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Inflation and the Role Of the Central Bank[1]

Introduction

In the last two years, the global economy has seen a massive surge in the general level of prices for goods and services as a result of supply and demand shocks associated with Covid-19, the war between Russia and the Ukraine, and the implementation of expansionary policies. Specifically, on the supply side, interruptions in global production and trade chains drove down the supply of goods like grains, microchips, fossil fuels, and others. On the demand side, increased public spending and low interest rates spurred rising global demand for goods that had been scarce due to pandemic restrictions and war. Due to Mexico's high level of integration in trade agreements with the United States and other countries, global inflation has been transferred to local prices, with the result that general inflation went from 2.1 percent in April 2020 to 8.4 percent in October 2022.

Mexico's central bank (Banxico) has a mandate to keep inflation at a target rate of 3 percent with a tolerance band of more or less one percentage point. To achieve that, its primary instrument is interest rate targeting, by means of rate adjustments with the aim of influencing aggregate demand and reaching its target inflation rate. Thus, to contain inflation, it increased the reference rate from 6 percent in April 2020 to 10 percent in November 2022, which suggests that its monetary policy has been highly restrictive, above all in recent months. This measure is beneficial for the country as long as it does not exceed

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certain limits. For example, a high reference rate, well above the interbank equilibrium rate (TIIE) compatible with full employment (neutral rate), may reduce inflation but also disincentivize economic growth due to its negative impact on consumer spending and private investment.

Several economic studies recommend that the central bank should set its monetary policy rate at a level at which its average short-term rate is equal to its neutral interest rate. It bears noting that the latter is the rate consistent with the potential product of the economy and the central bank's inflation target; therefore, if Banxico tries to keep its policy rate below the neutral rate for a long time, aggregate demand will exceed productive capacity, which would cause inflation. On the other hand, if the policy rate is above the neutral rate, it will hinder economic growth; therefore, the value of the neutral interest rate is an important parameter.

The International Monetary Fund (IMF) takes the position that economies with high inflation like Mexico should continue to toughen their monetary policy. In other words, "overheated" economies should raise interest rates to "cool down." However, it also acknowledges that a prolonged restrictive policy could sacrifice economic growth and raise the level of public debt. This in turn raises the question of how high Banxico could continue to raise its interest rate without compromising economic growth. To answer this, we need to estimate the current level of the neutral interest rate in Mexico to assess the need to maintain or reduce the rhythm at which interest rates are increased in 2023.

Methodology for Estimating the Neutral Interest Rate

The real neutral interest rate is that consistent with full employment and stability of prices around the inflation target. Because the variable is not observable, its value should be approximated using quantitative methods based on the Taylor rule, whereby it could be defined as:

$$r_t^* = r_t - \beta(\pi_t - \pi_t^*) - \theta(y_t - y_t^*)$$

where (r_t) is the real monetary policy rate; $(\pi_t - \pi_t^*)$ is the gap between observed inflation and the inflation target; and $(y_t - yt_t^*)$ is the gap between the real (y) and potential (y^*) product.[2] On the other hand, β and θ reflect Banxico's

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response to the inflation gap and the product gap, respectively. To estimate the neutral rate prevailing in the Mexican economy at present, we estimate a cointegrated var (CVAR) model, with which we will avoid the issues of spuriousness characteristic of non-seasonal time series and statistical bias due to problems of simultaneity.

The Data

For the estimates we used Banxico's target interest rate, real GDP, potential GDP obtained with the Hodrick-Prescott filter, general inflation, and inflation forecasts for the next twelve months, obtained from Banxico's "Survey of Forecasts by Private Sector Specialists in Economics" from the first quarter of 2008 through the third quarter of 2022.[3]

Results and Final Comments

Based on the estimates in our model, the nominal neutral interest rate for Mexico is 8.86 percent, while the monetary policy rate is 10 percent. This means that, after a series of rate hikes, Banxico no longer has enough room to continue to raise its interest rate and reduce inflation without compromising economic growth. In fact, the reference rate already exceeds the interbank equilibrium rate by 1.14 base points.

Maintaining an increasingly restrictive monetary policy would disincentivize economic growth —especially consumer spending and private investment—, which would have a negative impact on the creation of new jobs, causing income levels and standards of living to fall, with the resulting drop in consumer spending and inflation. Thus, not only Mexico but a majority of the world's economies are faced with a choice between growth and high inflation.

At the time of this writing, there were hopes that the Mexican economy could end 2022 with economic growth over 2 percent, driven primarily by growth in the United States; however, the risk of an economic downturn in 2023 continues due to high inflation and interest rates. It may be time for Banxico not only to consider price stability as a goal but also to sustain economic growth. We think that, in addition, comprehensive measures are needed to help reduce inflation without creating new imbalances in the economy, like strengthening the domestic supply of agricultural goods and energy to mitigate future supply shocks.

The authorities should use monetary and fiscal policy as complementary means of promoting growth and macroeconomic stability, so that the public sector can consolidate and enjoy a wider margin for fiscal maneuvering that allows it to support public-private investment projects that create new jobs and future revenues, thereby reducing debt-driven vulnerability. Also, macroeconomic stability would keep inflation forecasts down, and as a result inflation would be less persistent. Finally, Mexico could leverage the new realignment of global trade to strengthen its economy and integrate export-based sectors. VM

Further Reading

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Notes

1 This article is the product of the projects PAPIIT IN301421 and PAPIME PE301422 (DGAPA, UNAM). The authors are grateful for the technical support received from Gonzalo Curiel, Hector Soria, and Casandra Torres.

2 See J. B. Taylor, "Discretion *versus* Policy Rules in Practice," *Carnegie-Rochester Series on Public Policy*, vol. 39, no. 1, 1993, pp. 195-214.

3 Banco de México, "Encuesta sobre las expectativas de los especialistas en economía del sector privado," October 2022, https://www.banxico.org.mx/publicaciones-y-prensa/encuestas-sobre-las-expectativas-de-los-especialis/encuestas-expectativas-del-se.html. [Editor's Note]

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