CHAPTER 7

INFLATION AND BUSINESS CYCLE

*Fluctuations in the level of economic activity, alternating between periods of depression and boom, led by one prominent factor, i.e., the expectations of the future demand–intertwined with the inflation–has always been a fascinating topic for economists.**

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* *See Joseph E. Stiglitz and Carl E. Walsh,* Economics, 4th Edition (New York: W.W. Norton, 2005), 494–496; Collins internet-linked Dictionary of Economics, (Glasgow, Scotland: Harper Collins, 2006), pp. 48–49.

SECTION-A

INTRODUCTION

For a layman, inflation is just price rise. It becomes a matter of everyday discussion if the prices of daily or weekly items start rising. Whatever impact it might be having on other areas of economy, inflation might take an ugly turn and lead to a political crisis—at least in the developing economies. India has seen governments thrown out of power in elections due to price rise in daily-use items. This is not the case in the developed economies, but inflation takes its political toll there, too. In the developed economies, more aware and informed voters get carried away by the greater impact of higher or lower inflations in the elections. In this chapter, we will try to examine the concept of inflation from all possible dimensions to have an overall understanding.

DEFINITION

A rise in the general level of prices;[1] a sustained rise in the general level of prices;[2] persistent increases in the general level of prices;[3] an increase in the general level of prices in an economy that is sustained over time;[4] rising prices across the board[5]—is inflation. These are some of the most common academic definitions of inflation. If the price of one good has gone up, it is not inflation; it is inflation only if the prices of ***most*** goods have gone up.[6]

1. Samuelson, Paul A. and Nardhaus, William D., ***Economics***, Tata McGraw-Hill, N. Delhi, 2006, p. 439.
2. Mc Cormick, B.J. et.al, ***Introducing Economics***, Penguin Education, Great Britain, 1974, p.609.
3. ***Penguin Dictionary of Economics***, Penguin Books, London, 7th Ed., 2003.
4. ***Collins internet-linked Dictionary of Economics***, Harper-Collins Publishers., Glasgow, 2006.
5. Mathew Bishop, ***Pocket Economist***, *The Economist,* London, 2007, p. 121.
6. Stiglitz, Joseph E. and Walsh, Carl E., ***Economics***, W.W. Norton & Company, New York, 2005, p. 509.

When the general level of prices is falling over a period of time this is ***deflation***, the opposite situation of inflation. It is also known as ***disinflation***. But in contemporary economics, deflation or disinflation not used to indicate fall in prices. Instead, a price rise is termed a 'rise in inflation' and a price fall is termed a 'fall in inflation'. The terms deflation or disinflation have become part of the macroeconomic policy of modern governments. In policy terms, deflation or disinflation means a reduction in the level of national income and output, usually accompanied by a fall in the general price level. Such a policy is often deliberately brought about by the governments with the objective of reducing inflation and improving the balance of payments (BoP) by reducing import demand. As instruments of deflation, the policy includes fiscal measures (as for example, tax increase) or monetary measures (as for example, increase in interest rate).

The rate of inflation is measured on the basis of price indices which are of two kinds—Wholesale Price Index (WPI) and Consumer Price Index (CPI). A price index is a measure of the average level of prices, which means that it does not show the exact price rise or fall of a single good. The rate of inflation is the rate of change of general price level which is measured as follows:

Rate of inflation (year x) = Price level (year x) –Price level (year x-1) / Price level (year x-1)×100

This rate shows up in percentage form (%), though inflation is also shown in ***numbers,*** i.e., ***digits***. A price index is a weighted average of the prices of a number of goods and services. In the index the total weight is taken as 100 at a particular year of the past (the ***base year***), this when compared to the current year shows a rise or fall in the prices of current year, there is a rise or fall in the '100' in comparison to the base year—and this inflation is measured in digits.

Inflation is measured '***point-to-point***'. It means that the reference dates for the annual inflation is January 1 to January 1 of two consecutive years (not for January 1 to December 31 of the concerned year). Similarly, the weekly rate of inflation is the change in one week reference being the two consecutive last days of the week (i.e., 5 p.m. of two Fridays in India).

WHY INFLATION OCCURS

Economists have been giving different explanations throughout the 19th and 20th centuries for the occurrence of inflation—the debate still goes on. But the debate has certainly given us a clearer picture of inflation. We shall see the reasons responsible for inflation in two parts—

1. PRE-1970S

Till the rise of the monetarist school, economists used to agree upon two reasons behind inflation:

(a) Demand-Pull Inflation

A mis-match between demand and supply pulls up prices. Either the demand increases over the same level of supply, or the supply decreases with the same level of demand and thus the situation of demand-pull inflation arise. This was a Keynesian idea. The Keynesian School suggests cuts in spending as the way of tackling excess demand mainly by increasing taxes and reducing government expenditure.

In practice, the governments keep tracking the demand-supply matrix to check such inflation. Depending upon the situation, the goods in short supply are imported, interest on loans increased and wages revised.

(b) Cost-Push Inflation

An increase in factor input costs (i.e., wages and raw materials) pushes up prices. The price rise which is the result of increase in the production cost is cost-push inflation. The Keynesian school suggested controls on prices and incomes as direct ways of checking such an inflation and, 'moral suasions' and measures to reduce the monopoly power of trade unions as indirect measures (basically, cost-push inflations chiefly used to happen due to higher wage demanded by the trade unions during the era).

Today, the governments of the world use many tools to check such inflations—reducing excise and custom duties on raw materials, wage revisions, etc.

2. POST-1970S

After the rise of Monetaristic School of Economics in the early 1970s (monetarism developed in opposition to post-1945 Keynesian idea of demand management), the school provided monetarist explanation for inflation, the so-called 'demand-pull' or the 'cost-push' which is excessive creation of money in the economy.

(a) Demand-Pull Inflation

For the monetarists, a demand-pull inflation is creation of extra purchasing power to the consumer over the same level of production (which happens due to wage revisions at the micro level and deficit financing at the macro level). This is the typical case of creating extra money (either by printing or public borrowing) without equivalent creation in production/supply, i.e., 'too much money chasing too little output'—the ultimate source of demand-pull inflation.

(b) Cost-Push Inflation

Similarly, for the monetarists, 'cost-push' is not a truly independent theory of inflation—it has to be financed by some extra money (which is created by the government via wage revision, public borrowing, printing of currency, etc.). A price rise does not get automatically reciprocated by consumers' purchasing. Basically, people must have got some extra purchasing power created

that's why they start purchasing at higher prices also. If this has not been the reason, people would have cut-down their consumption (i.e., overall demand) to the level of their purchasing capacity and the aggregate demand of goods would have gone down. But this does not happen. It means every cost-push inflation is a result of excessive creation of money—increasing money flow or money supply.

For the monetarists, a particular level of money supply for a particular level of production is healthy for an economy. Extra creation of money over the same level of production causes inflation. They suggested proper monetary policy (money supply, interest rates, printing of currencies, public borrowing etc.), to check situations of inflationary pressure on the economy. Monetarists rejected the Keynesian theory of inflation.

3. MEASURES TO CHECK INFLATION

From the above-given reasons for inflation and the measures to control it, which of the measure the governments of the world should apply in their policymaking? In practice, governments around the world distance themselves from this debate and have been taking recourse to all possible options while controlling inflation. The governments resort to the following options to check rising inflation:

(i) As a ***supply side measure***, the government may go for import of goods which are in short-supply—as a short-term measure (as happened in India in the case of 'onion'[7] and meeting the buffer stock norm of wheat). As a long-term measure, governments go on to increase the production to matching the level of demand. Storage, transportation, distribution, hoarding are the other aspects of price management of this category.

(ii) As a ***cost side measure,*** governments may try to cool down the price by cutting down the production cost of goods showing price rise with the help of tax breaks—cuts in the excise and custom duties (as happened in June 2003 in India in the case of crude oil and steel[8]). This helps as a short-term measure. In the long-term, better production process, technological innovations etc., are helpful. Increasing income of the people is the monetary measure to avoid the heat of such inflation.

(iii) The governments may take recourse to tighter monetary policy to cool down either the demand-pull or the cost-push inflations. This is basically intended to cut down the money supply in the economy by siphoning out the extra money (as RBI increases the Cash Reserve Ratio of banks in India)[9] from the economy and by making money costlier (as RBI increases the Bank Rate or Repo Rate in India)[10]. This is a short-term measure. In the long-run, the best way is to increase production with the help of the best production practices.

Again, this measure does not work if the price rise is taking place in items of everyday use such as salt, onion, wheat, etc. (because nobody purchases such goods by borrowing from the banks). This measure helps if the prices are rising due to extra demand of cement, iron and steel, etc.

7. As per the ***Economic Survey, 1997–98,*** Ministry of Finance, GoI, N. Delhi, p. 89.

8. As per the ***Economic Survey, 2003–04,*** p. 90.

9. As the CRR for banks was revised upward to 6.5 per cent by the RBI in its **Credit and Monetary Policy** for April 2007 onwards and again increased to 7 per cent in the **Review**, July 31, 2007.

10. As the RBI increased the Repo Rate to 7.75 per cent in its ***Credit & Monetary Policy*** announced on March 31, 2007.

The governments might utilise any of the above or all the three measures to check and manage inflation in their day to day price management policy.

TYPES OF INFLATION

Depending upon the range of increase, and its severity, inflation may be classified into three broad categories.

1. LOW INFLATION

Such inflation is slow and on predictable[11] lines, which might be called small or gradual[12]. This is a comparative term which puts it opposite to the faster, bigger and unpredictable inflations. Low inflation takes place in a longer period and the range of increase is usually in 'single digit'. Such inflation has also been called as '***creeping inflation***'.[13] We may take an example of the monthly inflation rate of a country for six months being 2.3 per cent, 2.6 per cent, 2.7 per cent, 2.9 per cent, 3.1 per cent and 3.4 per cent. Here the range of change is of 1.1 per cent and over a period of six months.

2. GALLOPING INFLATION

This is a '***very high inflation***' running in the range of double-digit or triple digit (i.e., 20 per cent, 100 per cent or 200 per cent in a year).[14] In the decades of 1970s and 1980s, many Latin American countries such as Argentina, Chile and Brazil had such rates of inflation—in the range of 50 to 700 per cent. The Russian economy did show such inflation after the disintegration of the ex-USSR in the late 1980s.

Contemporary journalism has given some other names to this inflation—*hopping inflation, jumping inflation* and *running or runaway inflation*.[15]

3. HYPERINFLATION

This form of inflation is '***large and accelerating***'[16] which might have the annual rates in million or even trillion.[17] In such inflation not only the range of increase is very large, but the increase takes place in a very short span of time, prices shoot up overnight.

The best example of hyperinflation that economists cite is of Germany after the First World War—in early 1920s. At the end of 1923, prices were 36 billion times higher than two years earlier.[18] This inflation was so severe that paper German currencies (the Deutsche Mark) were more valuable as stove fuel than as actual money.[19] Some recent examples of hyperinflation had been the Bolivian inflation of mid-1985 (24,000 per cent per annum) and the Yugoslavian inflation of 1993 (20 per cent per day).[20]

Such an inflation quickly leads to a complete loss of confidence in the domestic currency and people start opting for other forms of money, as for example physical assets, gold and foreign currency (also known as 'inflation proof' assets) and people might switch to barter exchange.[21]

11. Samuelson and Nordhaus, ***Economics***, p. 671.
12. ***Collins Dictionary of Economics***, p. 251.
13. Ibid.
14. Samuelson and Nordhaus, ***Economics***, p. 671
15. As popularised by ***The Economist***, ***The Wall Street Journal***, ***The Economic Times*** (India), etc.
16. ***Collins Dictionary of Economics***, p. 251
17. Samuelson and Nordhaus, ***Economics***, p. 671.
18. Thomas Sargent, 'The Ends of Four Big Inflations', in R. Hall, ***Inflations, Causes and Effects*** (as quoted by Stiglitz and Walsh, ***Economics,*** p. 513).
19. Stiglitz & Walsh, ***Economics***, p. 512.
20. Sachs, Jeffery, ***The End of Poverty***, Penguin Books, London, 2005, pp. 92–108
21. Hyperinflation erodes the value of money very fast and that too at a very high scale. We may put it with an example, suppose the annual rate of inflation is 100 per cent, money loses half its value every year. It means that a note of Rs. 100 will have a value of just Rs. 3 after five years.

OTHER VARIANTS OF INFLATION

Other than the three broad categories we analysed above, some other variants of inflation are also considered by governments in their policymaking:

I. BOTTLENECK INFLATION

This inflation takes place when the supply falls drastically and the demand remains at the same level. Such situations arise due to supply-side hurdles, hazards or mismanagement which is also known as 'structural inflation'. This could be put in the 'demand-pull inflation' category.

II. CORE INFLATION

This nomenclature is based on the inclusion or exclusion of the goods and services while calculating inflation. Popular in western economies, core inflation shows price rise in all goods and services excluding ***energy*** and ***food articles***. In India, it was first time used in the financial year 2000–01 when the government expressed that it was under control—it means the prices of manufactured goods were under control.[22] This was criticised by experts on account of excluding food articles and energy out of the inflation and feeling satisfied on the inflation front. Basically, in the western economies, food and energy are not the problems for the masses, while in India these two segments are of most vital importance for the common people.

OTHER IMPORTANT TERMS

INFLATIONARY GAP

The excess of total government spending above the national income (i.e., fiscal deficit) is known as inflationary gap. This is intended to increase the production level, which ultimately pushes the prices up due to extra-creation of money during the process.

DEFLATIONARY GAP

The shortfall in total spending of the government (i.e., fiscal surplus) over the national income creates deflationary gaps in the economy. This is a situation of producing more than the demand and the economy usually heads for a general slowdown in the level of demand. This is also known as the ***output gap***.

INFLATION TAX

Inflation erodes the value of money and the people who hold currency suffer in this process. As the governments have authority of printing currency and circulating it into the economy (as they do in the case of deficit financing), this act functions as an income to the governments. This is a situation of sustaining government expenditure at the cost of people's income. This looks as if inflation is working as a tax.[23] That is how the term inflation tax is also known as ***seigniorage***. It means, inflation is always the level to which the government may go for deficit financing—level of deficit financing is directly reflected by the rate of inflation.

It could also be used by the governments in the form of prices and incomes policy under which the companies pay inflation tax on the salary increases above the set level prescribed by the government.[24]

INFLATION SPIRAL

An inflationary situation in an economy which results out of a process of wage and price interaction '***when wages press prices up and prices pull wages up***'[25] is known as the inflationary spiral. It is also known as the ***wage-price spiral***. This wage-

22. Ministry of Finance, ***Economic Survey, 2000–01***, (New Delhi: Government of India, 2001).

23. Stiglitz and Walsh, ***Economics***, p. 511.

24. ***Penguin Dictionary of Economics***.

25. Ibid.

price interaction was seen as a plausible cause of inflation in the year 1935 in the US economy, for the first time.[26]

Inflation Accounting

A term popular in the area of corporate profit accounting. Basically, due to inflation the profit of firms/companies gets overstated. When a firm calculates its profits after adjusting the effects of current level of inflation, this process is known as inflation accounting. Such profits are the real profit of the firm which could be compared to a historic rate of inflation (inflation of the base year), too.

Inflation Premium

The bonus brought by inflation to the borrowers is known as the inflation premium. The interest banks charge on their lending is known as the ***nominal*** interest rate, which might not be the real cost of borrowing paid by the borrower to the banks. To calculate the real cost a borrower is paying on its loan, the nominal rate of interest is adjusted with the effect of inflation and thus the interest rate we get is known as the real interest rate. Real interest is always lower than the nominal interest rate, if the inflation is taking place—the difference is the inflation premium.

Rising inflation premium shows depleting profits of the lending institutions. At times, to neutralise the effects of inflation premium, the lender takes the recourse to increase the nominal rate of interest.[27] In recent times, it was done by the Indian banks in July 2003 to ward off their depleting profits when inflation had crossed the 7 per cent level—the level of inflation was threatening to deplete even the capital base of the banks. Since then the RBI has been following a tighter credit policy as inflation was going beyond the upper limit of its healthy range (i.e., 4–5 per cent in the Indian case).

Phillips Curve

It is a graphic curve which advocates a relationship between inflation and unemployment in an economy. As per the curve there is a 'trade off' between inflation and unemployment, i.e., an inverse relationship between them. The curve suggests that lower the inflation, higher the unemployment and higher the inflation, lower the unemployment.[28] During the 1960s, this idea was among the most important theories of the modern economists. This concept is known after the economists who developed it—Alban William Housego Phillips (1914–75). Bill Phillips (popular name) was an electrical engineer from New Zealand and was an economist at the London School of Economics when propounded the idea. In 'The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861–1957' (published in *Economica* in 1958), he provided empirical evidence to support his ideas.[29]

By the early 1960s, an economic wisdom emerged around the world that by following a certain kind of monetary policy, unemployment could be checked forever and at the cost of a slightly higher inflation, unemployment could be reduced permanently. The central banks of the developed world started framing the required kind of monetary policies mixing the trade-off between inflation and unemployment. The idea became popular among the developing economies too by the late 1960s, though they were a bit confused, as most of them were fighting the menace of higher inflations (double digit) along with high level of unemployment.[30]

26. J.K. Galbraith, ***A History of Economics***, (London: Penguin Books, 1991), p. 205, pp. 267–70.
27. Patrick Lane, ***Economics*** (London: The Economist, 199), p. 270.
28. Stiglitz and Walsh, ***Economics***, pp. 821–22.
29. ***Penguin Dictionary of Economics***, pp. 297–98.
30. Gerald M. Meier and James E. Ranch, **Leading Issues in Economic Development** (New Delhi: Oxford University Press, 2006), pp. 37–39.

By the early 1970s, two American economists, Milton Friedman (Nobel Laureate, 1976) and Edmund Phelps challenged the idea of the Phillips Curve. According to them the trade-off between inflation and unemployment was only short-term, because once people came to expect higher inflation they started demanding higher wages and thus unemployment will rise back to its '***natural rate***' (the unemployment rate that occurs at full employment when the economy is producing at potential output, it is usually called the natural rate of unemployment).[31] They advocated that there was no long-term trade-off between inflation and unemployment. In the long run, monetary policy can influence inflation. They suggested that if monetary policy tried to hold unemployment below its natural rate, inflation will be rising to higher level, which is also known as the **non-accelerating inflation rate of unemployment (NAIRU)**.[32] The NAIRU is that rate of unemployment which is consistent with a constant rate of inflation. It means at NAIRU, the upward and downward forces on price (inflation) and wage (unemployment) neutralise each other and there is no tendency of change in the rate of inflation. We may say that the NAIRU is the lowest unemployment rate that an economy can sustain without any upward pressure on inflation rate.

REFLATION

Reflation is a situation often deliberately brought by the government to reduce unemployment and increase demand by going for higher levels of economic growth.[33] Governments go for higher public expenditures, tax cuts, interest rate cuts, etc. Fiscal deficit rises, extra money is generally printed at higher level of growth, wages increase and there is almost no improvement in unemployment.

Reflation can also be understood from a different angle—when the economy is crossing a cycle of recession (low inflation, high unemployment, low demand, etc.) and government takes some economic policy decisions to revive the economy from recession, certain goods see sudden and temporary increase in their prices, such price rise is also known as reflation.

STAGFLATION

Stagflation is a situation in an economy when inflation and unemployment both are at higher levels, contrary to conventional belief. Such a situation first arose in the 1970s in the US economy (average unemployment rate above 6 per cent and the average rate of inflation above 7 per cent)[34] and in many Euro-American economies. This took place as a result of oil price increases of 1973 and 1979 and anticipation of higher inflation. The stagflationary situation continued till the early 1980s. Conventional thinking that a trade-off existed between inflation and unemployment (i.e., Phillips Curve) was falsified and several economies switched over to alternative ways of economic policies, such as monetaristic and supply-side economics.

When the economy is passing through the cycle of stagnation (i.e., long period of low aggregate demand in relation to its productive capacity) and the government shuffles with the economic policy, a sudden and temporary price rise is seen in some of the goods—such inflation is also known as stagflation. Stagflation is basically a combination of high inflation and low growth.[35]

INFLATION TARGETING

The announcement of an official target range for inflation is known as inflation targeting. It is done by the Central Bank in an economy as a part of

31. Stiglitz and Walsh, ***Economics***, p. 822.
32. Samuelson and Nordhaus, ***Economics***, pp. 680–87.
33. ***Collins Dictionary of Economics***, p. 446.
34. Stiglitz and Walsh, ***Economics***, p. 478.
35. C. Rangarajan, ***Indian Economy: Essays on Money and Finance***, (New DelhI; UBSPD, 1998), p. 58.

their monetary policy to realise the objective of a ***stable*** rate of inflation[36] (the Government of India asked the RBI to perform this function in the early 1970s).

India commenced inflation targeting 'formally' in *February 2015* when an agreement between the GoI and the RBI was signed related to it—the **Agreement on Monetary Policy Framework.** The agreement provides the aim of inflation targeting in this way—'it is essential to have a modern monetary framework to meet the challenge of an increasingly complex economy. Whereas the objective of monetary policy is to primarily maintain *price stability*, while keeping in mind the objective of *growth*.' The highlights of the agreement is as given below:

1. The RBI will aim to bring CPI-C Inflation below 6 per cent by January 2016. The target for financial year 2016–17 and all subsequent years shall be 4 per cent with a band of +/- 2 per cent (it means the *'healthy range of inflation'* to be 2–6 per cent).
2. RBI to publish the *Operating Target(s)* and establish an *Operating Procedure* of monetary policy to achieve the target. Any change in the operating target(s) and operating procedure in response to evolving macro-financial conditions shall also be published.
3. Every six months, the RBI to publish a document explaining:
   (a) Source of inflation;
   (b) Forecasts of inflation for the period between six to eighteen months from the date of the publication of the document; and
4. The RBI shall be seen to have failed to meet the target if inflation is:
   (a) More than 6 per cent for three consecutive quarters for the financial year 2015–16 and all subsequent years.
   (b) Less than 2 per cent for three consecutive quarters in 2016–17 and all subsequent years.
5. If the RBI fails to meet the target it shall set out in a report to the GoI:
   (a) the reasons for its failure to achieve the target under set in this agreement;
   (b) remedial actions proposed to be taken by the RBI; and
   (c) an estimate of the time-period within which the target would be achieved pursuant to timely implementation of proposed remedial actions.
6. Any dispute regarding the interpretation or implementation of the agreement to be resolved between the Governor, RBI and the GoI.

It should be noted that the *Urjit Patel Committee* set by the RBI on monetary policy gave similar advices by early 2014—the move is seen as a follow up to this. This way India joined the club of inflation targeting countries such as USA, UK, European Union, Japan, South Korea, China, Indonesia and Brazil. It was New Zealand which went for inflation targeting in 1989 for the first time in the world.[37]

Skewflation

Economists usually distinguish between inflation and a relative price increase. 'Inflation' refers to a sustained, across-the-board price increase, whereas 'a relative price increase' is a reference

36. Samuelson and Nordhaus, ***Economics***, p. 723.

37. New Zealand passed a law to do this with a target of 0 to 2 per cent inflation with a provision that the Governor of the Reserve Bank of New Zealand could be fired if inflation crosses the 2 per cent upper limit—now this target range has been revised to 1 to 3 per cent (Stiglitz and Walsh, ***Economics***, p. 849).

to an episodic price rise pertaining to one or a small group of commodities. This leaves a ***third phenomenon***, namely one in which there is a price rise of one or a small group of commodities over a sustained period of time, without a traditional designation. '**Skewflation**' is a relatively new term to describe this third category of price rise.

In India, food prices rose steadily during the last months of 2009 and the early months of 2010, even though the prices of non-food items continued to be relatively stable. As this somewhat unusual phenomenon stubbornly persisted, policymakers conferred on how to bring it to an end. The term 'skewflation' made an appearance in internal documents of the Government of India, and then appeared in print in the ***Economic Survey 2009–10*** GoI, MoF.

The **skewedness** of inflation in India in the early months of 2010 was obvious from the fact that food price inflation crossed the 20 per cent mark in multiple months, whereas wholesale price index (WPI) inflation never once crossed 11 per cent. It may be pointed out that the skewflation has gradually given way to a lower-grade generalised inflation (with the economy in the middle of 2011 inflating at around 9 per cent with food and non-food price increases roughly at the same level).

Given that other nations have faced similar problems, the use of this term picked up quickly, with the ***Economist*** magazine *(January 24, 2011),* in an article entitled *'Price Rises in China: Inflated Fears',* wondering if China was beginning to suffer from an Indian-style skewflation.

GDP Deflator

This is the ratio between GDP at *Current Prices* and GDP at *Constant Prices.* If GDP at Current Prices is equal to the GDP at Constant Prices, GDP deflator will be 1, implying no change in price level. If GDP deflator is found to be 2, it implies rise in price level by a factor of 2, and if GDP deflator is found to be 4 , it implies a rise in price level by a factor of 4. GDP deflator is acclaimed as a *better measure* of price behaviour because it covers all goods and services produced in the country (because the weight of services has not been equitably accounted in the Indian 'headline inflation', i.e., inflation at WPI).

BASE EFFECT

It refers to the impact of the rise in price level (i.e., last year's inflation) in the previous year over the corresponding rise in price levels in the current year (i.e., current inflation). If the price index had risen at a high rate in the corresponding period of the previous year, leading to a high inflation rate, some of the potential rise is already factored in, therefore, a similar absolute increase in the Price index in the current year will lead to a relatively lower inflation rates. On the other hand, if the inflation rate was too low in the corresponding period of the previous year, even a relatively smaller rise in the Price Index will arithmetically give a high rate of current inflation. For example:

	Price Index				Inflation		
	2007	2008	2009	2010	2008	2009	2010
Jan	100	120	140	160	20	16.67	14.29

The index has increased by 20 points in all the three years, viz., 2008, 2009 and 2010. However, the inflation rate (calculated on 'year-on-year' basis) tends to decline over the three years from 20 per cent in 2008 to 14.29 per cent in 2010. This is because the absolute increase of 20 points in the price index in each year increases the *base year price index* by an equivalent amount, while the absolute increase in price index remains the same. The 'year-on-year' inflation is calculated by the formula :

Current Inflation Rate = [(Current Price Index – Last year's Price Index)] ÷ Last year's Price Index] x 100

EFFECTS OF INFLATION

There are multi-dimensional effects of inflation on an economy both at the micro and macro levels. It redistributes income, distorts relative prices, destabilises employment, tax, saving and investment policies, and finally it may bring in recession and depression in an economy. A brief and objective overview of the effects of inflation is given below:

1. On Creditors and Debtors

Inflation redistributes wealth from creditors to debtors, i.e., lenders suffer and borrowers benefit out of inflation. The opposite effect takes place when inflation falls (i.e., deflation).

2. On lending

With the rise in inflation, lending institutions feel the pressure of higher lending. Institutions don't revise the nominal rate of interest as the 'real cost of borrowing' (i.e., nominal rate of interest minus inflation) falls by the same percentage with which inflation rises.

3. On Aggregate Demand

Rising inflation indicates rising aggregate demand and indicates comparatively lower supply and higher purchasing capacity among the consumers. Usually, higher inflation suggests the producers to increase their production level as it is generally considered as an indication of higher demand in the economy.

4. On Investment

Investment in the economy is boosted by the inflation (in the short-run) because of two reasons:

(i) Higher inflation indicates higher demand and suggests entrepreneurs to expand their production level, and

(ii) Higher the inflation, lower the cost of loan (as shown above in no. 2)

5. On Income

Inflation affects the income of individual and firms alike. An increase in inflation, increases the 'nominal' value of income, while the 'real' value of income remains the same. Increased price levels erode the purchasing power of the money in the short-run, but in the long-run the income levels also increase (making the nominal value of income going upward). It means, in a given period of time income may go up due to two reasons, viz., inflationary situation and increased earning. The concept 'GDP Deflator' (GDP at current prices divided by GDP at constant prices) gives the idea of 'inflation effect' on income over a given period.

6. On Saving

Holding money does not remain an intelligent economic decision (because money loses value with every increase in inflation) that is why people visit banks more frequently and try to hold least money with themselves and put maximum with the banks in their saving accounts. This is also known as the ***shoe leather cost***[38] of inflation (as it consumes the precious time of the people visiting the bank frequently tagging their shoe). It means that saving rate increases. But this happens as a short-term effect of inflation. In the long-run, higher inflation depletes the saving rate in an economy. Just the opposite situation arises when inflation falls or shows falling traits with decreasing saving, in the short-run and increasing saving in the long-run, respectively.

7. On Expenditure

Inflation affects both the forms of expenditures —consumption as well as investment. Increased prices make our consumption levels fall as goods and services we buy get costlier. We see a tendency among the people to cut their consumption levels aimed at neutralising the impact of price rise—

38. Samuelson and Nordhaus, **Economics,** p. 674.

making consumption expenditure fall. Exact opposite happens once prices head downward.

On the other hand inflations makes 'investment' expenditure increase as a result of decreased cost of money/finance (inflation brings benefit to borrower—known as 'inflation premium'). In times of price fall just opposite happens.

8. On Tax

On tax structure of the economy, inflation creates two distortions:

(i) Tax-payers suffer while paying their direct and indirect taxes. As indirect taxes are imposed ad valorem (***on value***), increased prices of goods make tax-payers to pay increased indirect taxes (like cenvat, vat, etc., in India).

Similarly, due to inflation, direct tax (income tax, interest tax, etc.) burden of the tax-payers also increases as tax-payer's gross income moves to the upward ***slabs*** of official tax brackets (but the real value of money does not increase due to inflation; in fact, it falls). This problem is also known as ***bracket creep***—i.e., ***inflation-induced tax increases.***[39] Some economies (as in the US and many European countries) have ***indexed*** their tax provisions to neutralise this distortion on the direct tax payers.

(ii) The extent to which tax collections of the government are concerned, inflation increases the nominal value of the gross tax revenue, while real value of the tax collection does not compare with the current pace of inflation as there is a lag (***delay***) in the tax collection in all economies.

But governments get an advantage on their interest burden, on their borrowings as inflation benefits borrowers. This benefit, however, depends upon the contemporary levels of fiscal deficit and the total national debt.

In the case of a government incurring high fiscal deficit (increased borrowing, printing currency), inflation functions as a tax, i.e., ***inflation tax*** via which the government fulfils its expenditure by cutting down the expenditure and consumption of the people.

9. On Exchange Rate

With every inflation the currency of the economy ***depreciates*** (loses its exchange value in front of a foreign currency) provided it follows the flexible currency regime. Though it is a comparative matter, there might be inflationary pressure on the foreign currency against which the exchange rate is compared.

10. On Export

With inflation, exportable items of an economy gain competitive prices in the world market. Due to this, the volume of export increases (keep in mind that the value of export decreases here) and thus export income increases in the economy. It means export segment of the economy benefits due to inflation. Importing partners of the economy exert pressure for a stable exchange rate as their imports start increasing and exports start decreasing (see the next point).

11. On Import

Inflation gives an economy the advantage of lower imports and import-substitution as foreign goods become costlier. But in the case of compulsory imports (i.e., oil, technology, drugs, etc.) the economy does not get this benefit and loses more foreign currency instead of saving it.

12. On Trade Balance

In the case of a developed economy, inflation makes trade balance favourable, while for the

39. Samuelson and Nordhaus, **Economics,** p. 674.

developing economies inflation is unfavourable for their balance of trade. This is because of composition of their foreign trade. The benefit to export which inflation brings in to a developing economy is usually lower than the loss it incur due to its compulsory imports which become costlier due to inflation.

13. On Employment

Inflation increases employment in the short-run, but becomes neutral or even negative in the long run (see the Phillips Curve and the NAIRU in the earlier sections).

14. On Wages

Inflation increases the nominal (face) value of wages, while their real value falls. That is why there is a negative impact of inflation on the purchasing power and living standard of wage employees. To neutralise this negative impact the Indian government provides ***dearness allowance*** to its employees twice a year.

15. On the Self-employed

Inflation has a neutralising impact on the self-employed people in the short-run. But in the long-run they also get affected as the economy as a whole gets affected.

16. On the Economy

All the segments discussed above belong to an economy, but we must know the overall short-term and long-term impacts of inflation on an economy.

Experiences of the world economies in the late 1980s show that a particular level of inflation is healthy for an economy. This specific level of inflation was called as the 'range' of inflation and every economy needs to calculate its own range. Inflation beyond both the limits of the range is never healthy for any economy. In the case of India, it is considered 2 to 6 per cent at CPI(C), which is also known as the 'comfort zone' of inflation in India since 2015. Similarly for Australia, New Zealand, the USA, Canada and the European Union, the healthy range today is 1 to 3 per cent. This is why every economy today utilises ***inflation targeting*** as part of its monetary policy.

Inflation beyond the limits of the decided/prescribed range brings in recession to depressions. (We will see them in Section B of this Chapter, 'Business Cycle.)

INFLATION IN INDIA

Every economy calculates its inflation for efficient financial administration as the multi-dimensional effects of inflation make it necessary. India calculates its inflation on two price indices, i.e., the wholesale price index (WPI) and the consumer price index (CPI). While the WPI-inflation is used at the macro-level policymaking, the CPI-inflation is used for micro-level analyses. The inflation at the WPI is the inflation of the economy. Both the indices follow the 'point-to-point' method and may be shown in ***points*** (i.e., digit) as well as in ***percentage*** relative to a particular ***base year***.

Wholesale Price Index

The first index number of wholesale prices commenced in India for the week January 10, 1942. It was having the base week ending August 19, 1939 = 100, which was published by the office of the Economic Adviser to the Government of India (Ministry of Industry).[40] Independent India followed the same series with more number of commodities included in the index. Several changes regarding inclusion of commodities, assigning them the logical weights took place in the coming times including revisions in the ***base years*** for the WPI. The WPI base year has been revised five times till date. The base years are as given below:

40. Ministry of Finance, **Economic Survey 2006–07** (New Delhi: Government of India, 2007), p. 85.

(i) 1952–53 Base Year (112 Commodities) issued from June 1952.

(ii) 1961–62 Base Year (139 Commodities) issued from July 1969.

(iii) 1970–71 Base Year (360 Commodities) issued from January 1977.

(iv) 1981–82 Base Year (447 Commodities) issued from January 1989.

(v) 1993–94 Base Year (435 Commodities) issued from July, 1999.

(vi) 2004–05 Base Year (676 Commodities) released in September 2011.

(vii) 2011–12 Base Year (697 Commodities) released in May 2017.

REVISED WPI

The new series of the WPI was released[41] by the Government with the *revised* base year as 2011-12. The existing base year was 2004-05. The new base year aligns with the base year of other indicators like the Gross Domestic Product (GDP) and Index of Industrial Production (IIP). A Working Group was set up (March 2012) by the Government to advise on the new series of the WPI (headed by Saumitra Chaudhuri, Member, erstwhile Planning Commission). *Key highlights* of the revised series are as given below:

- WPI continues to constitute three major groups—Primary Articles, Fuel and Power, and Manufactured Products. The number of items has been increased from 676 to 697—in all 199 new items have been added and 146 old items have been dropped.
- It is more representative with increase in number of quotations from 5482 to 8331—an increase by 2849 quotations (52 per cent).
- The prices used for compilation do not include *indirect taxes* in order to remove impact of fiscal policy. This is in consonance with international practices and will make the new WPI conceptually closer to Producer Price Index (PPI).
- Item level aggregates for new WPI have been compiled using Geometric Mean (GM) following international best practice and as is currently used for compilation of the CPI-C.
- The major changes in weights, number of items and quotations between WPI 2004-05 and WPI 2011-12 are given in the ***Table*** 7.1.
- A new *Wholesale Food Price Index* (WPFI) has been introduced—combining the *Food Articles* (belonging to the group Primary Articles) and *Food Products* (belonging to the group Manufactured Products). Together with the *Consumer Food Price Index* (CPFI) released by Central Statistics Office, this would help monitor the price situation of food items better.
- To keep pace with the changing structure of the economy it is necessary to follow a dynamic review process of the WPI and related aspects it. That is why the Government has set up (for the *first time*) a high level Technical Review Committee (TRC) for this purpose. The committee is headed by the Secretary, Department of Industrial Policy and Promotion (DIPP).

41. ***Office of Economic Advisor***, Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, GoI, N. Delhi, May 12th, 2017.

Table 7.1

Major Group / Group	Weight		No. of items		No. of Quotations	
	2004–05	2011–12	2004–05	2011–12	2004–05	2011–12
All Commodities	100.00	100.00	676	697	5482	8331
Primary Articles	20.12	22.62	102	117	579	983
Fuel & Power	14.91	13.15	19	16	72	442
Manufactured Products	64.97	64.23	555	564	4831	6906

CONSUMER PRICE INDEX

Other than the WPI, India also calculates inflation at the consumer level, similar to all the economies of the world. As consumers in India show wide differentiation of their choice of consumption, purchasing powers. etc., a single consumer price index (CPI) has not been possible yet which can encompass all the Indian consumers.[42]

Depending upon the socio-economic differentiations among consumers, India has four differing sets of CPI with some differentials in the basket of commodities allotted to them. Though these four types of CPIs is proposed to be withdrawn in coming times, data for them are still released. A brief account of the four CPIs are as under:

1. CPI-IW

The Consumer Price Index for the industrial workers (CPI-IW) has 260 items (plus the services) in its basket with 2001 as the base year[43] (the first base year was 1958–59). The data is collected at 76 centres with one month's frequency and the index has a time lag of one month.

Basically, this index specifies the government employees (other than banks' and embassies' personnel). The wages/salaries of the central government employees are revised on the basis of the changes occurring in this index, the dearness allowance (DA) is announced ***twice*** a year. When the Pay Commission recommends pay revisions, the base is the CPI (IW).

2. CPI-UNME

The Consumer Price Index for the Urban Non-Manual Employees (CPI-UNME) has 1984–85 (first base year was 1958–59) as the base year and 146–365 commodities in the basket for which data is collected at 59 centres in the country—data collection frequency is monthly with two weeks time lag.[44]

This price index has limited use and it is basically used for determining dearness allowances (DAs) of employees of some foreign companies operating in India (i.e., airlines, communications, banking, insurance, embassies and other financial services). It is also used under the Income Tax Act to determine ***capital gains*** and by the CSO (Central Statistical Organisation) for deflating selected services sector's contribution to the GDP at factor cost and current prices to calculate the corresponding figure at constant prices. Since the publication of the CPI (U) started the index was discontinued with from January 2011.

3. CPI-AL

The Consumer Price Index for Agricultural Labourers (CPI-AL) has 1986–87 as its base year with 260 commodities in its basket. The data is collected in 600 villages with a monthly frequency and has three weeks time lag.

42. The economies of the Euro-American region have a single CPI as the majority of consumers show the same consumer behaviour (see J.B. Rosser and M.V. Rosser, ***Comparative Economics in a Transforming World Economy*** (Cambridge USA: Prentice Hall, MIT Press, 2004)).

43. Ministry of Finance, ***Economic Survey 2006–07,*** p. 90.

44. Ministry of Finance, ***Economic Survey 2001–02,*** p. 90.

This index is used for revising minimum wages for agricultural labourers in different states. As the consumption pattern of agricultural labourers has changed since 1986–87 (its base year), the Labour Bureau proposes to revise the existing base year of this index. For the revision, the consumer expenditure data collected by the NSSO during its 61st NSS Round (2004–05) is proposed to be used.

The governments at the Centre and states remain vigilant regarding the changes in this index as it shows the price impact on the most vulnerable segment of the society, this segment spends almost 75 per cent of its total income on the purchase of food articles. Governments' failure to stabilise the index in the long range can make them politically volatile and be translated into political debacles. That is why the FCI is always kept ready to supply cheaper foodgrains in the situations of any price rise.

4. CPI-RL

There is yet another Consumer Price Index for the Rural Labourers (CPI-RL) with 1983 as the base year, data is collected at 600 villages on monthly frequency with three weeks time lag, its basket contains 260 commodities.

The agricultural and rural labourers in India create an overlap, i.e., the same labourers work as the rural labourers once the farm sector has either low or no employment scope. Probably, due to this reason this index was dropped by the government in 2001–02.[45] But after the government change at the Centre the index was revived again.[46]

REVISION IN THE CPI

It was in 2011 that the government announced a new Consumer Price Index (CPI) – CPI (Rural); CPI (Urban) and by combining them into a 'national' CPI-C (where 'C' stands for 'Combined'). Meanwhile, the data for the existing four CPIs were also being published by the CSO. The base year was also revised from the existing 2004–05 to 2010–11.

In **February 2015,** the CPI was ***again*** revised by the CSO. Together with changing the base year, in this revision, many ***methodological changes*** have been incorporated, in order to make the indices more robust. The major changes introduced in the revised series are as given below:

1. The base year has been changed from 2010=100 to 2012=100.
2. The basket of items and their weighing diagrams have been prepared using the Modified Mixed Reference Period (MMRP) data of Consumer Expenditure Survey (CES), 2011–12, of the *68th Round* of National Sample Survey (NSS). This has been done to make it consistent with the *international practice* of shorter reference period for most of the food items and longer reference period for the items of infrequent consumption. The weighing diagrams of old series of CPI were based on the Uniform Reference Period (URP) data of CES, 2004–05, of the 61st Round of NSS.

   With this change in the weighing diagrams, the gap between Weight Reference Year and Price Reference Year (Base Year), which was *six years* in the old series, has now been reduced to *six months* only. Due to change in the *consumption pattern* from 2004–05 to 2011–12, the weighing diagrams (share of expenditure to total expenditure) have changed. A comparison of weighing diagrams of the old and revised series is given in ***Table 7.2***.

45. Ministry of Finance, ***Economic Survey 2001–02,*** p. 91.
46. Ministry of Finance, ***Economic Survey 2006–07,*** p. 90.

Table 7.2 *Comparison of weighing diagrams of the existing and revised series of CPI*

Group Description	Old Series of CPI (Weights computed on the basis CES 2004–05)			Revised Series of CPI (Weights computed on the basis CES 2011–12)		
	Rural	Urban	Combd.	Rural	Urban	Combd.
Food and beverages	56.39	35.81	47.58	34.18	36.29	45.86
Pan, tobacco and intoxicants	2.72	1.34	2.13	3.26	1.36	2.35
Clothing and Foodwear	5.36	3.91	4.73.	7.36	5.57	6.53
Housing	–	22.54	9.77	–	21.67	10.07
Fuel and Light	10.42	8.40	9.49	7.94	5.50	6.84
Miscellaneous	24.91	28.00	26.31	27.26	29.53	28.32
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: CSO, February 2015. Here, 'Combd.' stands for Combined while '-' stands for 'not available'.

3. The number of *Groups,* which was five in the old series, has now been increased to **six**. 'Pan, tobacco and intoxicants', which was a Sub-group under the group 'Food, beverages and tobacco', has now been made as a separate group. Accordingly, the group 'Food, beverages and tobacco' has been changed to 'Food and beverages'.
4. Egg, which was part of the sub-group 'Egg, fish and meat' in the old series, has now been made as a separate sub-group. Accordingly, the earlier sub-group has been modified as 'Meat and fish'.
5. The elementary/item indices are now being computed using Geometric Mean (GM) of the Price Relatives of Current Prices with respect to Base Prices of different markets in consonance with the international practice. In the old series, Arithmetic Mean (AM) was used for that purpose. The advantage of using GM is that it moderates the volatility of the indices as GM is less affected by extreme values.
6. Prices of PDS items under Antyodaya Anna Yojana (AAY) have also been included for compilation of indices of PDS items, in addition to Above Poverty Line (APL) and Below Poverty Line (BPL) prices being taken in the old series.
7. Sample size for collection of house rent data for compilation of *House Rent Index,* which was 6,684 rented dwellings in the old series, has now been doubled to 13,368 rented dwellings in the revised series.
8. Apart from All-India CPIs (Rural, Urban, Combined) for sub-group, group and general index (all-groups), which were released for the old series, all India Item CPIs (Combined) will also be available.
9. The Consumer Food Price Indices (Rural, Urban, Combined) will be compiled as weighted average of the indices of following sub-groups, as practiced earlier in the old series (only the weights have been revised):

Table 7.3 *All India Weights of different Sub-groups within Consumer Food Price Index*

Sub-Group Code	Sub-group Description	Rural	Urban	Combined
(1)	(2)	(3)	(4)	(5)
1.1.01	Cereals and products	26.14	22.24	24.77
1.1.02	Meat and fish	9.26	9.23	9.25
1.1.03	Egg	1.05	1.21	1.10
1.1.04	Milk and products	16.34	17.98	16.92
1.1.05	Oils and fats	8.90	9.49	9.11
1.1.06	Fruits	6.10	9.80	7.40
1.1.07	Vegetables	15.78	14.88	15.46
1.1.08	Pulses and products	6.25	5.84	6.11
1.1.09	Sugar and confectionery	3.61	3.28	3.49
1.1.10	Spices	6.57	6.05	6.39
All Sub-groups of CFPI		100.00	100.00	100.00

Source: CSO, February 2015. Here, CPFI stands for Consumer Food Price Index.

TRENDS IN INFLATION

Inflation has been a highly sensitive issue in India right since Independence and it has been so during the ongoing reforms process period, too. It has an incessant tendency of resulting into 'double digits', taking politically explosive proportions like governments falling at the Centre and state levels due to price rise of the commodities such as edible oil, onion, potato, etc. In such situations the government in general has been taking recourse to tighter money supply to contain the state level disturbances due to price rise of the commodities such as edible oil, onion, potato, etc., although it has contained inflation, but at the cost of higher growth. Price rise got rooted in India's political psyche in such a way that the government did check frequent famines quickly at the cost of long-term endemic hunger and sustained malnutrition.[47]

Decadal inflation in India looks comparatively normal with reference to many developing economies.[48] But it has sporadic incidences of double-digit tendencies mainly due to supply-side shortfalls caused by droughts (monsoon failures), price rise of crude oil in the international market or fund diversions due to wars (the Chinese war of 1962 and the Pakistan wars of 1965–66 and 1971). The decadal inflation in India has been as given below:[49]

(i) *During 1950s:* remained at 1.7 per cent.

(ii) *During 1960s:* remained at 6.4 per cent.

(iii) *During 1970s:* remained at 9.0 per cent.

(iv) *During 1980s:* remained at 8.0 per cent.

(v) *During 1990s:* remained at 9.5 per cent (though it reached 0.5 per cent by the fourth quarter of the fiscal 1998–99)

(vi) *During 2000s:* Inflation was at lower levels between 2000–08 (from 3 to 5 per cent). But from 2009 onwards it started moving upward with 'sttuborn' tendencies.[50]

47. Pranab Bardhan agrees to Amartya Sen (How is India Doing?', **New York Review of Books,** December 1982) in: 'A Political Economy Perspective on Development' in Bimal Jalan ed. **Indian Economy Problems and Prospects,** (New Delhi: Penguin Books, 1992), p. 369.

48. Rosser and Rosser, **Comparative Economics in a Transforming World Economy.**

49. Based on Rangarajan, **Indian Economy,** p. 63; Jalan,

50. Ministry of Finance, **Economic Survey 2013–14** (New Delhi: Government of India, 2014), pp. 75–77.

Between 2009–13, the headline inflation remained stuck at uncomfortable levels, primarily due to 'food articles' *(food inflation)* led by protein-rich items *(protein inflation)* in the consequence of shift in dietary habit, income effect (via MGNREGA kind of schemes), increased wages, increase in prices of commodities in the global market (especially, food articles), costlier fodder, costlier energy and fuel, etc. By late 2010, India had the phenomenon of *'skewflation'* with inflation being in the range of 9–10 per cent.

(vii) *During 2010s:* From 2010–11 to 2013–14 inflation remained higher—the average inflation at WPI and CPI was 8 per cent and 9.7 per cent, respectively. Food inflation, led by protein items, breached into double digit[51]. Since mid-2014 inflation started moderating—WPI inflation remained in negative (-5.1 per cent by August 2015) and CPI inflation positive of 4.9 per cent end-December 2016)—showing a 'wedge' of 10 per cent.

Current trends in inflation has been as given below, as per the *Economic Survey 2017-18:*

- *CPI-C (Headline Inflation):* The CPI-C (CPI-Combined) inflation declined to 4.5 per cent in 2016-17 from 4.9 per cent in 2015-16 and 5.9 per cent in 2014-15. It was at **3.3** per cent for 2017-18 (upto December) below the threshold of 4 per cent. It was 5.2 per cent for December, 2017 (as compared to 4.9 per cent of November, 2017 and 3.4 per cent in December, 2016).
- *Food Inflation:* Good agricultural production and regular price monitoring by the Government helped to contain consumer food price index (CFPI) at 4.2 per cent in 2016-17 (from 4.9 per cent in 2015-16 and 6.4 per cent in 2014-15). It was **1.2** per cent for 2017-18 (upto December) and 5 per cent for December, 2017. Major drivers of this decline have been meat and fish, oil and fats, spices, pulses. Wholesale food price index (WPFI) also declined to 2.3 per cent in 2017-18 (upto December) as compared to 6.3 per cent in 2016-17 (upto December).
- *Core Inflation:* While significant moderation has been witnessed in the headline and food inflation, the CPI based core inflation (excluding food and fuel groups) remained above 4 per cent during the last four financial years. However, it fell down to **4.5** per cent in 2017-18 (upto December) from 4.8 per cent of 2016-17 (upto December)—by December, 2017 it was at 5.2 per cent.

An analysis of inflationary trends in India does not pin-point any one reason behind it. Economists have pointed out all possible reasons (the so-called ***'good'*** and ***'bad'***) behind the inflationary pressures in the economy of which we may have a brief review:

1. Structural Inflation

With few exceptional years, India has been facing the typical problem of bottleneck inflation (***i.e., structural inflation***) which arises out of shortfalls in the supply of goods, a general crisis of a developing economy, rising demand but lack of investible capital to produce the required level of goods.[52] Whenever the government managed to go for higher growths by managing higher investible capital it had inflationary pressures on the economy (seen during 1970s and 1980s,

51. Ministry of Finance, **Economic Survey 2014–15** (New Delhi: Government of India, 2015), Vol. 2, pp. 69–75.

52. Desai, Meghnad, 'Development Perspectives' in I. J. Ahluwalia and I.M.D. Little, (eds), ***India's Economic Reforms and Development,*** (New Delhi: Oxford University Press, 1998), p. 41.

especially) and growth was sacrificed at the altar of lower inflation (which was politically more justified).[53] Thus, the supply-side mismatch remained a long-drawn problem in India for higher inflation. After some time even if the government managed higher expenditure, most of it went to the non-developmental areas, which did show low growth with higher inflation—signs of a stagnating economy.

2. Cost-Push Inflation

Due to 'inflation tax' the price of goods and services in India have been rising as the government took alternative recourse to increase its revenue receipts.[54] We see it taking place due to higher ***import duties*** on raw materials also.[55] The ***non-value-added*** tax (non-VAT) structure of India in the past was also having cascading effect on the prices of commodities in the country.[56] The government needed higher revenues to finance its planned development, thus the above given factors looked inescapable.

3. Fiscal Policy

To finance the developmental requirements of the economy, the governments became trapped in the cyclical process of over-money supply. At first it was done by external borrowings, but by the late 1960s onwards (once ***deficit financing*** got acceptance around the world) the government started taking recourse to heavy internal borrowings as well as printing of fresh currency too. A major part of the government's internal borrowing is contributed by the Reserve Bank of India (RBI) which leads to price rise.[57] For any government deficit if the Central Bank (RBI) is purchasing primary issues of the Government securities or creating fresh advances to the government, the combined effect has to be higher inflation, lower savings rates and lower economic growth[58]—the vices of unsound fiscal policy. The higher fiscal deficit tends to bring about higher interest rates as demand for funds rise, excess demand raises expected inflation and expected depreciation of the currency.[59] Once the foreign exchange (Forex) reserves started increasing with a faster pace by the early 2000–01 fiscal, its cost of maintenance has been translated into higher prices, as the RBI purchases the foreign currencies it supplies into equivalent rupees into the economy, which creates extra demand and the prices go up.[60]

The higher revenue deficits (driven by high interest payments, subsidies, salaries and pensions, basically) and fiscal deficits make the government supply more money which push the inflation in the upward direction. Once the Fiscal and Budget Management Act came into force in 2003, the scenario improved in the coming times. Though the period from 1999 to 2003 did show high growth with low inflation and the lowest interest rates in India.

53. Jalan Bimal, ***India's Economic Policy,*** (New Delhi: Penguin Books, 1992), pp. 52–58.
54. C. Rangarajan, 'Development, Inflation and Monetary Policy', in I.J. Ahluwalia and I.M.D. Little (eds), ***India's Economic Reforms and Development***, (New Delhi: Oxford University Press, 1998), pp. 56–57.
55. Jalan, **India's Economic Policy,** pp. 191–203.
56. ***Chelliah Committee Report,*** 1993.
57. V.M. Dandekar, 'Forty Years After Independence', (New Delhi: Penguin Books, 1992), pp. 81–88. in the Bimal Jalan (ed.), ***Indian Economy: Problems and Prospects.***
58. Y.V. Reddy, ***Lectures on Economic and Financial Sector Reforms in India*** (New Delhi: Oxford University Press, 2002), pp. 176–77.
59. Ashima Goyal, 'Puzzles in India Performance: Deficits without Diaster' in Kirit S. Parikh and R. Radhakrishna (eds), **India Development Report, 2004–05** (New Delhi: IGIDR and Oxford University Press, 2005), pp. 191–208.
60. Kaushik Basu, **India Emerging Economy: Performance and Prospects in the 1990's and Beyond** (New Delhi: Oxford University Press, 2004), pp. 89–103.

HEALTHY RANGE OF INFLATION

Higher inflation and higher growth as a trade-off was questioned in the late-1980s by the developed economies as the economic and social costs of higher inflation also needed policy attention—a costly 'trade-off'.[61] In coming times, most of the world economies went in favour of a stable inflation (i.e., ***inflation targeting***) though the idea has been ***protested***.[62] India also started inflation stabilisation (informed targeting at WPI) by the early 1970s. It was in 1973 that inflation crossed the 20 per cent mark on account of the international oil price rise and the government (the Indira Gandhi Government) devised a severe anti-inflation package which included directly restricting the disposable incomes of the people (this measure was used for the *first* time in India[63]). The package had an impact and by March 1975 the inflation calmed down to 5.7 per cent. This was the time when the RBI was given a new function 'inflation stabilisation' and India entered the era of monetary controls for inflation. With inflation targeting there started a debate concerning the healthy range of inflation for the Indian economy, i.e., by mid-1970s. We may have some official and non-official versions of the suitable range of inflation pointed out from time to time:

(i) The ***Chakravarty Committee (1985)*** treated 4 per cent inflation as acceptable for the economy in its report on the monetary system. He also added that this level of price rise will facilitate the purpose of attracting investment for the desired level of growth.

(ii) The ***Government of India*** accepted a range of 4 to 6 per cent inflation as acceptable for the economy citing the world average of 0 to 3 per cent at the time (1997–98).[64]

(iii) The RBI Governor ***C. Rangarajan*** advocated that inflation rate must come down initially to 6 to 7 per cent and eventually to 5 to 6 per cent on an average over the years.[65]

(iv) The ***Tarapore Committee*** on Capital Account Convertibility recommended an acceptable range of 3 to 5 per cent inflation for the three year period (1997–98 to 1999–2000).[66]

In the recent times (June 2003 onwards) the government/the RBI has maintained a general policy of keeping inflation below 5 per cent mark—at any cost—as if fixing 4 to 5 per cent as the healthy range of inflation for the economy.[67]

The medium-term objective (i.e., target) of the government is to keep inflation in the 4–4.5 per cent range.[68] One thing should be kept in mind that inflation has always been a political matter in the country. Every time the RBI tried to check the rising inflation via monetary measures a majority of experts objected to it by calling it a move to sacrifice growth for lower price levels. A tighter monetary policy decelerates investment

61. S. Fisher, 'Modern Central Banking', in F. Capie etal.,**The Future of Central Banking, The Tercentenary Symposium of the Bank of England** (Cambridge: Cambridge University Press, 1994) pp. 262–308.

62. Paul Krugman, 'Stable Prices and Fast Growth: Just Say No', **Economist** 31 (1996): pp. 15–18.

63. Ahluwalia and Little, ***India Economic Reforms and Development***, p. 2.

64. Ministry of Finance, **Economic Survey 1997–98** (New Delhi: Goverment of India, 1998), p. 92.

65. Rangarajan, 'Development, Inflation and Monetary Policy, pp. 61–63.

66. We may refer to almost all the credit and monetary policies announced by the RBI during this period.

67. As the RBI put it in its Credit and Monetary Policy Review of July 31, 2007.

68. It should be noted here that the level of inflation was below 5 per cent till the new Government came to power and the outgoing Government was blamed to freeze the inflation data to a more politically digestable level (i.e., below 5 per cent). The new Government in the process of preparing a producer price index (PPI) has also committed to make the inflation data automated like the share indices.

and growth, hampers the growth prospects of the middle class in general and the entrepreneurs in particular while the wage-earners as well as the poor segment of society feels relieved (at least in short term).

In **February 2015**, India formally commenced the process of 'inflation targeting'. Now, the new monthly CPI (C), is taken as the measure of **headline inflation** and is tracked by the RBI to **anchor** its monetary policy and the healthy annual range for it is between 2 to 6 per cent.

PRODUCER PRICE INDEX

A working group was set up in mid-2003–04 under the chairmanship of Prof. Abhijit Sen, Member, Planning Commission to fulfil the twin tasks of:

(i) revising the current series of WPI (i.e., base 1993–94) and

(ii) recommending a producer price index (PPI) for India which could replace the WPI.

As follow-up to its advices, the new series (***base year***) for the WPI has been revised to 2004–05.

The proposal of switching over to the PPI (from the WPI) came up from the government by mid-2003 and the working group has been getting inputs from the IMF regarding it. The PPI measures price changes from the perspective of the producer while the consumer price index (CPI) measures it from the consumers' perspective. Wholesellers charge higher prices to retailers, in turn retailers charge higher prices to consumers and the price increase is translated into the higher consumer prices—thus the PPI is useful in having an idea of the consumer prices in the future.[69] In PPI, only basic prices are used while taxes, trade margins and transport costs are excluded. This index is considered a better measure of inflation as price changes at primary and intermediate stages can be tracked before it gets built into the finished goods stage.[70] Due to its better use many economies have switched over to the PPI—the oldest such series is maintained by the Bureau of Labor Statistics (BLS) for the US economy—the index is capable of measuring prices at the wholesaler or the producer stage—widely used by private business houses in their price targetting.[71]

Once India shifts from the WPI to the upcoming PPI, the economy is supposed to have a better idea about the trends of inflation.

Meanwhile, the Working Group set up (in August 2014 under the Chairmanship of B. N. Goldar) by the Government to advise methodology for introducing PPI in the country submitted its recommendations in August 2017. The advises of the expert committee are under consideration of the Government.

HOUSING PRICE INDEX

India's official Housing Price Index (HPI) was launched in July 2007 in Mumbai. Basically developed by the Indian home loans regulator, the National Housing Bank (NHB) the index is named ***NHB Residex***.

Currently, it is published for 50 cities on quarterly basis with 2012-13 as base year. Among 50 cities covered are 18 State/UT capitals and 37 Smart Cities. NHB is not computing the composite all India housing price index as of now. Using population proportion as weights, an all India index as weighted average of city indices has been computed in-house—the figure shows that the rate of growth in housing prices at All India level has started to decline from the quarter ending December, 2016. It has decreased to around 4 per cent in the first quarter of 2017-18 from over 8 per cent in the third quarter of 2016-17.

Meanwhile, the RBI (Reserve Bank of India) began compiling a house price index (HPI) in 2007

69. Stiglitz and Walsh, **Economics,** p. 517.

70. Ministry of Finance, ***Economic Survey 2006–07,*** p. 92.

71. Samuelson and Nordhaus, **Economics,** p. 441.

with a quarterly HPI for Mumbai city (Base 2002-03=100). Since then, it has extended its coverage to nine more cities, revised its base to 2010-11 and started publishing a composite All India HPI. RBI's quarterly HPI is based on transactions data received from housing registration authorities in 10 major cities. As per it, growth (year on year) in housing prices after reaching a low of 3 per cent in quarter ending in March 2016, did show an upturn with to 8.7 per cent by the first quarter of 2017-18.

There are various concepts of housing price indices, and many sources and ways for compiling price data—both private and public. The methodology of constructing such indices varies from country to country depending upon the use and purpose as well as the data availability. A Technical Advisory Group (TAG) was set up under the chairmanship of an adviser from the Ministry of Finance in 2006–07 which had members and experts from public and private bodies of the concerned field, i.e., NHB, CSO, RBI, HDFC, HUDCD, LIC Housing Finance Ltd., Labour Bureau, Dewan Housing Finance Corporation Ltd., and the Society for Development Studies (SDS). After reviewing international best practices and the methodology, sampling techniques, collection of price data for construction of real estate price indices in the USA (index developed by the office of Federal Housing Enterprise Dversight), Canada (New Housing Price Index) and the UK (Halifax Index), the TAG suggested a proper methodology for India.

With an overall objective of bringing transparency in the Indian real estate market, the index is expected to serve some highly important and timely purposes:

(i) Whether a broker is quoting too high a price for houses in the cities.

(ii) Banks/housing finance bodies will be able to estimate only if the loan applications are realistic for the properties.

(iii) This will also show the level of non-performing assets in the housing sector.

(iv) And most importantly it will serve as a realistic price index for the buyers. (At present a buyer has no means, to judge whether a rise in property price was in the offing with the general level of inflation (i.e., at WPI) in the country, or has been scaled up disproportionately. Other than quotes from brokers, there are no means at present to evaluate the changes in price in this sector. At present the only index that gave some idea of housing price changes was the CPI (IW) which being a national index did not show ***regional variations***.)

Service Price Index

The contribution of the tertiary sector in India's GDP has been strengthening for the past 10 years and today it stands above 60 per cent. The need for a service price index (SPI) in India is warranted by the growing dominance of the sector in the economy.[72] There is no index, so far, to measure the price changes in the services sector. The present inflation (at the WPI) only shows the price movements of the commodity-producing sector, i.e., it includes only the primary and the secondary sectors—the tertiary sector is not represented by it.

The need for such an index was recommended by the working group (under the Chairmanship of Prof. Abhijit Sen, Member, Planning Commission) set up to revise the WPI (1993–94) series which was reiterated by the National Statistical Commission (headed by C. Rangarajan). The office of the Economic Adviser, Ministry of Commerce and Industry has been making an effort to develop sector-specific service price index for the country with the technical assistance being received under the World Bank Assisted Economic

72. Ministry of Finance, ***Economic Survey 2006–07,*** p. 94.

Reforms Projects (WBAERPs). At present, efforts are being made to develop service price indices for selected services initially on an experimental basis (covering road transport, railways, airways, business, trade, port, postal telecommunications, banking and insurance services only).

The basic studies of index construction are complete. Before formal launching of the index, the complete study is supposed to be discussed with academicians, practitioners and the users of the services. The need to construct a service price index for the economy was felt more after the *OECD-Eurosat Report of 2005* on the subject.[73]

GOVERNMENT STEPS TO CHECK INFLATION

The typical socio-economic composition of the consumer groups in India makes consumer inflation a highly sensitive issue. This is why controlling inflation at consumer level has been an *area of priority*, for the Government. The major steps[74] taken by the Government in this regard in the year 2017-18 are as briefed below:

- Regular review meeting on price and availability situation at the highest level.
- States took strict action against hoarding and black marketing (as advised by the Government).
- Higher MSP (minimum support prices) were announced to incentivize production and enhance availability of food items.
- *Price Stabilization Fund* (PSF) scheme is being implemented to control price volatility of agricultural commodities like pulses, onions, etc.
- Aimed at effective market intervention the buffer stock of *pulses* was enhanced to 2 million tonnes (from 1.5 lakh million tonnes).
- Minimum export price imposed on edible oils (US $900 per tonne). To incentivize domestic production this restriction has been removed on oil (except for palm oil, mustard oil and sunflower oil).
- Stock holding limits put on *sugar* till April, 2018 together with imposing 20 per cent duty on its export and allowed raw sugar import at zero custom duty (5 lakh tonnes).
- *Onion* put under minimum export price (of US $850 per tonne) till December 2017. States were advised to put stock limit on it and inform the Centre about their future needs (so that import can be done in time).

The impact of these measures has been quite positive. The *headline inflation* (CPI-C) declined to 3.3 per cent during 2017-18 (upto December, 2017) with broad based decline in inflation across major commodity groups (except Housing and, Fuel and Light). The index has been below 4 per cent for 12 straight months, from November, 2016 to October, 2017 and consumer food price index (CFPI) averaged around 1 per cent during the year (upto December 2017).

73. 'The number of National Statistical Agencies collecting service producer prices data, though growing, is still small', points out the ***OECD-Eurosat, 2005 Inquiry on National Collection of Services Producer Prices Preliminary Report,*** giving information on 45 such countries. The report further adds that while some such agencies have focused exclusively on the price of services provided to enterprises, others have approached the subject more broadly through the development of services producer price indices with varying approaches and coverage. As per the report, at present, 30 countries collect services producer prices while preliminary works have started in other countries, particularly the European countries under the auspices of the Eurosat. Other than the developed Euro-American economies some other countries which worked as inspiration for India which have such an index are China, Hong Kong, Czech Republic, Slovak Republic, Poland, Lithuania, Israel and Vietnam.

74. ***Economic Survey 2017-18***, Vol. 2, p. 67, Ministry of Finance, GoI, N. Delhi.

SECTION-B

BUSINESS CYCLE

INTRODUCTION

The discussion on growth and development has shown their internal interdependence. If the quality of life in an economy is to be enhanced, there is a need of conscious public policy which can spend and invest in areas like food, nutrition, health, education, shelter, social security, etc. But for such expenditures and investments, the economy needs equitable level of income, too. The income enhancement in any economy takes place via increasing the level of production in the economy, i.e., real gross national product (GNP). It means, development requires higher growth, i.e., higher levels of economic activities. With the help of suitable kind of economic policies, the government of an economy keeps trying to maintain a higher level of economic activity. But, at times, economy keeps failing in this objective. And, thus economies fluctuate between the best and the worst levels of economic activities which is known in economics as ***boom*** and ***depression***, respectively. They can be called different phases of the economic activities of the economies. In between boom and depression, there might be many other situations of the economic activities, such as—***stagnation***, ***slowdown***, ***recession*** and ***recovery***. The fluctuations in the level of economic activity between the depressions and booms has been called by the economists as ***business cycle*** or ***trade cycle*** with recession and recovery as the main intermediate stages.[75] Stagnation[76] and slowdown may be considered as other intermediate stages of the business cycle. We intend here to understand the actual meanings of each of the stages. Economists have pointed out that the business cycle is characterised by ***four*** phases or ***stages*** in which economies alternate:

(i) Depression
(ii) Recovery
(iii) Boom
(iv) Recession

DEPRESSION

Though depression has visited the world economy only once in 1929, economists have pin-pointed enough number of traits to recognise it. The ***major*** traits of depression could be as given below:

(i) an extremely low aggregate demand in the economy causes activities to decelerate;
(ii) the inflation being comparatively lower;
(iii) the employment avenues start shrinking forcing unemployment rate to grow fast;
(iv) to keep the business going, production houses go for ***forced labour-cuts*** or ***retrenchment*** (***to cut down production cost and be competitive in the market,***) etc.

The economic situations become so chaotic in the phase of depression that governments have almost no control over the economy. The Great Depression of 1929[77] gave rise to the ideas of ***strong***

75. *Collins internet-linked Dictionary of Economics,* Glasgow, 2006 & *Oxford Business Dictionary,* N. Delhi, 2004.
76. Simon Cox (ed.), **Economics** (London: The Economists, 2007), p. 60.
77. A very lively description of the Great Depression has been presented by ***Lee Iacocca*** in his autobiography. This is known as the Great Depression due to its length and depth—the economies could recover fully out of it only by the mid-1940s (Stiglitz and Walsh, p. 495).

government intervention[78] in the economy, such as deficit financing, monetary management, etc.

What the governments may do if depression visits the economy? The simple answer the world has been able to find is to repeat the policy measures of 1929. The best way to avoid depression is not to let it visit. This is why every modern economy keeps extra-vigil on the major symptoms of its economy so that the prevention-measures can be taken in time and depression is avoided.

RECOVERY

An economy tries to come out of the low production phase to survive. The low production phase might be depression, recession or slowdown with the former being the worst and rare, governments take many new fiscal and monetary measures to boost demand and production and ultimately a recovery in an economy is managed. The business cycle of recovery may show the following ***major*** economy traits:

(i) an upturn in aggregate (total) demand which has to be accompanied by increase in the level of production;

(ii) production process expands and new investments become attractive;

(iii) as demand goes upward, inflation also moves upward making borrowing cheaper for investors;

(iv) with an upturn in production, new employment avenues are created and unemployment rate starts declining; etc.

With the above symptoms, people's income go for a certain increase which creates new demand and a cycle of demand and production (supply) starts playing hand-in-hand to recover the economy. To recover an economy, governments usually go for tax-breaks, interest cuts, an increase in salaries of its employees, etc. Assimilation of innovations by the entrepreneurs and search for new frontiers of enterprise do play a very vital role in the process of recovery provided these activities are at first incentives by the governments.

The Euro-American economies recovered out of the Great Depression with the help of the measures cited above. Such recoveries have been seen many times around the world when economies recovered from slowdown or the recessionary phases. The best example of recent times could be cited from India of 1997 to 2002 when the economy suffered severe bouts of slowdown and recession.[79]

BOOM

A strong upward fluctuation in the economic activities is called boom.[80] As economies try to recover out of the phases of slowdown, recession and depression at times the measures taken by the governments as well as the private sector might put economic activities as such which the economic systems fail to digest. This is the phase of the ***boom.*** The ***major*** economic traits of boom may be listed as given below:

(i) an accelerated and prolonged increase in the demand;

(ii) demand peaks up to such a high level that it exceeds sustainable output/production levels;

(iii) the economy heats up and a demand-supply lag is visible;

(iv) the market forces mismatch (***i.e., demand and supply disequilibirium***) and tend to create a situation where inflation starts going upward;

(v) the economy might face structural problems like shortage of investible

78. Suggested by John Meynard Keynes in his seminal work ***The General Theory of Employment, Interest and Money*** (New York: Harcourt, 1935).

79. ***Economic Surveys, 1996–97 to 2002–03,*** MoF, GoI, N. Delhi.

80. Stiglitz & Walsh, op. cit., p. 945.

capital, lower savings, falling standard of living, creation of a sellers' market.

The phase of recovery is considered good for the economy and it reaches the stage of boom which is considered better. But the boom has its negative side also. Boom is usually followed by price rise.[81] As a boom is a strong upward fluctuation in an economy, the supply-side pattern of the economy starts lagging behind the pace of the accelerated aggregate demand.[82] But the dilemma of recovery puts every economy on the path to boom—this has been the experience in the developed world during the 1990s, especially in the US economy. The same scenario developed in India after the economy recovered from the recessionary period of 1996–97 by the year 2002–03 when the rate of inflation peaked to almost 8 per cent for a few months. Majority of the experts felt that Indian economy at that time was passing through a phase of boom and we have seen how the government has been facing difficulty in containing inflation around the 5 per cent mark. Even the government accepted that the economy was over-heating by mid-2007. *The symptoms of overheating are as follows:*

(i) There is a downturn in the aggregate demand on overall fall in the demand;

(ii) as demand falls, the level of production (output) in the economy also falls;

(iii) as producers cut down their production levels, new employment opportunities are not created—thus employment growth rate falls;

(iv) as demand keeps on falling, usually producers start cutting down their labour force to adjust their overhead expenditure and the cost of production (labour-cut is not 'forced' here but, 'voluntary')—resulting in increase in the unemployment rate;

(v) if the government fails to rescue the economy from the phase of recession, the dangerous stage of ***depression*** remains the logical follow up;

(vi) the rate of inflation always remains at lower levels—discouraging new investments and lending.

RECESSION

This is somewhat similar to the phase of 'depression' — we may call it a *mild form* of depression — fatal for economies as this may lead to depression if not handled with care and in time. The financial crises which followed the US 'sub-prime crisis' in almost the whole Euro-American economies has basically brought in 'severe recessionary' trends there. Major traits of recession, to a great extent, are similar to that of 'depression' [except the point (iv) of the Depression, discussed earlier]—may be summed up as follows:

(i) there is a general fall in demand as economic activities takes a downturn;

(ii) inflation remains lower or/and shows further signs of falling down;

(iii) employment rate falls/unemployment rate grows;

(iv) Industries resort to 'price cuts' to sustain their business.

In the financial year 1996–97, the Indian economy was taken up by the cycle of recession—basically due to a general downturn in domestic as well as foreign demands, initiated by the South East Asian Currency Crisis of mid-1990s.[83] The whole plan of economic reforms in India was derailed and it was only by the end of 2001–02 that the economy was able to recover. What may a government do to rescue the economy from the phase of recession? The usual remedies are given below:

81. Samuelson and Nordhaus, op.cit. pp. 680–84.

82. Stiglitz and Walsh, op.cit. pp. 495–796.

83. ***Economic Survey, 1996–97***, MoF, GoI, N. Delhi.

(i) Direct and indirect taxes should be cut down, so that the consumers have higher disposable incomes (income after paying direct tax, i.e., income tax) on the one hand and the goods should become cheaper on the other hand, thus there is hope that the demand might pick up.

(ii) The burden of direct taxes, especially the income tax, dividend tax, interest tax are slashed to enhance the disposable income (***i.e, income after direct tax payment***)—

(iii) Salaries and wages should be revised by the government to encourage general spending by the consumers (as the Government of India implemented the recommendations of the fifth pay commission without much deliberation in 1996–97).

(iv) Indirect taxes such as custom duty, excise duty (cenvat), sales tax, etc., should be cut down so that produced goods reach the market at cheaper prices.

(v) The government usually goes on to follow a cheap money supply policy by slashing down interest rates across the board and the lending procedure is also liberalised.

(vi) Tax breaks are announced for new investments in the productive areas, etc.

All the above-given measures were taken up by the United Front Government in 1996–97 to pull the economy out of the menace of the recession.[84] The forthcoming government took several other such measures by the end of 1998–99 onwards (the NDA Government). Ultimately, the measures taken up by the governments accompanied by a general recovery in the world economy, the Indian economy started recovering from the bout of recession. Many experts had already predicted a possibility of depression with a zero per cent rate of inflation.[85] Although this did not happen.[86]

GROWTH RECESSION

An expression coined by economists to describe an economy that is growing at such a slow pace that more jobs are being lost than are being added. The lack of job creation makes it "feel" as if the economy is in a recession, even though the economy is still advancing. Many economists believe that between 2002 and 2003, the United States' economy was in a phase of growth recession. In fact, at several points over the past 25 years the U.S. economy is said to have experienced a growth recession. That is, in spite of gains in real GDP, job growth was either non-existent or was being destroyed at a faster rate than new jobs were being added.

Experts have revived this term in the wake of the ongoing financial crises in the Euro-American economies since 2008. The situation is better described by the term ***'double-dip recession'.***

DOUBLE-DIP RECESSION

The concept of 'recession' in the USA and Euro Zone is quite precise and technical—'*two consecutive quarters of falling* GDP'—is how it is defined in these economies. And the idea of the 'double-dip recession' is an extension of it. A double-dip recession refers to a recession followed by a short-lived recovery, followed by

84. ***Economic Survey, 1996–97,*** MoF, GoI, N. Delhi.

85. It should be noted here that as an impact of recession the rate of inflation (at WPI) had been falling down throughout the mid 1998–99 fiscal finally to the level of 0.5 per cent for a fortnight (***Economic Survey, 1998–99,*** GoI, N. Delhi).

86. The literature of Economics and the empirical world experiences suggest that the phase of recession has all the symptoms of depression except one. Every thing being the same till producers are cutting the labour by force 'involuntarily (***i.e. forced labour cut***) it is the starting of depression—to be competitive in the market every producer starts 'forced labour cuts'—ultimately putting the economy into the grip of a full grown depression.

another recession—the GDP growth sliding back to negative after a quarter or two of positive growth. The causes for such a recession vary but often include a slowdown in the demand for goods and services because of layoffs and spending cutbacks done in the previous downturn. A double-dip (which may be even 'triple-dip') is a worst-case scenario—fear/speculation of it moves the economy into a deeper and longer recession and recovery becomes too difficult. As the world saw in the case of the Euro Zone crisis—there was a fear of such a recession by first quarter of 2013.

(For discussion on '**Retrocession'** see *Chapter 22*).

ABENOMICS

This new term has been in news for some time now. The term originates from the name of the Japanese Prime Minister **Shinzo Abe** and indicates the 'set of economic measures' he took to rejuvenate the sluggish Japanese economy from the spells of recession-like situation—after his December 2012 re-election to the post he last held in 2007. This is also known as the '*Three Arrows of Abenomics'* — the three economic measures under it are:

(i) **Fiscal Stimulus:** The government has initiated a massive fiscal stimulus to encourage public and private investments in the desired areas of the economy—investment in public works/infrastructure (which are by now 50 years old and need heavy investments), fiscal, concessions to private sector companies which invest in research & development, create jobs, increase salary, etc.

(ii) **Quantitative Easing:** The Bank of Japan (its Central bank) has been maintaining the official interest rate (like India's Repo Rate) near sub-zero to encourage lending by the banks. The aim is to double the amount of money in circulation by 2014 and reach the annual inflation target of 2 per cent. This makes the Japanese currency (Yen) to depreciate, too. Thus, this measure is intended to boost both domestic and external demands to propel the growth prospects of the economy. This measure, while at one hand increase the government expenditures, at the other it cuts the government's tax revenue, too – leading to higher fiscal deficit. This measure revolves around the current strength of the economy to 'absorb' higher levels of inflation (which plays a major role in the growth process).

(iii) **Structural Reforms:** Under this measure the government has promised a variety of deregulations in the economy, mainly aimed at increasing 'competitiveness' of the economy and attaining a sustained growth path. This arrow still remains least concrete. By now, the government has set up a *Group of Experts* (mainly formed of CEOs of large, medium and small companies) that is supposed to propose suitable measures to the government in the next three years regarding required set of 'structural' reforms needed by the economy. This measure also includes Japanese plan to 'join' TPP (Trans Pacific Partnership) and to go for a new FTA (Free Trade Agreement) between the countries in the Asis-Pacific region aimed at increasing its export potential.

The *Three Arrows of Abenomics* are a suite of economic measures which any economy may try in situations of any of the bad stages in the 'Economic Cycle'. Such economic measures were suggested by J. M. Keynes for the first time (in wake of the Great Depression of 1929). Today, its most famous exponent is the Nobel Economist Paul Krugman. Meanwhile, experts have mixed opinions on the success possibilities of the Abenomics.

CONCLUSION

Business cycles are basically fluctuations in the production levels of economies above and below the trend of the equilibirium levels.[87] But why do economies fluctuate? There are many factors which are said to be responsible for it, as per the experts:

(i) Economic instability and uncertainty (due to logical or illogical expectations) may discourage investments thereby reducing growth in the long-term.

(ii) A lack of the creative destruction (i.e. innovation) may put the economy in a slump or slowdown in its overall production.

(iii) Anti-inflationary government policies (especially when general elections are nearing) may direct the attraction of investors in the economy.

(iv) Unforseen disasters may cause economies to fluctuate.

87. Cox, Simon, op. cit., p. 58.