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How well do the sticky price models explain the disaggregated price responses to aggregate technology and monetary policy shocks?

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Abstract

This paper documents empirically and analyzes theoretically the responses of disaggregated prices to aggregate technology and monetary policy shocks. Based on the price data of US personal consumption expenditure, we find that disaggregated price responses have features across shocks and across sectors that are difficult to explain using standard multi-sector sticky price models. In terms of shocks, a substantial fraction of disaggregated prices initially rise in response to a contractionary monetary policy shock, while most prices fall immediately in response to an aggregate technological improvement. In terms of sectors, the disaggregated price responses are correlated weakly with the frequency of price changes. To reconcile these observations, we extend the standard model. We find that the cost channel of monetary policy and cross-sectional heterogeneity in real rigidity are possible avenues in accounting for these facts.

Keywords: Disaggregated Prices; Technology Shocks; Monetary Policy Shocks; Sticky Price Models
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