

Is full employment still possible in the coming age of robots?

Area (D)

By now, technological improvements are very fast and affect any institutions of society, including labour market. Nevertheless, economic modelling limps along and does not succeed in adapting to the rapidly changing world. As far as labour market is concerned, a massive technological unemployment is expected given the more and more actual possibility that “robots” substitute human beings in many areas. Therefore, public policy should deal with this new issue, trying to evaluate: a) if the relationship between humans and machines will open new job opportunities or increase unemployment; b) the way labour policies need to change and how fostering “flexicurity”; c) how to regulate legally and economically a labour market made of human beings and robots.

We provide a literature review on the effects of robots on employment and wages. Not surprisingly, empirical evidence is short and not unanimous, mainly as robots are not largely used yet, we are in a virtual field. Probably, the final result will depend upon the capability of institutional context to react to such a big technological revolution. Some data collected, in any case, show that the use of industrial robots has been increasing since 1990.

We provide some suggestions on the “capabilities” that the institutional context should carry out to face the age of robots; they involve not only the labour market but also welfare and education system. If “robots” increase productivity but not employment, for example, the available resources may be used to finance a kind of “basic income”. In addition, the education and training system should adapt to the new needs of the labour market and tackle the potential mismatch between demand and supply of professional occupations, at least initially.

Such kind of public investments allow to envisage whether countries’ economic growth is broadly inclusive or leaves large segments of society behind.

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