

TRAINING COURSE ON PRICE STATISTICS

18 – 20 JULY, 2017, BANDAR SERI BEGAWAN, BRUNEI DARUSSALAM

PRICE STATISTICS IN BRUNEI DARUSSALAM

Department of Statistics
Department of Economic Planning and Development

Price Statistics

There are several types of price statistics such as below:

- ❖ **Consumer Price Index (CPI)**
 - Measures the rate at which the prices of consumer goods and services are changing over time.
- ❖ **Export and Import Price Index (XMPI)**
 - Measure the overall change in the price component of transactions in goods and services between the country and the rest of the world.
- ❖ **Producer Price Index (PPI)**
 - Measures the rate at which the prices of producer goods and services are changing over time.
- ❖ **Residential Property Price Index (RPPI)**
 - Measuring the rate at which the prices of residential properties are changing over time.
- ❖ **Construction Material Price Index (CMPI)**
 - Measuring the rate at which the prices of raw material in construction are changing over time.

CPI for Brunei Darussalam

- CPI is an indicator which measures **average changes over time** in the **prices of a fixed 'basket' of goods and services of constant quality and quantity** purchased by households.
- CPI: “How much does it cost me now to buy the **same basket of goods and services** as I bought (at some defined time) in the past?”
- The ‘basket’ represents a set of quantities of goods and services that households purchase for day-to-day living. Each household purchases a different combination of goods and services for consumption.
 - Based on actual household expenditure data from the results of a Household Expenditure Survey (HES)
 - Reflects the **average spending pattern** of households in Brunei Darussalam
 - Basket and weights need to be regularly updated

History of CPI Rebasing

Period	Base Year	Weights Source
1963 – 1977	July 1963	Consumption patterns of a small number of low income families
1978 – 1990	1977	HES 1977 (Jan – Dec 1977)
1990 – 2002	1990	HES 1987/88 (Apr 1987 – Mar 1988)
2002 – 2010	2002	HES 1997/98 (Oct 1997 – Sep 1998)
2010 – Aug 2013	Jan 2005	HES 2005 (Jan – Dec 2005)
Sep 2013 - Present	Jan 2010	HES 2010/11 (Apr 2010 – Mar 2011)

Why Rebase?

- The CPI is rebased to make the indices reflect current households consumption patterns.
- Household consumption patterns changes over time in response to a change in products and/or incomes of households.
- It is necessary, therefore, to revise the weights regularly (rebase the CPI) so as to bring it in line with the current spending patterns of the population.
- To update weighting structure based on latest expenditure patterns of average household
- To update 'basket' of goods & services
 - *new sample of goods & goods*
 - *new sample of outlets*
- To improve methodology
 - *Update classification of goods & services*
 - *Implement latest recommendations*

Improvement in CPI Methodology

	CPI (Base Year 2005 & 2010)	CPI (Previous Base Years)
Classification	COICOP (12 Divisions) - Sub-indices available for Non-durables Semi-Durables Durables Services	Similar to COICOP (10 major groups)
Formula for elementary aggregate price indices	Arithmetic mean (AM) for : a) Homogenous items (mostly food items) b) Items with specific weights Geometric mean (GM) for others (Advantage: gives equal weight to each price)	AM for all (Disadvantage : bias towards items with higher price changes)
Computation of national average prices	Uses district weights, based on average of share of population, household expenditure & retail trade turnover by districts	No district weights used
Contribution to change	Available	Not available

Improvement in CPI Methodology

	CPI (Base Year 2005 & 2010)	CPI (Previous Base Years)
'Base' price	Previous month price	Average price of base year
Addition of items or outlets	Easy as long as we have previous month price	Not easy Have to impute base year price, splicing
Deletion of items or outlets	Straightforward History of deleted items or outlets still maintained	Not straightforward Replace by new item or outlet, but overwrite the earlier specs
Index calculation	Chain index Modified Laspeyres formula	Direct index Laspeyres formula
Data processing system	Customised computer program developed by ICT	Data capture – Excel Computation - SPSS

CPI Data Collection

- Prices are collected through fieldwork visits or by telephone.
- For items whose price fluctuate frequently (e.g. fresh fruits, vegetables and fish), prices are collected 4 times a month.
- For items with a fairly stable price (e.g. clothing, furniture, motor vehicles, airfares, tailoring), prices are collected monthly or quarterly.
- For items with a very stable rate (water, electricity, school fees) prices are collected once a year or as when the charges change.
- Price collection is done consistently on the same day of the week each month from the same outlet.

CPI Data Collection

Outlets

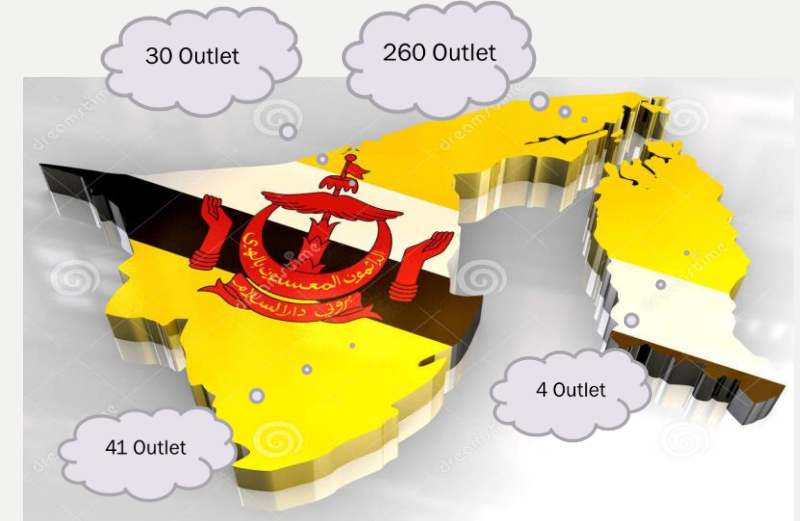
	Jan 2005 = 100	Jan 2010 = 100
Brunei Muara	352	260
Belait	63	41
Tutong	38	30
Temburong	4	4
Total	457	335

Items

	Jan 2005 = 100	Jan 2010 = 100
Food	165	121
Non-Food	282	318
Total	447	439

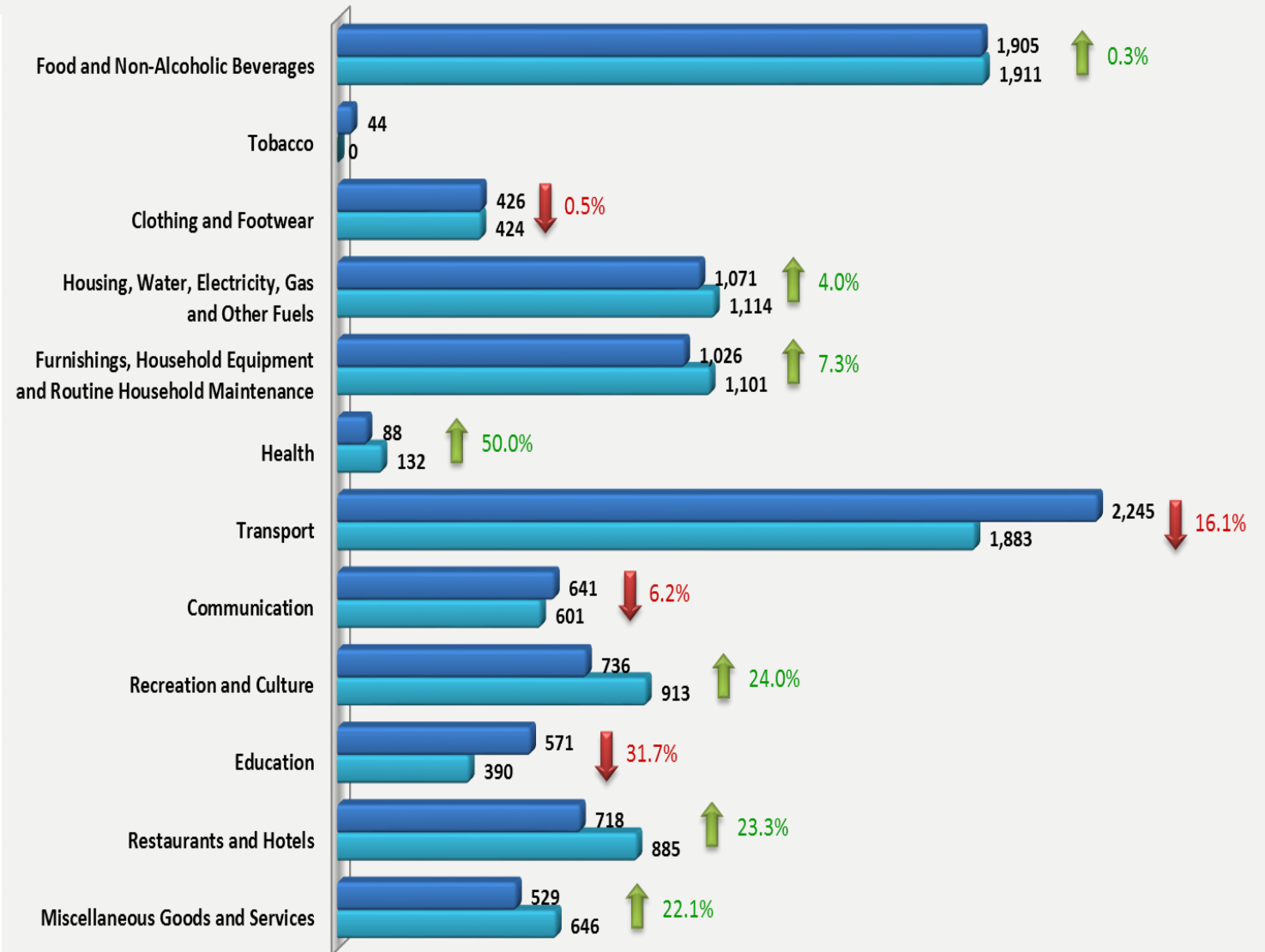
Price Quotations

	Jan 2005 = 100	Jan 2010 = 100
Observation	6,053	7,742



CPI Weights

Divisions	CPI 2005	CPI 2010
Overall CPI	10,000	10,000
Food & Non-Alcoholic Beverages	1,905	1,911
Tobacco	44	
Clothing & Footwear	426	424
Housing, Water, Electricity, Gas & Other Fuels	1,071	1,114
Furnishings, Household Equipment & Routine Household Maintenance	1,026	1,101
Health	88	132
Transport	2,245	1,883
Communication	641	601
Recreation & Culture	736	913
Education	571	390
Restaurants & Hotels	718	885
Miscellaneous Goods & Services	529	646



■ Jan 2005 = 100 ■ 2010 = 100

Measurement of CPI Changes

The following changes are measured for the CPI:

- ❖ **Month-on-month changes:** the percentage change between the current month over the previous month;
- ❖ **Year-on-year changes :** the percentage change between the current month and the same month in the previous year; and
- ❖ **Period-on-period changes:** the percentage change between the average index of the year-to-date compared to the same period the previous year.

For example, the average index from January to September of the current year is compared to the average index from January to September the previous year.

$$CPI = \frac{\text{Cost of CPI basket at current period}}{\text{Cost of CPI basket at based year}} \times 100 = \text{Price Index}$$

Year	Good A	CPI
2010 (Based Year)	\$2.00	X 100 = 150
2015	\$3.00	

CPI by Type of Products

1) Durables (D)

- Goods used repeatedly or continuously over a long period of time
(e.g. furniture, household equipment, vehicles)

2) Semi-durables (SD)

- Goods used repeatedly but expected lifetime use less than for durables and their purchaser's value is significantly less
(e.g. clothing, footwear, glassware, games, toys, household textiles)

3) Non-Durables (ND)

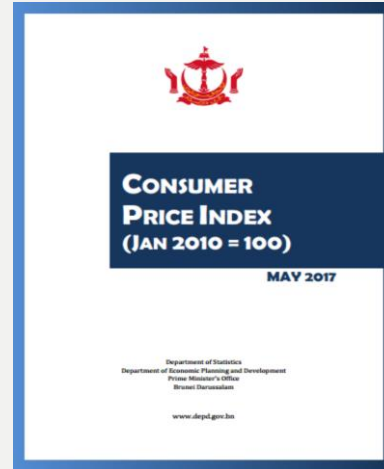
- "Single use" good (e.g. food and drink)


4) Services (S)

- e.g. education, health

CPI Dissemination

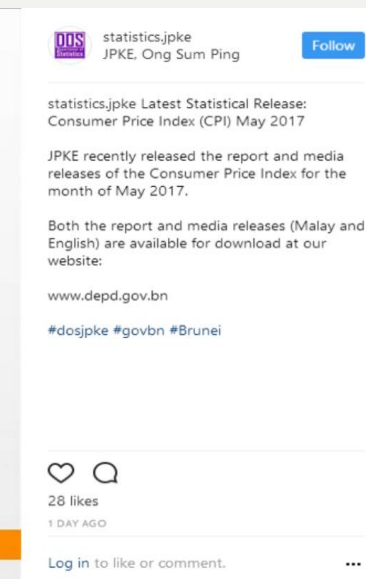
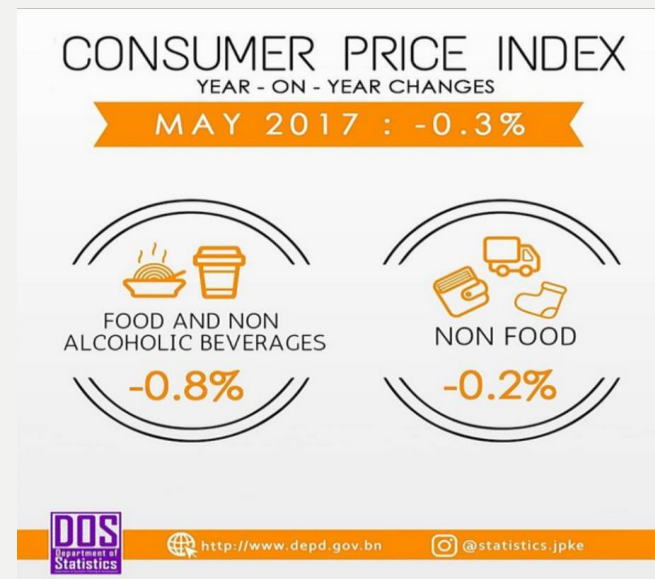
- Data, report and media release reviewed by Statistics Panel of DEPD.
- Schedule according to **Advance Release Calender (ARC)** :
3 weeks after reference month
- Through the media, DEPD's website and Instagram (use of Infographics)




ADVANCE RELEASE CALENDAR 2017, DEPARTMENT OF STATISTICS

	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
Monthly												
Consumer Price Index (CPI)	25 Wed, (Dec 2016)	22 Wed, (Jan 2017)	23 Thurs, (Feb 2017)	Sat 22, (Mar 2017)	24 Wed, (Apr 2017)	22 Thurs, (May 2017)	24 Mon, (Jun 2017)	23 Wed, (July 2017)	25 Mon, (Aug 2017)	24 Tue, (Sep 2017)	23 Thurs, (Oct 2017)	23 Sat, (Nov 2017)
International Merchandise Trade Statistics (IMTS)	21 Sat, (Nov 2016)	18 Sat, (Dec 2016)	18 Sat, (Jan 2017)	19 Wed, (Feb 2017)	20 Sat, (Mar 2017)	17 Sat, (Apr 2017)	26 Wed, (May 2017)	19 Sat, (Jun 2017)	20 Wed, (July 2017)	21 Sat, (Aug 2017)	18 Sat, (Sep 2017)	27 Wed, (Oct 2017)
Quarterly												
Gross Domestic Product (GDP)				30 Thurs, (Q4 2016)		29 Thurs, (Q1 2017)			28 Thurs, (Q2 2017)			28 Thurs, (Q3 2017)
Annual												
Foreign Direct Investment Statistics (FDIS)						30 Tues (2016)						
Balance of Payments (BoP)									22 Thurs (2016)			

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Future Developments in Price Statistics

CPI:

- Next update of basket and weights
 - based on HES 2015/16
- To consider compiling CPI of different income groups

Other price indices:

- Inflation index covers all transactions carried out in the economy, not only consumer goods and services
- CPI applies to the prices in the final stage in the chain of consumption
- Need to start compiling other price indices (PPI, XMPI, CMPI)

THANK YOU

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