

# NATIONAL DIRECTORATE FOR ECONOMIC POLICY

## QUARTERLY INFLATION REVIEW

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JANUARY – MARCH 2015

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### EXECUTIVE SUMMARY

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In March 2015 year-on-year (YoY) inflation in Timor-Leste was 0.7%, this rate is below the 4%-6% target range set out in the Government's Strategic Development Plan (SDP). YoY inflation is lower than the 1.8% rate seen in March 2014 and marginally up on the rate of 0.3% in December 2014. Quarter-on-quarter (QoQ) inflation in March 2015 was 0.8%; this is slightly higher than the rates of 0.4% and 0.4% seen in March 2014 and December 2014.

The low YoY inflation in Timor-Leste can mainly be attributed to international factors such as:

- The appreciation of the US dollar against the majority of Timor-Leste's trading partner's currencies.
  - The significant decrease in the international price of oil.
  - The decrease in international food prices.
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### TRENDS IN INFLATION

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In March 2015 YoY inflation in Timor-Leste was 0.7%; this means that a basket of goods and services that cost \$100.00 in March 2014 will now cost \$100.70 in March 2015. YoY inflation is lower than the 1.8% rate seen in March 2014, but marginally higher than the rate of 0.3% seen in December 2014.

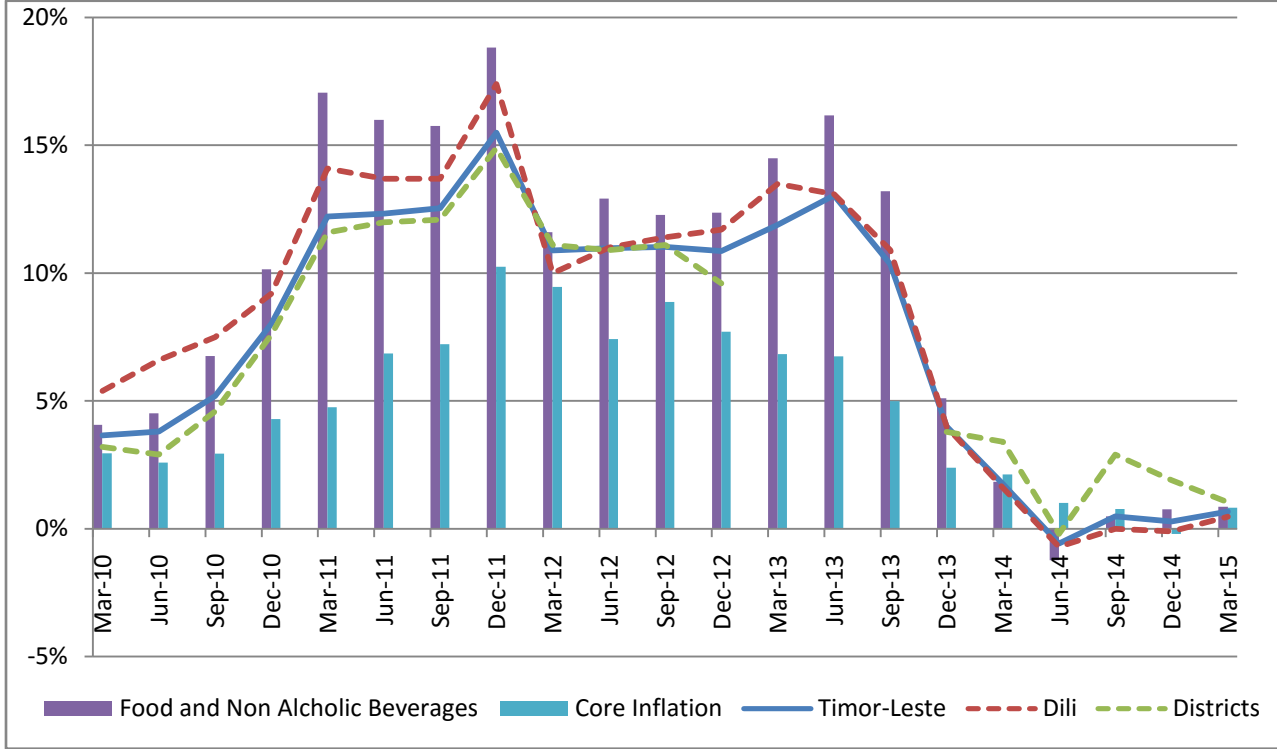
QoQ inflation in March 2015 was 0.8%; similar to the rates of 0.4% and 0.4% seen in March 2014 and December 2014 respectively.

After a lengthy period of double-digit inflation between March 2011 and September 2013, inflation decreased dramatically and fell below the Government's 4%-6% target range in January 2014. In recent months YoY inflation appears to have stabilized at around 0.0% - 1.0%.

The double digit YoY inflation between March 2011 and September 2013 was largely driven by increases in food and non-alcoholic beverages inflation (see Figure One). Food and non-alcoholic beverages account for approximately 65% of Timor-Leste’s CPI basket<sup>1</sup>, as nearly two thirds 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 the Timorese citizens. YoY food and non-alcoholic beverage inflation in March 2015 was 0.9%, down from 1.8% in March 2014.

Core inflation<sup>2</sup>, which excludes the prices of particularly volatile items, was 0.8% in March 2015, down from 2.1% in March 2014. Core inflation may provide a more accurate measure of long-term inflationary trends as it is less susceptible to being impacted by temporary price shocks.

**Figure One: Year-on-Year Inflation in Timor-Leste**



Over the past 12 months there have been significant price changes in the following expenditure classes<sup>3</sup>:

- Milk, cheese and eggs (7.0%)
- Food Products (8.6%)
- Education (18.6%)
- Transport (-6.3%)

The largest upwards contributions (see Figure Two) to the overall year-on-year inflation rate in March 2015 came from:

- Food and non-alcoholic (0.51 percentage points)

<sup>1</sup> Timor-Leste’s CPI basket is made up of the ten expenditure groupings seen in Figure Two.

<sup>2</sup> Calculated by the National Directorate of Economic Policy

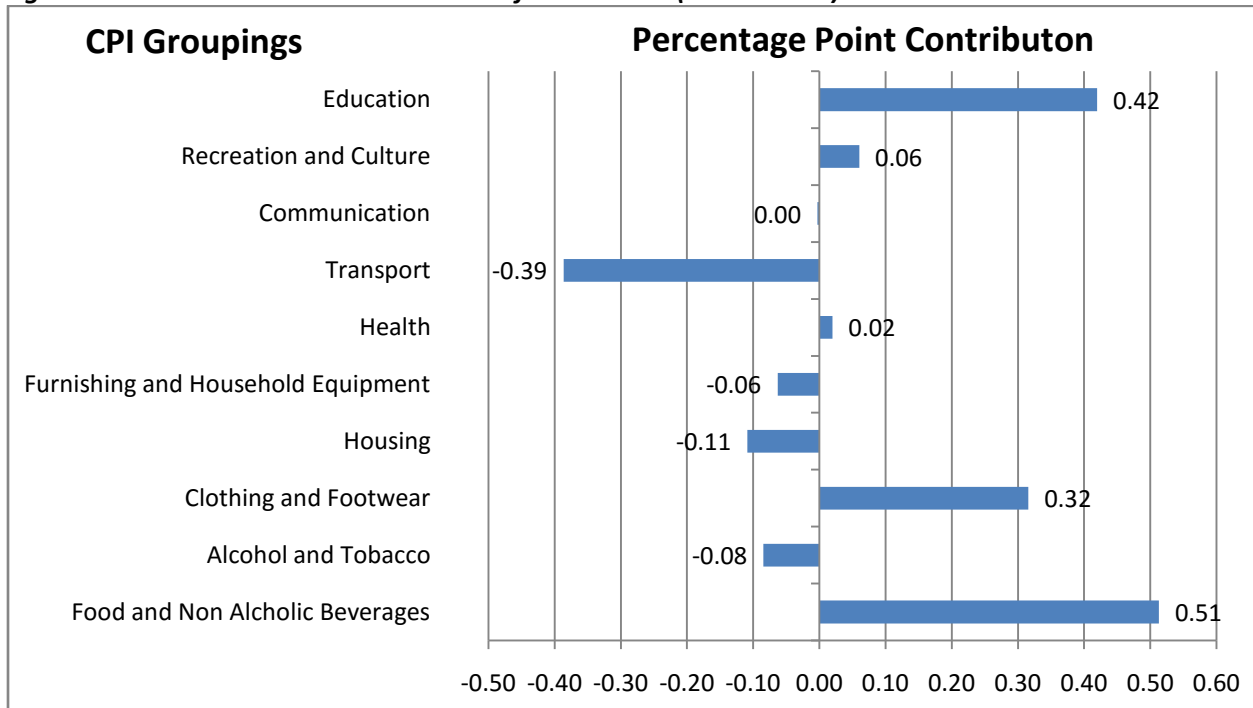
<sup>3</sup> Expenditure classes are the sub-categories within an expenditure group in a CPI index

- Education (0.42pp)
- Clothing and Footwear (0.32pp)

While the largest deflationary contributions (see Figure Two) to the overall year-on-year inflation rate in March 2015 came from:

- Transport (0.39pp)
- Housing (0.11pp)

**Figure Two: Contribution to Overall YoY Inflation Rates (March 2015)<sup>4</sup>**




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## CAUSES OF INFLATION<sup>5</sup>

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### International Factors

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<sup>6</sup>, 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. For this reason exchange rate movement over the December 2013 to December 2014 period are analyzed.

<sup>4</sup> See concepts and terminology section for further explanation

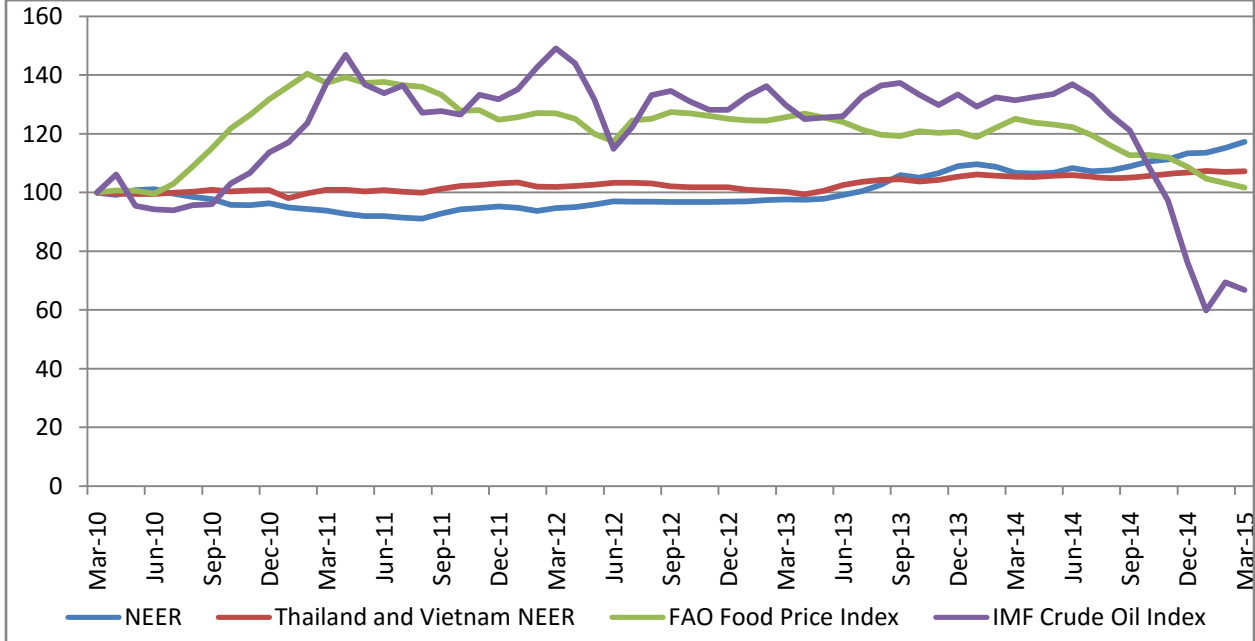
<sup>5</sup> Within this section inflation refers to YoY inflation

<sup>6</sup> This analysis lags the impact by one quarter

Between December 2013 and December 2014 Timor-Leste’s nominal effective exchange rate (NEER) appreciated by 3.9%, this appreciation was largely driven by the 3.7% appreciation of the US dollar against the Indonesian rupiah, the currency of Timor-Leste’s largest trading partner<sup>7</sup>. Over this period the US dollar also appreciated by 1.5% against a weighted Thai baht and Vietnamese dong basket. This appreciation is likely to have placed downward pressure on rice prices (as these countries export large quantities of rice to Timor-Leste) and therefore inflation, as rice has a large weight in the CPI index.

International oil prices also fell over the December 2013 to December 2014 period, the IMF’s crude petroleum price index fell<sup>8</sup> by 42.7% over the period placing significant downward pressure on prices, especially transport prices. International food prices also fell over the period with the Food and Agricultural Organization’s (FAO) food price index falling by 9.9% placing further downward pressure on imported food prices.

**Figure Three: Indices of International Factors affecting Inflation in Timor-Leste**

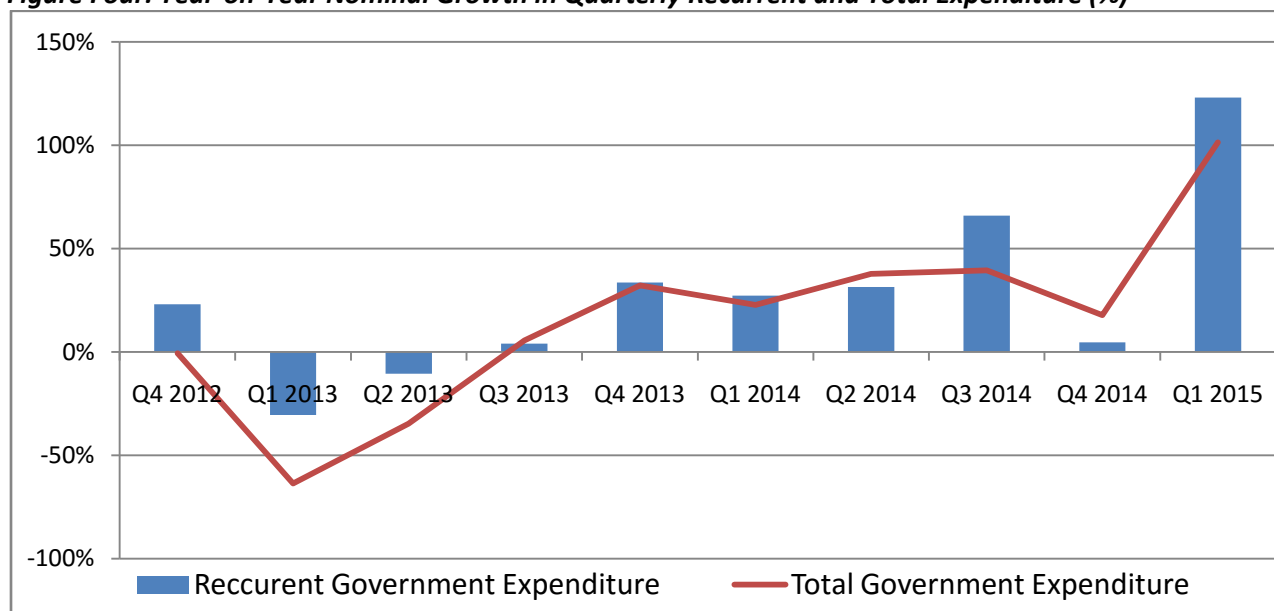


**Domestic Factors**

It is possible that increases in Government expenditure, particularly recurrent expenditures such as transfers and salaries & wages, have increased inflationary pressure in Timor-Leste. Recurrent Government expenditure between Q4 2013 and Q1 2015 has been substantially higher than in the same periods in the previous year (see Figure Four).

<sup>7</sup> External Trade Statistics Annual Report 2013, General Directorate of Statistics  
<sup>8</sup> The crude oil (petroleum) price index is a simple average of three spot prices; Dated Brent, West Texas Intermediate, and the Dubai Fateh.

**Figure Four: Year-on-Year Nominal Growth in Quarterly Recurrent and Total Expenditure (%)<sup>9</sup>**



This is at odds with the observed low inflation; however this is likely the result of a combination of other factors:

- The favourable international conditions, as discussed above, may outweigh the domestic inflationary pressure coming from Government expenditure.
- The inflationary impact of Government expenditure may not be felt until several periods after it occurs as it takes time for prices to adjust to the increase in demand.
- Downward inflationary pressure may be coming from other domestic factors on both the supply and demand side such as increases agricultural production, improvements in absorptive capacity<sup>10</sup> and decreased non-Government aggregate demand.

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## CONSEQUENCES OF INFLATION

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Inflation will cause households' purchasing power to fall, if increases in household income are lower than the increases in inflation. This situation is more likely to occur in a high inflation environment. Inflation which reduces consumers' purchasing power can reduce living standards and may increase poverty. Thus the recent low inflation seen in Timor-Leste is consistent with the Government's poverty reduction strategy.

If inflation is higher in Timor-Leste than in its trading partners, then Timor-Leste will become less competitive leading to a fall in export demand. Thus the recent low inflation environment is likely to have helped increase demand for Timorese exports.

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<sup>9</sup> This measures the year-on-year growth in quarterly nominal expenditure, i.e. the growth rate in Q1 2015 measure the change between nominal expenditure in Q1 2014 and Q1 2015.

<sup>10</sup> The amount of money that can be spent in an economy before inflation begins to increase

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## INFLATION OUTLOOK

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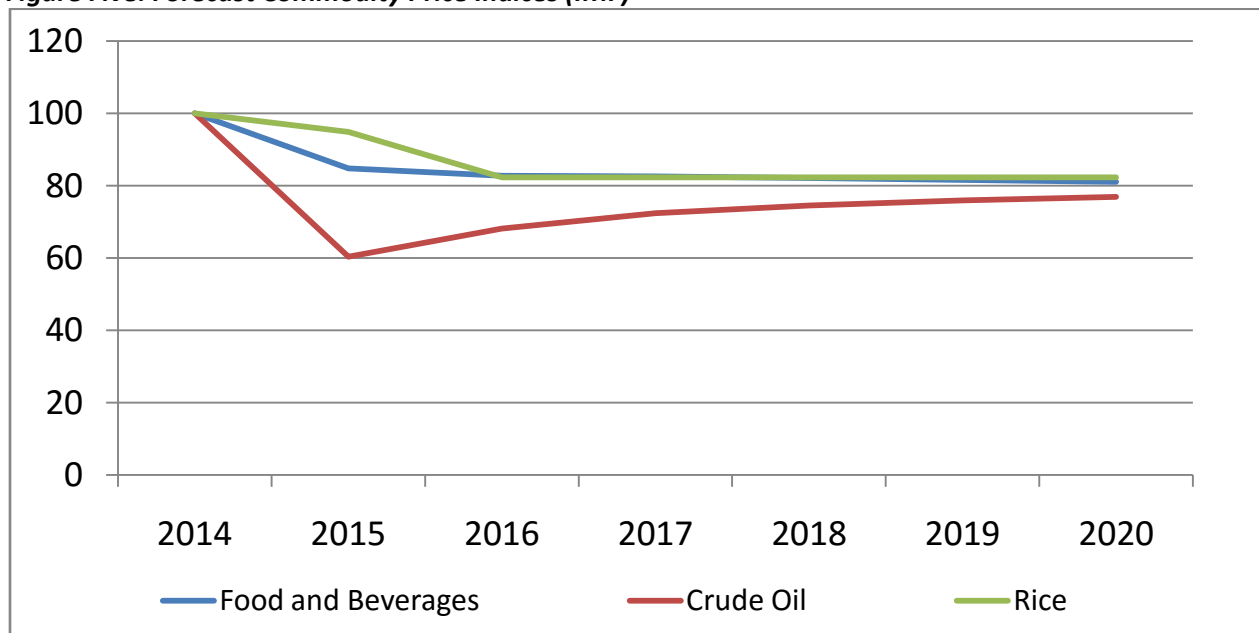
YoY inflation is likely to remain below the SDP target range in the near term. The following factors are likely to have an impact on future rates of inflation in Timor-Leste:

**International commodity prices:** between December 2014 and March 2015 there were falls in both international food (7.7%) and crude oil (12.6%) prices. The fall in international oil prices was largely driven by excess supply, resulting from Saudi Arabia's decision to maintain high production despite of increased global supply. As changes in commodity prices have a lagged affect on inflation in Timor-Leste it is likely that this will place downward inflationary pressure in Q2 2015. In the medium to long-term the low forecasted<sup>11</sup> commodity prices will help to keep inflation low in Timor-Leste.

**International exchange rates:** between December 2014 and March 2015 the 4.0% appreciation of Timor-Leste's NEER will put downward pressure on inflation by reducing the cost of imported goods and services.

**Government expenditure:** the increase in Government expenditure over the last four quarters will result in increased inflationary pressure, the extent to which this will result in higher inflation depends on the impact of other factors and the economies absorptive capacity.

**Figure Five: Forecast Commodity Price Indices (IMF)**



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<sup>11</sup> Primary Commodity Prices, IMF (<http://www.imf.org/external/np/res/commod/index.aspx>)

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## ANNEX: CONCEPTS AND TERMINOLOGY

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**Consumer price inflation** the rate at which the prices of goods and services bought by households increase or decrease.

**The Consumer Price Index (CPI)**<sup>12</sup> 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.

**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 March 2015 measures the percentage change in prices between March 2014 and March 2015.

**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<sup>13</sup>. Thus quarter-on-quarter inflation in March 2015 measures the percentage change in prices between December 2014 and March 2015.

**Month-on-month inflation (MoM)** is calculated by comparing the price index from the latest month to the previous month. Thus the month-on-month inflation in March 2015 measures the percentage change in prices between February 2015 and March 2015.

**Contribution to inflation rate** measures the contribution to the overall rate of inflation of a grouping of goods and services, a groups contribution to the overall rate of inflation is determined by its growth rate and weight within the series<sup>14</sup>.

**Nominal effective exchange rate (NEER)** is the weighted average value of a country's currency relative to the currencies of its major trading partners

**Core inflation** is a measure of inflation which excludes certain items that face volatile price movements. Core inflation eliminates products<sup>15</sup> that can have temporary price shocks because these shocks can cause a divergence from the overall trend in inflation giving a false measure of inflation.

**Purchasing Power** measures the quantity of goods and services which can be purchased with a unit of currency. All else being equal inflation decreases the amount of goods and services a consumer is able to purchase with their monthly salary.

Timor-Leste's Consumer Price Index is published monthly by General Directorate of Statistics (MoF)<sup>16</sup>. This index is divided into 10 specific groups representing specific sets of commodities such as food and non-alcoholic beverages, housing and transport. In addition, separate consumer price indices are compiled for both Dili and the districts.

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<sup>12</sup> 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.

<sup>13</sup> In this publication

<sup>14</sup> The contributions of each grouping will sum to give the overall rate of inflation

<sup>15</sup> The core inflation index in Timor-Leste excludes all food and non-alcoholic beverage items

<sup>16</sup> See for latest CPI data from the General Directorate of Statistics (<http://www.statistics.gov.tl/category/survey-indicators/consumer-price-index/?lang=en>)