

PAWEŁ KAWALEC

## **Interaction and Structural Representation in Calibration of Economic Models**

**ABSTRACT.** The paper discusses a version of empiricist structuralism with regard to general macroeconomic equilibrium models as instantiated by the initial RBC model. It argues that calibration, which is used to derive empirically substantiated answers to quantified questions in DSGE, explicitly represents interactions with how the model user conceptualizes the problem at hand and thus extends Bas van Fraassen's theory of representation, claiming that in the case of economic models the indexicality of the representation applies not only to the relationship between reality and the empirical model, but – as argued – pertains also to the relationship between the empirical and the theoretical model. Hence, the argument further undermines the simplistic views of the relationship between the theoretical model and reality, and in the case of economy, which involves intentional actions of economic agents, it demonstrates that even theoretical representation constitutively involves the user's indexical judgment.

**KEY WORDS:** empiricism, structuralism, DSGE, economic methodology, indexicality

### **1. Introduction**

The paper advances a version of structuralist account of representation with regard to an important class of economic models. It builds on a general empiricist structuralism with regard to scientific representation propounded by B. van Fraassen [2008; 2014], which is outlined in Section 2. below. He conceives of scientific representation as inherently pragmatic [Frisch, 2014, p. 4] as it constitutively depends on the user indexical judgement. Taking for granted the use of calibration in economic models, as presented in Section 4., I argue that indexicality pertains not only, as