

## Analysis of March 2018 inflation and TRAIN

1. **Key message: March 2018 inflation breached the BSP full-year target range of 2 to 4 percent. Year-to-date inflation of 3.8 percent, however, is still within the target range. Although TRAIN has begun to impact inflation as expected (0.4 percentage points), other factors are bigger contributors to higher inflation. The BSP expects the inflation path to moderate and stay within the full-year target.**
2. **March 2018 inflation was 4.3 percent, slightly above the 2 to 4 percent target of the BSP.**
  - a. March inflation was higher than the 3.8 percent inflation in February 2018.
3. **Just like last month, March 2018 inflation was driven by higher corn, fish, tobacco, and personal transport prices, all of which grew by double digits.**
  - a. Fish price remained elevated compared to last year (12.9 percent). However, month-on-month (MOM) fish inflation (from Feb to Mar 2018), at -0.2 percent, suggests continuing price normalization as the close of fishing season ends. This has been going on since last month.
  - b. Corn inflation was still high at 11.1 percent, brought about by natural phenomena, such as the Northeast monsoon in Luzon and typhoon *Caloy* passing through the Visayas area, which negatively affected supply.<sup>1</sup>
  - c. Overall all food inflation at 5.7 percent, in the absence of major shocks, might suggests some unwarranted price adjustment as businesses overprovided for anticipated cost increases given undue expectations.
4. **Tobacco inflation remained high at 25.3 percent as compliance improves.<sup>2</sup>**
  - a. Mighty Tobacco, now under Japan Tobacco International (JTI), is now paying the right taxes, and consequently passing this on to consumers. This means higher tobacco inflation is expected to persist until September 2018.
  - b. If tobacco inflation were only 8 percent, as the TRAIN law provides, then overall inflation would have gone down from 4.3 to 4.1 percent.

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<sup>1</sup> For further reading, please see <http://newsinfo.inquirer.net/978101/breaking-news-weather-pagasa-tropical-storm-jelawat> and <http://newsinfo.inquirer.net/978413/breaking-news-weather-pagasa-tropical-storm-caloy-jelawat>.

<sup>2</sup> See the January and February 2018 inflation reports for more discussion.

**5. In March 2018, private vehicle owners continue to feel the increase in fuel excise tax. However, higher fuel costs are largely due to higher global crude oil price and the peso’s depreciation (Table 1).**

- a. Private vehicle owners paid 15.9 percent more in fuel and other operating costs. Much of it is attributable to higher crude oil price, as the Dubai crude price grew by 23.3 percent while the peso depreciated by 3.6 percent (for a net impact of 27.7 percent). Meanwhile, the additional diesel and gas excise taxes only represent price increases of 9.0 and 6.4 percent, respectively, from the reference retail prices in mid-March 2017.
- b. Due to unadjusted fare prices, commuters paid only 1.4 percent more. This means that the lower income deciles are less affected. Diesel discounts offered to PUVs mitigate the impact on drivers and operators, while the government’s PUV modernization program, which offers subsidies to convert inefficient euro-2 to more efficient euro-4 engines, will provide the long-term solution.
- c. Inflation rate for electricity, gas, and other fuels increased to 4.3 percent year-on-year (YOY) and 2.2 percent MOM, from -0.4 percent MOM in February, suggesting some pass through of higher excise tax and global crude oil prices on retail energy prices. This also reflects the recent removal of VAT exemption for CDA-registered electric coops and NGCP.

**Table 1. Crude oil price and the PHP exchange rate**

	Levels						YOY growth		
	Jan 2017	Feb 2017	Mar 2017	Jan 2018	Feb 2018	Mar 2018	Jan 2018	Feb 2018	March 2018
Dubai crude (USD per barrel)	53.37	54.17	50.90	63.83	62.72	62.74	19.6	15.8	23.3
PHP/USD	49.74	49.96	50.28	50.51	51.78	52.07	1.6	3.6	3.6
Indicative price per barrel of crude (PHP)	2,654	2,706	2,559	3,224	3,248	3,267	21.5	20.0	27.7

Sources: BSP, Indexmundi, and Reuters

**6. The price of other excisable products grew as expected (Table 2).**

- a. Prices of non-alcoholic drinks, including sweetened drinks, increased by 7.1 percent YOY, and 3.2 percent MOM. This is about half of the expected increase, possibly due to price absorption by firms, partly reflecting weakening demand for these products.
- b. On the other hand, alcoholic beverages inflation was 5.3 percent and broadly in line with the expected increase in the alcohol excise tax under the sin tax reform (4.5 percent).
- c. Since prices of excisable products are increasing as expected, with the exception of sweetened drinks at only half of the expectation, the only reason for inflation breaching the target is a combination of higher global crude oil price, the peso's depreciation, previous non-tax compliance, and potential profiteering or unwarranted price increase as explained earlier.

**Table 2. Summary of commodity groups directly affected by TRAIN**

Commodity	2006 based CPI series (percent)		2012 based CPI series (percent)		Expected price increase due to TRAIN (percent)
	Mar 18 (YOY)	Feb 18 to Mar 18 (MOM)	Mar 18 (YOY)	Feb 18 to Mar 18 (MOM)	
Non-alcoholic beverages	8.3	3.1	7.1	3.2	15.0
Alcoholic beverages	6.0	0.8	5.3	0.9	4.0
Tobacco	29.8	4.9	25.3	3.1	8.0
Electricity, gas, and other fuels	6.1	2.7	4.3	2.2	9.2
Transportation (private)	6.9	-0.5	14.1	-1.1	7.0
Transportation (public)	2.9	0.1	1.4	0.0	0.0

Sources: PSA and DOF staff estimates

Notes: The expected price increases for the various commodity groups assume the following: i) the average increase in excise for alcoholic beverages and tobacco, ii) the introduction of excise taxes for sweetened drinks (i.e., the average increase in the prices of a can of Coke and a can of Coke light), iii) the increase in the retail price of a liter of diesel due only to the oil excise, and iv) zero increase in the transportation costs attributable to the oil excise.

**7. In summary, the higher March inflation is likely explained by the following:**

<b>Factor</b>	<b>Contribution to inflation</b>
March inflation	4.3
Average inflation target /1	3.0
Excess over target:	1.3
Due to better tobacco compliance	0.2
Due to TRAIN /2	0.4
Due to crude oil (beyond target)	0.2
Due to exchange rate (beyond target)	0.0
Due to other factors, notably unwarranted price increases	0.5

Notes:

1/ The 2018 inflation target of 2 to 4 percent assumes crude oil price between 45 and 60 USD per barrel and exchange rate between 48 to 51 PHP to USD.

2/ DOF estimates TRAIN impact at 0.4 percentage points. NEDA estimate is 0.42, BSP estimate is between 0.3 and 0.5, while DTI estimate is 0.4. Note that 0.4 is lower than 0.7 originally estimated by DOF (in June 2017) due to subsequent increase in oil prices in the second half of 2017 because of the higher crude price and further peso depreciation.

**8. Beginning 2018, inflation is revised to improve accuracy.**

- a. In line with international practice, starting February 2018, the consumer price index (CPI) series has been rebased from 2006 to 2012 in order to ensure that the prices in the basket of goods being measured stays relevant and representative.<sup>3</sup> This has been previously announced and planned, and the rebasing has been going on since 2015.<sup>4</sup>
- b. Without regular rebasing, inflation tends to be overestimated due to the Laspeyres' effect (see Appendix 1 for details). For instance, under the 2006 series, which was used since 2009, March 2018 inflation

<sup>3</sup> To quote the PSA: "When the basket of the reference year no longer represents what is commonly purchased by the households, the CPI becomes irrelevant and tends to give wrong market signals. Hence, it is necessary to update the CPI using a base year that reflects the typical market basket of the time." In July of this year, the PSA will stop releasing the 2006 based series and will exclusively only release the 2012 series.

<sup>4</sup> For further reference, please see: <http://www.bworldonline.com/content.php?section=Economy&title=psa-to-make-2012-new-base-year-for-gdp-cpi&id=102234>.

would be 4.8 percent instead of the more accurate and representative 4.3 percent.

**9. In a fast-growing economy, moderate increase in inflation is anticipated.**

- a. In 2017, the Philippine economy grew by 6.7 percent, one of the fastest in the region.
- b. The Philippines aims to create 1.7 million jobs by 2022 through the “Build, Build, Build” program, which currently consists of 75 projects worth USD 35.5 billion (some PHP 2 trillion).
- c. “Build Build Build” will address the infrastructure gap of this country by building six airports, nine railways, three bus rapid transits, 32 roads and bridges, and four seaports that will help bring down the costs of production, improve rural incomes, encourage countryside investments, make the movement of goods and people more efficient, and create more jobs.

**10. The Department of Trade and Industry (DTI) and the Department of Energy (DOE) continue to closely monitor any unusual price increase in order to prevent unwarranted price increases.**

- a. Major oil firms are continuing to offer discounts to PUJs. This will help ease prices.<sup>5</sup>
- b. Once the market adjusts, we expect inflation to ease in the coming months and the average full year inflation fall within the target set by the BSP.

**11. The BSP also expects the inflation path to moderate and settle within the target range.**

- a. In its latest meeting, the Monetary Board reiterated its commitment to price stability, and will continue to monitor threats to the inflation target.
- b. Inflation targets can be adjusted for reasons such as i) volatility in the prices of agricultural products, ii) natural calamities, iii) volatility in oil prices of agricultural products, iv) significant changes in government policy that directly affect prices such as changes in tax structure.<sup>6</sup>
- c. The interplay of these factors has affected the inflation rate recently. However, the target is set for the whole year, and the BSP remains

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<sup>5</sup> For further reading, please see <https://www.doe.gov.ph/press-releases/doe-petron-shell-and-phoenix-agree-provide-fuel-discounts-puvs> and <https://businessmirror.com.ph/doe-oil-firms-sign-agreement-on-fuel-price-discount-for-puvs/>

<sup>6</sup> For further reading, please see <http://www.bsp.gov.ph/downloads/Publications/FAQs/targeting.pdf>

ready to implement necessary monetary measures to actively keep inflation under control.

**Annex table 1. March 2018 CPI weights and inflation rates (2012 base year)**

	Inflation rates (percent)						
	PHL Weight	PHL		NCR		ONCR	
		Mar 2018 YOY	MOM	Mar 2018 YOY	MOM	Mar 2018 YOY	MOM
<b>ALL ITEMS</b>	<b>100.0</b>	<b>4.3</b>	<b>0.5</b>	<b>5.2</b>	<b>0.8</b>	<b>4.1</b>	<b>0.4</b>
<b>I. FOOD AND NON-ALCOHOLIC BEVERAGES</b>	<b>38.3</b>	<b>5.9</b>	<b>0.5</b>	<b>6.9</b>	<b>0.1</b>	<b>5.5</b>	<b>0.5</b>
<b>A. FOOD ITEMS</b>	<b>35.5</b>	<b>5.7</b>	<b>0.2</b>	<b>7.1</b>	<b>-0.3</b>	<b>5.4</b>	<b>0.3</b>
Rice	9.6	3.6	0.8	5.2	-1.3	3.6	1.1
Corn	0.6	11.1	1.8	5.7	-1.5	11.4	2.0
Other cereals	3.3	2.2	0.3	3.1	0.3	1.8	0.2
Meat	6.2	6.2	0.3	5.9	-0.1	6.2	0.3
Fish	5.7	12.9	0.0	18.2	0.6	11.6	-0.2
Milk, Cheese and Eggs	3.1	2.0	0.2	1.9	-0.1	2.1	0.3
Oils and Fats	0.8	3.8	0.5	7.9	0.5	2.9	0.4
Fruit	1.4	7.1	0.9	6.3	-0.1	7.3	1.1
Vegetables	2.6	6.0	-2.0	8.3	-1.8	5.9	-2.1
Sugar, Jam, Honey, Chocolate and Confectionery	1.0	-0.9	0.4	1.2	0.2	-1.3	0.4
Food Products N.E.C.	1.1	3.5	0.6	5.8	-0.1	2.9	0.7
<b>B. NON-ALCOHOLIC BEVERAGES</b>	<b>2.9</b>	<b>7.1</b>	<b>3.2</b>	<b>3.9</b>	<b>3.9</b>	<b>6.8</b>	<b>2.9</b>
<b>II. ALCOHOLIC BEVERAGES AND TOBACCO</b>	<b>1.6</b>	<b>18.6</b>	<b>2.4</b>	<b>19.1</b>	<b>2.2</b>	<b>18.0</b>	<b>2.4</b>
Alcoholic Beverages	0.7	5.3	0.9	4.9	0.4	5.2	0.8
Tobacco	0.9	25.3	3.1	29.2	3.3	24.1	3.2
<b>III. NON-FOOD ITEMS</b>	<b>60.1</b>	<b>2.9</b>	<b>0.5</b>	<b>2.7</b>	<b>1.1</b>	<b>2.5</b>	<b>0.3</b>
<b>A. CLOTHING AND FOOTWEAR</b>	<b>2.9</b>	<b>2.0</b>	<b>0.2</b>	<b>1.8</b>	<b>0.3</b>	<b>2.0</b>	<b>0.2</b>
<b>B. HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS</b>	<b>22.0</b>	<b>2.9</b>	<b>0.8</b>	<b>2.7</b>	<b>1.9</b>	<b>2.3</b>	<b>0.5</b>
Actual Rentals for Housing	12.9	2.3	0.3	3.6	0.6	1.5	0.1
Maintenance and Repair of the Dwelling	0.5	1.5	0.4	1.3	0.8	1.4	0.3
Water Supply and Miscellaneous Services Relating to the Dwelling	1.2	2.7	0.3	4.7	0.0	1.6	0.4
Electricity, Gas, and Other Fuels	7.4	4.3	2.2	-0.4	6.3	3.9	1.2
<b>C. FURNISHINGS, HOUSEHOLD EQUIPMENT</b>	<b>2.9</b>	<b>2.7</b>	<b>0.6</b>	<b>1.6</b>	<b>1.1</b>	<b>2.8</b>	<b>0.5</b>
<b>D. HEALTH</b>	<b>3.9</b>	<b>2.4</b>	<b>0.4</b>	<b>2.2</b>	<b>0.4</b>	<b>2.4</b>	<b>0.4</b>
<b>E. TRANSPORT</b>	<b>8.1</b>	<b>4.6</b>	<b>-0.3</b>	<b>5.6</b>	<b>-0.4</b>	<b>4.4</b>	<b>-0.3</b>
Operation of Personal Transport Equipment	2.5	14.1	-1.1	15.9	-0.7	13.8	-1.2
Transport Services	4.8	1.4	0.0	1.8	-0.2	1.3	0.1
<b>F. COMMUNICATION</b>	<b>2.9</b>	<b>0.3</b>	<b>0.1</b>	<b>0.3</b>	<b>0.1</b>	<b>0.3</b>	<b>0.1</b>
<b>G. RECREATION AND CULTURE</b>	<b>1.4</b>	<b>1.4</b>	<b>0.1</b>	<b>1.1</b>	<b>0.2</b>	<b>1.4</b>	<b>0.1</b>
<b>H. EDUCATION</b>	<b>3.3</b>	<b>1.9</b>	<b>0.0</b>	<b>1.6</b>	<b>0.0</b>	<b>2.0</b>	<b>0.0</b>
<b>I. RESTAURANTS AND MISCELLANEOUS GOODS AND SERVICES</b>	<b>12.6</b>	<b>3.0</b>	<b>0.6</b>	<b>3.1</b>	<b>1.3</b>	<b>2.5</b>	<b>0.4</b>

Note: Some figures may not exactly add up due to rounding

Source: Philippine Statistics Authority (PSA)

## Annex table 2. March 2018 CPI weights and inflation rates (2006 base year)

	Inflation rates (percent)						
	PHL Weight	PHL		NCR		ONCR	
		Mar 2018 YOY	MOM	Mar 2018 YOY	MOM	Mar 2018 YOY	MOM
<b>ALL ITEMS</b>	<b>100.0</b>	<b>4.8</b>	<b>0.5</b>	<b>6.0</b>	<b>0.7</b>	<b>4.5</b>	<b>0.4</b>
<b>I. FOOD AND NON-ALCOHOLIC BEVERAGES</b>	<b>39.0</b>	<b>5.5</b>	<b>0.2</b>	<b>5.8</b>	<b>-0.4</b>	<b>5.5</b>	<b>0.3</b>
<b>A. FOOD ITEMS</b>	<b>36.3</b>	<b>5.3</b>	<b>0.0</b>	<b>5.6</b>	<b>-0.6</b>	<b>5.2</b>	<b>0.1</b>
Rice	8.9	3.1	0.8	3.0	-1.1	3.1	1.1
Corn	0.7	11.1	1.1	4.2	-2.5	11.4	1.3
Other cereals	2.8	2.2	0.2	2.9	0.1	2.0	0.2
Meat	7.0	5.8	0.2	5.6	-0.1	6.0	0.3
Fish	5.8	11.7	-0.1	15.2	-0.4	11.1	-0.1
Milk, Cheese and Eggs	3.3	1.8	0.2	2.2	0.1	1.8	0.2
Oils and Fats	0.7	4.0	-0.1	10.6	0.0	2.2	-0.1
Fruit	1.7	9.1	0.0	3.7	0.5	10.5	-0.1
Vegetables	3.2	4.2	-2.7	3.8	-3.2	4.2	-2.6
Sugar, Jam, Honey, Chocolate and Confectionery	1.1	-2.3	0.1	0.1	0.3	-2.8	0.1
Food Products N.E.C.	1.1	3.2	0.7	3.5	0.0	3.0	0.8
<b>B. NON-ALCOHOLIC BEVERAGES</b>	<b>2.7</b>	<b>8.3</b>	<b>3.1</b>	<b>8.6</b>	<b>2.8</b>	<b>8.3</b>	<b>3.2</b>
<b>II. ALCOHOLIC BEVERAGES AND TOBACCO</b>	<b>2.0</b>	<b>20.0</b>	<b>3.4</b>	<b>13.7</b>	<b>2.1</b>	<b>21.1</b>	<b>3.6</b>
Alcoholic Beverages	1.0	6.0	0.8	5.3	0.5	6.1	0.8
Tobacco	1.0	29.8	4.9	23.7	3.7	30.5	5.1
<b>III. NON-FOOD ITEMS</b>	<b>59.0</b>	<b>3.5</b>	<b>0.6</b>	<b>5.9</b>	<b>1.2</b>	<b>2.7</b>	<b>0.4</b>
<b>A. CLOTHING AND FOOTWEAR</b>	<b>3.0</b>	<b>2.0</b>	<b>0.2</b>	<b>1.3</b>	<b>0.1</b>	<b>2.2</b>	<b>0.2</b>
<b>B. HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS</b>	<b>22.5</b>	<b>3.8</b>	<b>1.1</b>	<b>4.4</b>	<b>2.0</b>	<b>3.5</b>	<b>0.8</b>
Actual Rentals for Housing	13.8	2.6	0.3	3.6	0.7	2.3	0.1
Maintenance and Repair of the Dwelling	0.6	2.5	0.5	2.5	1.1	2.5	0.3
Water Supply and Miscellaneous Services Relating to the Dwelling	1.0	2.9	0.1	4.7	0.0	1.2	0.2
Electricity, Gas, and Other Fuels	7.1	6.1	2.7	6.8	6.1	5.8	1.7
<b>C. FURNISHINGS, HOUSEHOLD EQUIPMENT</b>	<b>3.2</b>	<b>2.7</b>	<b>0.4</b>	<b>2.4</b>	<b>0.6</b>	<b>2.7</b>	<b>0.4</b>
Furniture and Furnishings, Carpets and Other Floor Coverings	0.2	2.0	0.2	2.9	0.6	1.8	0.2
Household Textiles	0.1	1.1	0.1	0.7	0.0	1.2	0.1
Household Appliances	0.5	1.2	0.3	2.0	0.8	1.0	0.1
Glassware, Tableware, and Household Utensils	0.2	1.6	0.4	1.4	1.1	1.5	0.2
Tools and Equipment for House and Garden	0.1	1.6	0.2	1.2	0.5	1.7	0.2
Goods and Services for Routine Household Maintenance	2.1	3.2	0.4	2.6	0.5	3.4	0.4
<b>D. HEALTH</b>	<b>3.0</b>	<b>2.5</b>	<b>0.1</b>	<b>3.4</b>	<b>0.1</b>	<b>2.4</b>	<b>0.1</b>
<b>E. TRANSPORT</b>	<b>7.8</b>	<b>3.7</b>	<b>-0.1</b>	<b>9.6</b>	<b>-0.5</b>	<b>2.2</b>	<b>0.0</b>
Operation of Personal Transport Equipment	1.9	6.9	-0.5	6.7	-0.6	6.9	-0.5
Transport Services	5.9	2.9	0.1	10.8	-0.5	0.8	0.2
<b>F. COMMUNICATION</b>	<b>2.3</b>	<b>0.4</b>	<b>0.0</b>	<b>0.4</b>	<b>0.0</b>	<b>0.4</b>	<b>0.0</b>
<b>G. RECREATION AND CULTURE</b>	<b>1.9</b>	<b>1.5</b>	<b>0.1</b>	<b>3.0</b>	<b>0.2</b>	<b>0.9</b>	<b>0.0</b>
<b>H. EDUCATION</b>	<b>3.4</b>	<b>2.2</b>	<b>0.0</b>	<b>1.7</b>	<b>0.0</b>	<b>2.4</b>	<b>0.0</b>
<b>I. RESTAURANTS AND MISCELLANEOUS GOODS AND SERVICES</b>	<b>12.0</b>	<b>5.0</b>	<b>0.8</b>	<b>9.5</b>	<b>1.9</b>	<b>2.1</b>	<b>0.3</b>

Note: Some figures may not exactly add up due to rounding

Source: Philippine Statistics Authority (PSA)



**Annex table 3. March 2018 CPI weights and inflation rates (YOY and Jan 2018 to Mar 2018, 2012 base year)**

	Inflation rates (percent)						
	PHL Weight	PHL		NCR		ONCR	
		Mar 2018 YOY	Jan 18 to Mar 18	Mar 2018 YOY	Jan 18 to Mar 18	Mar 2018 YOY	Jan 18 to Mar 2018
<b>ALL ITEMS</b>	<b>100.0</b>	<b>4.3</b>	<b>2.1</b>	<b>5.2</b>	<b>2.3</b>	<b>4.1</b>	<b>2.0</b>
<b>I. FOOD AND NON-ALCOHOLIC BEVERAGES</b>	<b>38.3</b>	<b>5.9</b>	<b>2.5</b>	<b>7.0</b>	<b>1.9</b>	<b>5.5</b>	<b>2.5</b>
<b>A. FOOD ITEMS</b>	<b>35.5</b>	<b>5.7</b>	<b>2.2</b>	<b>6.8</b>	<b>1.5</b>	<b>5.4</b>	<b>2.3</b>
Rice	9.6	3.6	2.6	3.9	2.6	3.6	2.6
Corn	0.6	11.1	4.0	4.1	-4.3	11.4	4.4
Other cereals	3.3	2.2	1.0	3.4	1.6	1.8	0.7
Meat	6.2	6.2	1.5	5.8	0.4	6.2	1.7
Fish	5.7	12.9	4.9	18.8	3.9	11.6	5.1
Milk, Cheese and Eggs	3.1	2.0	0.9	1.8	0.6	2.1	0.9
Oils and Fats	0.8	3.8	1.2	8.5	1.5	2.9	1.1
Fruit	1.4	7.1	3.1	6.2	1.8	7.3	3.3
Vegetables	2.6	6.0	-1.4	6.3	-2.8	5.9	-1.2
Sugar, Jam, Honey, Chocolate and Confectionery	1.0	-0.9	0.6	1.4	0.9	-1.3	0.6
Food Products N.E.C.	1.1	3.5	2.5	5.7	3.8	2.9	2.2
<b>B. NON-ALCOHOLIC BEVERAGES</b>	<b>2.9</b>	<b>7.1</b>	<b>6.1</b>	<b>8.0</b>	<b>6.7</b>	<b>6.8</b>	<b>5.9</b>
<b>II. ALCOHOLIC BEVERAGES AND TOBACCO</b>	<b>1.6</b>	<b>18.6</b>	<b>14.5</b>	<b>21.7</b>	<b>17.7</b>	<b>18.0</b>	<b>13.9</b>
Alcoholic Beverages	0.7	5.3	3.2	5.3	2.6	5.2	3.2
Tobacco	0.9	25.3	20.1	33.5	28.3	24.1	18.9
<b>III. NON-FOOD ITEMS</b>	<b>60.1</b>	<b>2.9</b>	<b>1.5</b>	<b>3.8</b>	<b>2.1</b>	<b>2.5</b>	<b>1.2</b>
<b>A. CLOTHING AND FOOTWEAR</b>	<b>2.9</b>	<b>2.0</b>	<b>0.9</b>	<b>2.1</b>	<b>0.8</b>	<b>2.0</b>	<b>0.9</b>
<b>B. HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS</b>	<b>22.0</b>	<b>2.9</b>	<b>2.0</b>	<b>4.6</b>	<b>3.4</b>	<b>2.3</b>	<b>1.4</b>
Actual Rentals for Housing	12.9	2.3	1.2	4.3	1.9	1.5	1.0
Maintenance and Repair of the Dwelling	0.5	1.5	0.8	2.1	1.6	1.4	0.7
Water Supply and Miscellaneous Services Relating to the Dwelling	1.2	2.7	1.2	4.7	2.2	1.6	0.5
Electricity, Gas, and Other Fuels	7.4	4.3	3.6	5.8	8.5	3.9	2.2
<b>C. FURNISHINGS, HOUSEHOLD EQUIPMENT</b>	<b>2.9</b>	<b>2.7</b>	<b>1.3</b>	<b>2.7</b>	<b>1.3</b>	<b>2.8</b>	<b>1.3</b>
Furniture and Furnishings, Carpets and Other Floor Coverings	0.2	0.7	0.3	0.9	0.9	0.7	0.2
Household Textiles	0.1	1.2	0.5	0.5	0.4	1.4	0.6
Household Appliances	0.3	1.4	0.6	2.1	0.9	1.2	0.5
Glassware, Tableware, and Household Utensils	0.0	1.5	0.5	1.5	0.8	1.5	0.5
Tools and Equipment for House and Garden	0.0	2.6	1.1	1.2	0.3	2.7	1.2
Goods and Services for Routine Household Maintenance	2.3	3.2	1.6	2.9	1.4	3.2	1.5
<b>D. HEALTH</b>	<b>3.9</b>	<b>2.4</b>	<b>1.6</b>	<b>2.7</b>	<b>1.0</b>	<b>2.4</b>	<b>1.8</b>
Medical Products, Appliances and Equipment	2.0	1.5	0.7	2.6	1.2	1.2	0.6
Out-patient Services	0.6	2.7	1.3	5.7	1.7	2.1	1.2
Hospital Services	1.3	3.7	3.0	1.1	0.2	4.2	3.6
<b>E. TRANSPORT</b>	<b>8.1</b>	<b>4.6</b>	<b>2.0</b>	<b>5.2</b>	<b>1.6</b>	<b>4.4</b>	<b>2.0</b>
<b>F. COMMUNICATION</b>	<b>2.9</b>	<b>0.3</b>	<b>0.1</b>	<b>0.4</b>	<b>0.2</b>	<b>0.3</b>	<b>0.1</b>
<b>G. RECREATION AND CULTURE</b>	<b>1.4</b>	<b>1.4</b>	<b>0.3</b>	<b>1.3</b>	<b>0.4</b>	<b>1.4</b>	<b>0.3</b>
<b>H. EDUCATION</b>	<b>3.3</b>	<b>1.9</b>	<b>-0.4</b>	<b>1.6</b>	<b>0.0</b>	<b>2.0</b>	<b>-0.5</b>
<b>I. RESTAURANTS AND MISCELLANEOUS GOODS AND SERVICES</b>	<b>12.6</b>	<b>3.0</b>	<b>1.4</b>	<b>4.4</b>	<b>1.8</b>	<b>2.5</b>	<b>1.3</b>

Note: Some figures may not exactly add up due to rounding

Source: Philippine Statistics Authority (PSA)

## Appendix 1. Rebasing the CPI from 2006 to 2012 based series

### Rationale of regular rebasing<sup>7</sup>

The consumer price index (CPI) measures how the prices of goods and services purchased by a typical household (usually called a market basket) change over time. As consumer taste, behavior, trends, and technology evolve over time, a market basket loses accuracy the farther it is from the reference or base year. Given this, the CPI needs to be regularly rebased to ensure that it adequately represents the typical basket relevant to the current economic situation.

Using an updated market basket ensures that measures derived using the CPI, such as inflation, accurately reflect the consumption pattern of a typical Filipino household. To illustrate, the changes in the contents of the consumption baskets from 2006 to 2012 show that as a share of total expenditure in the household, there were decreases in the relative weights for food, alcohol, and tobacco. Meanwhile, the weights for health, transport, communication, and restaurants all increased, reflecting the changes in spending patterns and the increasing incomes of all households.

**Appendix table 1. Comparison of the 2012 and 2006 basket weights**

	2006	2012	Diff
<b>ALL ITEMS</b>	<b>100.0</b>	<b>100.0</b>	0.0
<b>I. FOOD AND NON-ALCOHOLIC BEVERAGES</b>	<b>39.0</b>	<b>38.3</b>	-0.6
A. FOOD ITEMS	36.3	35.5	-0.8
B. NON-ALCOHOLIC BEVERAGES	2.7	2.9	0.2
<b>II. ALCOHOLIC BEVERAGES AND TOBACCO</b>	<b>2.0</b>	<b>1.6</b>	-0.4
<b>III. NON-FOOD ITEMS</b>	<b>59.0</b>	<b>60.1</b>	1.1
A. CLOTHING AND FOOTWEAR	3.0	2.9	0.0
B. HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	22.5	22.0	-0.4
C. FURNISHINGS, HOUSEHOLD EQUIPMENT	3.2	2.9	-0.3
D. HEALTH	3.0	3.9	0.9
E. TRANSPORT	7.8	8.1	0.2
F. COMMUNICATION	2.3	2.9	0.7
G. RECREATION AND CULTURE	1.9	1.4	-0.5
H. EDUCATION	3.4	3.3	-0.1
I. RESTAURANTS AND MISCELLANEOUS GOODS AND SERVICES	12.0	12.6	0.6

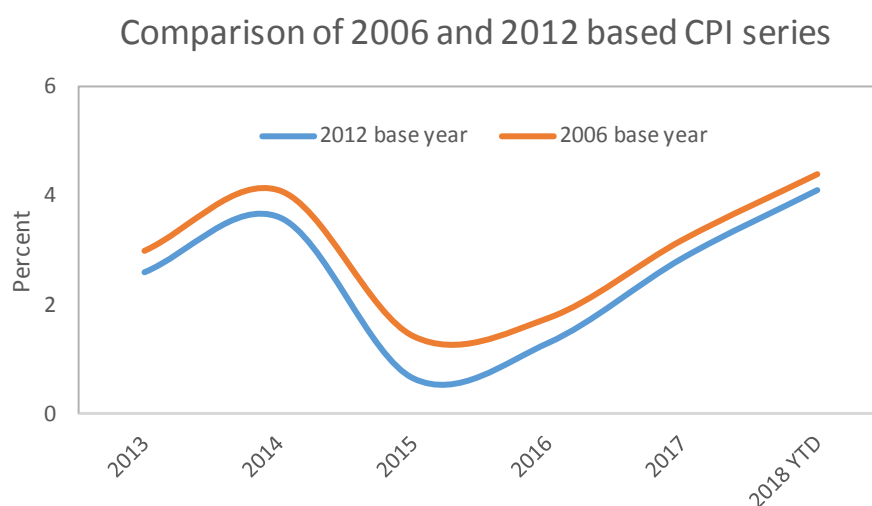
Source: PSA

<sup>7</sup> This section borrows heavily from the CPI technical notes of the PSA. For more details, please see: [https://psa.gov.ph/sites/default/files/attachments/itsd/cpi/2006-based%20CPI%20full%20report\\_revised%20as%20of%20sep%20%202011\\_31.pdf](https://psa.gov.ph/sites/default/files/attachments/itsd/cpi/2006-based%20CPI%20full%20report_revised%20as%20of%20sep%20%202011_31.pdf), [http://web0.psa.gov.ph/sites/default/files/attachments/itsd/cpi/2012-based%20CPI%20Methodology\\_0.pdf](http://web0.psa.gov.ph/sites/default/files/attachments/itsd/cpi/2012-based%20CPI%20Methodology_0.pdf), and <https://psa.gov.ph/system/files/attachments/itsd/cpi/METHODOLOGY%20IN%20REBASING%20THE%20CONSUMER%20PRICE%20INDEX%20TO%20BASE%20YEAR%202012%20AND%20ADOPTING%20THE%20CHAIN%20METHOD%20IN%20THE%202012-BASED%20CPI.pdf>

## The Laspeyres effect

Until the CPI is rebased, the quantities in the basket of goods used is fixed based on household consumption in the base year. However, the expenditure pattern of consumers changes overtime. Households typically react to price changes by buying more goods or services that have become relatively cheaper to replace those that have become relatively more expensive (i.e., the substitution effect). As the CPI base is fixed, inflation, which is computed based on the change in CPI, tends to be overestimated the farther it is from the base year. This is called the Laspeyres effect.<sup>8</sup> Historical data supports this. Inflation rates using the 2006 based CPI are higher than those using the more recent 2012 based CPI.

### Appendix figure 1. The 2006 series had higher inflation than the 2012 series.



Source: PSA

## The rebasing is on schedule

In February 2015, the PSA announced the plan to rebase the CPI from 2006 to 2012.<sup>9</sup> This was much earlier than the comprehensive tax reform proposal. PSA chose 2012 as the next base year as it was the latest year with available results from the Family Income and Expenditure Survey (FIES) at that time.

<sup>8</sup> For further reading, please see:

[https://www.statssa.gov.za/cpi/documents/Note\\_on\\_CPI\\_Laspeyres,\\_Paasche\\_and\\_Fischer\\_indices\\_2013.pdf](https://www.statssa.gov.za/cpi/documents/Note_on_CPI_Laspeyres,_Paasche_and_Fischer_indices_2013.pdf)

<sup>9</sup> For more details, please see: <http://www.bworldonline.com/content.php?section=Economy&title=psa-to-make-2012-new-base-year-for-gdp-cpi&id=102234>. See also PSA Board Resolution No. 1, Series of 2017-146.

Economists from the private sector and the academe laud the initiative to rebase the CPI regularly. Dennis Mapa, Dean of the UP School of Statistics, said that,

“[Rebasing the national accounts] may lead to a slower pace of growth or faster, but what is most important is that it’ll give us a clearer assessment of the economy. If growth slows and CPI accelerates then at least we would be aware. On the flip side, rebasing may show us that we had been underestimating growth and overestimating inflation trends.”

However, the rebasing was delayed. In January 2017, the PSA announced that the rebasing would instead be completed by end-2017.<sup>10</sup> This revised schedule puts it in line with the release this February 2018. Moving forward, the PSA plans to rebase the series every 6 years.

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<sup>10</sup> For more details, please see: <http://www.bworldonline.com/content.php?section=Economy&title=change-in-cpi-base-year-to-be-implemented-by-year&217s-end---psa&id=138791>