Considering socio-economic inclusivity in the transition to a circular economy

The circular economy (CE) provides an alternative to the linear economic model of extraction-production-use-disposal, and forms a key part of the EU’s Action Plan to foster sustainable consumption. A CE is often assumed to create new jobs and stimulate economic growth; this study now investigates these factors within the repair, reuse and recycling sectors of Europe, finding significant differences in terms of labour intensity, capital investment and working conditions across these activities.

In a CE, resources are kept, reused, refurbished and recycled within the economy for as long as possible to minimise the ecological impact of human activity. As circular activities are assumed to be labour-intensive, job losses resulting from this paradigm shift should be offset by overall gains. However, while the importance of sustainable resource consumption is clear on an international level, strong socio-economic inequalities remain between different EU territories, with the effects of the 2008 global financial crisis still prevailing (e.g. higher levels of unemployment and income inequality in southern than northern Europe). Research suggests that a CE could act as a potential source of sustainable job creation, thereby positioning it as an innovative and inclusive solution to the environmental and socio-economic challenges facing the EU.

The European Commission has highlighted the importance of a fair transition to a CE, and categorised the repair, reuse and recycling sectors as key activities in achieving circularity. This study explores these sectors as a proxy for CE, by reviewing Eurostat data (NACE Rev2, SBS), considering the different structural economic factors — and, therefore, the differing policy approaches — that apply to each.
The researchers analyse 24 productive activities that make up the repair, reuse and recycling sectors in the EU, clustered according to two relevant dimensions: labour intensity and average labour productivity. Activities include diverse tasks such as recovery of sorted materials, maintenance and repair of electrical, communication and transport equipment, and wholesale of waste and scrap. Data were collated for each activity on: the number of firms, total production value, value added, gross operating surplus, turnover, wages, gross investment in tangible goods, and number of people employed with, and without, remuneration. The data were collected from 2011 to 2016 — the longest and most recent period for which complete information was available for most activities.

The results confirmed that circular activities are currently relevant within EU economies, but their weight is still modest (1.72% in 2017, excluding the UK) considering the critical role they must play in the transition to a CE — and there is a need for active policy intervention if such activities are to be socially inclusive. While the study confirms that circular activities are generally labour-intensive, there are significant differences between the various sectors.

The analysis identified two key groups with differing levels of complexity, productivity and wages: capital-intensive activities (recycling and recovery of sorted materials, characterised by higher levels of gross investment in tangible goods per worker, and lower-wage waste collection, dismantling and trade); and labour-intensive activities (repairing and reuse). Taking this into account, reuse and repair activities could be the focus of a more cost-effective public policy strategy, as they provide a greater job creation potential with lower resource consumption (due to their lower capital investment requirements).

The results also highlight the marginal role reserved in the linear economy for value preservation activities that are key for the transition towards a CE — such as repair and reuse, which experience lower salaries and higher rates of unpaid work. The researchers suggest that reframing the social value of these activities, and improving working conditions, is necessary for a CE to deliver genuine improvement from a socio-economic perspective. One example is the application of tax exemptions or reductions to such labour-intensive activities, so that they can improve their relative costs and competitiveness vis-à-vis traditional sectors.
A third issue arising from the analysis concerns the repair and maintenance of motor vehicles, which comprises nearly 40% of all paid and unpaid employment in CE-related activities. Although this sector includes diverse establishments, from large brand agents to small independent specialists, the data suggest the prevalence of firms with few or no employees. The asymmetry in market power between the few large original equipment manufacturers and the multiple small independent operators results in high costs of access to technical information for the latter, forcing their inclusion in franchise networks of major brands. As a result, many independent repairers are, in practice, outsourced employees of the original manufacturers—a hidden and precarious labour relationship. The researchers suggest encouraging repairers to restructure into independent professional bodies to strengthen their position relative to manufacturers and distributors.

The researchers note that using activity share as a proxy for levels of ‘circularity’ can be a problematic assumption, as it fails to account for how various CE business models and practices propagate and cut across different economic sectors; however, there is currently a lack of data on such diffusion across EU countries, primarily due to practical limitations in ascertaining value creation and preservation. They therefore call for further analyses to complement this study, taking into account circular initiatives that apply across virtually all economic activities — such as eco-design, eco-innovation and industrial symbiosis.

The researchers posit that, in order to truly consider social welfare in the EU’s transition to a CE, variables other than just job creation and economic growth should be monitored — from wages to length and intensity of the working day, type and duration of contracts, access to social security and union representation, equal treatment and opportunities, and learning and professional development prospects, amongst others.