Author's Accepted Manuscript

www.elsevier.com/locate/jedc

Fiscal and Monetary Policies in Complex Evolving Economies

Giovanni Dosi, Giorgio Fagiolo, Mauro Napoletano, Andrea Roventini, Tania Treibich

PII: S0165-1889(14)00311-X
DOI: http://dx.doi.org/10.1016/j.jedc.2014.11.014
Reference: DYNCON3139

To appear in: *Journal of Economic Dynamics & Control*

Received date: 2 May 2014
Revised date: 14 October 2014
Accepted date: 21 November 2014

Cite this article as: Giovanni Dosi, Giorgio Fagiolo, Mauro Napoletano, Andrea Roventini, Tania Treibich, Fiscal and Monetary Policies in Complex Evolving Economies, *Journal of Economic Dynamics & Control*, http://dx.doi.org/10.1016/j.jedc.2014.11.014

Fiscal and Monetary Policies in Complex Evolving Economies

Giovanni Dosi[a,*], Giorgio Fagiolo[a], Mauro Napoletano[c,a], Andrea Roventini[e,a,c], Tania Treibich[d,a,b]

[a] *Institute of Economics (LEM), Scuola Superiore Sant'Anna; Piazza Martiri della Libertá 33 - I-56127 Pisa (Italy)*
[b] *GREDEG CNRS, University of Nice-Sophia Antipolis, 250 rue Albert Einstein - 06560 Valbonne (France)*
[c] *OFCE and Skema Business School, 60, rue Dostoïevski BP 85, 06902 Sophia Antipolis Cedex (France)*
[d] *Maastricht University (SBE), Tongersestraat 53, 6211LM Maastricht (the Netherlands)*
[e] *Department of Economics, University of Verona, via dell'Artigliere, 19 I-37129 Verona (Italy)*

Abstract

What is the most appropriate combination of fiscal and monetary policies in economies subject to banking crises and deep recessions? We study this issue using an agent-based model that is able to reproduce a wide array of macro and micro empirical regularities. Simulation results suggest that policy mixes associating unconstrained, counter-cyclical fiscal policy and monetary policy targeting employment is required to stabilize the economy. We also show that "discipline-guided" fiscal rules can be self-defeating, as they depress the economy without improving public finances. Finally, we find that the effects of monetary and fiscal policies become sharper as the level of income inequality increases.

Keywords: agent-based model, fiscal policy, monetary policy, banking crises, income inequality, austerity policies

JEL: C63, E32, E6, E52, G01, G21, O4

*Corresponding author. Telephone: +39-050-883326; Fax: +39-050-883344.
Email addresses: gdosi@sssup.it (Giovanni Dosi), giorgio.fagiolo@sssup.it (Giorgio Fagiolo), mauro.napoletano@sciencespo.fr (Mauro Napoletano), andrea.roventini@univr.it (Andrea Roventini), tania.treibich@gmail.com (Tania Treibich)