Optimal Monetary Policy, Tariff Shocks and Exporter Dynamics*

Masashige Hamano Francesco Pappadà Maria Teresa Punzi

April 27, 2023

Abstract

In this paper, we explore the response of optimal monetary policy to uncoordinated trade policies (foreign tariff shocks). We first provide a simple model of open economy with heterogeneous firms and derive a closed-form solution for the optimal monetary policy response to tariff shocks in presence of nominal rigidities. We show that optimal monetary policy is expansionary following foreign tariff hikes. Under nominal rigidities, uncertainty about foreign tariff hikes induces sluggish adjustments in the labor market reallocation between exporters and domestic firms, leading to an incentive for monetary authority to intervene and mitigate the impact of tariff shocks. In an extended model, we then show the quantitative response of our economy to a tariff shock under the Ramsey monetary policy, a Taylor Rule and a fixed exchange rate regime. Finally, we provide empirical evidence for the response of domestic monetary policy to foreign tariff shocks using data on Global Antidumping from the US.

Keywords: Optimal Monetary Policy; Tariff Shocks; Exporter Dynamics
JEL codes: E3, E6, Q54, R1

*First draft: April 2023. Hamano: Waseda University, masashige.hamano@waseda.jp. Pappadà: Paris School of Economics and Banque de France, francesco.pappada@psemail.eu. Punzi: Sim Kee Boon Institute, Singapore Management University, punzimt@gmail.com. Masashige Hamano acknowledges financial support from the Grant-in-Aid for Scientific Research (C), JSPS 18K01521 and Murata Foundation Research Grant. We thank seminar participants at CY Cergy Paris Université and Paris School of Economics for useful comments.