

RESERVE BANK OF FIJI



Inflation Measures in Fiji

Brief Introduction

This newspaper article builds on from the previous published articles titled *Inflation in Fiji* (printed in the Fiji Sun on 27 February 2016), *The Recent Natural Disasters, Yaqona Prices and Inflation* (printed in the Fiji Sun on 10 December 2016) and *An Analysis of Inflation by Division: 2017* (printed in the Fiji Sun on 30 January 2018). This article discusses the inflation measures in Fiji, particularly headline and core inflation. It also briefly discusses Fiji's inflation rates compared to its major trading partner economies (TPEs) and other developing economies (ODEs) similar to Fiji.

Studies have shown that countries that have been successful in containing inflation have recorded good growth performances for a longer period of time. It is therefore important to keep inflation low and stable.

Like most central banks, one of the twin monetary policy objectives of the Reserve Bank of Fiji (RBF) is price stability. Given that inflation targeting of the most developed central banks ranges between 2-4 percent, the global inflation benchmark for low inflation is set to be around 4.0 percent. Formal inflation targeting central banks such as the US Federal Reserve Bank has set its target at 2.0 percent while the range for the Reserve Bank of Australia and Reserve Bank of New Zealand (RBNZ) are 2-3 percent and 1-3 percent respectively. The Canadian Central Bank also has a range similar to the RBNZ.

For Fiji, the RBF is generally comfortable with a low and stable rate of inflation between 2-4 percent while moderate inflation is between 5-8 percent. Currently, Fiji is experiencing moderate inflation rates driven largely by

higher prices for alcohol, yaqona, cigarette and fuel.

How is Inflation Measured?

While Inflation measures vary across countries, the Consumer Price Index (CPI) is the most common measure of inflation.

1. Headline Inflation

The Fiji Bureau of Statistics (FBOS) as the national statistical agency calculates CPI inflation (often referred to as headline inflation) in Fiji using its surveys.

Firstly, FBOS uses its Household Income & Expenditure survey to determine a fixed basket of goods and services that an average Fijian household spends his or her income on. This survey also collects information on the proportion of income, for an average Fijian consumer, which is spent on individual items in the CPI basket. Based on this information, the weights for each item are derived; in line with the proportion of income spent on it i.e. a higher income proportion implies a higher weight in the basket.

Categories	Weight (%)
Food & Non Alcoholic Beverages	28.32
Transport	14.46
Housing, Water, Electricity, Gas & Other Fuels	11.73
Education	10.24
Alcoholic Beverages, Tobacco & Narcotics	7.71
Miscellaneous Goods and Services	7.69
Furnishing, Household Equipment & Routine Household Maintenance	5.88
Communication	5.42
Recreation & Culture	2.92
Restaurant & Hotels	2.38
Clothing & Footwear	1.87

Health	1.38
All items	100.00

Source: Fiji Bureau of Statistics (2011 CPI Base)

Table 1 above shows how the items and weights are then separated according to broad categories. FBOS then conducts another survey during its predetermined base year (the current one being the 2011 CPI base) to determine the base prices for each item.

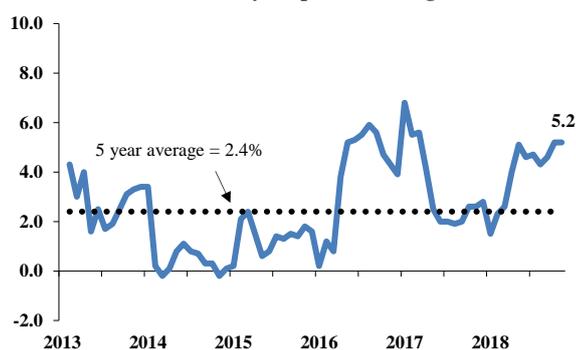
Finally, a monthly survey is carried out to compare the movements in prices of these items from base year prices which are referred to as inflation.

Headline inflation measures the total inflation within an economy. It covers “all items” in the CPI basket as in Table 1.

Fiji’s Headline Inflation

In the last 5 years¹, headline inflation in Fiji averaged around 2.4 percent (Figure 1). Recently, in November 2018, headline inflation stood at 5.2 percent specifically driven by higher prices of yaqona, alcohol, tobacco, vegetables and fuel.

Figure 1
November Headline Inflation
Year-on year percent change



Source: Fiji Bureau of Statistics

2. Core (underlying) inflation Measures

Given that headline inflation covers ‘all items’ in the CPI basket, it can sometimes include large temporary shocks that result from change in weather conditions (including natural disasters, policy changes in the National Budget (including subsidies and taxes) etc that affect

prices. The effects of these temporary shocks are usually for a short period of time.

Policy makers therefore are also interested in another measure of inflation called underlying or core inflation. Core inflation measures typically remove the volatile components (usually food and energy) from the CPI calculation. This is done to reflect the underlying inflation trend or only permanent price changes in an economy.

For Fiji, the FBOS does not provide any measure of core inflation. However, for policy purposes, the RBF estimates core inflation using two different measures. These are *Inflation excluding volatile items* and *Trimmed Mean*.

Inflation excluding volatile items excludes certain volatile items like food and energy (gas, oil, and diesel) from the total CPI. The *Trimmed Mean* measure calculates the inflation rate after removing extreme positive and negative (largest 15 percent and the smallest 15 percent) of monthly price changes.

Comparison of Fiji’s Headline and Core Inflation

While annual headline inflation has averaged around 2.4 percent in the last 5 years, core inflation, under the trimmed mean method and inflation excluding volatile items averaged around 0.4 percent and 3.1 percent, respectively, in the same period (Figure 2). In November 2018, although annual headline inflation stood high at 5.2 percent, trimmed mean and inflation excluding volatile items remained generally low at 1.0 percent and 2.0 percent, respectively.

¹ 2014-2017

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Figure 2
November Core Inflation
Year-on year percent change



Source: Reserve Bank of Fiji Estimates

Global Inflation

According to the International Monetary Fund's World Economic Outlook (IMF-WEO) October 2018, the *headline inflation* in advanced economies (AEs) and the emerging market developing economies (EMDEs) has averaged around 1.2 percent and 4.7 percent, respectively, in the last 5 years. However, core inflation remained soft. Early this year, core inflation began to show some signs of recovery in AEs, but it appears to have bottomed out in EMDEs.

Headline inflation for both economies is expected to stand at 1.8 percent and 5.0 percent, respectively in 2018. As far as latest international news is concerned, Venezuela is facing hyperinflation² with inflation standing at 488,865.0 percent in September 2018, reaching an all-time high. This is due to an economic crisis in which millions of Venezuelans are suffering from shortage of food and medicine.

Comparison of Fiji's inflation with its major TPEs and ODEs

Table 2 below shows the average headline inflation and core inflation for Fiji's major TPEs and ODEs over a 5 year period and the recent month available.

In terms of comparison with Fiji's major TPEs over a 5 year period, Fiji's average headline

inflation was higher compared to Australia, China, US, United Kingdom (UK), Eurozone, (NZ) and Japan. When compared with ODEs, Fiji's headline inflation was higher than Maldives, while lower compared to Mauritius, Trinidad & Tobago, Papua New Guinea (PNG) and Jamaica.

Over the same period, Fiji's core inflation has been high compared to all of its TPEs, except for Australia while at the same levels with China and UK. Moreover, Fiji's core inflation was lower than all ODEs.

Table 2	Annual Average +Inflation (2013-2017)		2018	
	Year-on year percent change			
	Headline	Core	Headline	Core
US	1.6	1.6	2.3 (Sep)	2.2 (Sep)
Australia	2.0	2.1	2.1 (Jun)	1.9 (Jun)
NZ	1.0	1.1	1.9 (Sep)	1.9 (Sep)
UK	1.5	1.7	2.4 (Sep)	1.9 (Sep)
Eurozone	0.7	0.8	2.1 (Sep)	0.9 (Sep)
Japan	0.7	0.9	1.2 (Sep)	1.0 (Sep)
China	1.9	1.7	2.5 (Sep)	1.7 (Sep)
Maldives	2.2	n.a.	2.6 (Aug)	n.a.
Mauritius	2.5	2.3	1.9 (Sep)	1.8 (Sep)
Trinidad & Tobago	4.1	1.8	1.2 (Jul)	1.4 (Jul)
PNG	5.7	3.4	4.8 (Mar)	5.3 (Mar)
Jamaica	5.6	4.0	4.3 (Sep)	2.1 (Jun)

Sources: IMF-WEO October 2018, Consensus forecast /Asia Pacific Consensus forecast August 2018, IEconomics, Trading economics, respective Central Banks and Finance Ministries.

Conclusion

Fiji has enjoyed relatively low inflation in the past years. However, the recent increase in headline inflation is largely attributed to supply side shocks especially natural disasters, surge in global crude oil prices along with structural changes announced in the 2018-2019 National

²Hyperinflation is a more extreme case of price increases. During this phase, inflation stands at the rate of a thousand, a million or even a billion percent per year.

Budget. Notably, these are factors beyond our direct control.

On a positive note, annual core inflation as measured by trimmed mean and exclusion of volatile items continue to remain low.

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