Inflation Annex

Rising commodity prices have made a major contribution to the increase in headline inflation rates, which are close to- or have breached the upper limit of central banks' targeted bands in many countries.

However local food prices in developing countries have not increased as much as international food prices. Notwithstanding the 47 percent increase in the dollar prices of internationally traded food commodities between June 2010 and February 2011, local food price indexes in developing countries have risen by only 7.9 percent over the same period. In part, this discrepancy reflects the depreciation of the dollar; the wider range of food commodities consumed locally; and weak pass through of internationally traded food prices to local prices. In developing countries in Sub-Saharan Africa and South America the pass through was less than 10 percent in: 67 percent of countries for rice, 69 percent for maize, and 70 percent for wheat. Government subsidies, price controls, weak infrastructure, and low import dependency impede pass through, while it tends to be higher in countries with closer links to international markets and limited government intervention (e.g. South Africa).

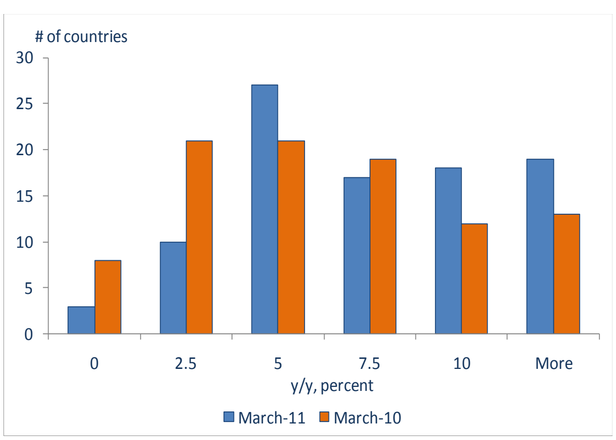
Annual inflation rates have increased in a large number of developing countries over the past year. More than half of developing countries now have annual inflation in excess of 5 percent, with one in five countries reporting inflation in excess of 10 percent. Meanwhile the share of countries with inflation rates in the range of 2.5 percent to 5 percent has also increased.

Headline inflation accelerated by more than 3 percentage points in one in four developing countries between March 2010 and March 2011, compared to more than one in five during the previous year (figure INFL.2). One in five countries have also seen inflation decline by more than 1 percentage point over the March 2010 to March 2011 period.

However, the extent of the pick up in inflation for most countries has been relatively modest, with inflation rates in more than half of developing countries still below average inflation recorded in the pre-crisis period (January 2000 through August 2008). Inflation is less than 2 percentage points higher than that average in 80 percent of countries.

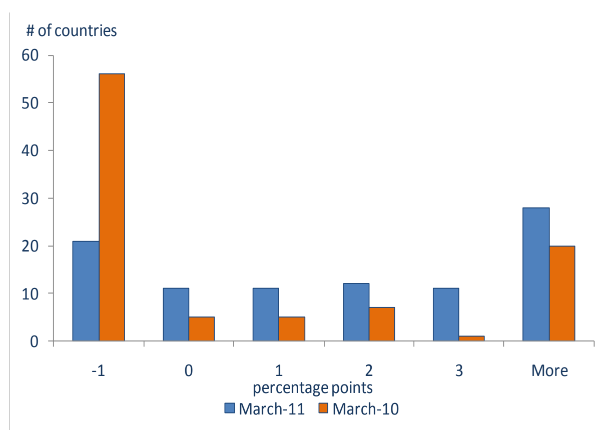
Inflation in high-income countries is rising but remains at relatively low levels. Prices in high-income OECD countries were 3.2 percent higher in April 2011 than a year earlier, an

Figure INFL.1 Headline inflation has accelerated in developing countries over the past year



Source: The World Bank.

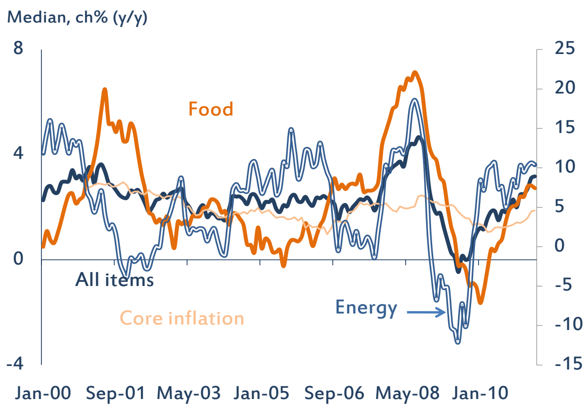
Figure INFL.2 Change in inflation rate over the past year



Source: The World Bank.

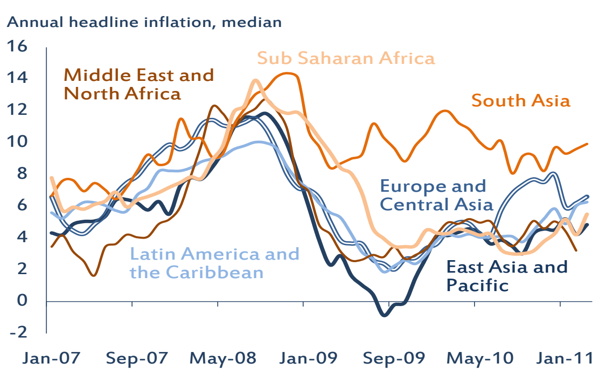
increase of 1.3 percentage points. The energy price component of the CPI index was up 10.4 percent, down slightly from the 10.6 percent increase recorded in March, while the food price component was up 3 percent (year-on-year in April, 2011) (figure INFL.3). In the euro area, headline inflation was 2.8 percent (y-o-y) in April, well above the 2 percent ECB targeted rate, in part due to rising energy prices. In the United States, headline inflation was 3.2 percent by April, pushed higher by energy prices up 19 percent and a weaker dollar (down by more-than 9 percent in nominal effective terms since June 2010). Headline inflation was up yet more strongly in other high-income countries, including Australia, Canada, Korea and Sweden.

Figure INFL.3 Core inflation in high-income OECD countries remains contained as inflationary expectations remained anchored



Source: OECD.

Figure INFL.4 Inflation accelerates in most developing regions on higher food and energy prices



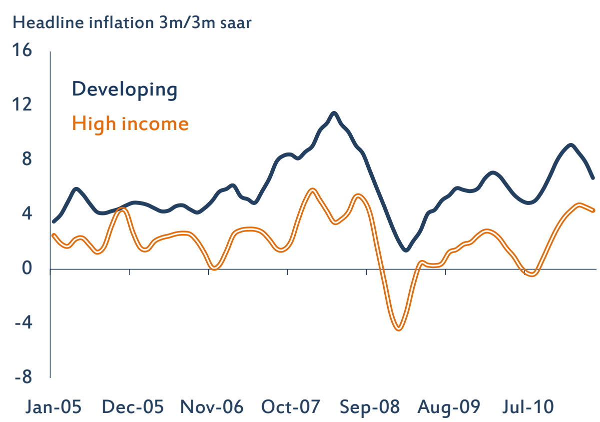
Source: The World Bank.

The rise in headline inflation in high-income OECD countries has had a limited impact on inflationary expectations to date, and core inflation has increased gradually to 1.9 percent as of April 2011, from 1.1 percent in the year-earlier period (to 1.3 percent in the United States and 1.5 percent in the euro zone).

Headline inflation in developing countries has accelerated recently to 6.9 percent by April 2011, from a 6 percent in April 2010, as international food and fuel prices stabilized recently. Food inflation exceeded 9 percent by February 2011 in developing countries.[1] Median headline inflation for these countries was slightly lower at 5.6 percent, reflecting the fact that inflation momentum in some of the larger middle-income countries, whose inflation rates have larger weights in the overall index is close to 6.9 percent (figure INFL.4). In developing countries, rising food and fuel prices, and in some cases tightening manufacturing capacity and lagging policy normalization, have combined to push headline inflation higher. But, most recently, monthly inflation rates have eased in both high-income and developing countries.

Inflation momentum is strong. From a three month over three month perspective, the pace of annualized inflation in both high-income and developing countries has been accelerating until just recently and exceeded year-over-year

Figure INFL.5 Headline inflation pressures have picked up since mid-2010 but are easing

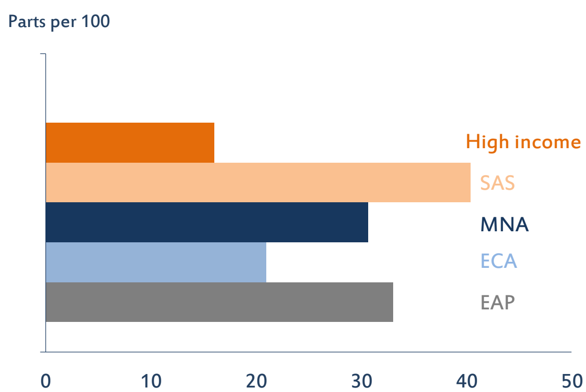


Source: The World Bank.

measures. At the global level, the annualized pace of monthly inflation was 5 percent (3m/3m saar) in the three months to April 2011, with prices rising at a 4.3 percent annualized rate in high-income countries and a 6.7 percent rate in developing countries (figure INFL.5). Although this momentum measure of inflation is lower in high-income countries than in developing countries, it has accelerated more quickly in high -income countries (up 4.7 percentage points versus 1.8 percentage point). This stronger acceleration likely reflects quicker pass-through of higher international fuel prices in high-income countries, and is observed despite the lower weight of food and fuel in the CPI basket in these economies (figure INFL.6 and figure INFL.7a). More recently however momentum has eased in developing countries, with a broad-based deceleration across income groups and regions. Among developing regions, the easing of inflationary pressures is most pronounced in the East Asia & Pacific, and the Europe & Central Asia regions. The deceleration is less well established in South Asia and in Latin America and the Caribbean, while monthly inflation is rising in the Middle-East & North Africa and Sub-Saharan Africa (figure INFL.7b).

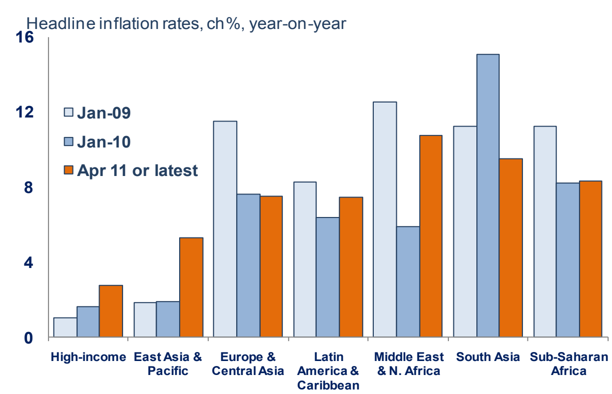
In addition to the inflationary pressures coming from higher international commodity prices capacity constraints in many middle-income countries have added to price pressures. In Brazil, headline inflation accelerated to 6.5 percent in April, while in China inflation was more than 5.3 percent (y-o-y), up 2.2 percentage points from a year earlier, as food inflation spiked to over 10 percent. Recent decisions to allow domestic gasoline and diesel prices to rise could push inflation as much as 0.5 percentage points higher. In India, year-on-year inflation continues to remain elevated and has surprised to the upside in March and April 2011 (9 and 8.7 percent respectively) due to accelerating non-food inflation and higher energy prices, and a surge in coal prices in April. There have been sharp upward revisions for three consecutive months, suggesting that actual inflation in March and April could be even higher.

Figure INFL.6 Weight of food in the CPI basket



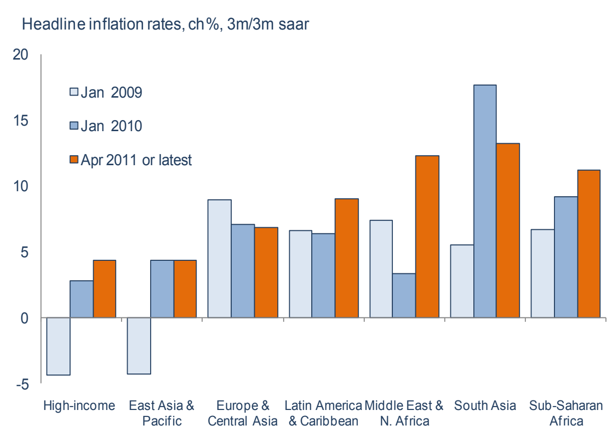
Source: IMF.

Figure INFL.7a Headline inflation rates, ch%, year-on-year



Source: The World Bank.

Figure INFL.7b Headline inflation rates



Source: The World Bank.

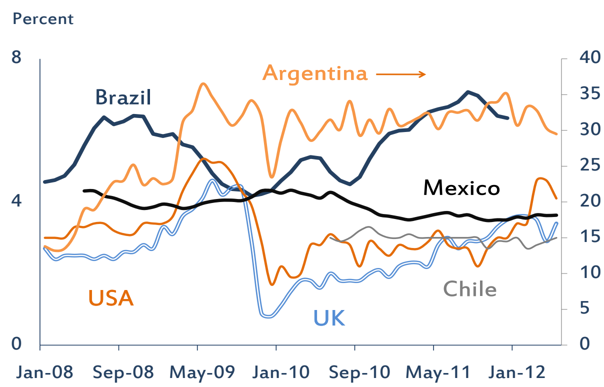
In Thailand, core inflation surprised to the upside in May as well, rising to 2.5 percent year-on-year, suggesting that higher energy and food prices are starting to have second round effects, while tighter labor markets are also putting upward pressure on producer prices. In Indonesia, annual headline inflation stood at 6.2 percent in April, before easing to 6 percent in May, while core inflation rose to a 19-month high of 4.6 percent in April and remained at that level in May. While policy is being tightened in all of these countries, both fiscal and monetary policy remain accommodative, leading to higher risks that headline CPI changes seep into core inflation, given strong domestic demand and elevated capacity utilization rates (see Walsh, 2011 for a discussion, suggesting that commodity prices should not be excluded from core measures of inflation in developing countries).

Outlook

Prospects for inflation in developing countries will vary depending on industrial capacity utilization rates, exchange rate movements and the policy stance. However, risks to inflation are to the upside, and inflation could overshoot the upper limits of central-bank targeted ranges in a number of countries-- that show signs of overheating and where monetary and fiscal policy tightening are behind the curve. Even if the prices of internationally traded food and oil stabilize in the second half of 2011, domestic food and fuel prices are expected to continue to rise in many developing countries, reflecting delayed pass-through to local markets and increased pressures from higher fuel prices from the costs of fertilizers and transportation. As outlined in the main text, in the current economic context it is entirely possible that both food and fuel prices rise further.

Headline CPI momentum suggests that inflation will accelerate further in most developing regions, in particular in South Asia, Sub Saharan Africa, the Middles East and North Africa; and to a lesser degree in Latin America, Europe and Central Asia and East Asia and the Pacific. Moreover, high food and fuel prices are starting to impact inflationary expectations, which in turn may increase pressure on wages, especially in the emerging economies, where labor markets are tightening (figure INFL.7). If policy tightening fails to bring inflationary expectations (figure INFL.8) down, we could see the beginnings of an inflationary spiral.

Figure INFL.8 Expectations for inflation rates twelve months forward are rising



Source: Datastream, Banco central do Brasil.

Notes

1. For example, the weight of food in the CPI basket is 40 points of 100 parts in South Asia, and over 30 in East Asia and Pacific (median value for Thailand, Malaysia, and the Philippines) and MENA. Data for Sub-Saharan African countries is not available but for example in Ghana the weight of food in the CPI basket is 44, while in Cote d'Ivoire it is 24.8. In comparison in high-income countries the median weight of food in the CPI basket is 16 parts per 100 parts.