhuravskaya. "Segregation and the Quality of Government in a Cross Section of Countries." *The American Economic Review* 101, no. 5 (2011): 1872–1911.
- Baskaran, Thushyanthan, and Lars P. Feld. "Fiscal Decentralization and Economic Growth in OECD Countries: Is There a Relationship?." *Public Finance Review* 41, no. 4 (July 2013): 421–445. <https://doi.org/10.1177/1091142112463726>.

- Brennan, Geoffrey and James M. Buchanan. *The Power to Tax: Analytic Foundations of a Fiscal Constitution*, Cambridge: Cambridge University Press, 1980.
- Camussi, Silvia, Anna Laura Mancini and Pietro Tommasino. "Does Trust Influence Social Expenditures? Evidence from Local Governments." *Kyklos* 71, no. 1 (2018): 59–85. <https://doi.org/10.1111/kykl.12162>.
- Charron, Nicholas, and Victor Lapuente. "Why Do Some Regions in Europe Have Higher Quality of Government?." *QoG Working Paper Series*, no. 1 (January 2011): 1–38. https://www.pol.gu.se/digitalAssets/1357/1357846_2011_1_charron_lapuente.pdf.
- Charron, Nicholas, Lewis Dijkstra and Victor Lapuente. "Regional Governance Matters: Quality of Government within European Union Member States." *Regional Studies* 48, no. 1 (2014): 68–90.
- Christainsen, Gregory B. "Biology, Immigration, and Public Policy." *Kyklos* 65, no. 2 (2012): 164–178. <https://doi.org/10.1111/j.1467-6435.2012.00532.x>.
- Clark, Tom, Robert D. Putnam and Edward Fieldhouse. *The Age of Obama: The Changing Place of Minorities in British and American Society*. Oxford: Oxford University Press, 2013.
- Congleton, Roger D., Andreas Kyriacou and Jordi Bacaria. "A Theory of Menu Federalism: Decentralization by Political Agreement." *Constitutional Political Economy* 14, no. 3 (2003): 167–190.
- Cutler, David M., Douglas W. Elmendorf and Richard J. Zeckhauser. "Demographic Characteristics and the Public Bundle." *National Bureau of Economic Research NBER Working Paper*, no. 4283 (February 1993): 1–55. <https://doi.org/10.3386/w4283>.
- Dennison, James, and Andrew Geddes. "Brexit and the Perils of 'Europeanised' Migration." *Journal of European Public Policy* 25, no. 8 (2018): 1137–1153. <https://doi.org/10.1080/13501763.2018.1467953>.
- Diaz-Serrano, Luis, and Andrés Rodríguez-Pose. "Decentralization, Happiness and the Perception of Institutions." *IZA Discussion Paper*, no. 5647 (April 2011): 1–28. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1812532.
- Diaz-Serrano, Luis, and Andrés Rodríguez-Pose. "Decentralization, Subjective Well-Being, and the Perception of Institutions." *Kyklos* 65, no. 2 (2012): 179–193. <https://doi.org/10.1111/j.1467-6435.2012.00533.x>.
- European Institute of Public Administration (EIPA). "Division of Powers between the European Union, the Member States and Regional and Local Authorities." December 2012: Page range. https://cor.europa.eu/en/engage/studies/Documents/division_of_powers/division_of_powers.pdf.
- Ezcurra, Roberto, and Andrés Rodríguez-Pose. "Political Decentralization, Economic Growth and Regional Disparities in the OECD." *Regional Studies* 47, no. 3 (2012): 388–401. <https://doi.org/10.1080/00343404.2012.731046>.
- Filippetti, Andrea, and Giovanni Cerulli. "Are Local Public Services Better Delivered in More Autonomous Regions? Evidence from European Regions Using a

- Dose-Response Approach." *Papers in Regional Science* 97, no. 3 (January 2017): 801–826. <https://doi.org/10.1111/pirs.12283>.
- Filippetti, Andrea and Sacchi, Agnese. "Decentralisation and Economic Growth Reconsidered: The Role of Regional Authority." *Environment and Planning C: Government and Policy* 34, no. 8 (2016): 1793–1824.
- Finseraas, Henning, and Niklas Jakobsson. "Trust and Ethnic Fractionalization: The Importance of Religion as a Cross-Cutting Dimension." *Kyklos* 65, no. 3 (July 2012): 327–39. <https://doi.org/10.1111/j.1467-6435.2012.00541.x>.
- Habyarimana, James, Macartan Humphreys, Daniel N. Posner and Jeremy M. Weinstein. "Why Does Ethnic Diversity Undermine Public Goods Provision?." *American Political Science Review* 101, no. 4 (2007): 709–725. <https://doi.org/10.1017/S0003055407070499>.
- Hooghe, Liesbet, Gary Marks and Arjan H. Schakel. "Operationalizing Regional Authority: A Coding Scheme for 42 Countries, 1950–2006." *Regional and Federal Studies* 18, no. 2–3 (2008): 123–142.
- Kyriacou, Andreas P. "Ethnic Segregation and the Quality of Government: The Importance of Regional Diversity." *Constitutional Political Economy* 23, no. 2 (2012): 166–180.
- Kyriacou, Andreas P. "Ethnic Group Inequalities and Governance: Evidence from Developing Countries." *Kyklos* 6, no. 1 (2013): 78–101. <https://doi.org/10.1111/kykl.12012>.
- Marks, Gary, Liesbet Hooghe and Arjan H. Schakel. "Measuring Regional Authority." *Regional and Federal Studies* 18, no. 2–3 (2008): 111–121.
- Marks, Gary, Liesbet Hooghe and Arjan H. Schakel. "Patterns of Regional Authority." *Regional and Federal Studies* 18, no. 2–3 (2008): 167–181.
- Marschall, Melissa J., and Dietlind Stolle. "Race and the City: Neighborhood Context and the Development of Generalized Trust." *Political Behavior* 26, no. 2 (2004): 125–153.
- Martinez-Vazquez, Jorge, Santiago Lago-Peñas and Agnese Sacchi. "The Impact of Fiscal Decentralization: A Survey." *Journal of Economic Surveys* 31, no. 4 (2016): 1095–1129. <https://doi.org/10.1111/joes.12182>.
- Miguel, Edward, and Mary Kay Gugerty. "Ethnic Diversity, Social Sanctions, and Public Goods in Kenya." *Journal of Public Economics* 89, no. 11 (2005): 2325–2368. <https://doi.org/10.1016/j.jpubeco.2004.09.004>.
- Oates, Wallace E. *Fiscal Federalism*. New York: Harcourt Brace Jonanovitch, 1972.
- Olson, Mancur. "Dictatorship, Democracy, and Development." *American Political Science Review* 87, no. 3 (1993): 567–576.
- Ozgen, Ceren, Peter Nijkamp and Jacques Poot. "The Impact of Cultural Diversity on Firm Innovation: Evidence from Dutch Micro-Data." *IZA Journal of Migration* 2, no. 1 (2013): 1–18. <https://doi.org/10.1186/2193-9039-2-18>.
- Ozgen, Ceren, Cornelius Peters, Annekatrin Niebuhr, Peter Nijkamp and Jacques Poot. "Does Cultural Diversity of Migrant Employees Affect Innovation?." *International Migration Review* 48, no. 1 (2014): 377–416. <https://doi.org/10.1111/imre.12138>.

- Quality of Government Institute of the University of Gothenborg. "Measuring the Quality of Government and Subnational Variation." *Report for the European Commission Directorate-General Regional Policy Directorate Policy Development* (December 2010): Page range. https://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/2010_government_1.pdf.
- Rodríguez-Pose, Andrés, and Roberto Ezcurra. "Is Fiscal Decentralization Harmful for Economic Growth? Evidence from the OECD Countries." *Journal of Economic Geography* 11, no. 4 (July 2011): 619–643. <https://doi.org/10.1093/jeg/lbq025>.
- Sacchi, Agnese, and Simone Salotti. "A Comprehensive Analysis of Expenditure Decentralization and of the Composition of Local Public Spending." *Regional Studies* 50, no. 1 (2014): 93–109. <https://doi.org/10.1080/00343404.2014.893387>.
- Stichnoth, Holger, and Karine van der Straeten. "Ethnic Diversity, Public Spending, and Individual Support for The Welfare State: A Review of the Empirical Literature." *Journal of Economic Surveys* 27, no. 2 (2013): 364–389. <https://doi.org/10.1111/j.1467-6419.2011.00711.x>.
- Stolle, Dietlind, Stuart Soroka and Richard Johnston. "When Does Diversity Erode Trust? Neighborhood Diversity, Interpersonal Trust and the Mediating Effect of Social Interactions." *Political Studies* 56, no. 1 (2008): 57–75.
- Tanzi, Vito. "Pitfalls on the Road to Fiscal Decentralization." *Working Papers*, no. 19 (April 2001): 1–12. <https://carnegieendowment.org/files/19Tanzi.pdf>.
- Tiebout, Charles M. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64, no. 5: 416–424.
- Tselios, Vassilis, Philip McCann and Jouke van Dijk. "Understanding the Gap between Reality and Expectation: Local Social Engagement and Ethnic Concentration." *Urban Studies* 54, no. 11 (August 2017): 2592–2612. <https://doi.org/10.1177/0042098016650395>.