Are DSGE models still useful in economic analysis?

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Abstract:

DSGE models are the workhorse in modern macroeconomic modeling. I will discuss the possibilities and limitations of DSGE models using three examples. My first piece looks at the impact of an influence epidemic on the macroeconomy. We used historical data to estimate a nonlinear DSGE model and found that, to some extent, woman replace men in the industrial sector. Compared to historical business-cycles, an influence epidemic has, therefore, an impact on the gender composition of the workforce. This paper shows that, in principle, DSGE models can be used in analyzing historical data. My second piece discusses the labor market limitations of standard DSGE models. We use a search and matching DSGE model and show that labor market flexibility has an impact on the adjustment of macroeconomic shocks. Estimating the model, nevertheless, is burdensome given data availability and technical limitations. The third piece, finally, discusses the business-cycle impact of migration. In the last years, and nearly unnoticed from the public, Intra-EU migration to Germany increased sharply. We show that the inflow of EU-citizens depends on the state of the economy. In a boom, the inflow is way higher than in a recession. This pattern, in general, helps the economy to adjust to asymmetric shocks. But the home economy of the migrant is much more important for the migration decision and the business-cycle impact than the host economy. Also, in this paper, data-limitations and technical possibilities limit the use of DSGE models.