
THE GREEN METAMORPHOSIS OF A SMALL OPEN ECONOMY

Evi Pappa*¹

¹Universidad Carlos III de Madrid [Madrid] – Spain

Abstract

We design a small open economy model where production combines energy and traditional factors with low short run substitutability and efficient technology adoption. We study green transitional dynamics. Permanent increases in brown energy prices induce a green transition with short run inflation and persistent output losses. Fiscal policy impacts the transition. Brown energy taxes are inflationary and crowd out brown energy use in favor of green energy. Green public investment or green subsidies have moderate macroeconomic effects, but do not crowd out brown energy use. We discuss fiscal costs and evaluate welfare along the green transition using different metrics.

Keywords: Green transition

*Speaker