

INFLATION

WHAT IS INFLATION?

Inflation is a general rise in prices across the economy. This is distinct from a rise in the price of a particular good or service. Individual prices rise and fall all the time in a market economy, reflecting consumer choices and preferences, and changing costs.

Inflation measures the extent to which your money today will buy less in the future.

Inflation is perhaps the most significant indicator for securities markets because it determines the erosion of the real value of your investment, and the necessary rate of return to compensate yourself for this erosion. For example, if inflation is measured at 1% per year, then you will need to earn an extra 1% per year in your investments to compensate for the effective 1% “loss” that your portfolio will realize as a result of the increase in prices during the year.

inflation is a general rise in prices across the economy

If the price of one item - say a particular model of car - increases because demand for it is high, we do not think of this as inflation. Inflation occurs when most prices are rising by some degree across the whole economy.

the inflation rate

We often hear about the rate of inflation being 2.3% or 2.7% or some other number. The inflation rate is a measure of the average change in prices across the economy over a specified period, most commonly 12 months - the annual rate of inflation. We typically hear about the annual inflation rate for a particular month. The annual rate of retail price inflation in July 2003 was 3.1%. This means prices overall were 3.1% higher in July 2003 than they were in July 2002. So a typical basket of goods and services costing, say, Rs.100 in July 2002 cost Rs.103.10 in July 2003.

There are many reasons why prices go up, thereby increasing measured inflation. For example, inflation may result from increased demand for a particular product, say chocolate on Valentine’s Day; from increase cost of supplies for manufacturing companies, say increased cost of silicon for computer chip makers; from planned shortages, such as oil producers purposefully cutting shipments to customers; or from

fear of shortages, as would occur in a war (especially war in the Middle East) where oil prices may go up for fear that supplies might be limited at some point in the future.

But the most significant single determinant of inflation is the output gap, the balance between supply and demand in the economy. The output gap measures the difference between the economy's potential, when all possible capital and labor resources are employed, and the actual level of output. When actual output is below its potential, inflation should remain steady, because there are excess workers and unused plant and equipment available to be put into action without any increase in wages or prices.

Actual level of output is quite simply the demand for goods and services, and is measured by GDP. Potential output is supply of goods and services, and requires an estimate of full employment and full capacity utilization in order to determine its value. Since potential output is decidedly difficult to judge, the output gap is not relied on as the sole measure of inflation

changes in the inflation rate

Any individual price change could cause the measured rate of inflation to change, particularly if it is large or if the item has a significant weight in the price index. But we are more interested in the general increase in prices rather than individual price changes. A large rise in the price of petrol, for example, might affect the overall rate of inflation. But unless this price carried on rising, the annual rate of inflation would eventually fall back again - the example in the box below explains this, if you want to know more.

Events affecting a range of prices can also result in a change in the inflation rate. For example, a rise (or fall) in oil prices might affect the price of other goods if producers pass on the increase (or decrease). But, again, unless the oil price continues to rise (or fall), this influence on the inflation rate will eventually wear off after a time.

A change in price

If petrol prices had been 50paisas a litre for some time and then they increased in, say, February 2003 to Rs1 a litre while no other prices changed, the annual rate of retail price inflation would increase. If petrol prices remained unchanged after that, the annual rate of inflation would then fall back in the following February. That is because the annual rate of inflation in say February 2004 measures the change in prices between February 2003

and February 2004, during which time the price in our example has stayed the same at Rs1 a litre - the rise in petrol prices recorded in February 2003 drops out of the calculation. So, although the price of petrol remains at the higher level, annual inflation is not higher after a year or more.

Similarly, if the value of the Pakistani Rupee falls against other currencies - ie the exchange rate depreciates - the price in the shops of some imported goods might rise. But only if the exchange rate keeps falling will this influence on inflation continue.

Price changes like those described can have other indirect effects on inflation. But individual price changes in themselves do not have a lasting impact on the inflation rate. The rate of inflation in a particular month will depend on movements in all prices. But we need to distinguish between individual price changes - which might change the measured rate of inflation for a period - and the notion of inflation as an ongoing, general increase in prices.

Types of inflation

⇒ Demand pull inflation –

Occurs when aggregate demand exceeds aggregate supply. If there is an excess level of demand in the economy, this will tend to cause prices to rise. This type of inflation is called demand-pull inflation and is argued by Keynesians to be one of the main causes of inflation. Demand-pull inflation is essentially "too much money chasing too few goods."

⇒ Cost push inflation –

When a cost of production (e.g. wages) increases and firms put up prices to maintain profits. Cost increases may happen because wages have gone up or because raw material prices have increased. It is important not to muddle cost-push with demand-pull inflation. Cost-push inflation happens when costs have risen independently of demand.

WHAT CAUSES INFLATION?

The measured inflation rate at any point in time will be made up of an array of individual price changes. But the amount of inflation in the economy is about more than just the sum of all individual price changes. Something more fundamental determines the amount of inflation in the economy - whether it is 1%, 10% or 100%.

demand...

One of the underlying causes of inflation is the level of monetary demand in the economy - how much money is being spent. We can demonstrate this by considering what happens when the prices of some products are rising. Imagine the price of coffee has risen, perhaps because of poor weather conditions in South America. If consumers want to buy the same amount of all goods and services as before, they will now have to spend more - because the price of one of the products they consume has risen. This will only be possible if their incomes are rising, or alternatively if consumers are prepared to spend a bigger proportion of their incomes and save less. But if total spending does not rise, then higher prices will mean consumers either will have to buy less coffee or buy less of something else. Any fall in demand for goods and services will put downward pressure on prices. So although higher costs or other factors might cause some prices to rise, there cannot be a sustained rise in prices unless incomes and spending are also rising.

On the other hand, if the price of some goods falls, people will need to spend less to buy the same amount of all goods and services as before. But if people still earn the same, they will have the same amount of income as before. So they will be able to buy more of those goods or of something else. Demand in the economy will rise and this, in turn, might cause some prices to rise.

Of course, this process takes time. And the situation will be complicated if some people's incomes are affected by the falls in prices - say because lower import prices cause firms competing with imports to lose sales and reduce the number of people they employ. However, it demonstrates a key feature of inflation - that it relates to the amount of demand in the economy.

the underlying causes of inflation relate to the amount of demand in the economy

... and supply

But inflation is not just about demand in isolation. Inflation reflects the amount of demand in the economy relative to the available supply of goods and services - in other words, the amount of money people are spending relative to what can be produced. Inflation tends to rise when, at the current price level, demand for goods and services in the economy is greater than the economy's ability to produce goods and services - its output. One of the original descriptions of inflation remains valid - that 'too much money chases too few goods.'

the gap between demand and supply

How much the economy is able to produce will reflect the rise of the working population. Increases in output will also depend on factors that enable more output to be produced from available resources - in other words, productivity increases. The amount the economy is able to produce, ie supply, might increase due to the introduction of new technologies, extra investment in new equipment, improved methods of production and distribution or by enhancing the skills of the workforce. These things can all lead to higher productivity.

There will be some price level at which there is a broad balance between the demand for, and supply of, goods and services. At this point there tends to be no upward or downward pressure on inflation. Firms will be working at their normal capacity - producing everything they can in the most efficient way with their existing resources.

=>...too much demand...

But what happens if there is an increase in demand for some reason, for example due to a reduction in income tax, or because consumers suddenly feel more optimistic and start spending more money rather than saving?

when demand rises above what firms can produce at their normal level of operation there tends to be upward pressure on costs and prices

Firms can usually increase production to meet higher demand. But this may only be possible by incurring higher costs. For example, it might be necessary to introduce overtime working or hire extra people. If many firms are trying to recruit extra people in order to produce more, wages might start to rise. And firms might have to pay more for additional materials or run their processes and machinery in a less efficient way.

So to produce more, firms increase their demand for resources and this may result in upward pressure on production costs and prices - for example, the price of bricks and the wages of bricklayers might rise if there is high demand for the construction of new buildings such as houses or offices.

At the same time, imports are likely to rise and the gap between what the country imports and exports - its trade balance - might widen. Higher prices in general might lead people to demand higher wages so they can still buy the same amount of goods and services. An increase in wage costs might then feed through to a further rise in prices. The inflation process can then continue until prices have risen to such a level that demand is once again equal to supply.

=>... too much supply

The opposite to this is when there is slack - ie spare capacity - in the economy. That is when the amount that can be produced is greater than demand. In this situation, there tends to be downward pressure on costs and prices.

inflation is usually generated by an excess of demand over supply

To contain inflationary pressures in the economy, demand needs to grow roughly in line with output. Output grows over time at a rate which largely depends on factors which

increase productivity. If demand grows faster than this, unless there is spare capacity in the economy - such as after a recession - inflation is likely to rise.

The ultimate cause of inflation can really be said to be central banks. Their behaviour and actions determine whether inflation is allowed to rise or is kept low - in other words, whether they allow prices to rise unchecked by monetary policy, or whether the central banks seeks to influence the amount of money in the economy by changing interest rates.

To keep inflation low, we want to ensure that the growth in demand does not get ahead of the growth in what the economy can produce. We want output to rise, but at a steady rate across the economy as a whole and not so fast that the resulting demand for resources generates upward pressure on costs and prices. Low levels of inflation will often result in firms experiencing increases in profitability. This will provide funds for investment purposes.

Inflation will erode the real value of loans that have been taken out and therefore may make repayment of existing loans easier.

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What are the effects of inflation on an economy ?

Inflation causes many distortions in the economy. It hurts people who are retired and living on a fixed income. When prices rise these consumers cannot buy as much as they could previously. This discourages savings due to the fact that the money is worth more presently than in the future. This expectation reduces economic growth because the economy needs a certain level of savings to finance investments which boosts economic growth. Also, inflation makes it harder for businesses to plan for the future. It is very difficult to decide how much to produce, because businesses cannot predict the demand for their product at the higher prices they will have to charge in order to cover their costs. High inflation not only disrupts the operation of a nation's financial institutions and markets, it also discourages their integration with the rest of the worlds markets. Inflation causes uncertainty about future prices, interest rates, and exchange rates, and this in turn increases the risks among potential trade partners, discouraging trade. As far

as commercial banking is concerned, it erodes the value of the depositor's savings as well as that of the bank's loans. The uncertainty associated with inflation increases the risk associated with the investment and production activity of firms and markets.

The impact inflation has on a portfolio depends on the type of securities held there. Investing only in stocks one may not have to worry about inflation. In the long run, a company's revenue and earnings should increase at the same pace as inflation. But inflation can discourage investors by reducing their confidence in investments that take a long time to mature. The main problem with stocks and inflation is that a company's returns can be overstated. When there is high inflation, a company may look like it's doing a great job, when really inflation is the reason behind the growth. In addition to this, when analyzing the earnings of a firm, inflation can be problematic depending on what technique the company is using to value its inventory. The effect of inflation on investment occurs directly and indirectly. Inflation increases transactions and information costs, which directly inhibits economic development. For example, when inflation makes nominal values uncertain, investment planning becomes difficult. Individuals may be reluctant to enter into contracts when inflation cannot be predicted making relative prices uncertain. This reluctance to enter into contracts over time will inhibit investment which will affect economic growth. In this case inflation will inhibit investment and could result in financial recession(Hellerstein, 1997). In an inflationary environment intermediaries will be less eager to provide long-term financing for capital formation and growth. Both lenders and borrowers will also be less willing to enter long-term contracts. High inflation is often associated with financial repression as governments take actions to protect certain sectors of the economy.

It has been shown that inflation affects investment in several ways, mostly inhibiting economic growth. The source of inflation is money and the supply of it. Investors need to be able to expect returns in order for them to make financial decisions. If people cannot trust money then they are less likely to engage in business relationships. This results in lower investment, production and less socially positive interactions. Among other effects, people may start to attempt to trade by other, less efficient, means in order to avoid the unpredictable price levels due to inflation.

In Pakistan the inflation rate was high before few years due to the hard work and well planing there has been seen a gradual decline.

Parameters	1998	1990	1980	1971
GNP (billion US \$)	63.04	41.02	23.41	10.59
GNP per Capita (US \$)	470	390	330	170
Imports (billion US \$)	11.61	8.438	5.412	0.925
Exports (billion US \$)	8.59	6.528	2.737	0.660
Foreign Debts.(billion US \$)	30	22.96	10.53	3.66
Ave. growth rate (%)	6	5.6	2.9	2.9
Inflation rate (%)	8.8	9.3	13.4	13.4

Decline in the Inflation rate in Pakistan 1997-1998. During the recent years the inflation rate has come to a gradual fall. It said that the trend of declining inflation in recent years was sustained in 2002. The inflation rate fell to 2.8 percent from 4.4 percent in 2001, due to a comfortable supply of essential commodities, weaker international prices for petroleum in the first half of the year, lower prices of cotton, and appreciation of the Pakistani rupee.

