



Monetary Policy in Open Economies with Production Networks

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This paper studies the design of monetary policy in small open economies with domestic and crossborder production networks and nominal rigidities. The monetary policy that closes the domestic output gap is nearly optimal and is implemented by stabilizing the aggregate inflation index that weights sectoral inflation according to the sector's roles as a supplier of inputs and a net exporter of products within the international production networks. To close the output gap, monetary policy should assign large weights to inflation in sectors with small direct or indirect (i.e., via the downstream sectors) import shares and failing to account for the cross-border production networks overemphasizes inflation in sectors that export intensively directly and indirectly (i.e. via the downstream sectors). We validate our theoretical results using the World Input-Output Database and show that the monetary policy that closes the output gap outperforms alternative policies that abstract from the openness of the economy or the input-output linkages.