HIGHLIGHTS from Special Focus 1.2:
Currency Depreciations, Inflation, and Central Bank Independence

Key Points

- The pass-through of exchange rate changes to inflation can vary considerably depending on the nature of the shock and country characteristics.
- The pass-through tends to be larger when currency movements are triggered by monetary policy action.
- It can be significantly lower when central banks have a credible inflation target, operate in a flexible exchange rate regime, and are independent from fiscal authorities.
- These findings highlight a self-reinforcing feedback loop between central bank credibility and exchange rate and price stability.

Renewed focus on currency depreciations. Recent episodes of financial market turbulence illustrated that emerging market and developing economies (EMDEs) continue to face the risk of destabilizing exchange rate depreciations. In particular, inflation rose sharply in countries where currency pressures were most pronounced (Figure A). These stress episodes often compelled central banks to tighten policy to fend off currency and inflationary pressures, sometimes with mixed outcomes.

Factors affecting the exchange rate pass-through. The pass-through of exchange rates to inflation depends on the size of the depreciation, the cause of the depreciation, and country characteristics. First, an event study of past depreciation episodes suggests that the pass-through can be small for modest exchange rate movements but can more than double when the effective exchange rate depreciates by more than 20 percent in a given quarter (Figure B). Second, monetary policy shocks, including an unexpected monetary loosening amid currency depreciation, is associated with the highest exchange rate pass-through, especially in EMDEs (Figure C). In contrast, domestic demand shocks are typically accompanied by modest pass-throughs, reflecting the offsetting effects of growth and exchange rate movements on inflation (Figure D). Third, the adoption of a credible inflation target and increased central bank independence tends to lower the pass-through (Figure E, F).

Policy implications. A number of conclusions can be drawn for policy makers. First, structural policies can reduce the exchange rate pass-through to inflation. Policies that reinforce market competition, value chain integration, and local currency invoicing can accelerate relative price adjustments in the event of shocks and hence help effective expenditure switching. Second, a credible commitment to maintaining low and stable inflation remains a powerful way for central banks to limit the pass-through. A number of central banks have been able to achieve such outcome under inflation-targeting regimes. For countries with pegged or managed exchange rate regimes, allowing for a greater role of currency market discovery and avoiding sharp devaluations from prolonged periods of currency overvaluation is an important step towards lowering the pass-through. In any case, a clear delineation between monetary and fiscal policies helps reinforce the credibility of the central bank and keep pass-through to a minimum.
Inflation rose sharply in countries were currency pressures were most pronounced in 2018. An event study suggests that the pass-through can more than double when the effective exchange rate drops by more than 20 percent in a given quarter. Pass-through is large and positive when currency movements result from monetary policy shocks, but small and negative when currency movements are associated with domestic demand shocks. Greater central bank independence and more flexible exchange rate regimes have tended to dampen the pass-through to inflation.

A. Currency depreciations and inflation in EMDEs in 2018

B. Pass-through from different depreciation episodes, 1998-2017

C. Pass-throughs: Monetary policy shocks

D. Pass-throughs: Domestic demand shocks

E. Central bank independence and ERPTRs from monetary policy shocks

F. Monetary policy regime and ERPTRs from monetary policy shocks

Sources: Haver Analytics, OECD, World Bank.

Notes: EMDEs = emerging market and developing economies.

A. The horizontal axis shows cumulative change in the nominal effective exchange rate (NEER) of more than 5 percent over the period January to December 2018. Vertical axis shows consumer price inflation in December 2018. Dotted line shows second order polynomial trend. Sample includes 28 EMDEs.

B. Depreciations are defined as negative quarterly changes in the nominal effective exchange rate. The sample comprises 34 advanced economies and 138 EMDEs. Pass-throughs are defined as the change in consumer prices after one quarter divided by the depreciation of the nominal effective exchange rate. The markers refer to the median pass-through.

C. D. Pass-throughs are defined as the ratio between the one-year cumulative impulse response of consumer price inflation and the one-year cumulative impulse response of the exchange rate change estimated from factor-augmented vector autoregression models. A positive pass-through means that a currency depreciation is associated with higher inflation. Bars show the interquartile range and markers represent the median across countries. Sample includes 29 advanced economies and 26 EMDEs over 1998-2017.

E. Low and high central bank independence are defined as below or above the sample average. Central bank independence is based on the central bank transparency and independence index by Dincer and Eichengreen (2014).

F. Exchange rate and inflation targeting regimes (“IT”) are based on IMF classifications.