

The Circular Economy: Testing the Nursery City Hypothesis

Conceptualisations of the circle economy are numerous, yet measuring its economic impact on cities and regions is in its infancy. When circular economies can be linked to economic prosperity and resilience, chances of political acceptance, dedicated policies and institutional embedding are probably higher than with a focus on sustainability effects alone. How many jobs in urban and regional economies directly or indirectly link to the circular economy, and how this stock evolves and diffuses over time, is the central question in this paper. We propose and implement the measurement of “direct circular jobs” in industries characterised by re-use, recycling, and recombination of existing resources and capital. Secondly, we determine which number of jobs help building the circular economy, in the sense that they relate to these direct circular industries by detailed input-output relations. Industries like building, architectural design and engineering potentially are related to the core-circular jobs, yet only to a certain degree. Finally, circular economic activity can be developed within larger industries, and we want to capture this category of (potential) circular jobs as well.

We map and model the emergence, existence and diffusion of direct and indirect circular economy employment in the period 1996-2016 for the Netherlands, using establishment level data. Following the nursery city hypothesis (Duranton & Puga 2001) we hypothesize that this relatively new type of activity will start business in urban, dense environments, where existing specialisation can be recombined to circular based principles. Over time, suburbanisation and/or regional dispersion to mere intermediate and peripheral regions is expected, both from cost advantages and from diffusion and application to industrial specialisations points of view. We discuss whether the circular economy should be treated economically different from other industries, highlighting policy

implications from our analysis, and present an agenda for further research.