## Box A

## Commodity Prices and Global Inflation

Over the past year, global food and energy prices have increased significantly. During this period, the IMF Food Price Index – which measures the prices of 22 key food commodities in global markets – has increased by 28 per cent in SDR terms, while the price of crude oil has risen by 30 per cent (Graph A1). These increases are putting upward pressure on headline inflation rates in a wide range of countries. This is particularly the case in Asia, where food typically accounts for around one-quarter of the Consumer Price Index (CPI) basket, compared with under 16 per cent of the CPI basket in the North Atlantic economies (Table A1).1 Energy – including fuel for vehicles and household energy needs – also accounts for a larger share of the CPI in many lower-income economies in Asia than in developed economies.

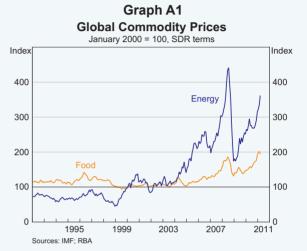


Table A1: Weight of Commodities in the CPI(a)

	Food <sup>(b)</sup>	Household energy	Vehicle fuel
Australia	12	3	4
China <sup>(c)</sup>	31	61/2	1/2
India	45	91/2	na
Japan	191/2	51/2	21/2
East Asia (excl China and Japan)(c)	19	41/2	51/2
Euro area	151/2	51/2	41/2
United Kingdom	12	41/2	41/2
United States	8	4	41/2

<sup>(</sup>a) Effective weights for 2011 or nearest available year

<sup>(</sup>b) Food and non-alcoholic beverages; excludes food consumed away from the home in all economies except China

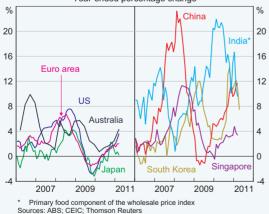
<sup>(</sup>c) Estimates

Sources: ABS; CEIC; Eurostat; Office for National Statistics; RBA; US Bureau of Labor Statistics

<sup>1</sup> Food is defined as food consumed in the home.

While the price of agricultural commodities has risen significantly over the past year, the impact of this on the food component of the CPI has varied considerably across economies (Graph A2).<sup>2</sup> The fastest increases in consumer food prices have occurred in Asia, with food prices increasing by around 10 per cent or more over the year to March in China, India, Indonesia and South Korea. In addition to the global factors influencing food prices, these economies have all experienced economy-specific disruptions to food supplies, including floods, droughts and, in the case of South Korea, an outbreak of foot and mouth disease. Food prices have increased more moderately in the North Atlantic economies and in Japan, with inflation averaging around 2½ per cent over the year to March, though some of this reflects consumption tax increases. In part, the less rapid increases in food prices in the CPIs of these economies are likely to reflect the smaller relative importance of raw commodity inputs in the overall retail price of food; households in higher-income economies tend to consume more processed and prepared food in the home, with distribution and advertising costs also likely to be higher in developed economies.





<sup>2</sup> We look specifically at Australia, Canada, China, euro area, Hong Kong, India, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand, United Kingdom and United States.

In many countries, the direct pass-through of higher global food prices to measured food price inflation in the CPIs has so far been lower in the current episode than occurred in 2007–2008, particularly in the North Atlantic economies and Japan. When year-ended inflation in the global price of food commodities reached 35 per cent in 2008, food prices in the CPI were increasing by an average of around 5 per cent across these economies. Although global food prices were recently rising at a similar pace, food price inflation in the CPI was typically around half of what it had been at the equivalent point in that earlier episode. To a significant extent, this reflects the spare capacity that exists in many developed economies, which is otherwise dampening the retail price of food. In contrast, in 2007–2008 a whole range of input costs were increasing guite guickly.

The impact of higher oil prices on the CPI is most evident in higher prices for automotive fuel (Graph A3). Although crude oil is internationally traded and priced on world markets, there is significant variation in how movements in the US dollar crude oil price affect retail fuel prices across the globe. Over the past year, fuel prices have increased the fastest in the United States, at almost 30 per cent over the year to March; these increases have also been significant in other developed economies, particularly in the euro area and the United Kingdom. In contrast, fuel price increases have been under 10 per cent in Australia and in many Asian economies over the past year. One reason for these differences is movements in exchange rates against the US dollar. A second reason is that the pass-through of movements in the price of crude oil in the domestic currency to the final fuel price is influenced by distribution costs and taxes and subsidies. Excise taxes are common in developed countries, with rates particularly high in Europe, while fuel subsidies are common in Asia, applying to at least some oil-based fuels in China, India, Indonesia, Malaysia and Thailand.

Higher prices for oil and other energy commodities also contribute to headline inflation through their impact on the price of energy used in the home. Inflation in the prices of electricity, gas and other household fuels has risen in most economies, although cross-country inflation rates for these components can also diverge significantly. For example, among Australia's major trading partners, current rates of inflation in electricity prices range from around -2 per cent (Thailand) to 10 per cent (Hong Kong), with differences in electricity generation technologies used and retail price regulation among the reasons for the disparity. Inflation in household gas prices has also picked up in many countries and the price of heating oil has risen rapidly in the North Atlantic economies.

Higher food and energy prices also affect consumer prices indirectly, since they are key inputs into the production of many goods and services. One clear example is clothing prices, which have been influenced by a trebling in the price of cotton since early 2009. In China, clothing prices are increasing at their fastest pace in a decade and this is contributing to higher prices of exported clothing (Graph A4). Higher rates of headline CPI inflation can also lead to an increase in inflation expectations and thus to a pick-up in the pace of wage inflation. Measures of inflation expectations over the year ahead have picked up in a range of economies in recent months and are considerably higher than the average over the past decade. In contrast, there has been relatively little change in measures of longer-term inflation expectations. \*

## Graph A3 Automotive Fuel Prices in the CPI



 Wholesale price index component for India; retail price index component for China Sources: ABS; CEIC; Thomson Reuters

**Graph A4**China – Merchandise Export Prices\*

