



Inequality and social capital in the EU regions: a multidimensional analysis

Francesca Parente

To cite this article: Francesca Parente (2019) Inequality and social capital in the EU regions: a multidimensional analysis, *Regional Studies, Regional Science*, 6:1, 1-24, DOI: [10.1080/21681376.2018.1558105](https://doi.org/10.1080/21681376.2018.1558105)

To link to this article: <https://doi.org/10.1080/21681376.2018.1558105>



© 2019 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 03 Jan 2019.



Submit your article to this journal [↗](#)



Article views: 993



View related articles [↗](#)



View Crossmark data [↗](#)

Inequality and social capital in the EU regions: a multidimensional analysis

Francesca Parente 

ABSTRACT

This paper focuses on the interactions between social capital and production structure in their relation with regional inequality. Combining survey data with available regional databases for the EU-15, it provides a panel data analysis of multidimensional inequalities based on the idea that social capital is a fundamental factor determining its regional levels, along with the economic specialization of regions. Results confirm an inverse relation between inequality and social capital. At the same time, they highlight the positive impact of production clusters on the regional environment. Findings suggest that the joint effect of predictors is ambiguous, and may so be dependent on the different sorts of local specialization and social capital endowment.

ARTICLE HISTORY

Received 7 January 2018; Accepted 8 December 2018

KEYWORDS

European Union; inequality; region; production specialization; social capital

INTRODUCTION

This paper contributes to the debate on regional disparities, and how they can possibly be reduced. Drawing upon both economic and sociological literature, it provides a multidimensional study of the role of social capital in the socioeconomic dynamics of regions.

Many previous analyses of inequality have inferred on its interaction with social capital. The direction of the relation is still not clear, but an inverse one has often been recognized to be in place (Barone & Mocetti, 2016; De Blasio & Nuzzo 2012; d'Hombres, Elia, & Weber, 2013). In fact, social capital is still a vaguely defined concept, which in the socioeconomic literature identifies a complex variety of elements, such as civic involvement and the participation of citizens (Putnam, 1993), level of trust (Fukuyama, 1995), and different kinds of social relations (Bourdieu, 1986; Coleman, 1988).

The sociological analysis has naturally devoted a higher concern to the conceptual definition of its theoretical construct. The economic analysis has instead been more interested in its connections with economic variables (Barone, de Blasio, & Sestito, 2014). Many scholars have studied social capital in its positive effects on growth (Beugelsdijk & van Schaik, 2001, 2005, 2009; Helliwell & Putnam, 1995; Whiteley, 2000). At the regional scale, this often translated to digging into the ties social capital has been proved to have with the regional production structure, especially with clusters of industries and their impulse on local virtuous dynamics

CONTACT

(Corresponding author)  francesca.parente@uniroma1.it

'Economics and Law' Department, Faculty of Economics, Sapienza Università di Roma, Rome, Italy.

are standardized values obtained through linear combination of all the variables included in the PCA and represent the best possible synthesis of the data (Di Franco, 2014). The first component seemed to relate to the degree of diversification of regional business structures: its correlation with the count of industries in which regions have $LQ_S > 2$ was 60%. The second component pertained more to the business environment features, and content of innovation. It showed a strong correlation with both the regional innovation scoreboard (55%) and the number of patents (43%, when the correlation between these two is 50%).

⁹ The Alkire and Foster (2010) adaptation of the Foster, Lopez-Calva, and Szekely (2005) method. That is why this index is somewhere also referred to as 'FLS IHDI'.

¹⁰ Also said, *Jacobs externalities* from the studies developed by the American urbanist Jane Jacobs (Jacobs, 1969), these are related to the proximity of firms from *different* industries, and the knowledge spillovers promoting innovation and growth, which their variety facilitates. They differ from the classic Marshall–Arrow–Romer (MAR) externalities because these focus on the proximity of firms from *common* industries. Other relevant speculations in this regard have been produced, especially by Porter (1990) and, more recently, by Boschma (i.e., the *related* variety; Frenken, van Oort, Verburg, & Boschma, 2004). For a review, see Glaeser, Kallal, Scheinkman, and Shleifer (1992).

¹¹ Another way of saying this is that the slopes of the regression lines between inequality and trust are different for the different categories of production clusters' structure. φ indicates how different those slopes are.

¹² The only ESS wave reporting such detail, distinguishing 10 sorts of voluntary organizations, is that from 2002.

ORCID

Francesca Parente  <http://orcid.org/0000-0002-1945-7794>

REFERENCES

- Alesina, A., & La Ferrara, E. (2002). Who trusts others? *Journal of Public Economics*, 85, 207–234.
- Alkire, S., & Foster, J. (2010). *Designing the inequality-adjusted human development index (IHDI)* (2010 HDR Background Paper No. 10).
- Aranguren, M. J., Franco, S., Ketels, C., Murciego, A., Navarro, M., & Wilson, J. R. (2010). *Benchmarking regional competitiveness in the European cluster observatory*. Europe Innova. Methodological Background Paper 1.
- Aranguren, M. J., & Wilson, J. R. (2013). What can experience with clusters teach us about fostering regional Smart Specialisation. *Ekonomiaz* N. 83, 2. cuatrimestre, 2013.
- Atkinson, A. B. (1983). *The economics of inequality*. Oxford: Oxford University Press.
- Atkinson, A. B. (2007). The distribution of earnings in OECD countries. *International Labour Review*, 146(1–2), 41–60.
- Atkinson, A. B. (2013a). Reducing income inequality in Europe. *Journal of European Labor Studies*, 2, 1–12.
- Atkinson, A. B. (2013b). *Where is inequality headed?* Arrow Lecture, Stanford University.
- Baker, W. E. (1990). Market networks and corporate behavior. *American Journal of Sociology*, 96, 589–625.
- Baltagi, B. H. (2008). *Econometric analysis of panel data*. Chichester: Wiley.
- Banfield, E. C. (1958). *The moral reasons of a backward society*. Glencoe: Free Press. Research Center in Economic Development and Cultural Change, The University of Chicago.
- Barca, F. (2009). An agenda for a reformed Cohesion Policy. A place-based approach to meeting European Union challenges and expectations.
- Barone, G., de Blasio, G., & Sestito, P. (2014, November 17). *Capitale sociale, economia, politica economica*. Workshops and Conferences. Rome: Banca d'Italia.

- Barone, G., & Mocetti, S. (2016). *Inequality and trust: New evidence from panel data*. Bank of Italy Research division.
- Baum, C. F. (2006). *An introduction to econometrics using Stata*. College Station, TX: Stata Press.
- Beccattini, G. (1990). The Marshallian district as a socio-economic notion. In F. Pyke, G. Beccattini, & W. Sengenberger (Eds.), *Industrial districts and intra-firm collaboration in Italy*. Geneva: IILS.
- Beccattini, G. (2000). *Dal distretto industriale allo sviluppo locale*. Turin: Bollati Boringhieri.
- Beccattini, G., Bellandi, M., & De Propriis, L. (2009). *A handbook of industrial districts*. Cheltenham: Elgar.
- Beugelsdijk, S., & Smulders, S. (2009). *Bonding and bridging social capital and economic growth* (CentER Discussion Paper; Vol. 2009-27). Tilburg: Tilburg University.
- Beugelsdijk, S., & van Schaik, T. (2001). *Social capital and regional economic growth* (CentER Discussion Paper 2001-102). Tilburg: Tilburg University.
- Beugelsdijk, S., & van Schaik, T. (2005). Social capital and growth in European regions: An empirical test. *European Journal of Political Economy*, 21, 301–324.
- Boschma, R. (2005). Proximity and innovation: A critical assessment. *Regional Studies*, 39(1), 61–74.
- Boschma, R., Cortinovis, N., Xiao, J., & van Oort, F. (2016). *Quality of government and social capital as drivers of regional diversification in Europe, No 1610*. Utrecht: PEEG Utrecht University.
- Boschma, R., & Giannelle, C. (2014). *Regional branching and Smart Specialisation policy, No JRC88242, JRC – Technical Reports, S3 Policy Brief Series 6/2014*. Luxembourg: Publications Office of the European Union.
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York, NY: Greenwood.
- Burt, R. S. (1992). *Structural holes. The social structure of completion*. Cambridge, MA: Harvard University Press.
- Celata, F. (2009). *Spazi di produzione. Una prospettiva relazionale*. Turin: G. Giappichelli.
- Celata, F., & Rossi, U. (2009). Industrial district. In R. Kitchin & N. Thrift (Eds.), *International encyclopaedia of human geography* (pp. 389–395). London: Elsevier.
- Charron, N., Dijkstra, L., & Lapuente, V. (2014). Regional governance matters: Quality of government within European Union member states. *Regional Studies*, 48(1), 68–90. doi:10.1080/00343404.2013.770141
- Coleman, J. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95–S120.
- Dasgupta, P., & Serageldin, I. (2000). *Social capital: A multifaceted perspective*. Washington, DC: World Bank.
- De Blasio, G., & Nuzzo, G. (2012). *Capitale sociale e disuguaglianza in Italia* (QEF No. 116). Roma: Banca d'Italia.
- De Blasio, G., Scalise, D., & Sestito, P. (2014). Universalism vs. Particularism: A round trip from sociology to economics. *SSRN Electronic Journal*, 212. doi:10.2139/ssrn.2419937
- d'Hombres, B., Elia, L., & Weber, A. (2013). *Multivariate analysis of the effect of income inequality on health, social capital, and happiness* (Report EUR 26488 EN). JRC Scientific and Policy Reports.
- Di Franco, G. (2014). *Il poliedro coesione sociale. Analisi teorica ed empirica di un concetto sociologico*. Milano: Franco Angeli.
- Di Franco, G., & Marradi, A. (2013). *Factorial analysis and principal component analysis*. Bologna: Il Mulino.
- European Commission. (2014). *Sixth report on economic, social and territorial cohesion*. Luxembourg: Publications Office of the European Union.
- European Social Survey (ESS). (2013). Retrieved from www.europeansocialsurvey.org
- European Values Study (EVS). (2017). Retrieved from www.europeanvaluesstudy.eu
- Flap, H. D. (1991). Social capital in the reproduction of inequality, a review. *Comparative Sociology of Family, Health and Education*, 20, 6179–6202.
- Florida, R. (2005). *Cities and the creative class*. Oxford: Routledge.
- Foray, D., David, P. A., & Hall, B. H. (2011). *Smart Specialisation: From academic idea to political instrument, the surprising career of a concept and the difficulties involved in its implementation* (Working Paper 2011-001). Lausanne: Management of Technology and Entrepreneurship Institute.
- Foster, J. E., Lopez-Calva, L., & Szekely, M. (2005). Measuring the distribution of human development: Methodology and an application to Mexico. *Journal of Human Development*, 6, 5–25.
- Frenken, K., van Oort, F. G., Verburg, T., & Boschma, R. A. (2004). *Variety and regional economic growth in the Netherlands*. Papers in Evolutionary Economic Geography (PEEG) 0502, Utrecht University, Department of Human Geography and Spatial Planning, Group Economic Geography, revised Dec 2004.

- Fukuyama, F. (1995). *Trust: The social virtues and the creation of prosperity*. New York, NY: Free Press.
- Ganong, P., & Shoag, D. (2017). Why has regional income convergence in the U.S. declined? *Journal of Urban Economics* [Internet], 102, 76–90.
- Glaeser, E., Laibson, D. I., & Sacerdote, B. (2002). An economic approach to social capital. *Economic Journal*, 112 (483), F437–F458.
- Glaeser, E. L., Kallal, H. D., Scheinkman, J., & Shleifer, A. (1992). Growth in cities. *Journal of Political Economy*, 100(6), 1126–1152.
- Glaeser, E. L., Resseger, M. G., & Tobio, K. (2008). *Urban inequality* (NBER Working Paper No. 14419).
- Gordon, I., & McCann, P. (2000). Industrial clusters: Complexes, agglomeration and/or social networks? *Urban Studies*, 37(3), 513–532.
- Granovetter, M. (1974). *Getting a job: A study of contacts and careers*. Cambridge, MA: Harvard University Press.
- Greene, W. H. (2008). *Econometric analysis* (6th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Helliwell, J., & Putnam, R. (1995). Economic growth and social capital in Italy. *Eastern Economic Journal*, 21, 295–307.
- Hollanders, H., Es-Sadki, N., Buligescu, B., Rivera Leon, L., Griniece, E., & Roman, L. (2014). *Regional innovation scoreboard*. Belgium: Publications Office of the European Union.
- Iacofano, D., & Goltsman, S. (2007). *The inclusive city: Design solution for buildings, neighbourhoods, and urban spaces*. Berkeley, CA: MIG Communications.
- Iammarino, S., & McCann, P. (2006). The structure and evolution of industrial clusters: Transactions, technology and knowledge spillovers. *Research Policy*, 35(7), 1018–1036.
- Jacobs, J. (1969). *The economy of cities*. Random House, 201 East 50th Street, New York 10022.
- Ketels, C., & Protsiv, S. (2013). *Clusters and the new growth path for Europe* (Working Paper No. 14). Retrieved from WWWforEurope
- Ketels, C., Sölvell, Ö., & Lindqvist, G. (2008). Industrial specialization and regional clusters in the ten new EU member states. *Competitiveness Review*, 18(1/2), 104–130. doi:10.1108/105954208180874637
- Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation. *Quarterly Journal of Economics*, 112(4), 1251–1288.
- Kohler, U., & Kreuter, F. (2009). *Data analysis using Stata* (2nd ed.). College Station, TX: Stata Press.
- Kovacevic. (2010). *Measurement of inequality in human development – A review* (Human Development Research Paper 2010/35).
- Krugman, P. (1990). *Cities in space: Three simple models* (NBER Working Paper, 3607). National Bureau of Economic Research.
- Krugman, P. (1991). *Geography and trade*. Cambridge, MA: MIT Press.
- Lefebvre, H. (1991). *The production of space*. Cambridge, MA: Basil Blackwell.
- Markusen, A. (1996). Sticky places in slippery space: A typology of industrial districts. *Economic Geography*, 72(3), 293–313.
- Marshall, A. (1920). *Principles of economics* (8th ed.). London: MacMillan (first edition 1890).
- Narayan, D. (2002). Bonds and bridges: Social capital and poverty. In S. Ramaswamy (Ed.), *Social capital and economic development: Well-being in developing countries* (pp. 58–83). Cheltenham: Edward Elgar.
- Parente, F. (2017). *Productive structure and spatial inequalities: The role of innovative clusters*. 13th IPGRC 2017 (pp. 990–1002). Manchester: University of Salford. Retrieved from <http://usir.salford.ac.uk/43913/>
- Parente, F. (2018). A multidimensional analysis of the EU regional inequalities. *Social Indicators Research*. doi:10.1007/s11205-018-2000-6
- Park, R. E., Burgess, E. W., & McKenzie, R. D. (1925). *The city*. Chicago, IL: University of Chicago Press.
- Pastor, M., Sanchez-Lopez, A., & Ito, J. (2015). *Linking innovation with inclusion. Demography, equity, and the future of San Diego*. Los Angeles, CA: USC PERE.
- Porter, E. M. (1990). *The competitive advantages of nations*. London: Macmillan.
- Porter, E. M. (1998). Clusters and the new economics of competition. *Harvard Business Review*, 76, 77–90.
- Porter, E. M. (2003a). The economic performance of regions. *Regional Studies*, 37(6/7), 549–578.

- Porter, E. M. (2003b). Location, clusters, and company strategy. In G. Clark, M. Feldman, & M. Gertler (Eds.), *Oxford handbook of economic geography*. Oxford: Oxford University Press. Retrieved from <https://www.hbs.edu/faculty/Pages/item.aspx?num=5432>
- Porter, E. M., Stern, S., & Artavia Lorea, R. (2013). *The social progress index*. Washington, DC: Social Progress Imperative.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24, 1–24.
- Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon & Schuster.
- Rodríguez-Pose, A. (1998). Social conditions and economic performance: The bond between social structure and regional growth in Western Europe. *International Journal of Urban and Regional Research*, 22, 443–459.
- Rodríguez-Pose, A., & Crescenzi, R. (2008). Research and development, spillovers, innovation systems, and the genesis of regional growth in Europe. *Regional Studies*, 42(1), 51–67.
- Salvareda, W., Nolan, B., & Smeeding, T. M. (2011). *The oxford handbook of economic inequality*. Oxford: Oxford University Press.
- Sen, A. K. (1987). *The standard of living*. Oxford: Oxford University Press.
- Sen, A. K. (2009). *The idea of justice*. Cambridge, MA: Belknap/Harvard University Press.
- Stock, J. H., & Watson, M. W. (2007). *Introduction to econometrics* (2nd ed.). Boston, MA: Pearson Addison Wesley.
- UNDP. (2016). *Human development report 2016. Human development for everyone*. Retrieved from http://www.undp.org/content/undp/en/home/librarypage/hdr/human_developmentreport2011.html
- UNDP. (2018). *Human development report* (Technical Notes). Oxford: Oxford University Press.
- van Schaik, T. (2002). *Social capital in the European values studies surveys*. Tilburg: Tilburg University.
- Vergati, S. (2000). *Affari di famiglia. Il neofamilismo: reti, valori, stili di vita*. Bonanno: Acireale-Roma.
- Vergati, S. (2014). Capitale sociale, coesione sociale e integrazione sociale. In *Il poliedro coesione sociale. Analisi teorica ed empirica di un concetto sociologico* (pp. 89–118). Milan: Franco Angeli.
- Weighting ESS Data. (2014). Retrieved from https://www.europeansocialsurvey.org/docs/methodology/ESS_weighting_data_1.pdf
- Whiteley, P. F. (2000). Economic growth and social capital. *Political Studies*, 48, 443–466.
- Wooldridge, J. M. (2002). *Econometric analysis of cross section and panel data*. Cambridge, MA: The MIT Press.
- Zak, P. J., & Knack, S. (2001). Trust and growth. *Economic Journal*, 111, 295–321.

APPENDIX A

European Social Survey (ESS) questions (§2)

Selected questions from the survey were the following:

Literal Question A3: Using this card, generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?

Literal Question A4: Using this card, do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?

Literal Question A5: Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?

A3–A5's numeric answers ranged from 0 to 10, where 0 means you can't be too careful/people will try to take advantage of you/people are mostly looking out for themselves, and 10 means that most people can be trusted/they try to be fair/they try to be helpful.