

Inflation and Its Causes and Effects

Inflation is rise in the general level of prices of goods and services in an economy over a period of time. The term "inflation" once referred to increases in the money supply (monetary inflation). However, economic debates about the relationship between money supply and price levels have led to its primary use today in describing price inflation. Inflation can also be described as a decline in the real value of money—a loss of purchasing power, i.e., when the general price level rises, the amount of goods and services that can be purchased for each unit of currency reduces. The rate at which the general price level changes over time, i.e., inflation rate is estimated by the percentage change in a price index over a time period.

Inflation originally referred to the debasement of the currency. When gold was used as currency, gold coins could be collected by the government (e.g., the king or the ruler of the region), melted down, mixed with other metals such as silver, copper or lead, and reissued at the same nominal value. By diluting the gold with other metals, the government could increase the total number of coins issued without also needing to increase the amount of gold used to make them. When the cost of each coin is lowered in this way, the government makes profits from an increase in seigniorage. This practice would increase the money supply, but at the same time lower the relative value of each coin. As the relative value of the coins decrease, consumers would need more coins to exchange for the same goods and services. These goods and services would experience a price increase as the value of each coin is reduced.

By the nineteenth century, economists categorised three separate factors that cause a rise or fall in the price of goods: a change in the value or resource costs of the good, a change in the price of money which then was usually a fluctuation in metallic content in the currency, and currency depreciation resulting from an increased supply of currency relative to the quantity of redeemable metal backing the currency. Following the proliferation of private bank note currency printed during the American Civil War, the term "inflation" started to appear as a direct reference to the currency depreciation that occurred as the quantity of redeemable bank notes outstripped the quantity of metal available for their redemption. The term inflation then referred to the devaluation of the currency, and not to a rise in the price of goods.

This relationship between the over-supply of bank notes and a resulting depreciation in their value was noted by earlier classical economists such as David Hume and David Ricardo, who would go on to examine and debate to what effect a currency devaluation (later termed *monetary inflation*) has on the price of goods (later termed *price inflation*).

The term "inflation" usually refers to a measured rise in a broad price index that represents the overall level of prices in goods and services in the economy. Consumer Price Index (CPI) and the Personal Consumption Expenditures Price Index (PCEPI) are two examples of broad price indices. The term inflation may also be used to describe the rising level of prices in a narrow set of assets, goods or services within the economy, such as commodities, which include food, fuel, metals, financial assets such as stocks and real estate, and service industries such as health care. The Reuters-Commodity Research Bureau CRB Index (CCI), the Producer Price Index, and Employment Cost Index (ECI) are examples of narrow price indices used to measure price inflation in particular sectors of the economy. Core inflation is a measure of price fluctuations in a sub-set of the broad price index which excludes food and energy prices. The Federal Reserve Board uses the core inflation rate to measure overall inflation, eliminating food and energy prices to mitigate against short term price fluctuations that could distort estimates of future long term inflation trends in the general economy.

The economic concepts related to inflation include: deflation, a fall in the general price level; disinflation, a decrease in the rate of inflation; hyperinflation, an out-of-control inflationary spiral; stagflation, a combination of inflation, slow economic growth and rising unemployment; and reflation, which is an attempt to raise the general level of prices to counteract deflationary pressures.

Measure

Measuring inflation in an economy requires objective means of differentiating changes in nominal prices of a common set of goods and services, and distinguishing them from the price shifts resulting from changes in value such as volume, quality, or performance. For example, if the price of a one kilogram of rice changes from Rs 0.90 to Rs 1.00 over the course of a year, with no change in quality, then this price difference represents inflation. This single price change would not, however, represent general inflation in an overall economy. To measure overall inflation, the price change of a large "basket" of representative goods and services is estimated through a price index, i.e., the combined price of a "basket" of many goods and services. The combined price is the sum of the weighted average prices of items in the "basket". A weighted price is calculated by multiplying the unit price of an item to the number of those items the average consumer purchases. Weighted pricing is a necessary to measure the impact of individual unit price changes on the economy's overall inflation. The Consumer Price Index, for example, uses data collected by surveying households to

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determine what proportion of the typical consumer's overall spending is spent on specific goods and services, and weighs the average prices of those items accordingly. The weighted average prices are combined to calculate the overall price. To better relate price changes over time, indexes typically

Inflation measures are often modified over time, either for the relative weight of goods in the basket, or in the way in which goods and services from the present are compared with goods and services from the past. Adjustments are necessary over time because the types of goods and services purchased by 'typical consumers' changes over time. New products may be introduced, older products disappear, the quality of existing products may change, and consumer preferences can shift. Both the sorts of goods and services which are included in the "basket" and the weighted price used in inflation measures will be changed over time in order to keep pace with the changing situations.

Inflation numbers are often seasonally adjusted in order to differentiate expected cyclical cost shifts. For example, home heating costs are expected to rise in colder months, and seasonal adjustments are often used when measuring inflation to compensate for cyclical spikes in energy or fuel demand. Inflation numbers may be averaged or otherwise subjected to statistical techniques in order to remove statistical noise and volatility of individual prices. When looking at inflation, (economic institutions) may focus only on certain kinds of prices, or special indices, such as the core inflation index which is used by central banks to formulate monetary policy. For example, in January 2007, the U.S. Consumer Price Index was 202.416, and in January 2008 it was 211.080. The resulting inflation rate for the CPI in this one-year period is 4.28%, meaning the general level of prices for typical U.S. consumers rose by approximately four percent in 2007.

Other widely-used price indices for calculating price inflation include the following:

- Cost of living indices (COLI) are indices similar to CPI which are often used to adjust fixed incomes and contractual incomes to maintain the real values of those incomes.
- Producer price indices (PPIs) which measures average changes in prices received by domestic producers for their outputs. This differs from the CPI in that price subsidization, profits, and taxes

may cause the amount received by the producer to differ from what the consumer paid. There is also typically a delay between an increase in the PPI and any eventual increase in the CPI. Producer Price Index measures the pressure being put on producers by the costs of their raw materials. This could be "passed on" to consumers, or it could be absorbed by profits, or offset by increasing productivity. In India and the United States, an earlier version of the PPI was called the Wholesale Price Index.

- Commodity price indices which measure the price of a selection of commodities. In the present commodity price indices are weighted by the relative importance of the components to the "all in" cost of an employee.
- Core price indices measure inflation excluding price changes of food and fuel. because food and oil prices can change quickly due to changes in supply and demand conditions in the food and oil markets, it would be difficult to detect the long-run trend in price levels when those prices are included. Therefore most statistical agencies also report a measure of 'core inflation', which removes the most volatile components (such as food and oil) from a broad price index like the CPI. Because core inflation is less affected by short run supply and demand conditions in specific markets, central banks rely on it to better measure the inflationary impact of current monetary policy.

Other common measures of inflation are:

- GDP deflator is a measure of the price of all the goods and services included in Gross Domestic Product (GDP). The US Commerce Department publishes a deflator series for US GDP, defined as its nominal GDP measure divided by its real GDP measure.
- Regional inflation is CPI calculations for different regions.
- Historical inflation Before collecting consistent econometric data became standard for governments, and for the purpose of comparing absolute, rather than relative standards of living, various economists have calculated imputed inflation figures. Most inflation data before the early 20th century were imputed values based on the known costs of goods, rather than compiled at the time. It is also used to adjust for the differences in real standard of living for the presence of technology.
- Asset price inflation is an undue increase in the prices of real or financial assets, such as stock (equity) and real estate. While there is no widely-accepted index of this type, some central bankers have suggested that it would be better to aim at stabilizing a wider general price level inflation measure that includes some asset prices, instead of stabilising CPI or core inflation only. The

reason is that by raising interest rates when stock prices or real estate prices rise, and lowering them when these asset prices fall, central banks might be more successful in avoiding bubbles and crashes in asset prices.

Causes

There is broad agreement among economists that in the long run, inflation is essentially a monetary phenomenon. However, in the short and medium term, inflation may be affected by supply and demand pressures in the economy and relative elasticity of wages, prices and interest rates. The question of whether the short-term effects last long enough to be important is the central topic of debate between monetarist and Keynesian schools. In monetarism, prices and wages adjust quickly enough to make other factors merely marginal behavior on a general trend-line. In the Keynesian view, prices and wages adjust at different rates, and these differences have enough effects on real output to be "long term" in the view of people in an economy.

Economists generally agree that high rates of inflation and hyperinflation are caused by an excessive growth of the money supply. Views on which factors determine moderate rates of inflation are more varied. Low or moderate inflation may be attributed to fluctuations in real demand for goods and services, or changes in available supplies such as during scarcities, as well as to growth in the money supply. The consensus view is a sustained period of inflation is caused when money supply increases faster than the growth in productivity in the economy.

There are different schools of thoughts as to what causes inflation. Most can be divided into two broad areas: quality theories of inflation and quantity theories of inflation. Many theories of inflation combine the two. The quality theory of inflation rests on the expectation of a seller accepting currency to be able to exchange that currency at a later time for goods that are desirable as a buyer. The quantity theory of inflation rests on the equation of the money supply, its velocity, and exchanges. Adam Smith and David Hume proposed a quantity theory of inflation for money, and a quality theory of inflation for production.

Keynesian view

Keynesian economic theory proposes that money is transparent to real forces in the economy, and that visible inflation is the result of pressures in the economy expressing themselves in prices. There are three major types of inflation, as part of what Robert J. Gordon calls the "triangle model":

- Demand-pull inflation: inflation caused by increases in aggregate demand due to increased

private and government spending, etc. Demand inflation is constructive to a faster rate of economic growth since the excess demand and favourable market conditions will stimulate investment and expansion.

- Cost-push inflation: also called "supply shock inflation," caused by drops in aggregate supply due to increased prices of inputs, for example. Take for instance a sudden decrease in the supply of oil, which would increase oil prices. Producers for whom oil is a part of their costs could then pass this on to consumers in the form of increased prices.
- Built-in inflation: induced by adaptive expectations, often linked to the "price/wage spiral" because it involves workers trying to keep their wages up (gross wages have to increase above the CPI rate to net to CPI after-tax) with prices and then employers passing higher costs on to consumers as higher prices as part of a "vicious circle." Built-in inflation reflects events in the past, and might be seen as hangover inflation.

A major demand-pull theory centres on the supply of money: inflation may be caused by an increase in the quantity of money in circulation relative to the ability of the economy to supply (its potential output). This is most obvious when governments finance spending in a crisis, such as a civil war, by printing money excessively, often leading to hyperinflation, a condition where prices can double in a month or less. Another cause can be a rapid decline in the demand for money, as happened in Europe during the Black Death.

The money supply is also thought to play a major role in determining moderate levels of inflation, although there are differences of opinion on how important it is. For example, Monetarist economists believe that the link is very strong; Keynesian economists, by contrast, emphasise the role of aggregate demand in the economy rather than the money supply in determining inflation. That is, for Keynesians the money supply is only one determinant of aggregate demand. Some economists disagree with the notion that central banks control the money supply, arguing that central banks have little control because the money supply adapts to the demand for bank credit issued by commercial banks. This is the theory of endogenous money. Advocated strongly by post-Keynesians as far back as the 1960s, it has today become a central focus of Taylor rule advocates. This position is not universally accepted: banks create money by making loans, but the aggregate volume of these loans diminishes as real interest rates increase. Thus, central banks influence the money supply by making money cheaper or more expensive, and thus increasing or decreasing its production.

Monetarist view

Monetarists believe the most significant factor influencing inflation or deflation is the management of money supply through the easing or tightening of credit. They consider that fiscal policy, or government spending and taxation, are ineffective in controlling inflation.

Monetarists assert that the empirical study of monetary history shows that inflation has always been a monetary phenomenon. The quantity theory of money, simply stated, says that the total amount of spending in an economy is primarily determined by the total amount of money in existence. This theory begins with the identity:

$$MV = PQ$$

where

P is the general price level;

V is the velocity of money in final expenditures;

Q is an index of the real value of final expenditures;

M is the quantity of money.

In this formula, the general price level is affected by the level of economic activity (*Q*), the quantity of money (*M*) and the velocity of money (*V*). The formula is an identity because the velocity of money (*V*) is defined as the ratio of final expenditure (*Q*) to the quantity of money (*M*).

Velocity of money is often assumed to be constant, and the real value of output is determined in the long run by the productive capacity of the economy. Under these assumptions, the primary driver of the change in the general price level is changes in the quantity of money. With constant velocity, the money supply determines the value of nominal output (which equals final expenditure) in the short run. In practice, velocity is not constant, and can only be measured indirectly and so the formula does not necessarily imply a stable relationship between money supply and nominal output. However, in the long run, changes in money supply and level of economic activity usually dwarf changes in velocity. If velocity is relatively constant, the long run rate of increase in prices (inflation) is equal to the difference between the long run growth rate of money supply and the long run growth rate of real output.

Rational expectations theory

Rational expectations theory holds that economic actors look rationally into future when trying to maximise their well-being, and do not respond solely to immediate opportunity costs and pressures. In this view, while generally grounded in monetarism, future expectations and strategies are important for inflation as well.

A core assertion of rational expectations theory is that actors will seek to "head off" central-bank decisions by acting in ways that fulfill predictions of higher inflation. This means that central banks must establish their credibility in fighting inflation, or have economic actors make bets that the economy will expand, believing that the central bank will expand the money supply rather than allow a recession.

Effects of Inflation

Inflation can cause adverse effects on the economy. For example, uncertainty about future inflation may discourage investment and saving. Inflation may widen the income gap between those with fixed incomes and those with variable incomes. High inflation may lead to shortages of goods as consumers begin hoarding them out and hence their prices will increase in future.

An increase in the general level of prices implies a decrease in the purchasing power of the currency. That is, when the general level of prices rises, amount of goods and services that can be bought for each monetary unit reduces fewer goods and services. The effect of inflation is not distributed evenly, and as a consequence, there are hidden costs to some and benefits to others from this decrease in purchasing power. For example, with inflation lenders or depositors who are paid a fixed rate of interest on loans or deposits will lose purchasing power from their interest earnings, while their borrowers benefit. Individuals or institutions with cash assets will experience a decline in the purchasing power of their holdings. Increases in payments to workers and pensioners often lag behind inflation, especially for those with fixed payments.

The real purchasing power of fixed payments is eroded by inflation unless they are inflation-adjusted to keep their real values constant. In many countries, employment contracts, pension benefits, and government entitlements (such as social security) are tied to a cost of living index, typically to the consumer price index. Salaries are adjusted annually based on changes in a cost of living index. They may also be tied to a cost of living index that varies by geographic location if the employee moves.

Annual escalation clauses in employment contracts can specify future percentage increases in worker pay which are not tied to any index. These negotiated increases in pay are colloquially referred to as cost of living adjustments or cost of living increases because of their similarity to increases tied to externally-determined indexes. Most economists and compensation analysts would consider the idea of predetermined future "cost of living increases" to be misleading for two reasons: (1) For most recent periods in the industrialised world, average wages have increased faster than

most calculated cost of living indexes, reflecting the influence of rising productivity and worker bargaining power rather than simply living costs, and (2) most cost of living indexes are not forward-looking, but instead compare current or historical data.

High or unpredictable inflation rates are regarded as harmful to an overall economy. They add inefficiencies in the market, and make it difficult for companies to budget or plan long-term. Inflation can act as a drag on productivity as companies are forced to shift resources away from products and services in order to focus on profit and losses from currency inflation. Uncertainty about the future purchasing power of money discourages investment and saving. Inflation can impose a hidden tax on incomes as inflated earnings push taxpayers to pay higher income tax.

With high inflation, purchasing power is redistributed from those on fixed incomes such as pensioners towards those with variable incomes whose earnings may better keep pace with the inflation. This redistribution of purchasing power will also occur between international trading partners. Where fixed exchange rates are imposed, rising inflation in one economy will cause its exports to become more expensive and effect the balance of trade. There can also be negative impacts to trade from an increased instability in currency exchange prices caused by unpredictable inflation. They are:

- *Inflation destroys the assumption that money is stable which is the basis of classic accountancy.* In such circumstances, historical values registered in accountancy books become heterogeneous amounts measured in different units. The use of such data under traditional accounting methods without previous correction, makes no sense and leads to results that are void of meaning.
- *Cost-push inflation:* Rising inflation can prompt trade unions to demand higher wages, to keep up with consumer prices. Rising wages in turn can help fuel inflation. In the case of collective bargaining, wages will be set as a factor of price expectations, which will be higher when inflation has an upward trend. This can cause a wage spiral. In a sense, inflation begets further inflationary expectations.
- *Hoarding:* People buy consumer durables as stores of wealth in the absence of viable alternatives as a means of getting rid of excess cash before it is devalued, creating shortages of the hoarded objects.
- *Hyperinflation:* If inflation gets totally out of control (in the upward direction), it can grossly interfere with the normal workings of the economy, hurting its ability to supply.

- **Shoe leather cost:** High inflation increases the opportunity cost of holding cash balances and can induce people to hold a greater portion of their assets in interest paying accounts. However, since cash is still needed in order to carry out transactions, this means that more "trips to the bank" are necessary to make withdrawals, proverbially wearing out the "shoe leather" with each trip.
- **Menu costs:** With high inflation, firms must change their prices often in order to keep up with economy-wide changes. But often changing prices is itself a costly activity whether explicitly, as with the need to print new menus, or implicitly.
- **Austrian School explanation of business cycles:** According to the Austrian Business Cycle Theory, inflation sets off the business cycle. Austrian economists hold this to be the most damaging effect of inflation. According to Austrian theory, artificially low interest rates and the associated increase in the money supply lead to reckless, speculative borrowing, resulting in clusters of malinvestments, which eventually have to be liquidated as they become unsustainable.
- **Inflation erodes the real value of nominally-fixed payments:-** The real value of fixed nominal payments (like rents, pensions, wages, interest, and taxes) is eroded by inflation. In many countries, such payments are adjusted for inflation on an annual basis.
- **Inflation erodes the real value of historical cost accounting items:** The real values of non-monetary assets and liabilities stated at historical cost (e.g. retained earnings, issued share capital, capital reserves, provisions, taxes, dividends, trade payables and receivables, etc.) are eroded when they are not inflation-adjusted. Two percent inflation - the European Central Bank's definition of price stability - will erode by 51 percent the real value of historical cost non-monetary items over 35 years.

Some possible positive effects of (moderate) inflation include:

- **Labour Market Adjustments:** Keynesians believe that nominal wages are slow to adjust downwards. This can lead to prolonged disequilibrium and high unemployment in the labor market. Since inflation would lower the real wage if nominal wages are kept constant, Keynesian argue that some inflation is good for the economy, as it would allow labor markets to reach equilibrium faster.
- **Room to maneuver:** The primary tools for controlling the money supply are the ability to set the discount rates, the rate at which banks can borrow from the central bank, and open

market operations which are the central bank's interventions into the bonds market with the aim of affecting the nominal interest rate. If an economy finds itself in a recession with already low, or even zero, nominal interest rates, then the bank cannot cut these rates further (since negative nominal interest rates are impossible) in order to stimulate the economy - this situation is known as a liquidity trap. A moderate level of inflation tends to ensure that nominal interest rates stay sufficiently above zero so that if the need arises, the bank can cut the nominal interest rate.

- **Tobin effect:** James Tobin, a Nobel prize won an economist who has won the Nobel prize, at, at one point had argued that a moderate level of inflation can increase investment in an economy leading to faster growth or at least higher steady state level of income. This is due to the fact that inflation lowers the return on monetary assets relative to real assets, such as physical capital. To avoid inflation, investors would switch from holding their assets as money (or a similar, susceptible to inflation, form) to investing in real capital projects.

Cost of living allowance: The real purchasing power of fixed payments is eroded by inflation unless they are inflation-adjusted to keep their real values constant. In many countries, employment contracts, pension benefits, and government entitlements (such as social security) are tied to a cost of living index, typically to the consumer price index. A cost of living allowance (COLA) adjusts salaries based on changes in a cost of living index. Salaries are typically adjusted annually. They may also be tied to a cost-of-living index that varies by geographic location if the employee moves.

Annual escalation clauses in employment contracts can specify retroactive or future percentage increases in worker pay which are not tied to any index. These negotiated increases in pay are colloquially referred to as cost-of-living adjustments or cost-of-living increases because of their similarity to increases tied to externally-determined indexes. Most economists and compensation analysts would consider the idea of predetermined future "cost of living increases" to be misleading for two reasons: (1) For most recent periods in the industrialized world, average wages have increased faster than most calculated cost-of-living indexes, reflecting the influence of rising productivity and worker bargaining power rather than simply living costs, and (2) most cost-of-living indexes are not forward-looking, but instead compare current or historical data.

A fundamental concept in inflation analysis is the relationship between inflation and unemployment, called the Phillips curve. This model suggests that there is a trade-off between price stability and

employment. Therefore, some level of inflation could be considered desirable in order to minimise unemployment. The Phillips curve model described the U.S. experience well in the 1960s, but failed to describe the combination of rising inflation and economic stagnation (sometimes referred to as stagflation) experienced in the 1970s.

Thus, modern macroeconomics describes inflation using a Phillips curve that shifts (so the trade-off between inflation and unemployment changes) because of such matters as supply shocks and inflation becoming built into the normal workings of the economy. The former refers to such events as the oil shocks of the 1970s, while the latter refers to the price/wage spiral and inflationary expectations implying that the economy "normally" suffers from inflation. Thus, the Phillips curve represents only the demand-pull component of the triangle model.

Another concept of note is the potential output (sometimes called the "natural gross domestic product"), a level of GDP, where the economy is at its optimal level of production given institutional and natural constraints (This level of output corresponds to the Non-Accelerating Inflation Rate of Unemployment, NAIRU, or the "natural" rate of unemployment or the full-employment unemployment rate.) If GDP exceeds its potential (and unemployment is below the NAIRU), the theory says that inflation will accelerate as suppliers increase their prices and built-in inflation worsens. If GDP falls below its potential level (and unemployment is above the NAIRU), inflation will decelerate as suppliers attempt to fill excess capacity, cutting prices and undermining built-in inflation.

However, one problem with this theory for policy-making purposes is that the exact level of potential output (and of the NAIRU) is generally unknown and tends to change over time. Inflation also seems to act in an asymmetric way, rising more quickly than it falls. Worse, it can change because of policy: for example, high unemployment under British Prime Minister Margaret Thatcher might have led to a rise in the NAIRU (and a fall in potential) because many of the unemployed found themselves as structurally unemployed (also see unemployment), unable to find jobs that fit their skills. A rise in structural unemployment implies that a smaller percentage of the labour force can find jobs at the NAIRU, where the economy avoids crossing the threshold into the realm of accelerating inflation.

Impact of Inflation

There is broad agreement among economists that in the long run, inflation is essentially a monetary phenomenon. However, in the short and medium term inflation may be affected by supply and demand pressures in the economy, and influenced by the relative elasticity of wages, prices and interest rates.

The question of whether the short-term effects last long enough to be important is the central topic of debate between monetarist and Keynesian schools. In monetarism prices and wages adjust quickly enough to make other factors merely marginal behavior on a general trend-line. In the Keynesian view, prices and wages adjust at different rates, and these differences have enough effects on real output to be "long term" in the view of people in an economy.

A great deal of economic literature concerns the question of what causes inflation and what effect it has. There are different schools of thought as to what causes inflation. Most can be divided into two broad areas: quality theories of inflation and quantity theories of inflation. Many theories of inflation combine the two. The quality theory of inflation rests on the expectation of a seller accepting currency to be able to exchange that currency at a later time for goods that are desirable as a buyer. The quantity theory of inflation rests on the equation of the money supply, its velocity, and exchanges. Adam Smith and David

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Thus, modern macroeconomics describes inflation using a Phillips curve that shifts (so the trade-off between inflation and unemployment changes) because of such matters as supply shocks and inflation becoming built into the normal workings of the economy. The former refers to such events as the oil shocks of the 1970s, while the latter refers to the price/wage spiral and inflationary expectations implying that the economy "normally" suffers from inflation. Thus, the Phillips curve represents only the demand-pull component of the triangle model. Another concept of note is the potential output (sometimes called the "natural gross domestic product"), a level of GDP, where the economy is

at its optimal level of production given institutional and natural constraints. (This level of output corresponds to the Non-Accelerating Inflation Rate of Unemployment, NAIRU, or the "natural" rate of unemployment or the full-employment unemployment rate.) If GDP exceeds its potential (and unemployment is below the NAIRU), the theory says that inflation will accelerate as suppliers increase their prices and built-in inflation worsens. If GDP falls below its potential level (and unemployment is above the NAIRU), inflation will decelerate as suppliers attempt to fill excess capacity, cutting prices and undermining built-in inflation.

However, one problem with this theory for policy-making purposes is that the exact level of potential output (and of the NAIRU) is generally unknown and tends to change over time. Inflation also seems to act in an asymmetric way, rising more quickly than it falls. Worse, it can change because of policy: for example, high unemployment under British Prime Minister Margaret Thatcher might have led to a rise in the NAIRU (and a fall in potential) because many of the unemployed found themselves as structurally unemployed (also see unemployment), unable to find jobs that fit their skills. A rise in structural unemployment implies that a smaller percentage of the labor force can find jobs at the NAIRU, where the economy avoids crossing the threshold into the realm of accelerating inflation.

Monetarist view

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Monetarists assert that the empirical study of monetary history shows that inflation has always been a monetary phenomenon. The quantity theory of money, simply stated, says that the total amount of spending in an economy is primarily determined by the total amount of money in existence. This theory begins with the identity:

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P is the general price level;

V is the velocity of money in final expenditures;

Q is an index of the real value of final expenditures;

M is the quantity of money.

In this formula, the general price level is affected by the level of economic activity (Q), the quantity of money (M) and the velocity of money (V). The formula is an identity because the velocity of money (V) is defined to be the ratio of final expenditure (Q) to the quantity of money (M).

Velocity of money is often assumed to be constant, and the real value of output is determined in the long run by the productive capacity of the economy. Under these assumptions, the primary driver of the change in the general price level is changes in the quantity of money. With constant velocity, the money supply determines the value of nominal output (which equals final expenditure) in the short run. In practice, velocity is not constant, and can only be measured indirectly and so the formula does not necessarily imply a stable relationship between money supply and nominal output. However, in the long run, changes in money supply and level of economic activity usually dwarf changes in velocity. If velocity is relatively constant, the long run rate of increase in prices (inflation) is equal to the difference between the long run growth rate of money supply and the long run growth rate of real output.

Rational expectations theory

Rational expectations theory holds that economic actors look rationally into the future when trying to maximize their well-being, and do not respond solely to immediate opportunity costs and pressures. In this view, while generally grounded in monetarism, future expectations and strategies are important for inflation as well.

A core assertion of rational expectations theory is that actors will seek to "head off" central-bank decisions by acting in ways that fulfill predictions of higher inflation. This means that central banks must establish their credibility in fighting inflation, or have economic actors make bets that the economy will expand, believing that the central bank will expand the money supply rather than allow a recession.

Impact of Inflation on Economy of Sri Lanka

The rate of inflation as measured by the Colombo Consumers' Price Index (CCPI) on a year-on-year basis decelerated further to 24.9 per cent in August, 2008 from 26.6 per cent recorded in July, 2008. Moreover, the monthly Index indicated a reversal of the trend with a slight drop from 206.4 in July, 2008 to 206.3 in August, 2008 for the first time since March, 2007. However, the annual average rate moved from 21.9 per cent to 22.6 per cent between the two months, reflecting the cumulative effect of the increase in the Index during the preceding 12 months period. The abatement of inflation which began in July, 2008 is expected to continue further during the remaining part of the year in response to the tight monetary policy stance adopted by the Central Bank as well as to the increase in domestic food production coupled with the moderation of world commodity prices due to

improvement in supply (news.alibaba.com/article/detail/economy).

Meanwhile, the underlying core inflation which measures the aggregate demand responsive to monetary policy covering price movements of non-food and non-energy items of the CCPI basket rose merely by 0.4 per cent in August, recording an annual average of 10.1 per cent and a point-to-point change of 17.4 per cent compared to 9.3 per cent and 17.2 per cent, respectively in the previous month. The marginal increase in the core inflation was mainly due to the increases in Furnishing, Household Equipment and Routine Household Maintenance (0.7 per cent) and Clothing and Footwear (0.6 per cent) sub categories.

Although the core inflation has risen at a faster rate than the headline inflation due to one-off impact of adjusting transport prices, the two have been converging from July, 2008. Increased supply of domestic agricultural produce mainly vegetables, coconut, coconut oil, eggs and rice (other than samba variety) contributed heavily towards the deceleration of the general price level in August. This was reflected by a decline of 0.4 per cent in the food sub index, which accounts for 47 percent of the total index. However, the total impact of this decline on the overall price level was offset by the increases in non-food categories mentioned above. With the availability of more local food supplies to the market with the onset of harvesting season and the declining commodity prices in the world market including oil, further aided by the continued demand management measures adopted by the Central Bank, may contribute to a further decrease in the inflation rate during the coming months.

Six months after the Central Bank (CB) presented its Monetary Policy Roadmap for 2008, highlighting the importance of keeping inflation at sustainable, low and predictable levels to support a sustainable economic growth; statistics show that inflation has consistently risen since January 2008 to levels that are highest in the entire region. Statistics released by the CB this week again show an increase with inflation at 28.2 percent in June 2008, up from 26.2 percent the previous month.

International oil prices have surged beyond a record high of US\$140 per barrel this past week and speculation is widespread that prices will reach US\$150 before long, renewing fears of a global economic slowdown. Coupled with increases in commodities and food prices, inflation is likely to keep climbing and will affect countries such as Sri Lanka which are import dependent for their energy needs, economists say.

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