Box 1. Determinants of Nonfood, Nonregulated Goods Inflation in Colombia: Evidence from a VAR under an Open-Economy Phillips Curve Approach - Monetary Policy Report, July 2026

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From a theoretical perspective, tradable-goods inflation can be described by a New Keynesian Phillips curve for an open economy, in which current inflation depends on inflation expectations and real marginal costs. Since the latter variable is not observable, the literature generally approximates its domestic component using real unit labor costs, defined as the ratio of real wages to labor productivity or, equivalently, as the share of wages in income. Likewise, the output gap is frequently used in empirical applications as a reduced form approximation for real marginal costs. In addition, in an open economy, international prices, the nominal exchange rate, and transportation costs affect import prices and, through these, firms’ marginal costs and tradable-goods inflation. Consequently, the output gap and measures of labor costs are interpreted as alternative proxies for domestic marginal costs, while external variables capture cost shocks originating in international markets.

In Colombia, in 2026 to date, the year-on-year change in the consumer price index (CPI) for nonfood, nonregulated goods (SAR goods for their Spanish acronym) has been on an upward trend, despite the appreciation of the peso against the U.S. dollar.1 Although exchange-rate appreciation tends to ease inflationary pressures on tradable goods by reducing the peso cost of imported goods and external inputs, the recent behavior of these prices suggests this effect has been constrained by other factors. In particular, strong domestic demand, reflected in a positive output gap, higher inflation expectations, and, more recently, the rebound in external nonfood, nonregulated goods inflation stand out.

Based on the above, this box presents an estimate of a structural VAR (vector autoregression) model to explain the dynamics of SAR goods inflation in Colombia. The structure incorporates: 1) external goods inflation, constructed using comparable price indices for the United States, China, and Germany, weighted according to their shares in Colombia’s imports; 2) changes in the nominal exchange rate, which capture the exchange-rate pass-through to domestic prices; 3) the GDP gap, as an indicator of domestic demand and cost pressures; 4) twelve-month inflation expectations from surveys of analysts; and 5) SAR goods inflation. The VAR is identified using a Cholesky decomposition, with the variables ordered according to their degree of contemporaneous exogeneity. Under this specification, external goods inflation is considered the most exogenous variable, while Colombia’s SAR goods inflation is the most endogenous.

Fuente: https://www.banrep.gov.co/en/publications-research/monetary-policy-report/box1-july-2026