NATIONAL DIRECTORATE FOR ECONOMIC POLICY

QUARTERLY INFLATION REVIEW

SEPTEMBER -DECEMBER 2020

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KEY STATISTICS

- In December 2020 over the last year (Year on Year, YoY) inflation in Timor-Leste has remained low at 1.2%.
- During the fourth quarter of 2020 (Quarter on Quarter, QoQ) inflation in the whole country was 0.5%.
- Between September and December (QoQ) inflation in Dili was higher than in the Districts (0.7% in Dili vs 0.3% in districts.)
- Core inflation ie removing volatile categories such as food and transport, is -0.1% when compared the same quarter last year.
- CPI category with biggest increase in the fourth quarter of the year was Food and Non Alcoholic Beverages which increased 1.0% (QoQ).
- CPI category with the biggest decrease was Transport and Furnishing and Household Equipment which both decreased -0.6% over the fourth quarter (QoQ).
- The World Bank (WB) food price index increased 14% between December 2019 and December 2020 (YoY) and 12% over the last 3 months (QoQ).
- Rice is a main staple of the diet in Timor and the world rice price has increased 20% since December 2019 (YoY) and 3% over the last 3 months (QoQ). There was a brief spike in prices in April 2020 but are now decreasing. This is good for Timorese consumers.
- Coffee is one of Timor's most important non-oil exports. The world price of coffee (Arabica) has remained constant over the last year (YoY) but decreased -6% in the fourth quarter (QoQ). This is still around 60% the price seen in 2011, but recovering from a 10 year low seen in May 2019. This should be good news for coffee farmers and exporters.
- Domestic food prices rose in December though these remained muted at 2.2% (YoY) and 1.0% (QoQ). This benefits poorer households who spend most of their income on food.
- The price of oil halved in the 1st quarter of the year due to the fall in global demand during the height of the Covid-19 crisis, bottoming out at \$21.04 per barrel in April 2020, but have improved since, increasing to \$48.73 per barrel in December 2020. The price of oil still remains around a quarter less

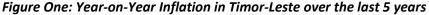
than it was in December 2019 (YoY). This is also like to have a downward effect on general inflation in the near future.

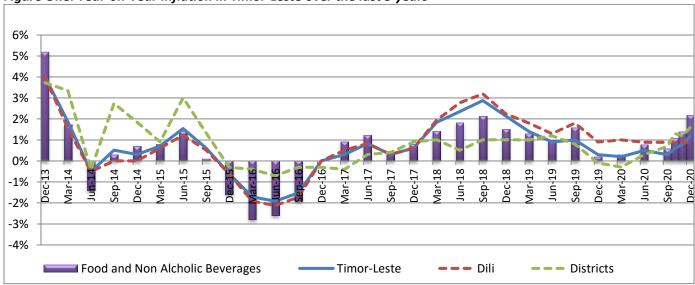
- The Nominal Effective Exchange Rate (NEER) decreased --1.1% (YoY) while the Real Effective Exchange Rate (REER) decreased -1.5% (YoY).
- This will have a negative on consumers and importers in Timor Leste as imports become more expensive but will have a positive effect on exporters whose products become cheaper overseas.
- Government Expenditure decreased -20.7% when you compare Q4 2020 with Q4 2019.
- Money Supply in December 2020 increased YoY 5.6%.
- The fourth quarter of 2020 saw a smaller increase in the price of non-tradeables (0.8%) than tradeables (1.4%).

Inflation Outlook	2018	2019	2020*	2021*	2022*	2023*
Timor-Leste*	2.3%	0.9%	0.3%	1.3%	2.3%	2.4%

TRENDS IN INFLATION OVER TIME

In December 2020 YoY inflation in Timor-Leste was 1.2%; this means that a basket of goods and services that cost \$100.00 in June 2019 will now cost \$101.20 inDecember 2020— on average, prices are very slightly up compared to one year ago. The Government's target range is 4%-6% as set out in the Government's Strategic Development Plan. The last time inflation was in this range was December 2013 when inflation was 4.0%.. YoY food and non-alcoholic beverage inflation in December 2020 was 2.2%, lower than the increase of 0.2% witnessed last December. Inflation in **Dili** was 0.9% (YoY) which is less than inflation in **Districts** which rose by 1.6% over the same period.





TIMOR LESTE'S CPI BASKET

The Consumer Price Index (CPI)¹ is used to measure consumer price inflation. To understand CPI think of a large basket containing the goods and services bought by households, the CPI estimates the change to the total cost of the basket on a monthly basis. Food and non-alcoholic beverages represent 54% of Timor-Leste's CPI basket² as more than half of Timorese household expenditure is spent on this group. Thus price movements in this group will have a significant impact on the overall rate of inflation and the purchasing power of Timorese citizens.

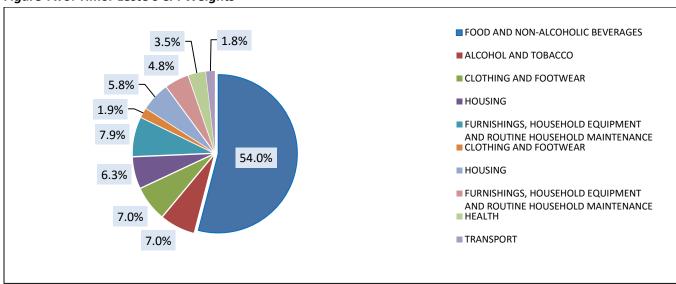


Figure Two: Timor Leste's CPI Weights

Over the 12 months from December 2019 to December 2020 there have been significant *price changes* in the following spending classes³:

- Education (+2.6%)- biggest increase
- Clothing and footwear & Food and Non Alcoholic Beverages (+2.2%)- second biggest increase
- Transport (-2.5%)- biggest decrease
- Furnishing and Household Equipment (-1.0%)- second biggest decrease

Despite these price changes for the groups mentioned above, contribution to overall inflation can be very different. **Contribution to inflation rate** measures the contribution to the overall rate of inflation of a grouping of goods and services, eg, the combination of its *price change and weight* within the series⁴. Therefore a small change in the growth rate of Food and Non Alcoholic Beverages can still have a big contribution to overall inflation due to it being the most important category as we can see below.

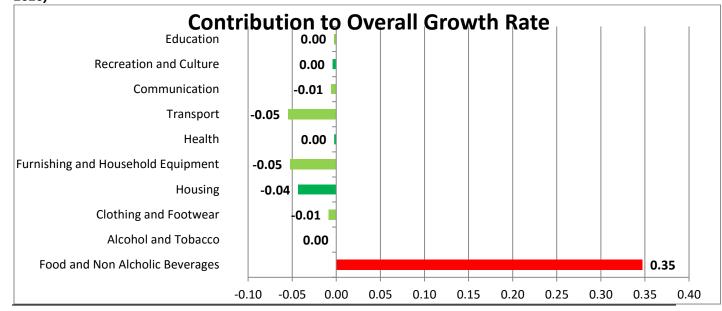
¹ The CPI is a weighted index meaning that the influence on the CPI index of a given item is dependent on the item's share in total household consumption.

² Timor-Leste's CPI basket is made up of the ten expenditure groupings seen in Figure Two.

Expenditure classes are the sub-categories within an expenditure group in a CPI index

⁴ The contributions of each grouping will sum to give the overall rate of inflation

Figure Three: Contribution to Overall YoY Inflation Rates taking into account the CPI weights (December 2020)⁵



CAUSES OF INFLATION⁶

International Factors

Commodity Prices

International food prices have generally remained stable and the World Bank (WB) food price index increased 14% between December 2019 and December 2020. World rice price (Thai 3% benchmark) increased 20% (YoY). Coffee Arabica Prices increased 0% (YoY). In Q1 2020, crude oil (Brent)⁷ fell dramatically to half its price, in Q4 the prices have increased since then but this is still -23% less than prices seen in December 2019 (YoY)) due to supressed global demand during the COVID-19 crisis.

Figure Four: International Commodity Prices

⁵ See concepts and terminology section for further explanation

⁶ Within this section inflation refers to YoY inflation

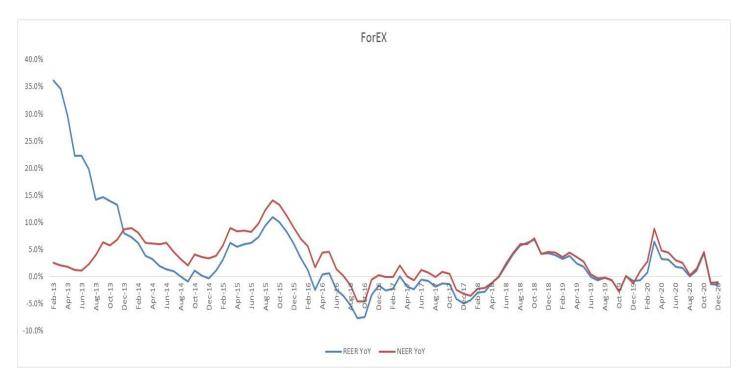
⁷ World Bank Pink Sheet, updated December 2020



Exchange Rate

An appreciation (depreciation) of the US dollar against the currencies of Timor-Leste's major trading partners will put downward (upward) pressure on the price of imports in Timor-Leste. However, the effects of exchange rate and international commodity price movements on prices in Timor-Leste are likely to be felt some time after they occur, as it takes time for the change in the price of imported goods to feed through to a change in the price of consumer goods. The **effective exchange rate** is the exchange rate of a country's currency, measured as the weighted sum of the exchange rates with its commercial partners. The **nominal effective exchange rate** (**NEER**) is an unadjusted weighted average rate at which one country's currency exchanges for a basket of multiple foreign currencies. The **real effective exchange rate** (**REER**) is adjusted for the effects of inflation.

Figure Five: Exchange Rates



Between December 2019 and December 2020 Timor-Leste's NEER depreciated by -1.1% while the REER depreciated -1.5%. Over this period the NEER also experience no change against a weighted Thai Baht and Vietnamese Dong Hong-Kong dollar basket. However, the REER depreciated by -0..7% against the same basket. This slight real appreciation places some downwards pressure on rice prices and inflation (as Thailand and Vietnam export large quantities of rice to Timor-Leste).

Domestic Factors

Government Spending

Year on year government expenditure decreased in Q4 2020 by -20.7% compared with Q4 2019. A rise in government expenditure, particularly recurrent expenditures such as transfers and salaries & wages, can have an inflationary impact on the economy, however this is currently not the case in Timor-Leste. The current situation of low inflation in Timor-Leste is likely the result of a combination of international factors mentioned above.

Money Supply

Taking the average change in money supply across the year to December2020⁸, a 5.6% increase was witnessed. However is a small open economy such as Timor Leste, without local currency: money supply does not have any systematic and plausible effect over inflation in Timor Leste.

Tradable vs Non-tradable (International vs Domestic pressures)

⁸ Taking the average change in money supply for the last 12 months compared to the previous 12 months.

Tradable goods and services refer to those whose prices are largely determined on the world market, and all other goods and services are non-tradable. This enables splitting out the inflationary (or deflationary) pressures coming from international or domestic sources. SinceDecember 2019 non-tradeable (domestic) prices have remained stable than the tradeable (international) prices, with non-tradeable prices growing at 0.8% vs tradeable prices growing 1.4% (YoY) in December 2020.

CONSEQUENCES OF INFLATION

Inflation can cause households' purchasing power to fall. **Purchasing power** measures the quantity of goods and services which can be purchased with a unit of currency. Therefore inflation decreases the amount of goods and services a consumer is able to purchase with their monthly salary which can reduce living standards and may increase poverty. The current low inflation level should benefit households on lower incomes.

INFLATION OUTLOOK

Commodity Outlook- food prices are likely to remain stable, oil will continue to rise gradually but still remaining well below pre-Covid levels.

Exchange Rate Outlook- both NEER and REER are both set to remain stable

The inflation rate in Timor-Leste is expected to be lower than its neighbours in the near future as Southeast Asia is expected to have an average inflation rate of 1.8% in 2021.

	Actual		Forecast*			
	2018	2019	2020	2021*	2022*	2023*
Timor-Leste	2.3%	0.9%	0.1%	1.3%	2.3%	2.4%

ANNEX 1: CONCEPTS AND TERMINOLOGY

Year-on-year (YoY) inflation is the most commonly used measure and is calculated by comparing the price index from a given period with the same month in the previous year. For example, the year-on-year inflation in December 2020 measures the percentage change in prices between December 2019 and December 2020. **Quarter-on-quarter inflation (QoQ)** is calculated by comparing the price index from the last month of a given

quarter (March, June, September or December) with the last month of the previous quarter. Eg QoQ inflation in December 2020 measures the percentage change in prices between September 2020 and December 2020.

Month-on-month inflation (MoM) is calculated by comparing the price index from the latest month to the previous month. Eg, MoM inflation in December 2020 measures the percentage change in prices between November 2020 and December 2020.

Timor-Leste's Consumer Price Index is published monthly by General Directorate of Statistics (MPF)9.

⁹ See for latest CPI data from the General Directorate of Statistics (http://www.statistics.gov.tl/category/survey-indicators/consumer-price-index/?lang=en)

ANNEX 2: NOTES

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