

# **NET OR GROSS? ASSESSING THE ANTI-POVERTY EFFECTS OF SOCIAL TRANSFERS IN THE EUROPEAN UNION**

Chrysa Leventi, Andrea Papini and Holly Sutherland

Institute for Social and Economic Research (ISER), University of Essex

One of the aims of social security systems, and social transfers in particular, is to redistribute income in such a way that supports people in hardship. There are two EU indicators that are used to assess the effects of social transfers on income poverty; the at-risk-of-poverty (AROP) rate before social transfers, where pensions are included in social transfers and the AROP rate before social transfers, where pensions are excluded from social transfers and are thus treated as part of original income. These indicators are produced using micro-data from the European Union Statistics on Income and Living Conditions (EU-SILC) and measure AROP in hypothetical situations where social transfers are supposed to be absent from a country's welfare system. They are then compared against the standard AROP after social transfers to show the effectiveness of transfers in reducing income poverty.

The anti-poverty effectiveness of social transfers varies widely among the EU-28. In fact, the difference between the AROP rate before and after social transfers (excluding pensions) in 2015 varied from a maximum of 20 percentage points in Ireland to a minimum 3.9 percentage points in Romania (Eurostat, 2018). Interestingly, the before-transfers AROP rate remained stable from 2010 and 2015 at the EU-28 level whereas the post-transfer indicator experienced a rise during the same period, suggesting a decrease in social transfers' effectiveness in reducing income poverty. Both considerations, the heterogeneity across countries and a possible overall decrease in the anti-poverty effectiveness of social transfers over time, call for a deeper investigation of the role of different types of transfers in poverty reduction and of the indicators that are used to measure their effectiveness.

First, it may be argued that the impact of transfers on income poverty reduction should be assessed based on transfers received (i.e. net of taxes and social insurance contributions), not on gross transfers, as is currently the case. If transfers are taxable, their net contribution to poverty reduction may be smaller than if they are considered in gross terms (Figari et al., 2011). Moreover, the extent of taxation on transfers and the extent to which taxation affects those at risk of poverty differ substantially across countries. The EU-SILC data included in the Users' Database do not have complete information on net incomes and provide no disaggregated information on taxes and social insurance contributions (SIC). The way different national statistical institutes compute and treat taxes and SIC paid on transfers is also likely to be different. In this paper we explore an alternative approach to define transfers in net terms in a transparent and comparable manner. Using the EU-wide tax-benefit microsimulation model EUROMOD, which is based on EU-SILC micro-data, we simulate the taxes and SIC paid by household members in the presence and in the absence of transfers, and thus measure the taxes and SIC paid on transfers and hence the contribution of net transfers to income poverty reduction.

Second, exploring the impact of different types of transfers on income poverty reduction may provide a more comprehensive picture of their role. This research aims to shed light on the anti-poverty efficiency of means-tested and non-means-tested benefits both in gross and in net terms. Moreover, the currently available EU indicators define pensions as old-age and survivors' benefits. The main components of these benefits are public retirement pensions and widowhood pensions. However, some countries (e.g. Denmark, Ireland, the Netherlands, Finland, and the UK) rely more on compulsory private pension schemes which in EU-SILC are classified as original income. For some purposes and for comparability reasons, private pensions could be treated in the same way as public pensions. The paper examines the distributional effects of this scenario.

Finally, a usual assumption when constructing hypothetical scenarios where social transfers are set to zero is that the loss of a transfer would not be (entirely or partially) compensated by other kinds of transfers. In practice, however, this is usually not the case. For example, in the absence of pensions individuals might become eligible for other kinds of benefits, such as social assistance. The use of microsimulation techniques allows us to calculate the net effects of these scenarios, taking into account the complex interactions within and between the tax-benefit policies as well as the heterogeneity of population characteristics.

Our analysis uses EU-SILC 2015 data and is performed for all EU-28 countries. The most important results can be summarised as follows. We find that the treatment of taxes and SIC has an important impact on the indicators used to assess the anti-poverty effectiveness of social transfers. The average contribution of net transfers to poverty reduction is 1.5 percentage points smaller than the corresponding contribution of gross transfers. The countries where the poverty-reducing effect of transfers is most significantly overestimated if these are considered in gross terms are Denmark, Finland, Sweden, the Netherlands, Italy and Luxembourg. Our results suggest that gross public pensions reduce the AROP rate by 18.3 percentage points on average, whereas net public pensions combined with increased means-tested benefits by 16.1 percentage points. Net public pensions per se (i.e. after removing the impact of policy interactions) reduce the AROP rate by 17.3 percentage points. The anti-poverty impact of non-means-tested benefits seems to be explaining most of the total impact of benefits on income poverty reduction. Finally, with the exceptions of the UK and Denmark, we find that treating private pensions the same way as public ones does not change our estimated assessment on the anti-poverty effectiveness of pension income.

## References

- Eurostat (2018) *Online statistics database* (last accessed: February 2018), Eurostat, Luxembourg.
- Figari, F., Paulus, A. and Sutherland, H. (2011), "Measuring the Size and Impact of Public Cash Support for Children in Cross-National Perspective", *Social Science Computer Review*, 29(1): 85-102.