To bring down imported inflation, interest rates must rise back to normal

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When I studied for my PhD in economics at a US graduate school, the compulsory macro course focused on closed economy macroeconomics. A close economy has no economic links to other countries (no exports, imports or capital flows). This focus on a closed economy continued until the last lecture when the international economy was mentioned. An open economy is one in which there is trade in goods and services (exports and imports) and financial capital can flow in and out. Students interested in the open economy could take a different course on international macroeconomics. I assume this is probably still the case today. Much of what many macroeconomists understand derives from a closed economy. It is surprising given that closed economy macro is even less relevant for the US economy as the dominance of the United States in the world economy has declined. However, it has always been the wrong way to understand key aspects of macroeconomics for almost every other country.

A closed economy was already a poor approximation for Australia in the 1950s when people like Trevor Swan were rethinking macroeconomics relevant to an open economy. However, with the opening of the Australian economy following the Hawke and Keating reforms in the 1980s, Australia's interconnectedness with the world economy increased dramatically.

Ignoring open economy macro was one reason why the RBA made the fundamental mistake of sharply raising interest rates in the late 1980s, causing the recession Australia didn't have to have. The goal at the time was to reduce the current account deficit and avoid Australia becoming a 'banana republic'. Instead of improving the current account, the higher interest rate in Australia attracted capital from overseas, which appreciated the Aussie dollar and worsened the current account by reducing exports and increasing imports. This fundamental misunderstanding of the importance of open economy macro led to a very long and severe recession which could have been entirely avoidable if there had been a better understanding of open economy macroeconomics.

The lessons of the early 90s recession that Australia isn't a closed economy (and it matters) may not have been well understood by central bankers. Why does the openness of the economy matter for inflation?

Inflation is caused by excess demand relative to supply. Inflation can be generated within a country or it could be imported from overseas. Persistent inflation is a macroeconomic phenomenon usually sustained by loose fiscal or monetary policies. Inflation impulses can also be initiated by a rise in a relative price in the domestic or world economies. So the critical issue is what is causing the inflation impulse in the first place and then what macroeconomic policies are required to prevent the initial shock of surging prices from becoming persistent inflation.

Consider a closed economy that produces output with capital, labour and intermediate inputs such as energy and other manufactured goods. These intermediate inputs have all been produced domestically. The output price is the cost of each of the inputs times the share of each input in production.

Gross output is all goods and services produced, including inputs into production chains. Value added (or Gross Domestic Product) is the value of output added by labour and capital. GDP nets out the intermediate goods and services and condenses everything down to capital and labour inputs.

In a closed Australian economy, the price level can be calculated by using the shares of capital and labour in GDP multiplied by the costs of each primary factor. Labour's share in GDP is approximately 2/3, and capital's share is about 1/3. So a change in prices will be 2/3 times the change in labour cost plus 1/3 times the change in the cost of capital. If wages rise by three per cent, the price level will increase by two per cent. This calculation is similar to Governor Lowe's 'back of the envelope' calculation and why central banks worry about wages as a cause of inflation.

Whether using GDP or gross output shares in a closed economy, the impact of input cost on inflation is the same because the intermediate goods can be substituted for the capital and labour in those goods.

This equivalence is not valid in an open economy where many intermediate inputs are imported from overseas or produced in Australia but sold at the world price. An increase in the world gas price will feed directly into higher production costs of all Australian goods. There will be higher profits for gas producers if there is no initial change in input costs in Australia. This excess profit will eventually go to shareholders or workers, depending on relative power.

What matter in the open economy for thinking about inflation is the share of all primary domestic factors and intermediate goods either imported or sold at world prices in Australia.

In Australia, labour's share in gross output is 18%. The impact of wages on Australian inflation will be between 18% and 66% depending on how wages feed into the production of domestically produced intermediate goods.

When a global shock such as the covid 19 pandemic impacts supply chains, a war in Ukraine disrupts worldwide food and energy markets, or there is global monetary and fiscal expansion, the cost of many inputs in Australian production chains will rise. This global inflation directly increases Australian inflation. Loose Australian monetary and fiscal policies will also add demand, and climate shocks will reduce supply, adding to Australian inflation. The Aussie dollar can appreciate offsetting some of this international shock. But if the RBA is tightening monetary policy more slowly than other central banks, the exchange rate will tend to depreciate, adding further to Australian inflation. McKibbin Cagliarini (2009) shows the exchange rate can only, at best, offset the average change in world prices but not the change in global relative prices.

Thus there can be an inflation surge not caused by wages because the world's structure is different from the 1970s. Central banks need to understand the broader implications of open economy macroeconomics and production networks so they at least are working with a more appropriate model. How to respond to the current inflation shock? Just as rising real wages didn't cause the current inflation, reducing real wages is not necessary to reduce inflation. However, increasing interest rates back to normal levels is essential because this will reduce demand and appreciate the exchange rate, making intermediate and final goods cheaper.

https://www.rba.gov.au/publications/confs/2009/cagliarini-mckibbin.html

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