

## THE ELEPHANT IN THE ROOM

*A Review of Theory and Practice regarding the concept of the Circular Economy*

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In recent years the concept of the circular economy has gained a lot of attention in the academic literature. Most scholars conducted empirical studies on the micro- and meso-level. The circular economy is also a macroeconomic concept, which origins can be traced back into the classical economists. Our findings indicate that, while there are some common theoretical bases, the relative usage of these concepts varies over time, between countries and between sectors.

The aim of this paper is to review the conceptual and empirical literature on the concept of the Circular Economy (CE) in order to identify its origins, key arguments and areas for further empirical research and theoretical grounding from a macroeconomic perspective. Attention is paid to the similarities and differences between CE and related concepts, including industrial ecology, environmental economics and the notion of sustainable development.

On a macro level, there seems to be a disconnect between the current popularized version of macro circularity, practical concepts of the circular economy and the macro literature on sustainable development, steady state economics (SSE) and degrowth.

This disconnect is twofold. First, popularized CE (EMF, 2012) may appear at odds with the ecological economic discourses of degrowth or SSE. Notions of circularity, or decreased throughput combined with increased product durability and regeneration are however conveyed through both the degrowth and SSE literature. Since the popularized macro circular discourse analysed here belongs to the neoclassical economic approach, its fundamental aspects and principles can and should be adapted and integrated into the ecological approaches. This alters the macroeconomic judgement of the success of CE.

Second, in the literature there is ample attention for feedback-loops, substitution effects and second- or third-order effects in value feedback loops on a micro and meso level. It is mostly assumed that circular practices at lower levels of activity will add up to a macro-circularity. Most attention

is directed towards resource and material feedback loops, but these also affect behavior of other actors in the economy. This induces behavioral effects of other agents in the economy, and might change the outcome of circularity on a macroeconomic level.

It is concluded that descriptive and normative perspectives which dominate the literature of macro circularity which dominate the literature should be supplemented by more critical accounts which recognize the rhetorical and discursive significance of CE in (re)constructing the economic paradigm, mobilizing collective engagement and challenging or reinforcing traditional forms of organization.