Subjective well-being inequalities in European cities. What explains that large cities are more unequal?

Nicola Pontarollo,[♣] Vicente Royuela,[♠] Paolo Veneri[♥]

[♣] University of Brescia, Italy
[♠] AQR-IREA Research Group - University of Barcelona, Spain
[♥] Gran Sasso Science Institute, Italy

Extended abstract

This study assesses the contribution of individual and contextual characteristics in explaining life satisfaction inequalities within European cities. By drawing on a decomposition method based on Recentred Influence Function (RIF) regression, we shed light on the persistently higher inequalities and lower levels of life satisfaction observed in large cities compared to their smaller counterparts. We analyse 77 cities across Europe between 2012 and 2022, using four waves of the Quality of Life in European Cities' survey, whose samples are representative at the city level. We find that differences in the individual characteristics of city population (i.e., composition effect) explains only a small part of the variation in life satisfaction inequality across cities. Most of the differences are captured by a structural effect, namely differences in the higher returns of specific individual characteristics in large compared to in small cities.

During the last two decades, understanding the nature and implications of the degree of interpersonal inequality characterising our societies has attracted increasing attention by both scholars and policy makers. Many studies have shown that interpersonal inequality, most often measured in terms of income distribution among households, matters for people's life. To start with, the study by Alesina et al. (2004) showed that, although with differences between social groups and political preferences, higher inequalities are associated with lower subjective wellbeing and that such a relationship is particularly strong in Europe compared to the United States. While reporting consistent results, Becchetti et al. (2024) distinguished between inequality in opportunities from inequalities in effort and found that it is primarily the former to dampen subjective well-being.

Inequalities have been recently analysed also among the agglomeration costs and as a key driver political discontent, notably at the city or regional scale. Lenzi and Perucca (2023) have shown that interpersonal income inequalities are a powerful factor in explaining the persistently lower subjective well-being in the largest cities in Europe (i.e., the so called "urban well-being paradox" (Burger et al., 2021; Morrison, 2021). On the political discontent, Rodriguez-Pose et al., (2023), have documented a significant association between both interpersonal and spatial (income) inequalities and the rise of far-right populism in Europe and in the USA.

Among the channels underlying that relationship is trust. More specifically, Graafland and Lous (2019) found that income inequality has a significant negative impact on social trust. According to the authors, an important part of that effect is driven by inequality in life satisfaction, as distrust is generated by a perception of uneven opportunities, especially among the least happy. These findings confirm that life satisfaction inequality has an important role in driving and understanding societal discontent. Consistently with such a view, Goff et al. (2018) highlight the need to measure inequality in a comprehensive way and argue that inequality in life satisfaction is a superior measure of inequality compared to income inequality when trying to understand the link between inequality, trust, and subjective well-being. This echoes also the Measurement of Economic Performance and Social Progress report (Stiglitz et al., 2009), according to which subjective wellbeing inequalities is an important metric of social welfare and should be considered by policy makers.

One aspect that the recent literature on the implications of inequalities has demonstrated is that it is hard to neglect its geographical dimension. Inequality at the local scale is important in many respects. First, interpersonal inequality shows clear spatial patterns, with income inequalities increasing consistently with city size in developed countries (Castells-Quintana et al., 2020; Sarkar et al., 2016; Veneri et al., 2021). Second, inequality at the local level is connected to many other well-being outcomes and evidence points to a negative association between local inequality and city-level growth in income and population (Glaeser et al., 2009). Despite that importance, almost no evidence has been produced to date on trends in life satisfaction inequality at the city scale.

To fill this gap, this study focuses on life satisfaction inequalities within European cities between 2012 and 2022. We start by documenting a clear spatial pattern in life satisfaction inequality, which increase with city size. Subsequently, we assign cities in our sample to two groups - large vs. small based on their population size - and we employ a decomposition approach developed by Fortin et al. (2011). Such a method, which builds on Recentred Influence Function (RIF) regressions (Firpo et al., 2009), allows us to identify the drivers of the observed differences in life satisfaction inequality between large and small cities. This approach extends the Oaxaca-Blinder procedure, making it applicable to any distributional parameter beyond the mean. It enables us to break down the overall difference in life satisfaction inequality into two main effects: the composition effect, which captures the role of different distributions between large and small cities in the factors affecting life satisfaction inequality (e.g., differences in the characteristics of people or other relevant city-level features) and the coefficient or structure effect, which could be interpreted as pertaining to differences in the effect ('return') of the individual or place-based characteristics in small vs. large cities.

To the authors' knowledge, no study exists on the assessment of life satisfaction inequality at the city scale and on the analysis of the drivers of the increasing inequality by city size. As suggested by Becchetti et al. (2014), one reason underlying the lack of studies on life satisfaction inequality at the individual level is that life satisfaction cannot be redistributed through policy. However, shedding light on the drivers of such inequality at the city scale can help understand where and why inequalities are higher in specific places rather than others.

Our results show that differences in the individual characteristics of city population (i.e., composition effect) explains only a small part of the variation in life satisfaction inequality across cities. On the other hand, most of the differences are captured by a structural effect, namely differences in the returns of individual characteristics in large vs. small cities.

These findings highlight the importance of addressing both individual and contextual factors in reducing life satisfaction inequalities. The use of a decomposition method based on RIF regressions allows for a detailed examination of the composition and structural effects, offering valuable insights for urban policy.

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