

# CPI AND ICP

Md. Shahabuddin Sarker

Deputy Director

National Accounting Wing

Bangladesh Bureau of Statistics





# CPI

What is CPI?

A monthly or quarterly price index compiled and published by a NSO/NSI that measures changes in the prices of consumption goods and services acquired or used by household

What is COLI?

An index which measures the change between two periods in the minimum expenditure that would be incurred by a utility-maximizing consumer whose preferences or taste remain unchanged, in order to maintain a given level of utility, standard of living or welfare

What is Inflation?

It is defined as a sustained increase in the general level of prices for goods and services in a country and is measured as percentage change. It declines purchasing power of money.

What is Core Inflation?

A type of CPI which shows the underlying trend in inflation by excluding those movements which arise from transient factors such as seasonality or other short-term price volatility. Also known as “underlying” inflation.



# CPI

## Types of Inflation

- Demand pull inflation: caused by overall increase in demand for goods and services. Termed as too much money chasing few goods. When demand grows faster than supply. This usually occurs in rapidly growing economies.
- Cost push inflation: When companies cost of production goes up.
- Monetary Inflation: Caused by over supply of money.  
Most developed countries have attempted to sustain an inflation rate of 2-3% by using monetary policy tools put to use by central banks. This general form of monetary policy is known as inflation targeting.

## Costs (Disadvantages) of Inflation

- Discourages saving (cash drag) and foreign investment
- Distort relative prices
- Encourages wasteful financial expenditure
- Promotes dollarization, speculation and capital flight
- Creditors (lenders) lose and debtors (borrowers) gain

## Advantages of low inflation:

- A modest inflation is a sign that an economy is growing.
- Low inflation is said to encourage greater stability and encourage firms to take risks and invest.
- Moderate inflation enables adjustment of wages**

## Disadvantages of low inflation

- Hampers economic growth since peoples remain reluctant in further expenditure



# ICP

What is ICP?

Global survey of prices of comparable items across countries and representative within countries

- Global review of GDP - provides the weights to aggregate the PPP  
Produces:

- PPP adjusted economic aggregates
- PPP estimates
- Internationally comparable price level

To provide international comparison of GDP & and per capita expenditures

sub-aggregates:

- household consumption of food, clothing, housing, transport, etc.
- government expenditure on education, health, public order & safety, etc.
- investment in machinery, transport equipment, residential buildings, etc



# Purpose of ICP

To provide international comparison of GDP & and per capita expenditures

sub-aggregates:

- household consumption of food, clothing, housing, transport, etc.
- government expenditure on education, health, public order & safety, etc.
- investment in machinery, transport equipment, residential buildings, etc.

For International Comparison

- Requires GDP to be
  - expressed in the same currency unit
  - defined in the same way
  - be valued at the same price level (national)
- Comparison to the same currency can be done thru:
  - Exchange rates ,or
  - Purchasing power parities



# Exchange Rate

- Convert GDPs to a common currency
- Can be easily understood - determined by the demand for & the supply of currencies
- Can be easily observed, cover all countries, readily available

## ***However,***

- X-rate converted GDPs remain valued at national prices & reflect both volume & price level differences between countries
- X- rate converted GDPs overstate the size of economies with relatively high price levels & understate the size of those with relatively low price levels



# Exchange Rate contd.

## ***X-rate converted GDPs are not consistent overtime***

- X-rates are only partially determined by the demand & supply of currencies for international trade in goods and services
- Factors such as interest rate differentials; currency speculations; short-term capital movements can have a significant impact on the demand & supply of currencies causing X-rates to fluctuate
- X-rate fluctuations can make it appear that countries get “richer” or “poorer”



# What are PPPs

- PPPs are price relatives or ratios of prices between countries
- Based on relationship of actual prices between countries
  - Market basket of like items
  - Weighted by GDP expenditures
- PPPs are both currency converters & price deflators
- PPP converted GDPs reflect only volume differences between countries
- PPP converted data are generally more consistent over time
  - PPPs being price relatives are calculated in three stages:
    - first for individual products
    - then for product groups (Basic Headings)
    - & finally for aggregates
  - Weights are introduced at the third & last stage
    - explicit expenditure weights are not available below product group level
    - expenditures on the product group are used as weights





# Key Uses of PPP

- Analyze the extent of convergence in real incomes & prices across countries
- Measure levels & trends in inequality in real GDPs between countries & between regions within a country
- Assist in establishing aid policies for less developed countries
- Calculate cost of living adjustments for people assigned to posts in different countries



# ICP and CPI Compare

<b>Temporal</b>	<b>Spatial</b>
Compare same location in different points in time	Compare different location in same point in time
Reference: Base Period	Reference: Base Country/Region
Example: CPI series, GDP in constant price	Example: ICP series, Regional price level comparisons
Same product each <b>time</b> – but may adjust for small differences	Same product each <b>place</b> – but may adjust for small differences
<b>Different</b> specifications across different outlets	<b>Same</b> specification across different outlets
<b>Many</b> specifications	<b>One</b> specification



# ICP and CPI: The Link

- ICP uses the statistical infrastructure already in place in a country to the maximum extent
- Practical approach - take the outlets selected for the CPI and use them for the ICP.
- Issue: ICP and CPI has no sufficient overlap.
  - Tightly defined product specifications on ICP lists for which prices have to be collected will often differ from those used for the CPI.
- Prospects: ICP can use the same CPI outlets, the same price collectors and same data transmission within the country and processing procedures, as long as they comply with ICP requirements.



# ICP and CPI: Link

- ICP price collection - may take place simultaneously with the CPI price collection.
  
- The main advantage of making use of the CPI survey:
  - Expertise of price collectors
  - Time and Cost Efficient
- Limitation CPI may not be adequate. The scope of the ICP price collection will need to be extended beyond that of the CPI.
- Integration of ICP with CPI: Ideal opportunity for national authorities to consider whether the scope of the CPI should be permanently extended.
- Main Advantages of having core ICP products in the CPI: .
  - Allow comparability across comparison across region/state/province
- Note:
  - CPI – Temporal movement
  - ICP (or PPP) – Spatial movement