

BHARAT SCHOOL OF BANKING

PRICE INDICES - PPI, WPI, CPI

Measurement of Inflation

Price indices are used to measure the **relative price changes** (of **goods** and **services**) in a region (generally a **country**) during a specific **period** of time (e.g., **financial year**, or **quarter**, or **month**).

With the price indices, we comprehend about how much the **price** of **goods and services** has **increased** (**Inflation**) or **decreased** (**Deflation**) from a fixed normal year, known as **base year** (with respect to this **base year**, we calculate how much increase or decrease in prices happened in this **current year**).

Price indices are generally used to measure the **cost of living** in order to determine the **wage increases** necessary to maintain a **constant standard** of living.

Price Indices

Goods and **services** are provided to the **consumer** by the **producer**. It follows several **stages / levels** in between -

- **producer level** (produced, or manufactured) - **PPI**
- **wholesale level** (at **wholesale market**, before going to the **retail market**) - **WPI**
- **retail / consumer level** (at **retail market**, from where **consumers** buy) - **CPI**

Wholesale Price Index (WPI)

WPI is used to track **prices** of **goods** at the **wholesale** stage (meaning goods sold in **bulk**, rather than **retailed**), and traded between **organizations**, before going to **consumers**.

It is **practically impossible** to find **price changes** of **all** the **goods** traded in an **economy** (millions of goods!). So it is logical to take a **sample set**, or '**basket of goods**' (e.g., **676 commodities**, or **goods**) to measure the **inflation** (few important goods taken for measuring price changes).

Then determine a **base year** (e.g., **2004-05**, **2010-11**), with respect to which the **current inflation** will be measured. WPI indicator tracks the **price movement** of **each commodity individually**, and then determine through the **averaging** principle (Methods like **Laspeyres formula**, **Ten-day Price Index**, etc. are used)

Note that **all commodities** are classified into **3 groups**, and then their **weighted average** is taken for measuring WPI -

- **Primary Articles** (e.g., food, non-food, mineral, etc.) - **20.1 %** of **total weight**
- **Fuel & Power** (Coal, Mineral Oil, Electricity, etc.) - **14.9 %** of **total weight**
- **Manufactured Articles** (food products, beverages, woods, paper, chemicals, machinery, transport, etc.) - **65 %** of **total weight**

Indian wholesale prices increased by **0.11 %** in **December 2014** after being flat (**0 %**) in **November 2014**.

Consumer Price Index (CPI)

BHARAT SCHOOL OF BANKING

PRICE INDICES - PPI, WPI, CPI

While WPI is calculated in **wholesale** stage, **CPI** is determined at **retail** stage, where **consumers** are directly involved. Hence, CPI method better measures the **effect** of **inflation** on **general public**. RBI adopted **CPI** as the key measure for determining **Inflation** situation of **economy**, on recommendation of **Urjit Patel committee**.

CPI measures **changes** in **prices**, **paid** by **consumers** for a **basket of goods** (similar to **WPI**, but here **retail goods**, instead of **wholesale goods**).

There are **3** broad types of CPIs - (for different type of consumers; new CPI system of 2012)

- **CPI for Urban** population, known as **CPI (Urban)**
- **CPI for Rural** population, known as **CPI (Rural)**
- **Consolidated CPI** for Urban and Rural, which is based on **CPI (Urban)** and **CPI (Rural)** - **key measure** for CPI

CPI in India decreased to **144.90 Index Points** in **December 2014** from **145.50** in **November**.

Producer Price Index (PPI)

PPI is used to track pure **price changes** at **producer level** for **goods** as well as **services**. **PPI prices** of many **products** and some **services** are determined from **first commercial transaction**.

Note that in contrast to **WPI**, **PPI** doesn't contain **tax** components, keeping **inflation** free of **tax fluctuations**.

The **government** of **India** has set up (**Sep, 2014**) a **committee (13 members)**, headed by **Professor B.N.Goldar**, to devise **PPI** for Indian **economy**. It is an **international standard**, which is followed by **major economies** (e.g., **USA**) of the world.

Why devising PPI in India?

- **Currently**, there is no **index** tracking **inflation** in **service sector**, that contributes about **55 %** to India's **GDP** (note that **WPI** doesn't track **services** sector in India)
- **PPI** tracks **inflation** excluding **tax components**. It will help to track actual **change** in **prices** (note that **WPI**, **CPI**, both includes **tax** components)

Disclaimer - This article only gives a **basic idea**, just for **learning** purpose. No figure or content mentioned here to be considered as accurate.