A quality adjusted labour input index of the European Union for a better understanding of productivity developments

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The paper describes the Quality Adjusted Labour Input (QALI) as implemented in a harmonised way for the EU, euro area and its countries, developed by Eurostat and JRC. QALI is an index that measures the rate at which labour use in the economy changes over time considering two effects: the amount of labour (hours worked) and the composition of the workforce (in terms of educational attainment skills, age or skills-and-age). Already published in Eurostat as experimental statistics, QALI combines macro-data from National Accounts (as a benchmark) and micro-data from the EU statistics of the Labour Force Survey, Structural Earnings Survey and the Survey on Income and Living Conditions, which is available for most countries (2002-2018).

The purpose of QALI is to provide a better estimation of the Labour Input that will help to improve our understanding of the developments of productivity. Single measures of total labour input considering the change of the skills of the workforce over time are not widely available. QALI measures the change of labour input considering the hours worked and their composition (by skills or age).

Models analysing economic trends often use labour input figures available from National Accounts. However, changes in the labour composition (i.e. skills) are not reflected in these datasets. The potential implications for productivity analysis are important. We show that labour input adjusted by QALI results provides outcomes significantly different compared to 'un-adjusted' data. Thus, we propose that practitioners consider QALI results to adjust hours worked. This would help to get a more precise measure of labour productivity trends.