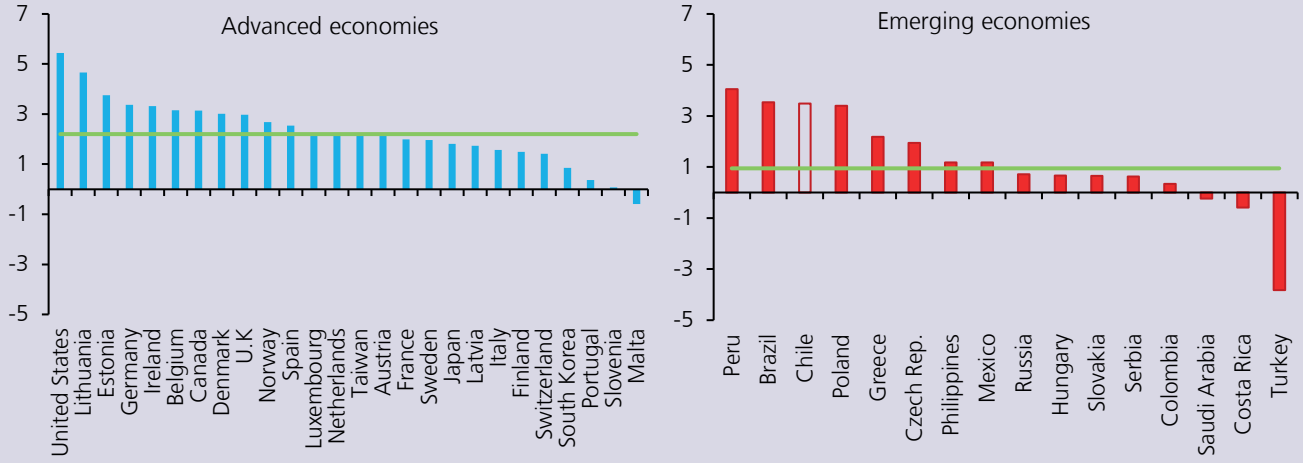
BOX IV.1:

Relevance of global and local factors in the recent evolution of inflation

In recent months, inflation has accelerated in most economies, with many of them surpassing the peaks of the aftermath of the 2008-2009 global financial crisis. This phenomenon owes both to global factors, which affect all countries, and country-specific ones. Among the former, the behavior of energy and food prices, stand out, as do the higher costs derived from the inability of the suppliers of some manufactured goods to respond to the higher demand. Within the latter, the intensity and form shown by aid policies during the pandemic play a major role, and explains much of the heterogeneity of the inflationary phenomenon across countries. This has been particularly intense in the U.S. among developed countries, and in Chile among emerging ones (figure IV.9).

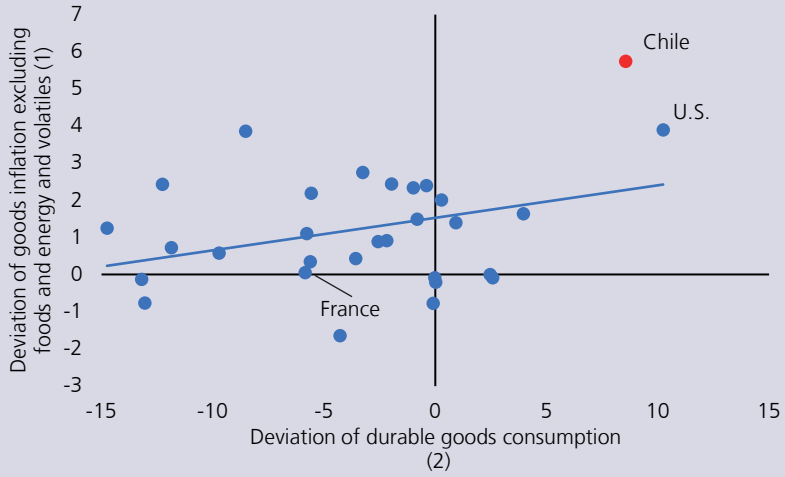
FIGURE IV.9 INFLATION IN A SAMPLE OF COUNTRIES (*)
(October 2021 figure with respect to 1998-2019 average, percentage points)



(*) Economies classified as advanced or emerging using definition of the IMF. The Philippines' inflation figure covers up to September. Green line shows group median.
Source: Bajraj, Carlomagno y Wlasiuk (2021).

The cross-country comparison suggests that local factors explain part of the difference in the observed inflation evolution during 2021. In particular, the magnitude of the increase in the prices of goods would be correlated with the increase in demand in each country. In a sample of 30 countries, this relationship is found to be non-linear, i.e., it would manifest itself more clearly in the case of higher increases in durable consumption (figure IV.10)[1]/. A more formal statistical analysis, done with the methodology of Bajraj, Carlomagno y Wlasiuk (2021), finds that global and local factors have played different roles in the evolution of inflation in different countries. In these results, the local factor has had a considerable weight in the increase of non-volatile inflation in Chile and the U.S., while in other countries, such as France, global or common factors among economies have mattered more (figure IV.11)[2]/. It is important to note that although the contribution of the global factor is relevant for most economies, this does not mean that in these countries the origin of inflation is completely imported, but rather that it has been caused by a factor that is common to several economies worldwide, such as the relatively synchronized opening up of economies.

FIGURE IV.10 GOODS INFLATION W/O VOLATILES AND CONSUMPTION OF DURABLES
(average increase in 2019-2021 with respect to 1998-2021 average, percentage)

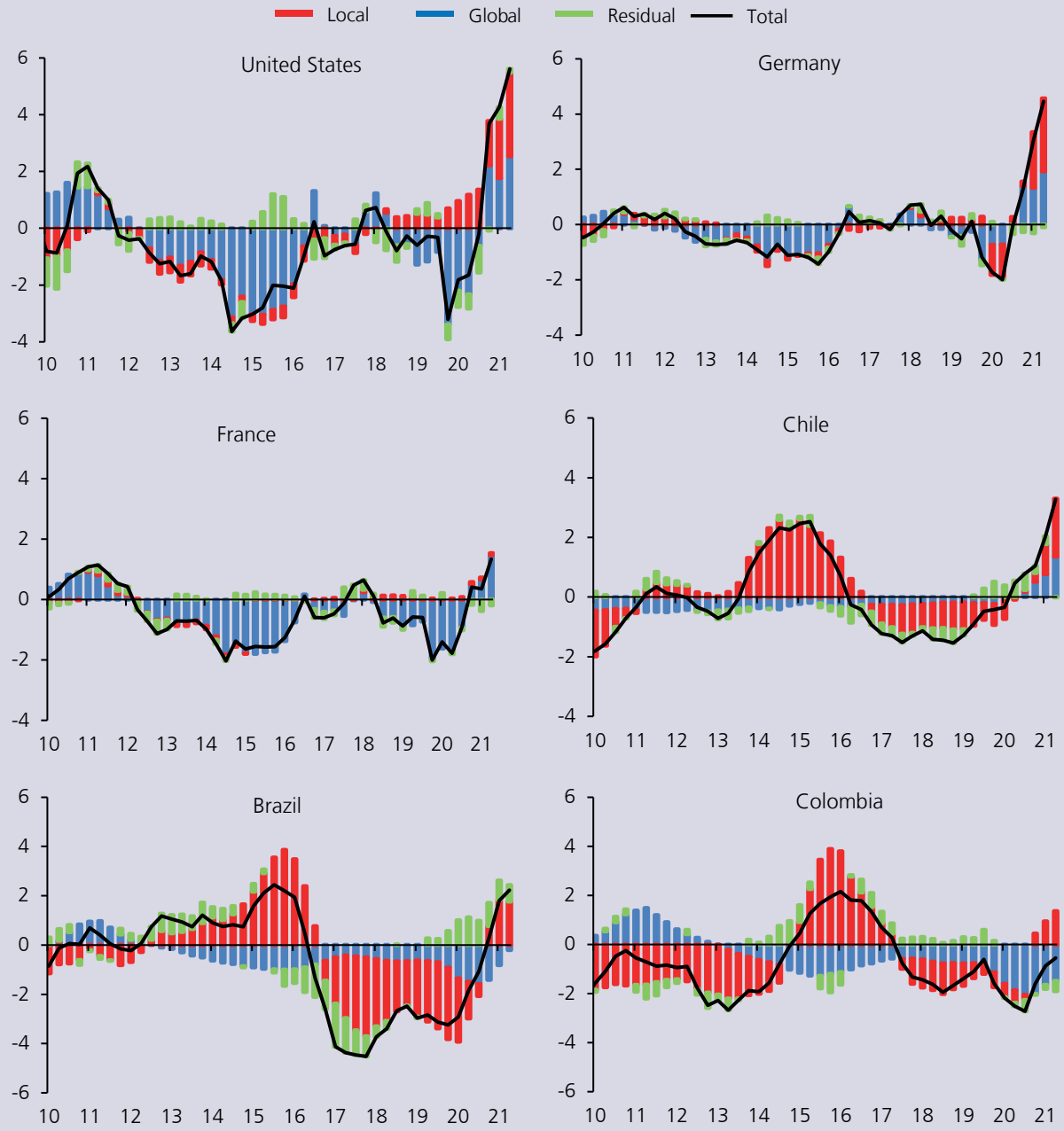


(1) Uses methodology and database presented in Bajraj, Carlomagno, and Wlasiuk (2021). The axis shows the deviation of annual price growth between the third quarters of 2019 and of 2021 from average annual growth between 1998 and 2021. (2) Figures from OECD data library, DANE, Central Bank of Chile, and Bloomberg are used for durable goods consumption. The axis shows deviation of annual consumption growth between first halves of 2019 and of 2021 from average annual growth between 1998 and 2021.
Source: Central Bank of Chile.

[1]/ Adrian y Gopinath (2021) find a positive correlation between post-pandemic inflation and the velocity of the recovery of economic activity.

[2]/ In the case of Germany, the contribution of local factors at the end of the sample reflects the downward reversal of VAT implemented early on in the pandemic.

FIGURE IV.11 DECOMPOSITION OF ANNUAL VARIATION OF THE CPI W/O VOLATILES (*)
(percentage points - deviation from average inflation between 2001 and 2021)



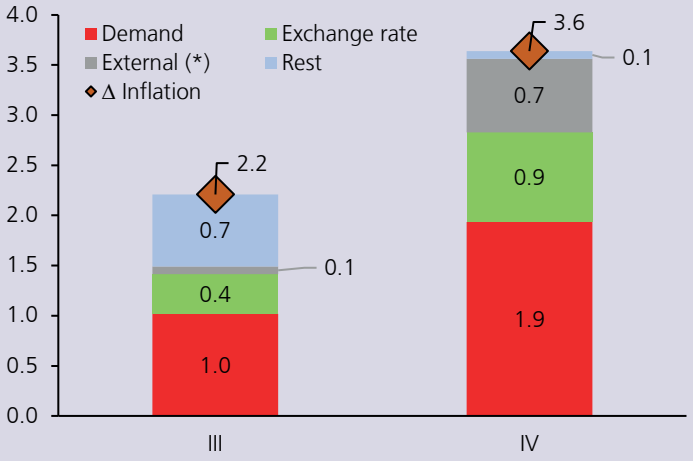
(*) Contributions are calculated using the Bajraj, Carlomagno, and Wlasiuk (2021) database and factor model. The bars indicate the contribution of (a) global factors (sum of a factor common to all countries and series, and of a set of global sectoral factors), and (b) local factors (country factor, common to all CPI series of each country). The residual can also be interpreted as a local component, but not common to all CPI series. Data for the fourth quarter of 2021 calculated based on average quarterly velocity up to October 2021.
Source: Central Bank of Chile.

For Chile, the contribution of external and local factors to the increase in inflation can also be analyzed with the models that the Bank frequently uses in its forecasting process (Macroeconomic Models at the Central Bank of Chile). These tools quantify how much of the observed increase in inflation can be attributed to local elements, such as demand growth, and how much is due to external factors, such as higher oil prices. The decomposition of the Semi-Structural Model of Projections (MSEP) shows that the increase in domestic demand explains half of the higher inflation in the third and fourth quarters of 2021 with respect to the same quarters the year before. The depreciation of the Chilean peso, whose movements have also been driven by local factors, would explain about 20% of the increase in inflation (figure IV.12).

The inflation increase of recent months has been significant. Although part of the higher price pressures has an external component, the evidence presented in this box suggests that in Chile the bulk of the effect lies in local factors, mainly the very significant increase in spending derived from policies to stimulate private consumption, which place Chile as one of the countries with the highest growth in 2021 (figure IV.13). In quantitative terms, of the 3.6 percentage points (pp) increase in inflation estimated for the fourth quarter of 2021 with respect to the same period of 2020, half (1.9 pp) is due to the increased dynamism of demand.

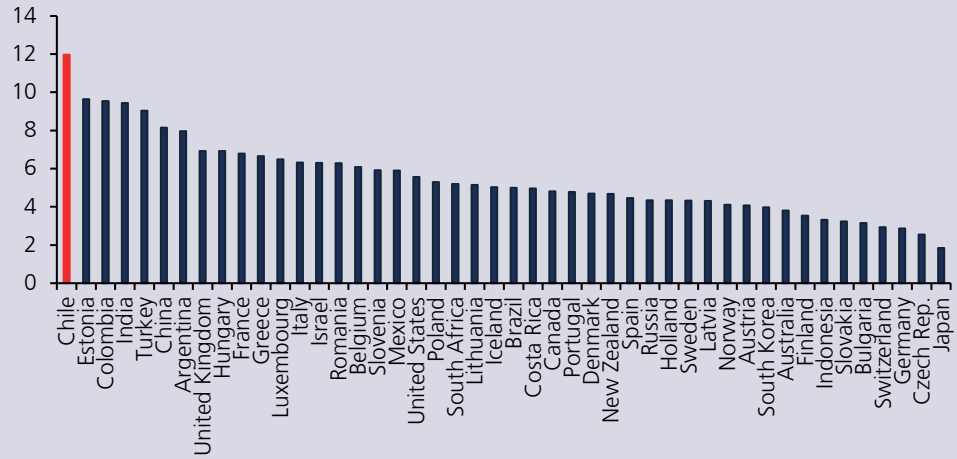
Understanding the origin of the inflationary increase is relevant to determine its persistence and to deliver an adequate monetary policy response. However, that inflation has an external component does not invalidate the fact that this phenomenon may have implications for monetary policy. Thus, in economies where indexation is significant, inflation increases tend to perpetuate themselves, making price increases more persistent. Likewise, countries in which inflationary expectations rise more as inflation increases will suffer greater complications in the convergence of the inflationary process. This will involve greater adjustments in monetary policy to prevent these second-round effects or via expectations from generating deviations of actual inflation from the defined target. Thus, in many countries, the market has corrected upward the expectations on the monetary policy rate in line with the higher expected inflation.

FIGURE IV.12 CHANGE IN 2021 ANNUAL INFLATION WITH RESPECT TO SAME QUARTER A YEAR BEFORE
(quarterly data, percentage points)



(*) External includes oil and copper prices, trading partners´activity and other external factors.
Source: Central Bank of Chile.

FIGURE IV.13 2021 GDP GROWTH FORECAST
(annual change, percent)



Source: OCDE (2021).