Socio-economic Analysis of Distribution: An Investigation of the Influence of Income Distribution and Returns on Capital on Wealth Formation in Different Institutional Environments

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The large increase in wealth and income inequality in the last decades can be attributed to several, often heterogenous, effects. To explain the dynamics of wealth distribution we must investigate the complex link between income and wealth, considering not only the heterogeneity but also the feedback effects in this relationship. While economic models incorporate functional distribution and macroeconomic effects, dynamics of personal distribution have mostly been captured by empirical studies up until now.

This paper makes a methodological contribution by introducing the concept of a lateral distribution matrix, which combines income groups, income sources, savings behaviour, and rates of return. Lateral distribution describes the combination of the functional and personal view (Atkinson, 2009). This perspective allows not only to differentiate between income from labour and wealth, but also to capture intra-country heterogeneity which is driven by a heterogenous savings rate increasing with income (Späth & Schmid, 2016), returns on capital depending on the type of assets, returns on capital increasing with on amount of wealth (Piketty, 2014), and the heterogeneity of capital gains (Adam & Tzamourani, 2016).

The lateral distribution matrix is estimated for a specific country and can be used directly in models and simulations. Therefore, it reflects at the same time also inter-country heterogeneity by incorporating behavioural factors such as risk-aversion, financial market participation, and investment behaviour of households, which are the result of an amalgamation of characteristic behaviour for a specific variety of capitalism, the influence of financialization and for some countries (such as Germany) a national peculiarity. This refers to the undeniable relationship between the shape and intensity of distribution, as described by Chauvel (2016), and the distinct lines of research in comparative capitalism studies following the works of Esping-Andersen (1990, 1999), Hall & Soskice (2001), Boyer (2004) and Amable (2003). Not only formal institutions such as the welfare state or regulation (Acemoglu & Robinson, 2015) but also informal institutions such as norms and habits (Williamson, 2001) play an essential role in shaping country-specific distributional dynamics.

To capture the complexity of the relationship between wealth and income a standard linear approach does not suffice. One needs a more holistic method. Therefore, to illustrate how the lateral distribution matrix can be integrated into economic models, I present a fully empirical stock-flow consistent (Godley, 1997; Godley und Lavoie, 2007; Miess et. al., 2019) agent-based (Caiani et al., 2016) systems dynamics model (Forrester, 1961) disaggregated on a household level

(Dafermos & Papatheodorou, 2015; Carvalho & Rezai, 2016). It is based on a framework developed in my previous work on the connection between distributional dynamics and comparative capitalism, which sees the economy as a circular flow system defined by institutions.

Thus, this ambitious proposal inevitably has to solve three theoretical problems at the same time: (1) the connection between wealth and income distribution, (2) the combination of the effects of functional and personal income distribution, and (3) the path dependence caused by the institutional environment of economies. From an empirical perspective, this paper combines the macro and micro levels by using data from the German national accounts, household survey data on income distribution (German SOEP) and survey data on wealth (HFCS, German PHF). Therefore, it contributes to empirical, methodological, and theoretical aspects of wealth distribution research.