On the Relationship between Pass-Through and Sticky Nominal Prices

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Summary

The paper considers the impact of exchange rates on import prices – the degree of "pass-through". There are two different ways in which analysis of pass-through has been approached theoretically. The first considers a firm's optimal pricing decision for exports, and how it relates to the effects of exchange rate changes. This literature assumes that firms change their price instantaneously when the exchange rate changes. The second type of analysis assumes that firms only occasionally change prices, and asks whether it is optimal for firms to set export prices in their own currency or the currency of the importer. In part, the answer to that question depends on certain statistical properties of the exchange rate. This paper draws a link between the conditions for low pass-through when there are flexible prices, and "local-currency pricing" (the decision to set prices in advance in the importer's currency) when there are sticky nominal prices.

The paper shows that in fact there is a close link between the conditions. The condition under which pass-through is less than one-half when prices are flexible is the same as the condition under which exporting firms set prices in the currency of importing countries when nominal prices must be set in advance. The implication is that when pass-through is low in the flexible-price models, it will be low in the sticky price models (because there will be local-currency pricing.) When pass-through is high in the flexible-price models, the sticky price models will also predict high pass-through (because prices will be priced in the exporter's currency, implying full pass-through of exchange rates to the importer).

The conditions under which pass-through will be low are: If the exchange rate (exporter's currency price of importer's currency) has a high covariance with prices of competing goods in the import market; if the exchange rate has a high covariance with factors that shift demand up; if the exchange rate has a high covariance with costs of production; if there are large distribution costs in the importer's market; if the elasticity of demand is increasing in the price; and if marginal cost is increasing in output.