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Inflation over the decades

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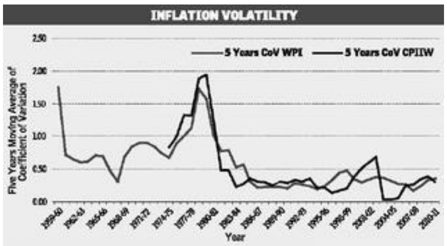
Current inflation rates are high, but not too worrisome in relation to the experience of the last 40 years. Increased volatility, however, is a concern.



Source: Authors' calculations from Labour Bureau, Government of India and Office of the Economic Advisor

The Reserve Bank's repeated rate hikes point to its concern over inflation. Consumer price inflation has been in double digits for the two consecutive years. The last time annual consumer price inflation was in double digits was in 1998-99 for a single year.

The average annual inflation rate (calculated from the Consumer Price Index of Industrial Workers with 2001 as the base year) was 12.05 per cent peaked in 2009-10, declining slightly last financial year (2010-11) to 11.12 per cent.

To make matters worse, the average annual inflation rate on the basis of wholesale price index (WPI) with 2004-05 as the base year jumped up from 3.57 per cent in 2009-10 to 9.25 per cent in 2010-11.

PRESENT AND PAST

Using data from the post-Independence period, we calculate five-year moving averages of WPI and CPI inflation rates to examine whether the present is significantly different from the past. Further, we use five-year moving averages of coefficient of variation (standard deviation/mean) to study volatility. Overall average WPI inflation from 1959-60 to 2010-11 is 6.8 per cent (7.65 per cent for 1970-71 to 2010-11) and CPI-IW inflation from 1970-71 to 2010-11 is 8.08 per cent. However, this average hides significant variations. Some of those key variations are: First, the period from 1994-95 to 2004-05 shows a consistent 10-year decline in inflation rates, unlike any other time in history.

Second, although inflation has started increasing after 2004-05, it still is not close to the pre-1994-95 phase.

Inflation rates' volatility reduced sharply after the mid-1980s. It remained low thereafter except for brief periods. Since 2009, we see rise in volatility, although they are nowhere near the levels seen in the 1960s to the early 1980s.

The two series —WPI and CPI — show different degrees of volatility. Post 1985-86, WPI inflation rate remained relatively more stable than CPI except during a brief period between 1994-95 and 1998-99.

This is because WPI gives less weight to food and rental prices, while services do not get any weights at all.

High average rates of inflation and volatility may not be necessarily correlated. In the 1960s and the 1970s, the averages rates of inflation and volatility were quite high.

In contrast, we see lower volatility with relatively higher average inflation in the 1980s. A reverse trend is observed in 1995-96, when inflation started moving down but volatility increased.

Currently, we see both increasing rates of average inflation and volatility, but they are still lower than historical trends.

DRIVERS OF INFLATION

Mr Deepak Mohanty, RBI Deputy Governor, in his speech at the Bankers Club in September 2010 summarised the major factors that have driven inflation.

Historically, high inflation in India has been a combination of three factors: poor agricultural productivity and high dependence on monsoon; commodity price shocks, mainly oil prices; global business cycles and wars.

During the 1970s and the early 1980s, OPEC price hike and inconsistent oil supply was one of the major factors that led to higher inflation in India. India being a net importer of oil, exogenous supply shock had a cascading impact on prices of inputs and deteriorating balance of payments. In the 1980s and the early 1990s, supply shocks (food shortages and oil price rise due to US-Iraq war) were accompanied by demand pressures of high fiscal deficit in the 1980s and growing GDP in the 1990s.

Structural changes

The declining trend in inflation during 1994-95 to 2004-05 was the result of structural changes in the macroeconomic framework due to liberalisation.

The improved supply response, improved financial and real economy, better monetary policy and emphasis on fiscal consolidation all helped bring down inflation.

Post 2004-05, we observe a new phenomenon— demand conditions (especially non-government) influencing inflation along with the supply side. The Indian economy grew at an average rate of 8.24 per cent between 2004-05 and 2009-10, fuelled by the growth rate in the services sector. India experienced growth rates of above 9 per cent for three years from 2005-06 to 2007-08. This implied a rise in real per capita income, as inflation was below 6 per cent during those three years.

Increase in income raised aggregate demand, which the supply side found difficult to match, at least in the short run. Accompanying this increasing demand were the increases in prices of food and fuel in 2008.

The Lehman crisis acted as a negative demand shock in the latter part of 2008, bringing down inflation. But the relief was shortlived.

India recovered quickly from the financial crisis. However, the drought of 2009 followed by the uneven rainfall in 2010 and increase in aggregate demand have kept food prices inflation in double digits.

The recent Middle East political crisis has added to the inflation pressures. These uncertain times have also increased volatility, in CPI and recently in WPI.

INCREASED VOLATILITY

When we compare the current inflation rates to the 1990s, they seem high but compared with four decades of data, the trends are not so worrisome. However, the increased volatility displayed by both the inflation rates is troubling.

India has experienced an unusual combination of factors in a short span of time after 2004-05 which have affected inflation volatility — rise in prices of food and fuel (partly fuelled by increase in global demand), uncertain monsoon, the financial crisis and then domestic rise in demand.

Not only does volatility deter private investment, it also affects inflation expectations. Considering that majority of the population in India is relatively poor, double digit food inflation and high inflation in general hits the poorest and weakest sections the hardest.

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