Introduction to post-Keynesian stock-flow consistent modelling

Post-Keynesian stock-flow consistent modelling: theory and methodology (lecture)

Dr Maria Nikolaidi, University of Greenwich

8 June 2016, 10:00-11:45, Queen Anne Building Room 038 (QA038), University of Greenwich

Building a stock-flow consistent model in practice (lab session)

Dr Yannis Dafermos, University of the West of England

8 June 2016, 12:00-13:45, IT Lab King William Room 015 (KW015), University of Greenwich

Brief description:

Over the past decade, post-Keynesian stock-flow consistent (SFC) modelling has become a dominant approach in heterodox macro modelling, largely due to the works of Wynne Godley and Marc Lavoie. SFC modelling has been used by various heterodox economists in order to formulate and analyse a plethora of issues, such as growth and income distribution, the implications of financialisation and the role of fiscal and monetary policy. This 4-hour session will provide an introduction to the theory, methodology and applications of SFC modelling.

The lecture will discuss the main features of SFC models. It will focus on the origins of the models, the distinction and the links between stock and flows and the role of accounting principles. Emphasis will also be placed on the use and the implications of the transactions and the balance sheet matrices, which constitute the skeleton of SFC models. The role of money and finance in the SFC literature will be discussed.

The lab session will present how discrete-time SFC models can be constructed and solved using R. It will be shown how these models can be built step-by-step and how consistency is ensured in practice using the identities of the balance sheet and the transactions matrices. The dynamics of the models will also be explored. Simple SFC models with both inside and outside money will be used as examples.

Core readings:

Dos Santos, C.H. (2006). 'Keynesian theorising during hard times: stock-flow consistent models as an unexplored 'frontier' of Keynesian macroeconomics', *Cambridge Journal of Economics 2006*, 30 (4), 541-565.

Godley, W. and Lavoie, M. (2001-2002). 'Kaleckian models of growth in a coherent stock-flow monetary framework: a Kaldorian view', *Journal of Post Keynesian Economics*, 24 (2), 277-312.

Godley, W. and Lavoie, M. (2007). *Monetary Economics: An Integrated Approach to Credit, Money, Production and Wealth*. Palgrave Macmillan, Basingstoke, UK. chapters 1, 2, 4 and 7.

Macedo and Silva, A.C. and Dos Santos, C.H. (2011). 'Peering over the edge of the short period? the Keynesian roots of stock-flow consistent macroeconomic models', *Cambridge Journal of Economics,* 35 (1), 105–124.

Optional readings:

Bezemer, D.J. (2010). 'Understanding financial crisis through accounting models', *Accounting, Organizations and Society*, 35, 676-688.

Caverzasi, E. and Godin, A. (2015). 'Post-Keynesian stock-flow-consistent modelling: a survey', *Cambridge Journal of Economics*, 39 (1), 157-187.

Dafermos, Y. (2012). 'Liquidity preference, uncertainty, and recession in a stock-flow consistent model', *Journal of Post Keynesian Economics*, 34 (4), 749-776.

Dos Santos, C.H. and Zezza, G. (2008). 'A simplified, 'benchmark', stock-flow consistent Post-Keynesian growth model', *Metroeconomica*, 59 (3), 441-478.

Lavoie, M. and Daigle, G. (2011). 'A behavioural finance model of exchange rate expectations within a stock-flow consistent framework', *Metroeconomica,* 2 (3), 434-458.

Le Heron, E. and Mouakil, T. (2008). 'A Post-Keynesian stock-flow consistent model for dynamic analysis of monetary policy shock on banking behaviour'. *Metroeconomica,* 59 (3), 405-440.

Nikolaidi, M. (2014). 'Margins of safety and instability in a macrodynamic model with Minskyan insights', *Structural Change and Economic Dynamics*, 31, 1-16.

van Treeck, T. (2009). 'A synthetic, stock-flow consistent macroeconomic model of 'financialization'', *Cambridge Journal of Economics*, 33 (3), 467-93.

Zezza, G. (2008). 'U.S. growth, the housing market, and the distribution of income', *Journal of Post Keynesian Economics*, 30 (3), 375-401.