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**Sectoral Price Changes and Output Growth: Supply and Demand in General
Equilibrium**

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Abstract:

Price changes and output growth, both at the aggregate and the sectoral level, appear to be negatively correlated. At a basic level, this suggests that sectoral “supply” shocks are more prevalent than sectoral “demand” shocks. However, it is not clear what these sectoral price-output correlations mean once one thinks in terms of general equilibrium. To help us understand the implication of these price-output correlations, this paper examines a multi-sector dynamic general equilibrium model that includes sectoral technology shocks and sectoral demand shocks, as well as aggregate money growth shocks. We show that while a model driven solely by sectoral technology shocks can generate “plausible” price-output correlations, “demand” shocks, particularly sectoral demand shocks, are needed for the model to generate the sectoral price-output correlations observed in the data. We also show that technology shocks do not always look like “supply” shocks. Positive technology shocks to sectors producing goods that are used for investment frequently result in increases in output and prices in other sectors while positive technology shocks to sectors producing goods that are used primarily as intermediate inputs look like supply shocks in other sectors