Changes in the Composition of Tax Revenues: Implications for Monetary and Fiscal Policy^{*}

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This Version: October 7, 2020

Abstract

This paper examines how the composition of tax revenues affects monetary and fiscal policy interactions. To do so, we consider an environment where household's wage and interest income as well as firm's profits are taxed. The government follows a Taylor rule and a fiscal rule that links tax revenues to public debt. The fiscal authority also sets the long-run debt to GDP ratio as well as the tax revenue composition. In this setting, both monetary and fiscal policies directly impact the demand for government liabilities. Thus, there is a direct channel through which fiscal policy affects inflation. As a result, the evolution of inflation and real debt are not independent of each other. Because taxes are distortionary, we find multiplicity of stationary equilibria as a Laffer curve exists. We also show that the composition of the tax revenue is key in determining the combinations of monetary and fiscal policies that deliver determinate equilibria. When calibrated to the U.S. economy, we find that passive monetary and active fiscal policies are more likely to generate unique and determinate equilibria. Moreover, we find that higher debt to GDP ratio lead to more locally indeterminate equilibria. This is also the case when households contribute a larger share to total tax revenues.

JEL Codes: C11, E32, E62.

Keywords: Taxes; Interest Income; Monetary and Fiscal Policy Interactions.

^{*}We would like to thank Eric Leeper, Todd Walker and Bruce Preston for their valuable suggestions. Any errors in the paper are ours.

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