Di Novi, C., Piacenza, M., Robone, S., Turati, G. (2019). "Does fiscal decentralization affect regional disparities in health? Quasi-experimental evidence from Italy", *Regional Science and Urban Economics*, Elsevier, vol. 78 (103465).

The emergency caused by COVID-19 in Italy triggered a debate on the measures taken by the central and the regional governments to control the pandemic. Some politicians and health policy experts have judged as inadequate the current decentralized organization for an effective management of the crisis, thus calling for a re-centralization of the powers now attributed to the regions. At the same time, the pandemic has relaunched the debate on socio-economic health inequalities started with the 2008 financial crisis, since the risk of contracting COVID-19 is higher and the outcome is worst for individuals at the lower end of the income distribution. In turn, this has stimulated a discussion on the need for the Italian NHS to pay more attention in the future to the risk differentials across social groups, in order to contain the inequalities in health outcomes.

These two topics – the decentralized organization of health policy and health inequalities - are the focus of the analysis in a paper by Di Novi, Piacenza, Robone and Turati, recently published in Regional Science and Urban Economics. The authors investigate the consequences of fiscal decentralization in Italy on both *between-* and *within-regional* disparities in health outcomes, considering the years 1994-2007, a period before the onset of the financial crisis and the adoption of Recovery Plans. Health outcomes are measured by using self-assessed health (SAH), taking advantage of individual survey data.

The analysis exploits the reform that has increased *fiscal autonomy* of Italian regions since 1998, by substituting transfers from central government with a new regional tax on value added (*IRAP*) and a regional surcharge on the Personal Income Tax (*Addizionale Regionale IRPEF*). As a consequence of the reform, regions characterized by a higher per-capita income (a proxy of the higher tax base for the two new taxes) have become more fiscally autonomous than regions with a lower per-capita income. In turn, according to modern theories of fiscal federalism, this would have made local politicians more accountable towards their citizens in richer regions than in poorer ones.

First, the authors assess the *between-regional* variation in median SAH by computing the coefficient of variation across regions before and after tax decentralization reform. Results suggest that *between-regional* disparities in median SAH did not show any change or even slightly decreased, supporting the view that tax decentralization did not exacerbate health disparities *between* regions. This happened mainly because a system of *equalization grants* was implemented and adequate resources remained available in all regions.

Second, the authors estimate the *causal impact* of tax decentralization reform on the *within-regional* inequality in SAH, adopting a *multivalued treatment* approach that exploits the *differences in the level of income* across Italian regions. Inequality in SAH is computed using the Kobus - Milos index for ordinal data. Descriptive evidence on the evolution of *within-regional* disparities in SAH in poor and rich regions is represented in Figures 1a and 1b. Health inequalities in the first group of regions seems to have increased after tax decentralization reform, whereas inequalities in the second group appear relatively stable across the whole period. Therefore, one would expect a reduction in SAH inequalities associated to a higher fiscal autonomy.

Figure 1a. *KM* index in low-GDP regions, by region and year

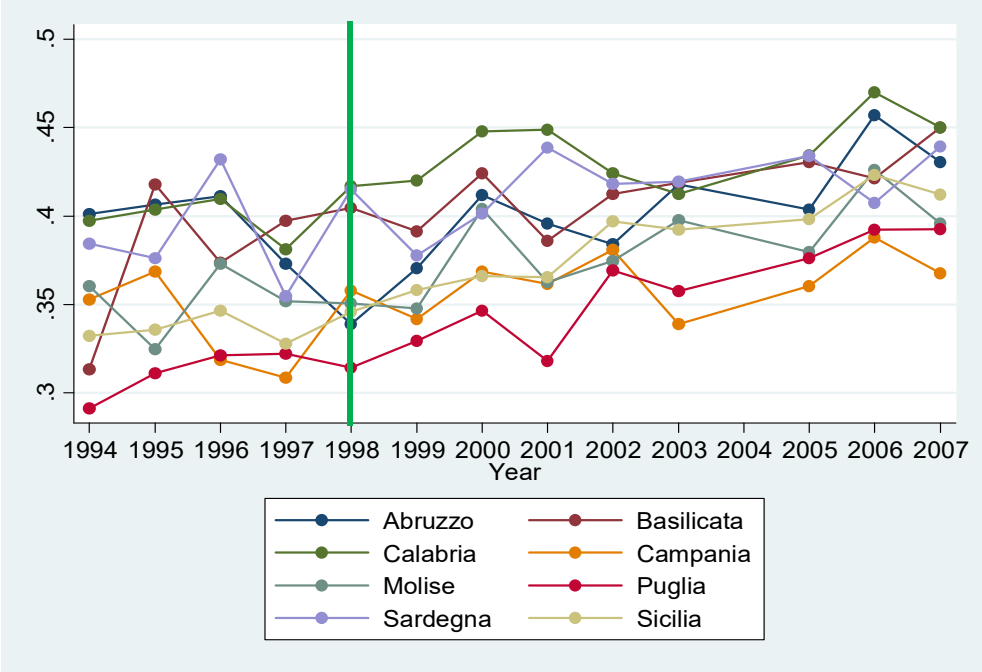
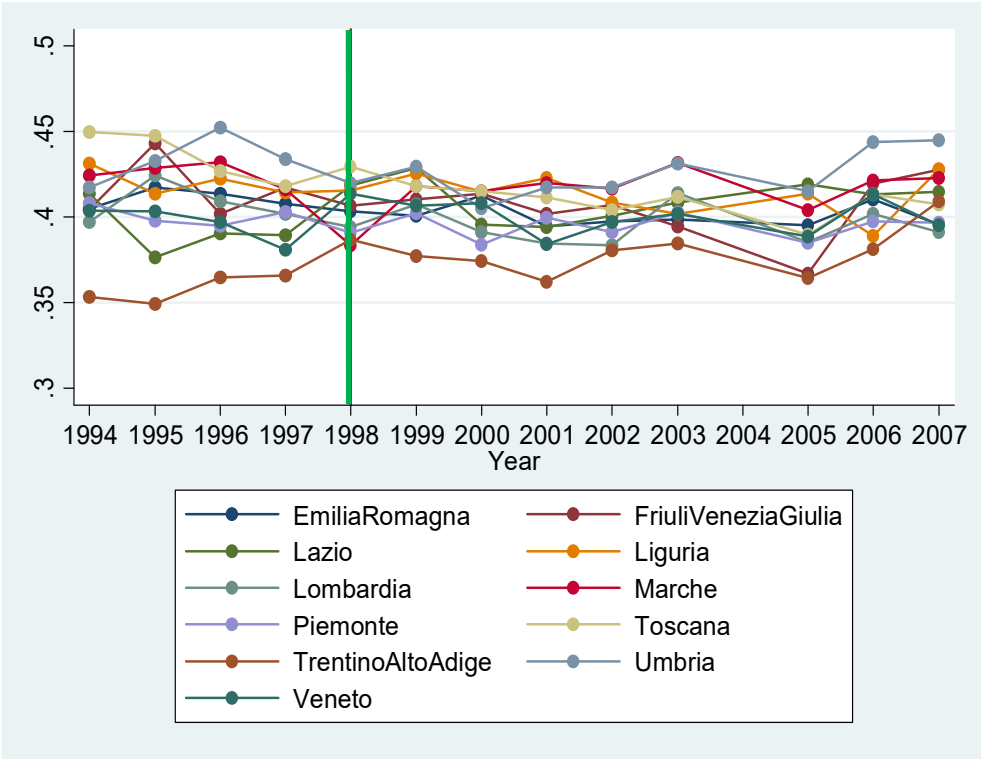


Figure 1b. *KM* index in high-GDP regions, by region and year



Econometric results show that the impact of tax decentralization reform differs according to the degree of exposure to treatment, with much stronger effects in terms of containment of health inequalities in *richer* regions than in *poorer* ones. The authors also investigate possible explanations for this evidence. Modern theories of fiscal federalism suggest a story of better *incentives* for local officials. The authors find that more accountable politicians in richer regions are likely to supply more *appropriate* and more *targeted services*. They estimate an increase in the probability of

individuals with medium-low education to be healthier after tax decentralization, to schedule more appointments with Local Health Authority (e.g., for taking prevention tests) and to access more home care services, while reducing the utilization of inpatient care and emergency care services; and these effects are more pronounced for the individuals living in richer regions.

Overall, the findings of this study support the view that outcomes of fiscal decentralization, in terms of both efficiency and equity, depends on the level of development, which eventually determined the real degree of fiscal autonomy of Italian regions in the period under study. In the Italian context, this evidence backs the institutional design of a *"two-way" fiscal federalism*. For the richer regions of the country, one can strengthen fiscal autonomy and expect to obtain better outcomes, via improved fiscal accountability following the substantial increase in own revenues. In contrast, for the Italian *Mezzogiorno*, it would be better to first implement *growth-enhancing policies* aimed at reducing the gap with more developed regions in terms of fiscal capacity, and only then push on autonomy and tax decentralization.