

# Currency invoicing and the implications for prices

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When a country's currency appreciates, it lowers prices for imported goods; concomitantly, currency depreciation has the opposite effect. The extent to which prices are affected is measured by a pass-through effect that results from the shock of exchange rate movements. Responding to such movements might require that a company raise or lower prices to maintain profits; a strategy that runs counter to most companies' general preference to maintain stable prices. This desire to keep prices stable has led to many firms adopting the U.S. dollar as the preferred currency in world trade.

In the paper, "The International Price System" (National Bureau of Economic Research, working paper no. 21646, October 2015), Gita Gopinath makes the case that a country's sensitivity to inflation is dependent on exchange-rate fluctuations by which their imports are invoiced in a foreign currency. The greater the share of imports invoiced in a foreign currency, the more susceptible that country is to spillover effects. To drive this point further, the author provides empirical evidence from 44 developed and developing countries. The author argues that, because so many nations choose to invoice in dollars—including many that do not trade much with the United States—the dollar enjoys a "privileged insularity" against inflation. The author calculated that about 4.7 times its share of world imports (and 3.1 times its share of exports) were invoiced in U.S. dollars from the sampled data.

What does this mean for import prices? Japan and the United States were used as examples to explain this asymmetry of trade. In Japan, through the 1990–2014 sample period, a 10-percent yen depreciation resulted in an 8.3 percent increase in import prices after 1 quarter and a 9 percent increase after 2 years—a pass-through rate of 90 percent. In the United States, 93 percent of trade is invoiced in U.S. dollars and during the same sample period, a 10-percent dollar depreciation increased import prices by 3.4 percent after 1 quarter and 4.4 percent after 2 years—a considerably lower pass-through rate of 44 percent. This, according to the author, was a result of the United States enjoying a "privileged insularity" status, as most countries invoiced imports in dollars.

How are exports affected? Japan only invoices 33 percent of its exports in yen. If the Japanese yen were devalued, it would make a relatively small portion of its exports cheaper in the world market. This contrasts greatly with the United States. Because 97 percent of U.S. exports are invoiced in dollars, a depreciating dollar would make the vast majority of exports cheaper on the world market.

What does this mean for consumer prices? The author estimated that a 10-percent dollar depreciation would raise consumer prices in the United States by 0.4–0.7 percentage points after 2 years. A relatively small change thanks, once again, to the dollar's privileged insularity. For comparison, in Mexico, a 10-percent peso depreciation would raise consumer prices by 1.38–1.59 percentage points.

The International Price System implies that devaluing a country's currency may not stimulate demand for a country's goods because many firms invoice a larger share of exports in foreign currency (as seen in the abovementioned Japan example). One method for limiting the monetary spillover effects of the appreciation (depreciation) of a country's currency is firms' invoicing in Special Drawing Rights (SDRs). SDRs are based on the market value of a basket of currencies (the dollar, euro, yen, and pound sterling), rather than a single currency. More firms invoicing in SDRs would lead to greater symmetry between trading firms, as all firms invoicing in SDRs would be equally impacted by exchange-rate shocks. Thus, greatly reducing pass-through effects mentioned in the article due to the current asymmetry in trade.