

An international comparison of subjective perceptions of inequality of opportunity

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1. Extended abstract

Inequality has been a central topic in social science research for many decades and lately interest in this issue has gained growing public opinion's attention as a consequence of the 2009 Great Financial Crisis. The press often features articles regarding the worryingly increasing trends in income inequality and the public opinion is exposed to numerous information sources on the matter. Economists have been conceiving inequality predominantly in terms of income and have produced many different measures of it. Consistently with a theoretical tradition in which individual welfare can be aggregated in a social welfare function, economists have been using synthetic indexes which summarise the overall level of inequality. For instance, the Gini coefficient, a metric that ranges between 0 and 100 and assesses the extent to which a society deviates from perfect equality, is by far the most popular tool used to evaluate inequality. More recently, especially after the seminal contributions by Anthony Atkinson, Thomas Piketty and Emmanuel Saez (2009), economists have devoted increasing attention to measure the income and wealth share available to the top quantiles of the income distribution, in order to capture the wealth concentration in favour of the most privileged individuals in society and have shown clear cut trends of increasing levels of inequality in many Western countries (Atkinson et al, 2009). These measures are relatively crude and provide internationally comparable metrics of income inequality. When adopting them one is implicitly endorsing an egalitarian approach, according to which any inequality is considered as a violation of the principle of equality, disregarding the ultimate causes of those differences. An alternative approach has gained ground amongst economists in the last decades. Since Rawls (1971) a number of authors have suggested that equity judgments and inequality measurement should be based on opportunities rather than on observed outcomes (see Ferreira and Peragine, 2015 for review of this literature). The early contributions by Roemer (1998) and Fleurbaey (1995, 2008) in developing the equality of opportunity approach have led to an explosion of empirical applications proposing estimates of inequality of opportunity in the last two decades. A measure of equality of opportunity is a multi-dimensional metric that conceptually stems from the idea that valuable outcomes, generally measured in terms of income, can be influenced by factors within individual's control, such as effort and motivation, and factors outside of individual's control such as gender, ethnicity, family background or any other pre-determined circumstance. The share of success attributable to factors outside of individuals' control is perceived as promoting unfair inequality and for this reason is undesirable. Inequality of opportunity has been measured in

many dimensions of individual wellbeing such as income, consumption, health and education and for a large number of countries.

Differently from the afore-mentioned standard measures of income inequality, assessing inequality of opportunity can be particularly challenging especially when internationally comparable datasets are not readily available. Computing the proportion of income inequality attributable to pre-determined conditions, on the other hand, provides a more in depth understanding of inequality as it allows to decompose it into its unfair factors shedding light on the specific issues that need to be addressed by policy makers interested in promoting a more equal society.

Amongst the most convincing argument for studying and tackling income inequality is the fact that the latter tends to deteriorate social cohesion which in turn can cause conflict and a slower economic growth (The World Bank (2006)). Moreover, low degree of equality of opportunity, limiting the outcome achievable by particular groups of individuals can discourage their effort and further worsen their economic conditions. These mechanisms rely on the assumption that individuals' knowledge and perception of inequality align with the way it is measured by researchers. If this is not the case then an unequal country whose public opinion has mixed feelings in terms of perceived levels of inequality would not experience political turmoil or eventually a shift in redistribution policy by means of elections. To date studies on perceptions of inequality have mainly analysed the relationship between income distribution beliefs and redistribution preferences but, with the exception of Brunori (2015) whose analysis is confined to a sample of European countries, no study so far has analysed the concept of subjective perceptions of inequality of opportunity.

In this paper we focus on exploring the determinants of subjective perceptions of inequality of opportunity and the relationship between objective measures and subjective perceptions of inequality of opportunity. International data on perceptions of inequality are available from the International Social Survey Programme (ISSP) modules on Social Inequality collected in 1987, 1992, 1999 and 2009. This is the only public opinion survey that contains information on the extent to which respondents perceive specific pre-determined factors affect chances of success in life together with a large number of respondents' characteristics such as education, income and socioeconomic background. Ideally we intend to include the largest possible set of countries available in the 2009 survey wave. We are currently able to include 23 European countries and Australia in our analysis.

We elicit the perceptions of the role of circumstances beyond individual control in determining individual outcomes through the answers to the following set of questions:

Do you strongly agree/ agree/ neither agree nor disagree/ disagree/ strongly disagree/ cannot choose how important it is for getting ahead in life:

- coming from a wealthy family (family wealth)?
- having well-educated parents (parental education)?
- a person's race (ethnicity)?
- being born a man or a woman (gender)?

The higher the score associated to the answer, the greater the role attributed to each specific circumstance. Following Brunori (2015) we obtain a composite measure of perceptions computing the median value of the answers provided to this set of questions. We focus as well on the determinants of each circumstance perceptions separately. We intend to use both measures of perceptions (i.e. composite and singular) to acquire a deeper understanding of the way perceptions can be measured and analysed.

We compute objective measures of inequality of opportunity by means of external income survey data estimating the proportion of income inequality attributable to a single pre-determined circumstance and relate it to the extent to which people think such circumstance affects chances of success in life. In practice we proxy success with an income measure, we compute, for instance, between ethnic group inequality and then we assess the extent to which this is related to the answer to the question on how important is a person's race for getting ahead in life. When possible, we decompose the total level of inequality of opportunity to obtain the relative contribution of each specific circumstance and evaluate the relationship between this measure of inequality and its perception. We use the European Union Statistics on Income and Living Conditions (EU-SILC) and the Household, Income and Labour Dynamics in Australia (HILDA) as external surveys for the computation of inequality of opportunity measure. Internationally available data sources will instead be used to obtain circumstance specific between group inequality metrics (e.g. country level gender pay gap).

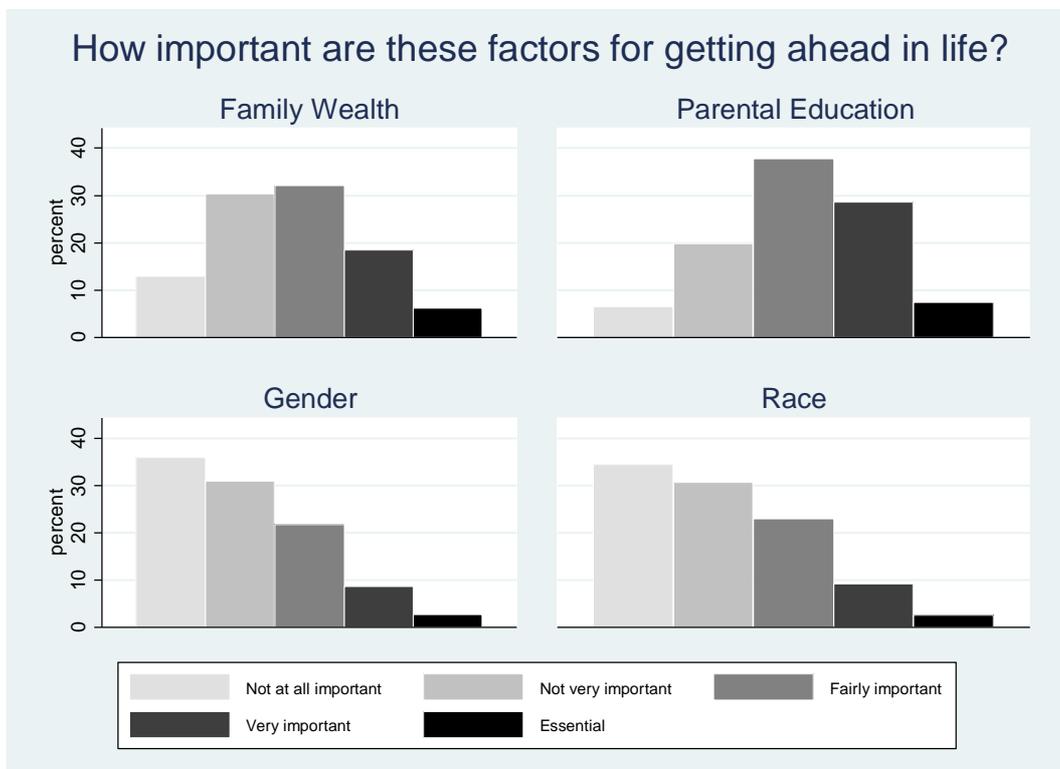
ISSP collects as well information on income, family background and respondents' demographics which we use as covariates in our estimates of perceptions. Another important piece of available information is the respondent's self-reported experience of either up-ward or down-ward (income) mobility. Experience is renowned to affect perceptions and there is evidence that support for redistribution is lower for people who believe opportunities for

upward mobility are available (Niehues 2014; Page and Goldstein 2015). The downside of this dataset is that its sampling structure is meant to be representative of public opinion but not necessarily of the population income distribution. This is the main reason why we require external data to compute objective measures of inequality of opportunity.

We provide preliminary evidence on the relationship between perceptions measured using 2009 ISSP data and objective measures of inequality of opportunity that are readily available in Brunori et al (2013).

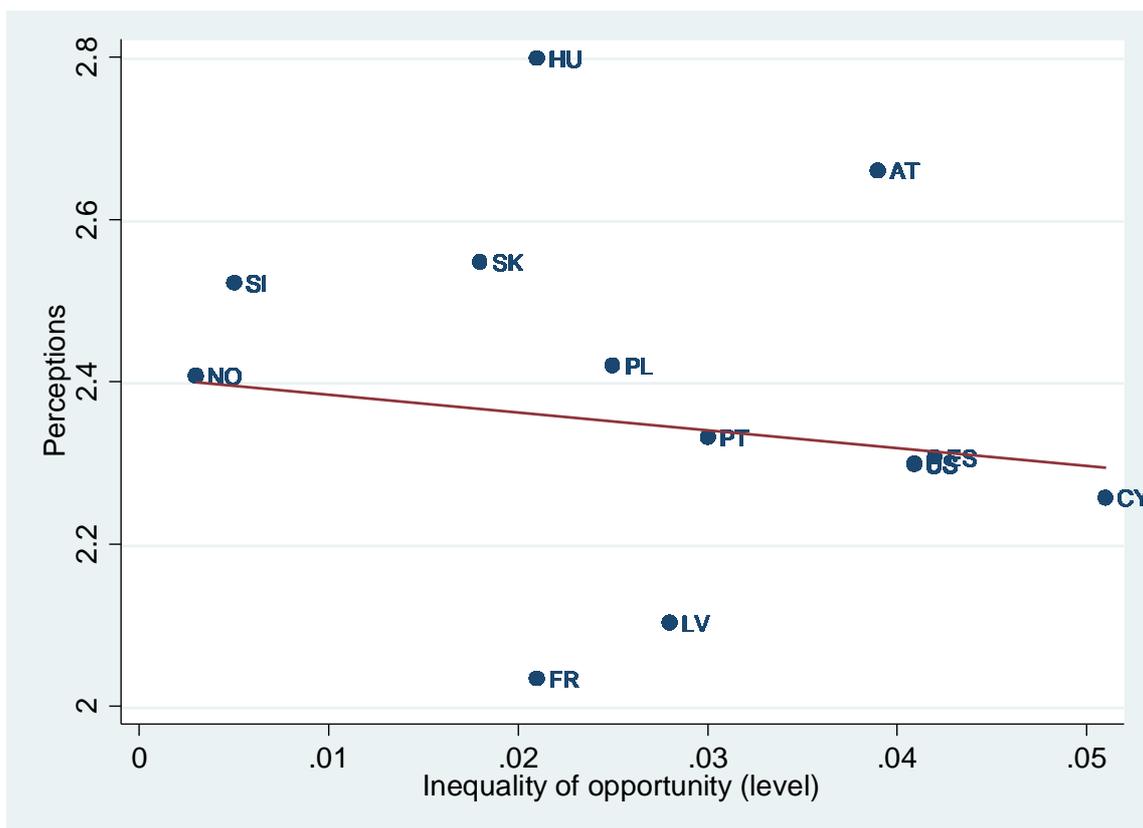
In Figure 1 we report respondents' perceptions of the relevance of each specific circumstance in affecting success in life. According to the graphical representation respondents generally do not believe that predetermined circumstances play a major role in affecting chances of success as the great majority thinks that these factors are either not at all important or fairly important but very rarely essential.

**Figure 1. Inequality of opportunities perceptions by circumstances
ISSP: 2009**



In Figure 2 we depict the relationship between inequality of opportunity perceptions and levels employing our comprehensive measure of subjective perceptions of inequality of opportunity computed using data from ISSP 2009 and estimates for the level of inequality of (income) opportunity from Brunori et al (2013) for all the countries present in both information sources¹. The graphical representation shows quite a weak relation between subjective perceptions and objective measures of inequality of opportunity and, if anything, there appears to be a negative relation meaning that respondents from countries where income inequality is more likely to be related to predetermined factors tend to believe these factors (i.e. family wealth, personal connections, race, religion and gender) do not play an essential role in affecting individual chances to succeed in life.

Figure 2. Inequality of opportunity: subjective perceptions and objective levels



¹ The countries we are able to include in Figure 2 are: Austria, Cyprus, Czech Republic, France, Hungary, Latvia, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United States

From a simple exploratory analysis of subjective perceptions of inequality of opportunity we are able to see that there might be factors, other than objective measures of inequality, influencing the formation of beliefs around chances to succeed in life. What we aim to do in this paper is understanding what individual and country level factors determine these perceptions. We believe this is important because voters' redistributive preferences are likely to be influenced by beliefs around chances to succeed in life, which, in turn, might be influenced by personal experience or the reference group individuals look up to. In addition to this, perceptions around the possibility to succeed in life irrespective of gender, race and family background, influence the extent to which individuals decide to exert effort and feel motivated to pursue important goals such as educational and professional careers.

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