

## Box 2

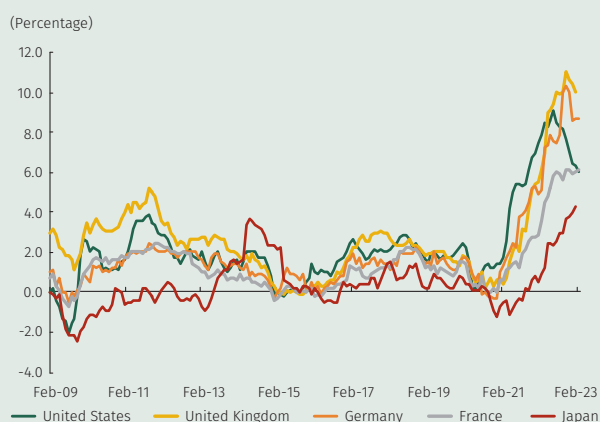
# Inflation and Global Monetary Policy

Over the last year and a half, the world has faced a major setback in the low and stable inflation behavior that had been observed for several years. The price increases that have occurred since 2021 have taken place in a context of increases in aggregate demand resulting from the economic reactivation that emerged after the pandemic, the weakening of productive apparatuses around the world, disruptions in global supply chains, and price increases in the energy sectors, among other factors.

Since the last quarter of 2022, global inflation has started to show signs of a slowdown and, in a significant number of countries it seems to have reached a peak due to the restrictive monetary policy stance, lower prices of raw materials, and the dilution of supply shocks. The fiscal consolidation that has taken place in several economies after withdrawing the stimuli implemented during the pandemic has also allowed for a reduction in inflation, as aggregate demand has contracted (Graph B.1). Core inflation, which excludes food and energy prices, has moderated, although it is not yet on a downward path in most economies. The persistence of this inflation indicator may be a response to the fact that there is still excess demand and labor markets continue to be tight.

Despite recent corrections in the global inflation trend, both the level of inflation and inflation expectations remain well above pre-pandemic levels and monetary authorities' targets. Although most central banks raised their monetary policy rates in 2022, inflation is expected to persist and convergence to their respective targets is expected to take longer than anticipated months ago. According to the projections made by the International Monetary Fund (IMF), global inflation will probably stand at 6.6% at the end of 2023, reaching 4.6% in advanced economies and 8.1% in emerging economies. Against this backdrop, the contractionary global monetary policy stance is likely to remain the same in order to continue reducing inflation and converging to the various targets. This reduction would also be supported by decreases in the international price of crude oil and other commodities.

Graph B.1  
Annual Consumer Inflation



Source: Central banks and statistics offices.

### 1. Background and Factors Explaining the Increase in Global Inflation

The current inflation dynamics are attributable to several factors, mainly related to the effects of the pandemic and the measures adopted to deal with it as well as the economic and geopolitical situation of the last few years. This has been characterized by both supply and demand shocks in a period of high volatility in international markets.

The COVID-19 pandemic resulted in difficulties on the economic front for all countries. The economic effects of mobility restrictions and the paralysis of economic activity necessary to cope with the health emergency had a significant impact on household and business economies, with effects on wages, employment, and value chains. In this context, the priority of strengthening health care plans and mitigating the effect of the pandemic on households and businesses

resulted in significant fiscal stimulus and more expansionary monetary policy stances in those countries that had the means to do so.

As economies opened up and travel restrictions eased in late 2020 and early 2021, the effects of the pandemic on inflation began to materialize, explained by both demand and supply factors. For one thing, the reactivation of the economies and the continuation of fiscal and monetary policy stimuli that were intended to boost the economic recovery generated significant pressure on prices from increases in demand. This pressure was driven particularly by the recovery of the labor market and the increase in consumption as a result of the stimuli, pent-up savings, and a greater flow of credit to households. The strength of aggregate demand helped close the negative output gaps widened during the pandemic generated a positive trend in core inflation through growth of both public and private consumption.

In the same vein, supply-side inflationary pressure materialized and contributed to inflation dynamics. First, disruptions to companies and the global production chains of goods and services during 2021 had a slower recovery than aggregate demand. Although the reopening and stimuli favored the reactivation of companies, losses in global value chains did not allow the pace of recovery of supply to match that of demand and thus contributed to pressure on. Second, wage increases and changes in labor markets in some countries were passed on in the form of higher costs for companies, thus contributing to pressure on the prices of goods and services.

In line with the aforementioned shocks, Russia's invasion of Ukraine in early 2022 led to even greater supply-side inflationary pressure. In particular, trade restrictions and economic war measures contributed to significant increases in energy prices in Europe in the context of a harsher-than-expected winter as well as in the prices of intermediate goods (such as fertilizers), which had impact on food prices with a particular effect on emerging economies. In the same respect, the geopolitical context and its effects on the global economy as well as idiosyncratic events throughout 2022 affected risk perceptions of emerging economy assets to a greater extent and, together with a more restrictive monetary stance in the United States, led to a generalized strengthening of the dollar, mainly in the second half of 2022. This depreciation of global exchange rates in the context of greater aggregate demand also contributed to additional inflationary pressure on both goods and services, which was particularly strong in import-intensive developing countries.

Although this pressure has been substantially corrected in the last few months and fuel and other raw material prices have moderated facilitating a reduction in headline inflation, emerging economies have continued to experience significant inflationary pressure. The presence of price spirals in Latin American economies and some European countries appears to contribute to inflation, as they transmit minimum wage increases to prices via indexation and affect inflation expectations. Finally, the dismantling of subsidies on food prices or energy services in some countries has caused additional inflationary pressures.

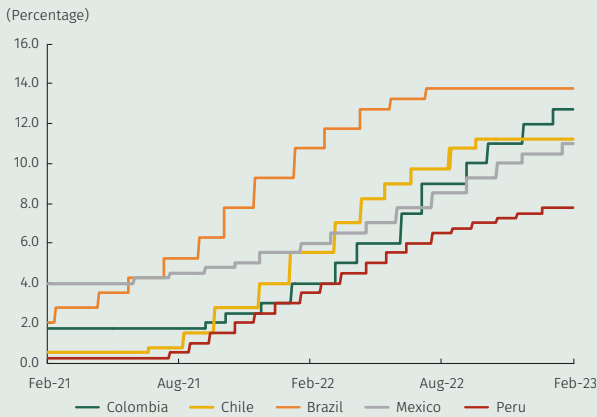
## 2. Central Banks' Response to Inflationary Pressure

Central banks have responded to rising inflation with significant increases in monetary policy rates in both advanced and emerging economies. The current monetary tightening process stands out for its speed and for being a simultaneous global tightening cycle that seeks to reduce inflation and inflation expectations. However, there are differences between advanced and emerging economies as well as by region.

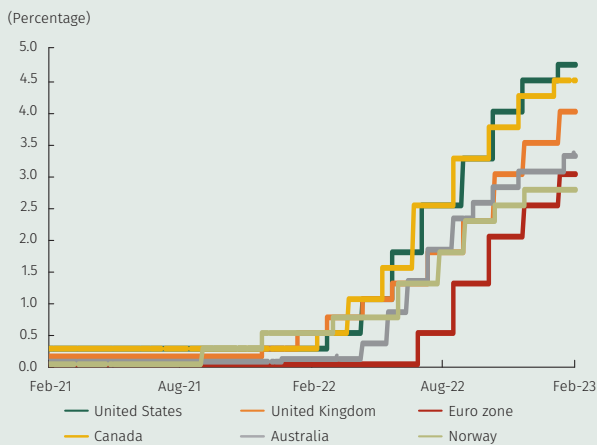
In Latin America, Brazil, Colombia, Chile, and Peru interest rates have risen 1,175 bp, 1,100 bp, 1,075 bp, and 750 bp, respectively. Monetary normalization in the region began in the second half of 2021 except for Brazil, where the central bank made the first interest rate increase in March 2021 (Graph B2.2, panel A). Among the emerging European economies, the adjustment in Hungary (where interest rates have been raised 1,240 bp since June 2021) is notable. Poland, in turn, has made 665 bp increases since October 2021. Asia's emerging economies, which are more open internationally than other emerging economies, have not had such high inflationary pressures, so their interest rate increases have been lower com-

Graph B2.2  
Monetary Policy Interest Rate

A. Emerging economies



B. Advanced economies



Source: central banks.

pared to other regions. Since 2021, interest rates in Malaysia, India, and the Philippines have increased 100 bp, 250 bp, and 400 bp, respectively.

In advanced economies, monetary policy rate increases exceeded 300 bp compared to the levels reached during the pandemic. The Federal Reserve of the United States (Fed), the European Central Bank (ECB), the Bank of England, and the Bank of Canada have increased their interest rates by 450 bp, 300 bp, 390 bp, and 425 bp respectively. These central banks began their cycles of increases in the first half of 2022 with the exception of the ECB, which raised its interest rate in July of that year. In Japan, no changes have been made to the monetary policy interest rate due to the limited inflationary pressure facing the country's economy. Faced with a 4.0% annual inflation rate, the Central Bank of Japan has kept its interest rate constant since before the pandemic. The Reserve Bank of Australia, in turn, raised its benchmark policy rate by 330 bp as of the fourth quarter of 2021. In addition to monetary policy increases, countries that adopted quantitative easing measures<sup>1</sup> during the pandemic have begun to reduce the level of assets on their balance sheets, thereby reducing the money supply in the economy to moderate economic activity and control inflation (Graph B2.2, panel B).

The tightening of monetary policy by central banks has implications for growth and inflation. Moderating aggregate demand, smoothing credit growth, and anchoring inflation expectations are objectives that central banks pursue through tighter policy. The increase in monetary policy interest rates in most countries has resulted in less favorable global financial conditions, an adjustment that has moderated the growth rate of economic activity and contributed to the slowdown in inflation. In addition to these effects, tighter financial conditions, caused by monetary normalization in advanced economies, have resulted in lower portfolio flows to emerging economies, lower external demand for their exports, and pressure on exchange rates.

Although the global monetary contraction already seems to be influencing economic activity and inflation, it may have taken too long. In 2021, both monetary authorities and analysts agreed that the increase in inflation was caused by transitory supply shocks, and a gradual normalization of monetary policy was expected after the stimulus implemented in the pandemic. This diagnosis, which in retrospect turned out to be wrong, caused interest rates, particularly in advanced economies, to not rise so soon in anticipation of inflation. Although monetary authorities could not determine the duration of the supply shocks that began to materialize in 2021, nor was it possible for them to anticipate the invasion of Ukraine, the delay in monetary policy actions could explain the persistence of inflation and part of the rise in inflation expectations since this damaged the credibility of central banks with respect to their price control mandate. While it is difficult to assess a counterfactual scenario, the delay in monetary normalization could also have detracted from the effectiveness of monetary policy, since it may have caused recent interest rate increases to be higher compared to a tightening cycle that had started earlier.

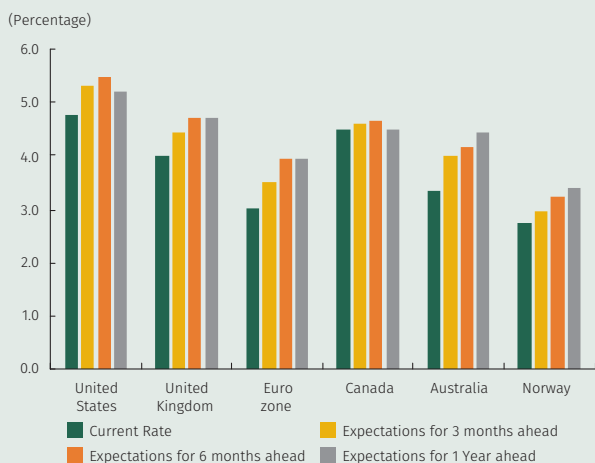
<sup>1</sup> Quantitative easing is a monetary policy tool that consists of the purchase of financial assets by central banks to increase the money supply and stimulate economic activity.

**Graph B2.3**  
**Monetary Policy Interest Rates Implied in the Financial Markets**

**A. Emerging economies**



**B. Advanced economies**



Source: Bloomberg.

Although monetary tightening has been widespread, the speed and size of interest rate increases, as well as their terminal level and the duration of the tightening stance will continue to depend on idiosyncratic factors in each economy and the persistence of the shocks described in the previous section. An example of local factors are levels of public spending that continue to stimulate domestic demand, or the presence of domestic supply shocks. Countries with these situations will face additional inflationary pressure and will probably require a more contractionary monetary policy. Likewise, the speed of inflation convergence to their respective targets will depend on the persistence of inflation resulting from the different shocks faced by each country, the behavior of labor markets, the degree of indexation in each economy, and the speed with which demand adjusts to tighter financial conditions.

Looking ahead, there is still a high level of uncertainty about the duration of this upward interest rate cycle as well as about how long central banks will keep rates at elevated levels and their subsequent reduction (Graph B2.3). Unexpected inflation, growth or employment figures may change expectations about the future of global monetary policy. For example, higher growth forecasts for this year could give central banks more room to keep interest rates in contractionary territory while inflation returns to target. Also, a more-persistent-than-expected inflation will imply that central banks will maintain their contractionary policy for a longer period or at higher levels than currently expected.

In line with the above, despite the slowdown in inflation in certain economies, monetary authorities should be cautious about initiating a cycle of cuts, precisely because of the uncertainty regarding the slowdown in inflation, whether it is permanent or not. Otherwise, new increases could occur in the future as is expected for some economies in the region (Graph B2.3, panel A). Faced with this scenario, central banks have stressed the importance of a normalization process based on new information as it emerges, especially in a context of high global uncertainty. The actions and communication of the monetary authorities will be focused on ensuring the convergence of inflation and its expectations to the target at the lowest possible cost in terms of economic activity and employment.