

# Nowcasting Household Income In The UK

*Sofiya Stoyanova*  
*Office for National Statistics, UK*

*Richard Tonkin*  
*Office for National Statistics, UK*

**Paper Abstract:** In order to properly understand changes in households' economic well-being, it is important to have measures which not only reflect the experience of the typical household but also provide a description of the whole distribution. However, the complexities involved in producing such measures (from household surveys and/or administrative data) mean they are typically only available with a significant time lag, limiting their usefulness. Various academic researchers (e.g. Leventi et al., 2014) have explored the use of so-called 'nowcasting' techniques to produce more timely income distribution indicators. However, to date, there has been limited use of such methods within official statistics produced by national statistical offices.

This paper therefore presents a nowcasting approach that has been used by the UK Office for National Statistics to produce provisional/early estimates of median equivalised disposable income and various measures of income inequality. To capture how changes in macro-economic conditions affect households at different points of the income distribution, a microsimulation model used by the UK Government is employed, through which policy reforms are simulated and incomes updated accordingly. Additionally, adjustments are made to account for labour market and demographic changes.

The nowcast estimates are evaluated against comparable survey based figures and the effectiveness of this methodology in producing estimates that are sufficiently robust to be of use in informing policy and wider public debate is assessed.