Michele Raitano

Income Inequality in Europe Since the Crisis

The economic literature is increasingly concerned about inequality in income and in the living standards of individuals and households. A vast amount of empirical evidence has proved that in most countries since the 1980s, incomes have become more dispersed and much more concentrated in the hands of small segments of society, i.e. the top one per cent or 0.1%. Furthermore, preliminary studies on the income inequality trends during the economic crisis that began in 2008 report a large increase in the inequality of market income (i.e. gross earnings and capital incomes) in many developed countries. However, these studies point out that the increase in market income inequality during the crisis has been cushioned by the tax-benefit system in most of the countries, so that changes in the inequality of disposable income (i.e. gross of cash transfers and net of taxes) are rather limited.

Actually, economic inequalities are engendered by a complex process, characterised by several steps and involving the interaction of several factors. According to the literature, the best indicator of individual economic well-being is disposable equivalised income, which stems from the sum of all income earned in the market by household members – regardless of its source, i.e. employment, self-employment, capital, rent – net of taxes and including transfers by the state and made equivalent by dividing income by the so-called equivalence scale in order to take into account the number of members of the household.

For a better understanding of income inequality, the process that shapes equivalised disposable incomes can be depicted as a chain made of at least three links. The first link refers to individual earnings inequality and is related to labour market outcomes (i.e. hourly wages, working hours, contractual arrangements, unemployment spells). The second link acts at the household level and refers to market income inequality related to the earnings of all household members (and, therefore, is dependent on the number of them who are employed) and also to income stemming from all other market sources, including the return on capital, if any. The final link refers to the public redistribution through taxes and transfers (e.g. pensions, unemployment benefits, social assistance).

In this article, we follow this view and present data on income inequality trends in the aftermath of the economic crisis in EU15 countries, distinguishing among the various components of disposable incomes, in order to specify the role played by each of the links listed above. We cluster EU15 countries according to the four usual geographical groups highlighted by the welfare regime literature, i.e. Nordic, Continental, Anglo-Saxon and Southern, and we compare data about income inequality for these country groups.

After presenting concepts and the dataset, we then focus on household incomes and show how much inequality is imputable to labour and capital incomes and to redistribution. Finally, we focus on inequality in individual labour incomes.

Data and concepts of income

We use data collected by Eurostat through the sample survey European Union Statistics on Income and Living Conditions (EU-SILC). Being interested in the time trend of inequality indexes, we use the longitudinal survey carried out in the four-year period 2009-2012, which recorded annual incomes in the period 2008-2011, so as to assess changes in inequality since the start of the eco-


onomic crisis.\(^7\) We include only the balanced subsample, i.e. those individuals and households who participated in the longitudinal survey for the whole four-year period.

As mentioned above, we focus our analysis on the four groups of EU15 countries, but in the longitudinal EU-SILC 2009-2012 survey four countries are missing – Sweden, Luxembourg, Germany, Ireland. The remaining 11 countries have then been clustered in the following groups: Nordic (Denmark and Finland), Continental (Austria, Belgium, France and the Netherlands), Anglo-Saxon (the UK), and Southern (Greece, Italy, Portugal and Spain).\(^8\)

We use two samples in our analysis. For the analysis of household income inequality,\(^9\) our final sample is composed of 21,829 households present for the whole period in the longitudinal EU-SILC. For the study of labour income inequality, we use the subsample of 19,440 individuals who were active and less than 60 years old in 2008 and who did not retire during the four-year period.

The EU-SILC dataset is based on a homogeneous conceptualisation of the various income sources (e.g. employment, self-employment, pensions, welfare benefits), and thus it allows us to precisely compare income inequality across EU countries. Each income source is recorded gross of the personal income taxes and social contributions paid by the worker. Furthermore, household disposable income (i.e. the sum of all market income received by all household members net of personal income taxes and including welfare cash benefits) is also recorded.

However, only a few countries also report net values for each income source (e.g. wages or pensions), preventing us from comparing the effect of tax progressivity for each source. Furthermore, as usual in most computations of disposable incomes, only personal income taxes and cash transfers are taken into account, while indirect taxes, tax expenditures and monetary values imputable to in-kind public transfers (e.g. education, health care) are not included. As argued by Jenkins et al.,\(^10\) this limitation prevents us from assessing the effect on inequality of cuts to in-kind benefits (e.g. health care or education) or of higher indirect taxes on consumption, like the ones introduced by some EU governments since the outbreak of the crisis. As a further limit, one common to all sample surveys, the effective trend of inequality can be underestimated due to the difficulties of survey data in precisely recording the tails of the income distribution, because the poorest (in particular immigrants) and the richest tend to be under-sampled in sample surveys, and the individuals characterised by large income drops are more likely to drop out of the panel over time.

With these caveats in mind, the longitudinal EU-SILC is well suited for comparing the trend of income inequality and its main determining factors across groups of EU countries. In the next section, we will first focus on equivalised household income and compare disposable income, gross income (i.e. total household income gross of personal income taxes) and market income (i.e. disposable income net of cash welfare benefits). We then decompose gross income inequality in order to highlight the contribution of each income source in determining total inequality.

In more detail, market incomes are comprised of gross incomes earned by all household members and coming from all market sources, i.e. employment, self-employment and capital;\(^11\) gross incomes are computed adding welfare cash benefits (pensions and other welfare transfers, expressed gross of personal income taxes in the EU-SILC)\(^12\) to market incomes; finally, disposable incomes are obtained by subtracting social contributions and personal income taxes paid on all income sources from gross incomes.

Income inequality and its trend depend on several sources, and each of these sources affect total inequality according to the share of total income received by that source and to the inequality within each source. As demonstrated by Shorrocks,\(^13\) inequality in total income (independent of the index used for computing it) can be de-

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7 The official data on income inequality based on the EU-SILC that is available on the Eurostat website is computed on the various cross-sectional waves of the EU-SILC, without attention to the longitudinal dimension; this data may then differ from our results.

8 Incomes values, expressed in euros, have been adjusted through the Purchasing Power Parities (PPPs) indexes provided by Eurostat to allow for cross-country comparisons. Note that all computations shown in this article have been made using the longitudinal EU-SILC sample weights.

9 All income sources computed at the household level have been equivalised using the “modified OECD equivalence scale”, which assigns a weight of 1 to the first adult in the household, 0.5 to other individuals aged 14 and over, and 0.3 to each child aged under 14. Note also that in our definition of household income, we do not include imputed rents on housing.


11 Capital incomes are computed adding income from rental of a property or land and interest, dividends, and profit from capital investments in unincorporated businesses.

12 We include old-age, disability and survivors benefits in pensions, while the “other transfers” are composed of individual welfare benefits (unemployment benefits, sickness, maternity and education allowances) plus cash benefits directly devoted to households (family and housing allowances plus other social assistance benefits).