Inflation
Concepts, Facts and Policy

Inflation means a persistent rise in the price of goods and services. Inflation reduces the purchasing power of money. It hurts the poor more as a greater proportion of their incomes are needed to pay for their consumption. Inflation reduces savings; pushes up interest rates; dampens investment; leads to depreciation of currency thus making imports costlier.

Depending upon the rate of growth of prices, inflation can be of the following types
Creeping inflation is a rate of general price increase of 1 to 5 percent a year. Creeping inflation of 3 to 5 percent erodes the purchasing power of money when continued over many years, but it is "manageable." Furthermore, a low creeping inflation could be good for the economy as producers and traders make reasonable profits encouraging them to invest.
Trotting inflation is usually defined as a 5 to 10 percent annual rate of increase in the general level of prices that, if not controlled, might accelerate into a galloping inflation of 10 to 20 percent a year. If it aggravates, galloping inflation can worsen to "runaway" inflation which may change into a hyperinflation. Hyperinflation is inflation that is "out of control," a condition in which prices increase rapidly as a currency loses its value. No definition of hyperinflation is universally accepted. One simple definition requires a monthly inflation rate of 20 or 30% or more- 'an inflationary cycle without any tendency toward equilibrium'. The worst is a monetary collapse, if prices are not reined in , in time.
Other related concepts are

- deflation when there is a general fall in the level of prices
- disinflation which is the reduction of the rate of inflation
- stagflation which is a combination of inflation and rising unemployment due to recession and
- Reflation, which is an attempt to raise prices to counteract deflationary pressures.

Measures of inflation

GDP deflator

GDP stands for gross domestic product, the total value of all final goods and services produced within that economy during a specified period.GDP deflator is a measure of the change in prices of all new, domestically produced, final goods and services in an economy. The GDP deflator is not based on a fixed market basket of goods and services but applies to all goods and services domestically produced.

Cost of living index

The cost of living is the cost of maintaining a certain standard of living. It is defined with reference to a basket of goods and services. When their cost goes up, CoL is said to be dearer and the index will go up. It has a value of 100 in the base year. An index value of 105 indicates that the cost of living is five percent higher than in the base year.

PPI

Producer price index (PPIs) measures the change in the prices received by a producer. The difference with the WPI is accounted for by logistics, profits and taxes, mainly. Producer price inflation measures the price pressure due to increase in the costs of raw materials. It may be absorbed by them or made up by increases in productivity or passed on to the consumers. It depends on the market conditions.

WPI

Wholesale price indices, which measure the change in price of a selection of goods at wholesale, prior to retail sales thus excluding sales taxes. These are very similar to the Producer Price Indexes.

CPI

Consumer price index measures the changes in prices paid by the consumer at the retail level. It can be for the whole community or group-specific- for example, CPI for industrial workers etc as in India.

Types of inflation based on causes

There are four major types of inflation

- **Demand-pull inflation:** inflation caused by increases in demand due to increased private and government spending, etc. It involves inflation rising as real gross domestic product rises and unemployment falls. This is commonly described as "too much money chasing too few goods". For example, India in 2010 when the economy is said to have overheated and demand outstripped supply and prices rose. Since supplies will be augmented to adjust to demand, prices will come down. It may be refered to as `growth inflation' too. Demand-pull inflation can be caused by money supply increasing. For example, the expansionary monetary policy of the RBI in 2009 saw rates come down and easy and cheap credit pushed up prices as demand grew. From 2010 March till the end of 2011, repo rates went up 13 times and thus RBI sought to control prices by controlling demand. Wage inflation, money supply growth etc create this type of inflation.
- **Cost-push inflation:** It is also refered to as "supply shock inflation," caused by reduced supplies due to increased prices of inputs, for example, crude prices globally have gone up causing supply constraints which means higher costs of production and so higher prices. Crude and food prices shot up in 2008 July, came down and again increased. Food prices are shooting up again due to deficient monsoon and global shortages. Other examples are higher cost of capital, increases in prices of imported raw materials. Just as a shortage of goods tends to push prices up, an oversupply of commodities tends to induce the opposite effect on prices.
- **Structural inflation:** A type of persistent inflation caused by deficiencies in certain conditions in the economy such as a backward agricultural sector that is unable to respond to people's increased demand for food, inefficient distribution and storage facilities leading to artificial shortages of goods, and production of some goods controlled by some people. Food inflation currently being witnessed (2012) is structural in nature as the preference for protein foods is far ahead of its supplies and this is a phenomenon driven by income rise.
- **Speculation**
- **Cartelization**
- **Hoarding**

High Inflation hurts
If inflation is high in an economy, the following problems can arise

- low income groups are particularly hurt
- People on a fixed income (e.g. pensioners, students) will be worse off in real terms due to higher prices and equal income as before
- inflation discourages exports as domestic sales are attractive and BOP problems can be caused. Inflation may erode the external competitiveness of domestic products if it leads to higher production costs such as wage increases, higher interest rate and currency depreciation.
- inflation can drag down growth as investment climate turns bad due to instability and uncertainty and also as interest rates are raised and cost of credit increases
- Inflation may discourage saving and thus hit investment. The savings pattern also gets skewed in favour of unproductive assets like gold as inflation may be higher than interest rates and yield is negative.
- Inflation tax happens. When a government borrows and spends, the cash held by people erodes in value due to inflation
- It will redistribute income from those on fixed incomes, such as pensioners, and shifts it to those who draw an inflation-linked income and businesses.
- strikes can take place for higher wages which can cause a wage spiral. Also if strikes occur in an important industry which has a comparative advantage the nation may see a decrease in productivity, exports and growth.
- Govt fiscal deficit may go up as the need to subsidise is more to make goods and services affordable

Small amount of inflation can be good
Inflation means growth, normally- higher incomes and more demand and so more inflation. It can be argued that a low level of inflation can be good if it is a result of innovation. New products are launched at high prices, which quickly come down through competition. Therefore, there is encouragement for innovation and the problem is short lived. Also, a small price rise is necessary for wages to go up. It further helps the economy keep off deflation which can otherwise set off a recession. Besides, inflation at a moderate level is an incentive to the producer. Some see mild inflation as "greasing the wheels of commerce."

Anticipated inflation: When inflation is anticipated, individuals know what is coming, and how to deal with it. For example, banks may raise interest rates to compensate for the anticipated inflation, workers may ask for raises to maintain their real incomes, wealth holders will put their wealth into assets that will rise in value at least at the same rate as the increase in the price index, etc.

Unanticipated inflation: When inflation is unanticipated, individuals do not realize that they should protect their real purchasing power against a rising price level until the price level has already risen and their real purchasing power has already fallen. In this instance, there will be gainers and losers, in terms of purchasing power, from the inflation.

Losers: Individuals on fixed incomes, retirees, all creditors (who lent at fixed rate of interest.)

Gainers: Individuals whose incomes rise faster than inflation, debtors (who will pay back at fixed rate of interest).

In December 2013, the WPI and CPI inflation figures are as follows:
WPI showed 7% plus and CPI almost 11% rise.

To control inflation

There are fiscal, monetary, supply-side and administrative measures to control inflation to ideal/optimal rates though zero rate of inflation is never preferred for the reasons cited elsewhere in the lesson.

- Fiscal measures include reduction in indirect taxes
- Dual pricing like in sugar.
- Monetary measures include rate and reserve requirements changes. Open market operations can stabilize prices under normal conditions Also, sterilization through Government bond transactions as in the case of MSBs
- Supply side factors include making goods available- import of edible oil in India.
- Administrative measures include implementation of dehoarding and anti-black-marketing measures. Wage and price controls can also be used

Indices of Inflation

Changes in the price levels at the wholesale and retail level are tracked by various price indices in India- WPI and CPI. 3 CPIs exist for different consumer groups each of which is homogenous.

All price indices use a particular year as a "base year". That means that rises or falls in prices are measured with reference to the price in that year. For example, the base year used for the Wholesale Price Index is 2004-05. Wholesale prices of all products in the basket with their respective weightages in that year add upto "100". If, in 04-05, the wholesale price of gur was Rs 2 a kg, and rose by 50 paise the following year, it would mean that the wholesale price index for gur would rise to 125 in 2005-06. But the movement of an index is based on the average of price movement of all the goods in the basket and not just one article. Different base years are used for different price indices due to convenience, data availability, logistics etc.

WPI

The Wholesale Price Index

Government launched a new series of wholesale price index (WPI) with 2004-05 as base from 2010. Earlier, 1993-94 was used as base year to calculate WPI. The new series of WPI has 676 items as against 435 items in the previous series. Consumer items widely used by the middle class like ice-cream, mineral water, flowers, microwave oven, washing machine, gold and silver are reflected in the new series of WPI. This would give better picture of the price variation. Readymade food, computer stationary, refrigerators, dish antenna, VCD, petroleum products and computers will also be part of the new series.

Under primary article group of the new WPI, there are 102 items against earlier 98, while fuel and power category remains static at 19. In the new series, there are 555 items of manufactured products compared to 318 items earlier.

241 new items are there in the basket of commodities making up the official wholesale price index in a bid to reflect changes in India's price line and consumption pattern better. The new series altered the weight attached to each commodity group.

Manufactured items now have a higher weight of 64.972 as against 63.749 earlier. The weight for fuels has also increased to 14.910 against 14.226. But for primary articles, the weight is down at 20.118 against 22.025.

In a bid to reflect the actual consumption pattern, the new series drops as many as 200 items sach as typewriters, video cassette recorders, to make a room for items like computers, refrigerators, televisions and video disc players.

Government is also working on a two new indices to reflect the changes in the cost of services — one on financial services and the other on trade and transport.

The Indian WPI is now updated on a monthly basis. The WPI is published by the Economic Advisor in the Ministry of Commerce and Industry, with a two week lag, tracks the wholesale traded price of 676 items that include agricultural commodities (such as rice, tea, raw cotton, groundnut oil seed), industrial commodities (such as iron ore, bauxite, coking coal), intermediate products for industry (such as cotton yarn, polyester fiber, synthetic resins, iron & steel, sheet glass), products for consumers (atta, sugar, paper, electricity, ceiling fans) and energy items (petrol, kerosene, electricity for commercial use). The weight attached to each item in the index is meant to reflect the volume (by value) of wholesale trade in that item in the Indian market.

The index is a vital guide in economic analysis and policy formulation. WPI covers primary goods, power/fuel and manufactured goods.

The WPI is not intended to capture the effect of price rise on the consumer though it generally and broadly indicates it.

WPI has an All India character. It is due to these attributes that it is widely used in business and industry circles and in Government and is generally taken as an indicator of the rate of inflation in the economy.

To reflect the structural changes in the economy that have taken place over a decade, a large number of commodities have been added and a few with diminished importance have been dropped.

WPI is announced with a time lag of two weeks. The data is made final after a period of 8 weeks.

The inflation rate is calculated on point to point basis i.e. on the basis of the variation between the index of the latest week of the current year and for the corresponding week of the previous year.

There are a number of agricultural commodities, especially, some fruits and vegetables, which are of a seasonal nature. Such seasonal items are handled in the index in a special manner. When a particular seasonal item disappears from the market and its prices are not quoted, the index of such an item ceases to get compiled and its weight is distributed over the remaining items and new seasonal items, if any, in the concerned sub-group.
The advantage of the WPI is that it covers more goods; is available with relatively small time lag of fortnight; is convenient to compile. Disadvantages are that it does not include services like transport, health, education etc.

Limitations on WPI

The accuracy of WPI is unsatisfactory even after the introduction of the revised series in 2010. Services such as rail and road transport, health care, postal, banking and insurance, for example, are not part of the WPI basket. Neither are the products of the unorganised sector that are estimated to constitute about 35 per cent of the total manufactured output of the country. The index thus falls well short of being a broad based indicator of the price level even in its construction.

WPI: new reporting method

From 2009, government presented WPI inflation figures on a monthly basis instead of weekly system. Analysts say since weekly data on wholesale price index-based inflation do not adequately capture the movement of prices of manufactured goods, government has to often revise the figures later. Therefore, the government decided to have weekly release of inflation data on food and fuel prices and monthly data on WPI. Inflation of primary goods within the WPI is reported on a weekly basis. But from 2011, the WPI is reported every month, including the food and primary article data

Comparative Statement of Commodities and price quotations

	No of Commodities		No of Price Quotations	
	1993-94	2004-05	1993-94	2004-05
All Commodities	435	676	1918	5482
Primary Articles	98	102	455	579
Fuel and Power	19	19	72	72
Manufactured Products	318	555	1391	4831

Weightage of the Sub Indices

	1993-94	2004-05
All Commodities	100%	100%
Primary Articles	22.025%	20.118%
Fuel and Power	14.226%	14.910%
Manufactured Products	63.749%	64.972%

CPI

There are three Consumer Price Indices in India. Each tracks the retail prices of goods and services for specific group of people, because the consumption patterns of different groups differ.

For Industrial Workers (CPI-IW), a basket of 370 commodities is tracked; for Urban Non-Manual Employees (CPI-UNME), 180 commodities; for Agricultural Labourers (CPI-AL), 60 commodities. The respective base years are 2001, 1984-85 and 1986-87. The first two indices have services in them. These baskets and the weightages to each item have been determined on the basis of surveys of consumption patterns. Information also differs from centre to centre around the country; the all-India figures declared are averages.

Mahatma Gandhi NaREGA wages are to be indexed to the CPI(AL) from the beginning of the year 2011.

CSO decided to discontinue CPI(UNME) from 2008.

Each commodity is given a specific weightage, which differs from one index to another index. For example, the CPI-AL would give a greater weightage to foodgrains than the CPI-UNME, since a greater proportion of the agricultural labourer's expenditure would go toward foodgrains, and he would be unlikely to buy the sort of items the office-goer would buy.

The coverage of CPI IW is broader than the other indices of CPI like the CPI for agricultural laborers (AL) and the CPI for urban non-manual employees (UNME).

In the organised sector, CPI-IW is used as a cost of living index.

CPI-AL and CPI-UNME are not considered as robust national inflation measures because they are designed for specific groups of population with the main purpose of measuring the impact of price rise on rural and urban poverty.

In accordance with the Government of India (Allocation of Business) Rules, 1961, as amended from time to time, it is the responsibility of the Ministry of Labour to compile and release the data on the CPI for Industrial Workers and the data on the CPI for Rural Labourers. It is the responsibility of the Ministry of Statistics and Programme Implementation to compile and release the data on the CPI for Urban Non-Manual Employees.

The Government of India (Allocation of Business) Rules, 1961, with subsequent amendments, assigns the responsibility for compiling the WPI to the Office of the Economic Adviser in the Department of Industrial Policy and Promotion under the Ministry of Commerce and Industry. The Economic Adviser holds the final authority for all decisions regarding the WPI.
The national income deflator(GDP deflator) is a comprehensive measure statistically derived from national accounts data released by the Central Statistical Organization (CSO). Since it encompasses the entire spectrum of economic activities including services, the scope and coverage of national income deflator is wider than any other measure. At present, the GDP deflator is available only annually with a long lag of over one year and hence has very limited use for the conduct of policy.

Difference between wholesale prices and consumer prices
WPI measures price rise at the wholesale level. Wholesale means sale in large quantities and meant for resale It covers a certain set of goods that are traded at the wholesale level. CPI on the other hand measures price rise at the retail level. There is a difference between the two. The difference is due to a number of factors. A substantial portion of the differential is accounted for by the retailers' margins which are built into what the consumer pays. Besides, the way the two indices are calculated differs both in terms of weightage assigned to products as well as the kind of items included in the basket of products.

While wholesale prices are more or less the same throughout the country, consumer prices or retail prices vary across regions (rural and urban) and also across cities according to the consumer preferences for certain products, supplies and purchasing power. Besides, taxes levied by states comprise an important component of the variation in prices of many products.

Therefore, give WPI an important place in government policy as it is more representative ; figues come quickly relatively; and has an all India character.

Divergence between WPI and CPI

Why do WPI and CPIs differ? They differ in terms of their weighting pattern. First, food has a larger weight in CPI ranging from 46 per cent in CPI-IW to 69 per cent in CPI-AL whereas it has a weight of only 27 per cent in WPI. The CPIs are, therefore, more sensitive to changes in prices of food items. Second, the fuel group has a much higher weight in the WPI (14.2 per cent) than the CPIs (5.5 to 8.4 per cent). As a result, movement in international crude prices has a greater bearing on WPI than on the CPIs. Third, services are not covered under WPI while they are, to different degrees, covered under CPIs. Consequently, service price inflation has a greater influence on CPIs.

New CPI series

The Central Statistics Office (CSO) of the Ministry of Statistics & Programme Implementation introduced the new series of Consumer Price Index (CPI) numbers for Rural, Urban and Combined (Rural +Urban) on base 2010 =100 taking all segments of rural and urban population for the States/UTs and all- India . Since 2011, the new series is force. These indices are available for five major groups namely Food, beverages and tobacco; Fuel and light; Housing; Clothing, bedding and footwear, and Miscellaneous.

Present CPI numbers do not encompass all the segments of the population in the country and as such they do not reflect the true picture of the price behavior in the country. It is therefore necessary to compile a CPI which takes into account the consumption patterns of all segments of the population and includes services.

New series of CPI for urban areas

CPI (Urban) numbers are compiled at State/UT as well as at all- India level. Weighting diagrams (consumption patterns) of the CPI (Urban) have been derived from the results of the NSS 61st round of Consumer Expenditure Survey (2004-05). For regular price collection, 310 towns have been selected, which include all State/UT capitals. From each selected town, price data are collected in respect of items consumed by the population of the respective State/UT. In all, 1114 price schedules containing an average of 250 items are canvassed every month. House rent data are also collected from a fixed set of rented dwellings from the selected towns. Prices of items are collected by the field officials of the National Sample Survey Office (NSSO).

New series of CPI for rural areas

CPI (Rural) numbers are compiled at state/UT and all- India levels. Weighting diagrams of the CPI (Rural) have also been derived from the results of the NSS 61st round of Consumer Expenditure Survey (2004-05).

Considering the fact that the CPI (Rural) would provide the price changes for the entire rural population of the country, a total of 1181 villages have been selected at all India level. Regular prices are collected by the officials of the Department of Posts. One schedule containing an average of 225 items from each selected village is canvassed for collection of prices every month.

National CPI

CSO will also compile national CPI by merging CPI (Rural) and CPI (Urban) with appropriate weights, as derived from NSS 61st round of Consumer Expenditure Survey (2004-05) data.

Weighting diagrams

The share (weight) of the Food, beverages and tobacco group in the all India CPI (Rural) is 59.31% and it is 37.15% in the all India CPI (Urban). Fuel and light group has a weight of 10.42% in CPI (Rural) and 8.40% in CPI (Urban). Clothing, bedding and footwear group has weight of 5.36% in CPI (Rural) and the weightage of 3.91% in CPI (Urban). Housing group has not been given any weightage in the rural areas CPI as its share is around 1% and it has been distributed to other groups on pro rata basis. CPI (Urban) has a weightage of 22.53% in respect of Housing group. The Miscellaneous Group consisting of education, medical care, transport and communication etc has 24.91% weight in the all India CPI (Rural) and the corresponding weight in the all India CPI (Urban) is 28%.

Release of indices

Index numbers for both rural and urban areas and also combined for each month and released. Indices are released with a time lag of one month.

Revision of indices

These new CPI numbers would be revised on the basis of the results of the next round of Consumer Expenditure Survey scheduled to be conducted during 2011-12 by the NSSO. Thereafter, revision will be undertaken every five years or so (whenever large scale Consumer Expenditure Survey data become available).

New series of CPI-- All India weights			
Sub group/group	**Rural**	**Urban**	**Combined (Rural+Urban)**
Cereals and products	19.08	8.73	14.59
Pulses and products	3.25	1.87	2.65
Milk and milk products	8.59	6.61	7.73
Oils and fats	4.67	2.89	3.90
Egg, fish and meat	3.38	2.26	2.89
Vegetables	6.57	3.96	5.44
Fruits	1.90	1.88	1.89
Sugar etc	2.41	1.26	1.91
Condiments and spices	2.13	1.16	1.71
Non- alcoholic beverages	2.04	2.02	2.03
Prepared meals etc	2.57	3.17	2.83
Pan, tobacco and Intoxicants	2.73	1.35	2.13
Food, beverages and tobacco	**59.31**	**37.15**	**49.71**
Fuel and light	**10.42**	**8.40**	**9.49**
Clothing and bedding	4.60	3.34	4.05
Footwear	0.77	0.57	0.68
Clothing, bedding and	**5.36**	**3.91**	**4.73**

footwear			
Housing		**22.53**	**9.77**
Education	2.71	4.18	3.35
Medical care	6.72	4.34	5.69
Recreation and amusement	1.00	1.99	1.43
Transport and communication	5.83	9.84	7.57
Personal care and effects	3.05	2.74	2.92
Household requisites	4.48	3.92	4.30
Others	1.12	0.99	1.06
Miscellaneous	**24.91**	**28.00**	**26.31**
All Groups	**100.00**	**100.00**	**100.00**

The new series is broad based and covers the entire rural and urban population. In the new series compiled by Central Statistics Office, the consumption patterns have been derived from the results of the Consumer Expenditure Survey conducted by the National Sample Survey Office during 2004-05. Food group weights in all-India CPI (Rural), CPI (Urban) and CPI (Combined) are 59.31%, 37.15% and 49.71% respectively. Remaining weights are for non-food groups i.e. housing, fuel & light, clothing & footwear and miscellaneous group.

Which index should one use?

The WPI is useful in certain contexts. For example, for industrialists, the costs of setting up a factory over the course of several years; and further to calculate the costs of production and returns over several years. The basket of items in the CPI does not include machinery, chemicals, and so on; secondly, the price of electricity in the CPI is the consumer tariffs, not the industrial tariffs; and so on.

Figures for inflation in the WPI are on the average much lower than those in the CPI indices. There could be two reasons for this difference in rates between the WPI and CPI: first, prices of the items in the CPI basket might have risen more sharply than items excluded from it — this would mean that prices of mass consumption goods have risen more sharply than inputs for production; secondly, the retail prices of commodities might have grown more sharply than the wholesale prices, indicating that middlemen have taken a bigger share.

Services and price index

While the WPI now does not include services, the two consumer price indices (CPI) meant for urban non-manual employees and industrial workers, do include certain services such as medical care, education, recreation and amusement, transport and communication. On the other hand, some of the other major services such as trade, hotels, financing, insurance, real estate and business services do not find a mention either in the WPI or in the CPIs.

In India, the services sector accounts for about 57 per cent of the GDP.

In August 2010, Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & Industry constituted an Expert Committee to render technical advice for development of Service Price Index (SPI) and its related issues. The Committee is chaired by Prof. C. P. Chandrasekhar.

Producer price index

The process of introducing the producer price index (PPI) is also underway in India, according to Dr Abhijit Sen, Member of Planning Commission. It means prices of goods as they are sold to the wholesalers by the producers. The difference between WPI and PPI is accounted for by the margins and other transport and distribution costs.

'Core' or' Underlying Inflation'

Core or underlying inflation measures the long-run trend in the general price level. Temporary effects on inflation are factored out to calculate core inflation. For this purpose, certain items are usually excluded from the computation of core inflation. These items include: changes in the price of fuel and food which are volatile or subject to short-term fluctuations and/or seasonal in nature like food items. In other words, core or underlying inflation is an alternative measure of inflation that eliminates transitory effects .The main argument here is that the central bank should effectively be responding to the demand side- for example, the money available in the market, demand for credit and so on and not the supply shocks like energy and food. Core inflation in India on the WPI is about 2%.Headline inflation on the other hand includes the official rate of increase in prices that excludes no item in the basket. Core includes the primary articles and the food processing part of manufacturing.

Inflation Targeting

Inflation targeting focuses mainly on achieving price stability as the ultimate objective of monetary policy. This approach entails the announcement of an inflation target- either a number or a range, that the central bank promises to achieve over a given time period. The targeted inflation rate will be set jointly by the RBI and the government, the responsibility of achieving the target would rest primarily on the RBI on the demand side and supply side is that of the government. This would reflect an active government participation in achieving the goal of price stability with fiscal discipline by way of a rational borrowing programme (not borrowing in excess).

Monetary policy and fiscal policy have to converge for achievement of inflation targeting. Advantage is that it promotes transparency in the conduct of monetary policy. Further, it increases the accountability of monetary authorities to the inflation objective.

Prices impact on the macro economy in many ways – welfare of people, growth and stability of the economy in a globalised order.

We do not adopt this policy in India.

Ideal level of Inflation

Ideal inflation rate is one that takes into consideration human, social and economic impact. It is the level of inflation beyond which the adverse consequences are strong. Chakravarty Committee (1985) had indicated 4 per cent as an acceptable level of inflation on a long-term basis However, such a level of inflation cannot be fixed at one level for all times. It depends on growth rate. It also depends on what the global levels are. RBI sees about 5.5% rate of inflation as 'comfortable'- neither does it hurt in human terms nor in growth terms.

Collection of Statistics Act, 2008

Collection of Statistics Act, 2008 was made to bring in new rules aimed at improving data collection.

Government will levy higher penalty for not sharing data and tougher punishment will be imposed in cases where manipulation of data is involved, they say.

Under the new Act, people or companies not divulging data would have to pay a fine of Rs 1,000 and they would be given a 14-day notice period to comply. If the information is not provided even after two weeks, the penalty will rise to Rs 5,000 per day.

Under the old Act, which was passed in 1953, the penalty was only Rs 500 for the first default and Rs 200 per day thereafter.

The new penalty scheme will ensure that data collection is done on time. It will increase the accuracy of the data

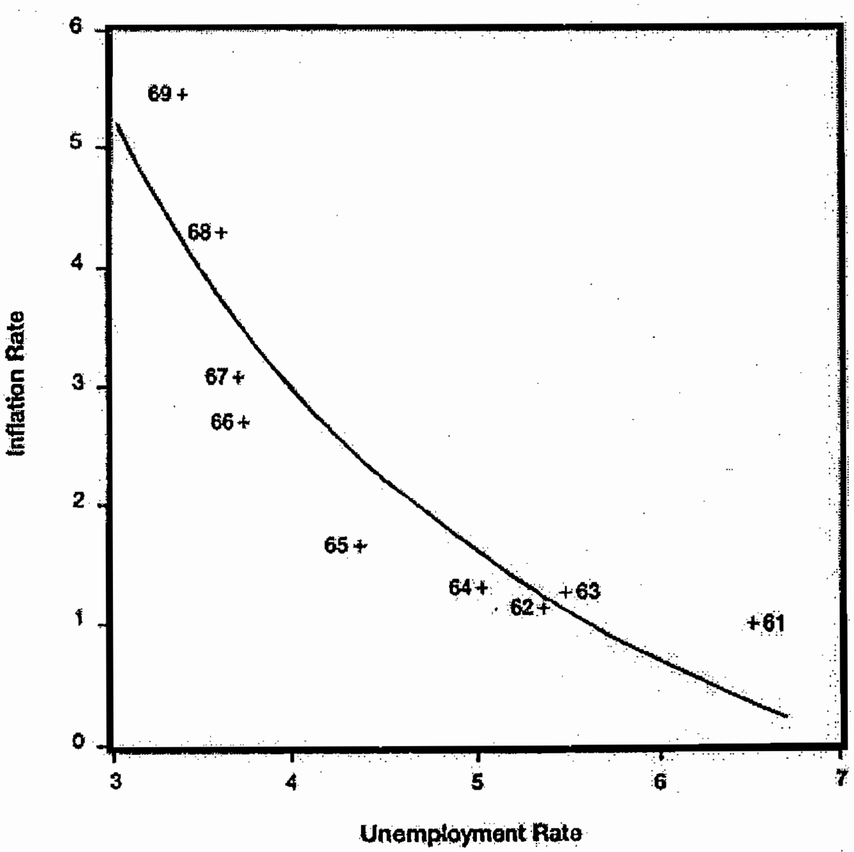
The Act also makes wilful manipulation or omission of data a criminal offence, punishable by a prison term that may extend up to 6 months. This penalty will also apply if a company prevents or obstructs any employee from collecting data.

The Collection of Statistics Act, 2008, gives powers to the government to classify any statistics as "core statistics" and also determine the method to collect and disseminate the same

Philips's curve
The inverse relationship between rate of inflation and rate of unemployment is shown in the **Phillips curve:** price stability has a trade-off against employment. Some level of inflation could be considered desirable in order to minimize unemployment.

Potential output (sometimes called the "natural gross domestic product") is an important concept in relation to inflation. It is the level of GDP where the economy is at its optimal level of production, given various constraints- institutional and natural.

This level of output corresponds to the Non-Accelerating Inflation Rate of Unemployment, NAIRU. If GDP exceeds its potential, inflation will accelerate and if GDP falls below its potential level, inflation will decelerate as suppliers attempt to use excess capacity by cutting prices.



Deflation

Deflation is a prolonged and widespread decline in prices that causes consumers and businesses to curb spending as they wait for prices to fall further. It is the opposite of inflation, when prices rise, and should not be confused with disinflation, which merely describes a slowdown in the rate of inflation.
Deflation occurs when an economy's annual headline inflation indicator -- typically the consumer price index -- enters negative territory.
Deflation is hard to deal with because it is self-reinforcing. Put simply, unless it is stopped early, deflation can breed deflation, leading to what is known as a deflationary spiral.

When an economy has fallen into deflation, demand from businesses and consumers to buy products falls because they expect to pay less later as prices fall. But as producers struggle to sell and go bankrupt, unemployment rises, reducing demand further. That causes deflation to become more pronounced.

It makes it more expensive to service existing debts. This is as true of governments, who have borrowed trillions of dollars globally to prop up the financial sector, as it is for consumers.
As debt becomes more expensive to pay off, the risk of default and bankruptcy rises too, making banks more wary of lending. This reduces demand and further exacerbates the deflationary problem.
Remedy

- Tax cuts to boost demand from consumers and businesses
- Lowering central bank interest rates to encourage economic activity
- Printing more currency to boost money supply
- Capital injections into the banking system
- Increase government spending on projects that boost the return on private investment

India did not face the threat of deflation as demand has not dropped so much. Also, food scarcity meant food prices did not fall. In fact they rose.

India and deflation

On the WPI, we faced disinflation- rate of growth of prices fell but not prices themselves till the first quarter of 2009. In the second quarter and later, there was 'deflation' on the WPI. This negative inflation is due to higher base as inflation peaked in July 2008 due to international energy and food price rises because of speculation.

The deflationary phase was short lived for a few weeks as the fiscal as well as monetary measures of the government started showing results and demand and growth returned.

Growth -inflation trade off

With high growth, economy overheats. .Overheating of the economy means demand overshoots supply and there is pressure on prices. As growth creates more employment and incomes rise, demands rises pushing up prices.

As prices rise, the central bank intervenes and raises rates to cool consumption and so prices fall relatively. Repo rates- the policy rate- is the tool along with CRR and OMOs available to the central bank as signals to the economy that it is ready to act to soften prices -partly because the poor suffer disproportionately and partly because inflation can derail the medium and long term growth.

Such intervention by the central bank has a dampening impact on growth as higher interest rates prevent easy borrowing and thus demand slackens.

We witnessed the same in India with CRR and repo rates going down from 2009 for one year and later till 2011 going up in reponse to priceline in the country. Today they stand at 4% and 7.75% respectively (December 2013)The primary goal of the RBI is to moderate and stabilize prices.

Thus, growth and inflation are intimately connected- one being traded for the other depending upon where the growth situation stands.

As prices stabilise, growth resumes and a new and higher base is set for the growth process. Growth and inflation do have a trade off but that is only in the short term. As Dr.C.Rangarajan says, growth is a marathon while overheating and slow down are temporary pauses to gain greater strength.

Further, unless the RBI raises the policy rates with inflation going up, there is a danger of banks failing to attract deposits as real interest rates become negative and savings may be diverted to unproductive assets like gold with serious consequences- inside and outside for the economy.

Fiscal drag operates in an overheated economy. That is the tax liability increases as wages rise. That leaves less purchasing power in the hands of the people and so demands drops automatically. It acts as an automatic stabilizer.

Inflation in India

Reasons for the current inflation

In spite of the steps of the government, prices are relentlessly on rise. WPI at 7.5% and CPI above 10% in mid-2012 have many reasons

- Growth
- The bad monsoons and the decline in production raised inflationary expectations
- Even as the buffer stocks accumulated to huge surplus, governance problems and the fiscal pressures of the states prevented them from being distributed
- Narega
- MSP increases
- Fuel price deregulation for petrol and increase in the prices of diesel and LPG
- Hoarding and cartelization as in the case of food items, cement
- Middle men
- APMC Acts of States
- Diesel price deregulation in phases
- Imported inflation due to rupee depreciation since late 2011

For food inflation, Dr. Subba Rao gave the following reasons in November 2011 and they continue to be relevant

1. Shift in dietary habits towards protein foods.
2. Pressure stemming from inclusive growth policies.
3. Large increases in MSPs of food grains.
4. Shocks from global food inflation.
5. Financialisation of commodities.

Government steps to control inflation
The Government has taken a number of short term and medium term measures to improve domestic availability of essential commodities and moderate inflation.

It has procured record food grains. Even after keeping the minimum buffer stock, there are enough food grains to intervene in the market to keep the prices at reasonable level.

A Strategic Reserve of 5 million tonnes of wheat and rice has also been created to offload n the open market when prices are high. This is in addition to the buffer stock held by FCI every year.

Issue price of grains supplied through PDS outlets are frozen.
The price situation is reviewed periodically at high-level meetings such as the Cabinet Committee on Prices (CCP).

Fiscal Measures

- Reduced import duties on food items
- Import duties are raised on gold etc to contain CAD

Administrative Measures

- Ban on exports of food items
- Dehoarding

Monetary Measures
Repo rates were raised and CRR also went up to make credit dearer.

Inflation and corruption
The link is as follows

a. through black money
b. hoarding not being checked
c. commodity prices being manipulated through speculation as NSEL crisis shows.

Open inflation
When the government does not attempt to prevent a price rise, inflation is said to be open. Thus, inflation is open when prices rise without any interruption. In open inflation, the free market mechanism is permitted to fulfill its historic function of rationing the short supply of goods and distribute them according to consumer's ability to pay. Therefore, the essential characteristics of an open inflation lie in the operation of the price mechanism as the sole distributing agent.

Repressed / suppressed inflation
When the government interrupts a price rise, there is a repressed or suppressed' inflation. Thus, it refers to those conditions in which price increases are prevented at the present time through an adoption of certain measures like price controls and subsidies like diesel subsidy etc.

Inflation tax
Price rise means more money being paid by the consumers for what they buy. Thus, it is a type of tax.