NATIONAL DIRECTORATE FOR ECONOMIC POLICY

QUARTERLY INFLATION REVIEW

SEPTEMBER - DECEMBER 2021

n.39

KEY STATISTICS

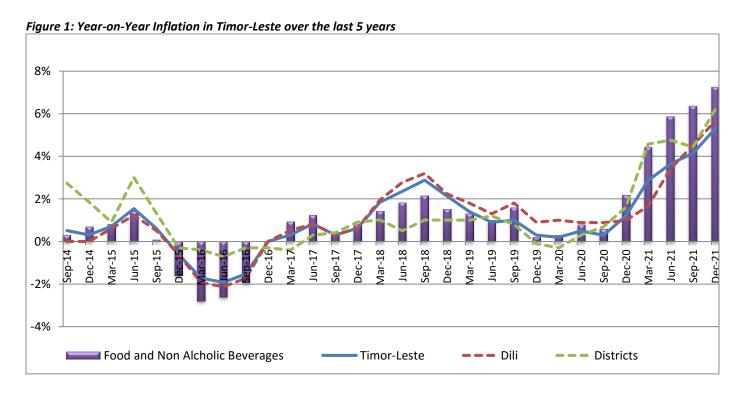
- In December 2021 over the last year (Year on Year, YoY) inflation in Timor-Leste has risen to 5.3%. This is a large increase considering the same time last year was only 1.2%
- During the final quarter of 2021 (Quarter on Quarter, QoQ) inflation in the whole country was 1.6%.
- Between September and December (QoQ) inflation in District was slightly higher than in Dili (2.0% in District vs 1.8% in Dili).
- Core inflation ie removing volatile categories such as food, is 3.1% when compared the same quarter last year.
- CPI category with biggest increase in the final quarter of the year was Alcohol and tabacco 3.1% (QoQ).
- CPI category with the smallest increase over the final quarter was Education which didn't change (QoQ).
- The World Bank (WB) food price index increased a huge 18% between December 2020 and December 2021 (YoY) but increased only 4% over the last 3 months (QoQ).
- Domestic food prices rose in December 7.3% (YoY) and 1.8% (QoQ). This is thought to be due to the Covid-19 lockdown in 2021 which disrupted domestic food supply chains.
- Rice is a main staple of the diet in Timor and the world rice price has fallen -23% since December 2020 (YoY) but stayed constant over the last 3 months (QoQ). There was a brief spike in prices in April 2020 but are now in line with 2019 prices. This is good for Timorese consumers.
- Coffee is one of Timor's most important non-oil exports. The world price of coffee (Arabica) has increased 71% over the last year (YoY) and increased 19% in the final quarter (QoQ). This is around 90% the peak price seen in April 2011, but steady recovery from a 10 year low seen in May 2019. This should be good news for coffee farmers and exporters.
- The price of oil halved in the 1st and 2st quarter of 2020 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 prices have recovered since, increasing to \$72.87 per barrel in December 2021. This is a 50% increase since the same time last year. The price of oil is now higher than it was before the start of the Covid-19 crisis in Dec 2019. Oil is an important component of everyday products and involved in the supply chain of nearly all goods, so the increase in oil prices over th last year is a key reason why we are seeing higher inflation in Timor-Leste.
- The Nominal Effective Exchange Rate (NEER) increases 0.5% (YoY) while the Real Effective Exchange Rate (REER) increased 0.4.% (YoY). This will have a positive effect on consumers and importers in Timor Leste as imports become more cheaper but will have a negative effect on Timorese exporters whose products become more expensive overseas.

- Total government Expenditure increased 27% when you compare Q4 2021 with Q4 2020.
- Money Supply in December 2021 increased YoY 7.3%.
- International supply chain issues, increased transportation costs and a rebound in oil prices in the aftermath of Covid is seeing global price levels increase.
- As a small open economics, the current level of inflation witnessed in Timor-Leste is a result of international markets.

Inflation Outlook	2018	2019	2020	2021	2022*	2023*
Timor-Leste	2.3%	0.9%	0.5%	3.8%	2.6%	2.0%

TRENDS IN INFLATION OVER TIME

In December 2021 YoY inflation in Timor-Leste was 5.3%; this means that a basket of goods and services that cost \$100.00 in December 2020 will now cost \$105.3 in December 2021— on average, prices are up compared to one year ago. The Government's target range for inflation is 4%-6% as set out in the Government's Strategic Development Plan. September 2021 is the first time quarterly inflation was in this range since December 2013 as the last few years in Timor has seen low inflation. YoY food and non-alcoholic beverage inflation in December 2021 was 7.3%, lower than the increase of 2.2% witnessed last December. Inflation in **Dili** was 5.7% (YoY) which is slightly more than inflation in **Districts** which rose by 6.2% 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.

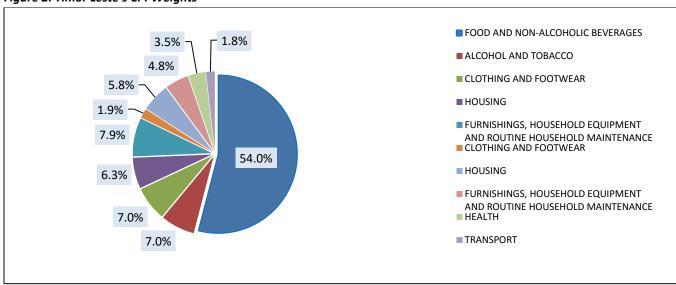


Figure 2: Timor Leste's CPI Weights

Over the 12 months from December 2020 to December 2021 there have been significant *price changes* in the following spending classes³:

- Alcohol and Tabacco (+10.7%)- biggest increase
- Food and Non Alcoholic Beverages (+7.3%)- second biggest increase
- Clothing and Footwear (-0.1%)- 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* <u>and</u> <u>weight</u> 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.

³ 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

CAUSES OF INFLATION⁵

International Factors

Commodity Prices

International food prices have increased significantly over the last year with the World Bank (WB) food price index increasing 18% between December 2020 and December 2021. World rice price (Thai benchmark) increased -23% (YoY). Coffee Arabica Prices increased 71% (YoY). In Q4 2021, crude oil (Brent)⁶ rise dramatically 50% YoY and now surpuses pre-Covid price levels.



Figure 3: International Commodity Price Indice

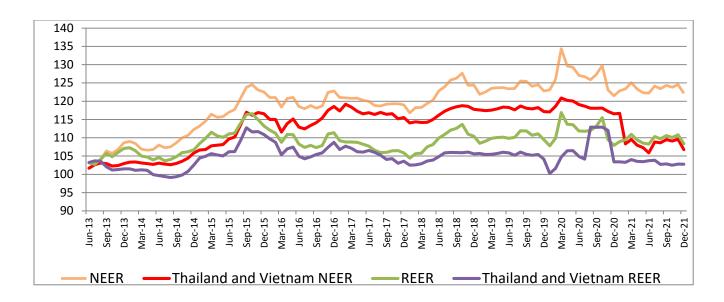
Exchange Rate

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 4: Exchange Rates

⁵ Within this section inflation refers to YoY inflation

⁶ World Bank Pink Sheet, updated September 2021



Between December 2020 and December 2021 Timor-Leste's NEER appreciated by 0.5% while the REER appreciated 0.4%. Over this period the NEER also experience -8.4% against a weighted Thai Baht and Vietnamese Dong basket and, the REER depreciated by -0.6% against the same basket. This real depreciation places upwards pressure on rice prices and inflation in Timor-Leste (as Thailand and Vietnam export large quantities of rice to Timor-Leste).

Domestic Factors

Government Spending

Year on year total government expenditure increased in Q4 2021 by 27.1% compared with Q4 2020. 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 which is a small open economy. The current rise in inflation in Timor-Leste is likely the result of a combination of international factors mentioned above and when covid 19 occurred, food supply from the District to Dili's capital was hampered due to the lock down so that prices rose.

Money Supply

Taking the average change in money supply across the year to December 2021⁷, a 7.3% 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)

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. In December 2021 non-tradeable (domestic) prices have been lower than the tradeable (international) prices, with non-tradeable prices growing at 2.8% vs tradeable prices growing 6.4% (YoY) in December 2021. This suggests that the current level of inflation in Timor-Leste is largely determined by international markets.

⁷ Taking the average change in money supply for the last 12 months compared to the previous 12 months.

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- both oil and food are forecast to increase slightly in 2022 and then reduce and stabilise in the medium term.

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 emerging and developing asia is forecast to have an iflation rate of 2.7% in 2022.

Inflation Outlook	2018	2019	2020	2021	2022*	2023*
Timor-Leste*	2.3%	0.9%	0.5%	3.8%	2.6%	2.0%

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 2021 measures the percentage change in prices between December 2020 and December 2021.

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 September 2021 measures the percentage change in prices between June 2020 and September 2021.

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 2021 measures the percentage change in prices between November 2021 and December 2021. Timor-Leste's Consumer Price Index is published monthly by General Directorate of Statistics (MPF)⁸.

ANNEX 2: NOTES

This bulletin is produced by the National Directorate for Economic Policy, Ministry of Finance, on a quarterly basis. Please refer any queries to the below contacts:

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⁸ See for latest CPI data from the General Directorate of Statistics (http://www.statistics.gov.tl/category/survey-indicators/consumer-price-index/?lang=en)