Duvvuri Subbarao: Is there a new normal for inflation?

Speech by Dr Duvvuri Subbarao, Governor of the Reserve Bank of India, at the Bankers' Club, New Delhi, 8 March 2013.

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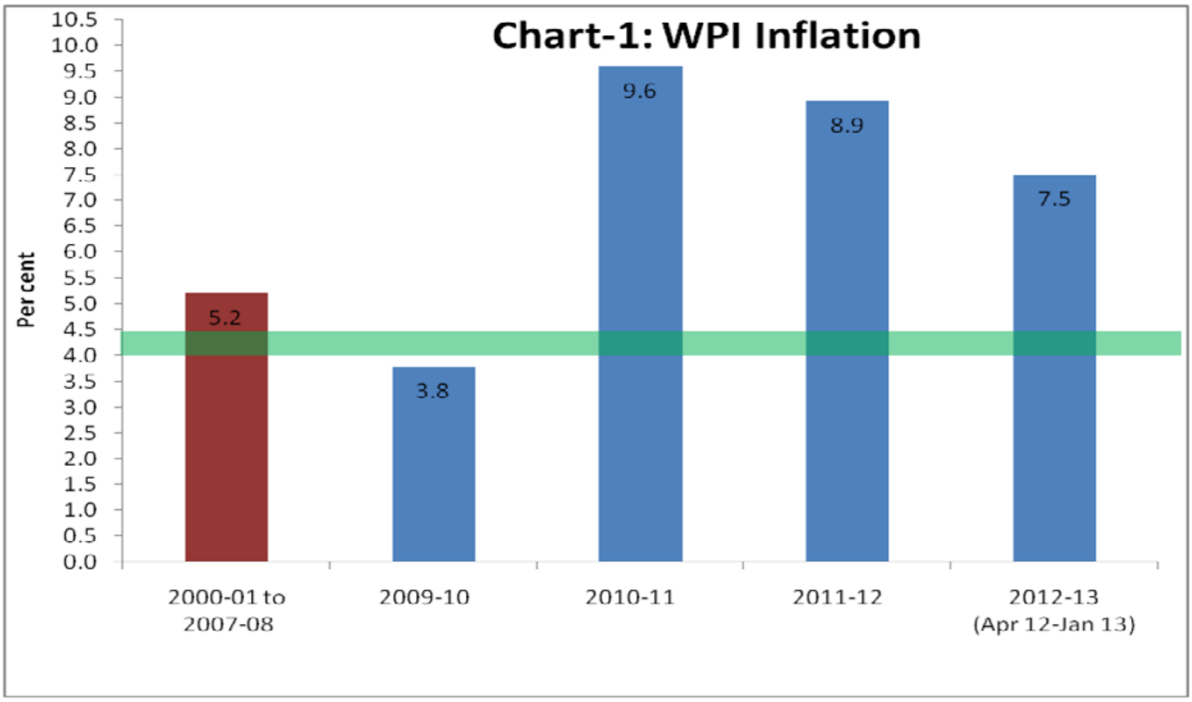
1. India recovered from the global financial crisis ahead of most other countries, but inflation too caught up with us sooner than elsewhere. As measured by the wholesale price index (WPI), inflation went marginally into negative territory for a few months into the crisis in 2009 and started rising sharply thereafter, clocking a peak rate of 10.9 per cent in April 2010[1]. Average WPI inflation was 9.6 per cent in fiscal year 2010/11, 8.9 per cent in 2011/12 and 7.5 per cent during the first ten months of 2012/13 (Chart-1).



New normal hypothesis

2. Despite this high episode of inflation playing out over the last three years, the Reserve Bank has consistently maintained in all its policy reviews that its objective is to "… condition and contain perception of inflation in the range of 4.0–4.5 per cent. This is in line with the medium-term objective of 3.0 per cent inflation consistent with India's broader integration into the global economy."

3. In recent months, some analysts have questioned the Reserve Bank's resolve to bring inflation down to this level given the trend of stubborn and persistent inflation. Their main contention is that average WPI inflation over the last three years for which data are available (February 2010 – January 2013), at 8.8 per cent, is significantly higher than the

[1] The last time India experienced more than three successive years of inflation above 7.5 per cent was during 1990–96.

average inflation of 6.0 per cent in the three years before the Lehman collapse (September 2005 – August 2008) suggesting that India's inflation rate has undergone an upward phase shift owing to a host of domestic and global developments. Monetary policy calibration, it is argued, can get flawed unless the Reserve Bank acknowledges this new normal.

4. The Reserve Bank does not agree with this 'new normal' argument. Indeed it is this intellectual conviction that informed our efforts to rein in inflation over the last three years as we brought inflation from double digit levels to below 7 per cent. The central task of this speech is to present the Reserve Bank's position on the 'new normal' debate.

Arguments in support of a new normal

5. In order to make my case, let me first summarize the arguments put forward by various analysts in support of a new normal.

(i) Wage-price spiral is a permanent shock to the inflation path

6. The first argument for a 'new normal' stems from the steep increase in rural wages over the last few years that has set off a wage-price spiral. Nominal rural wages increased at double digit rates over the last five years. Indeed they increased so rapidly that despite high retail inflation, real wages too surged at close to double digits in the last three years (Table-1).

Table 1: Increase in Rural Wages

Year	Nominal Wage Increase*	Average CPI (RL) Inflation	Real Wage Increase
	(Per cent)		
2007-08	8.9	7.2	1.5
2008-09	15.9	10.2	5.1
2009-10	18.0	13.8	3.8
2010-11	20.0	10.0	8.9
2011-12	19.9	8.3	10.6
2012-13 (Apr-Dec)	18.1	9.4	8.0

* Daily wage rate for rural unskilled labourer (male)

Source: Labour Bureau, Shimla

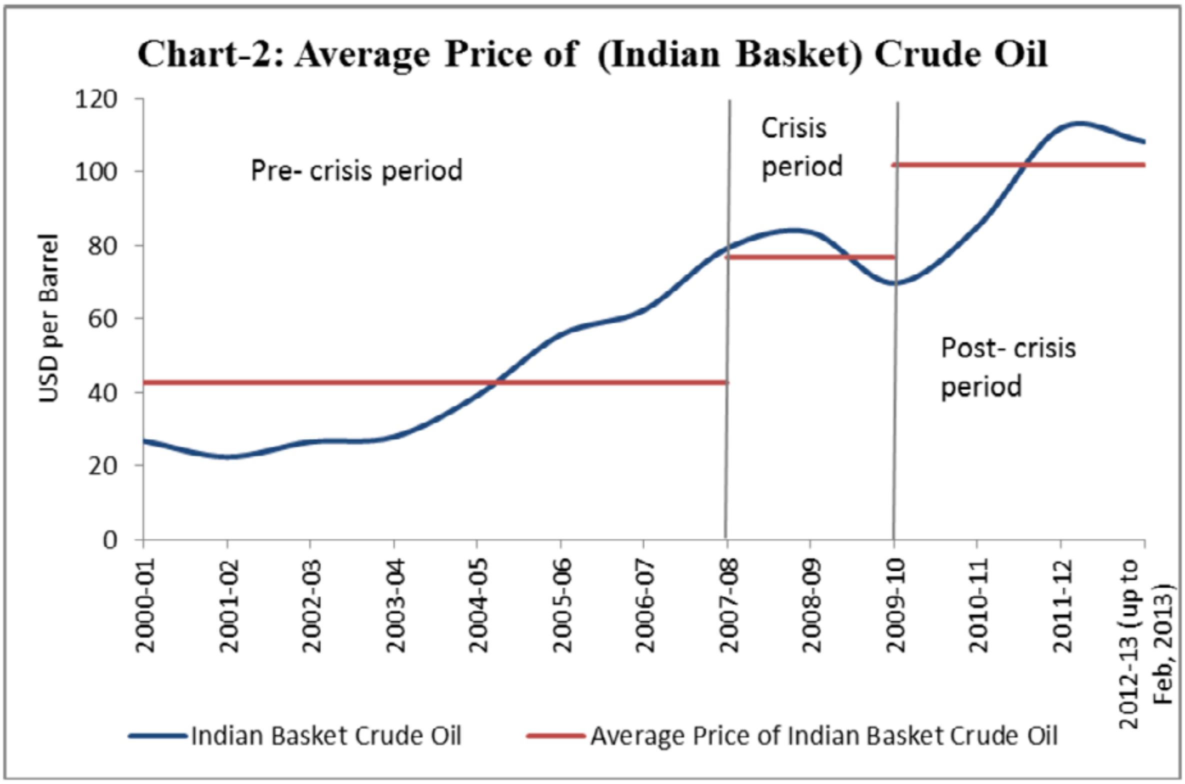
7. By far the most dominant driver of rural wages has been the Government's affirmative action programmes, both by way of transfer payments (subsidies) and welfare programmes, which have significantly raised the demand for wage goods while also

restraining supply of labour at low wages. Two other factors exacerbated the wage-price spiral. First, the large public employment programme has not only pushed up wages, but also exerted upward pressure on agricultural input prices and thereby on food prices. Second, even as wages have increased, there has been no corresponding increase in productivity – a recipe for inflation.

8. The 'new normal' argument drawing from this is that it will be politically difficult to reverse these entitlement programmes, they are here to stay, and that India should accept wage-price pressures as a structural feature and adjust its inflation goal accordingly.

(ii) Commodity price pressures will persist

9. Given the tepid recovery of advanced economies from the crisis and consequent sluggish demand, the expectation was that global prices of commodities, especially of crude, would remain soft. On the contrary, commodity prices have surged compared to the pre-crisis period (excluding the highly volatile two years of the crisis) and have remained firm at that level (Chart-2).



10. Several forces that will extend into the medium-term, it is argued, will work to keep commodity prices firm. First, oil producers, notwithstanding assurances to the contrary, will calibrate supply to ensure a minimum floor price for crude. Second, 'financialization of commodities', a catch phrase used to describe a spike in commodity prices quite unrelated to fundamentals, that gathered momentum thanks to the buildup in global liquidity provided by the unprecedented quantitative easing (QE) in advanced economies is here to stay. This creates an asymmetry between financial market conditions and the real economy that will remain a structural feature of the global economy. The third argument in support of higher commodity prices is made on the basis of long-term fundamentals. These will stem from several factors: a larger world population, up from 7 billion in 2012 to over 9 billion in 2050, higher per capita energy consumption as emerging and developing economies 'catch up' on GDP levels, and the recovery of advanced economy growth to normal levels.

11. The new normal argument in this context is that these global price pressures will transmit to Indian prices either because of actual imports or because of largely import parity pricing, thereby stoking inflation pressures.

(iii) The positive supply shock of the Great Moderation has run out

12. The world enjoyed an extended period of extraordinary price stability during the Great Moderation of the pre-crisis years. As we now know, this was largely the benign influence of the integration of emerging economies, especially China, into the global economy. Through the 80s and 90s, China alone added over a billion people to the global labour pool. This raised global production, but without commensurate increase in demand, and hence prices remained low.

13. The world, it is argued, will not return to the "Great Moderation" situation post-crisis. As China goes forward on its "rebalancing" from external demand to domestic demand, the global economy will see shrinking of low cost supplies from China and hence higher prices. The era of cheap imports is over and done forever.

14. The new normal argument in this context runs as follows. Because the positive supply shock from China has all but waned, global inflation will shift to a new normal once the recovery is complete. The Reserve Bank's implicit formula is to calibrate its comfort level of inflation some 2–3 percentage points above the average rate of inflation in advanced economies, while also aiming to converge to the world average inflation in the medium-term. If so, it should recognize the new global normal for inflation and recalibrate its comfort level for domestic inflation accordingly.

(iv) Quantitative easing will lead to higher inflation in advanced economies

15. Advanced economy central banks have battled the global financial crisis with an unusual show of policy force by resorting to unprecedented levels of "Quantitative Easing". It is argued that this excess will haunt their economies through higher and persistent inflation once they recover to an equilibrium level.

16. Will advanced economies have an incentive to battle those inflation pressures? Possibly not. Given their extraordinary fiscal pressures and consequent heavy obligation of public debt servicing, they may in fact find it a convenient way to inflate their way out of debt.

17. The Indian dimension of this global outlook is as follows. If higher level of inflation in advanced economies on the way forward is inevitable, India should recognize this, and factor it into its policy calculus consistent with its goal of inflation a few percentage points above the average inflation in AEs.

(v) India should exploit the positive relationship suggested by the Philips Curve

18. Macroeconomists have long struggled with the dilemma posed by the Philips Curve relationship. The Philips Curve is just an empirically observed positive relationship between inflation and growth (or an inverse relationship between inflation and unemployment). Notwithstanding subsequent economic research, some of it rewarded with Nobel Prizes, which showed that the Philips Curve trade-off has no theoretical basis, there is a school of thought that monetary policy can exploit this inflation-growth trade-off to achieve higher growth (or lower unemployment) by tolerating slightly higher inflation.

19. For those who believe in the Philips Curve trade-off, India presents a persuasive case for bargaining away a bit of inflation to secure higher growth because the multiplier impact of higher growth on poverty reduction will be larger in the case of India. But wouldn't higher inflation hurt the poor? The proponents argue that it will not because higher real incomes will raise purchasing power to more than offset the impact of higher inflation.

20. It should be noted that the new normal inflation argument deriving from the Philips Curve is different from the earlier arguments in one important way. The earlier arguments

have an involuntary dimension. India cannot influence these forces; it has to perforce adjust to them. In contrast, the Philips Curve argument involves a voluntary policy choice of accepting higher inflation to secure higher growth. Should that choice be made, it will require the Reserve Bank to recalibrate its inflation goal at a higher level.

(vi) PPP convergence on account of India's integration into the global economy will imply accepting a new normal for inflation

21. This argument is based on the Balassa-Samuelson effect which says that the absolute price level in a developing economy needs to converge with those of developed economies as it integrates into the global economy on account of "PPP" (purchasing power parity) catch up. In the process of this catch-up, wages may increase ahead of productivity levels, especially in the non-tradeable sector, leading to inflation.

22. India's integration with the global economy over the last ten years has been much more rapid than we tend to acknowledge, and over the next ten years, it will be much more rapid than we tend to believe. The Economic Survey of 2011/12 had argued that this PPP convergence process for India over the next 30 years would involve an additional inflation of 2 percentage points with no exchange rate adjustment and 1.5 per centage points if the rupee is allowed to appreciate. The counsel to monetary authorities accordingly is to acquiesce in this "new normal" and support growth to hasten the process of PPP catch up.

Debate about a new normal not unique to India

23. Interestingly, the debate about a new normal for inflation is not unique to India; it is playing out in several countries in the post-crisis context in, of course, different ways.

24. As early as in 2000, Bernanke[2] had argued that the Bank of Japan's (BoJ) monetary policy had hit the Keynesian liquidity trap, and that the BoJ should raise its inflation tolerance to 3 to 4 per cent in order to flog the deflationary forces.

25. As the global financial crisis unfolded, Bernanke found himself at the receiving end of similar advice when Blanchard *et al.*[3] and Krugman[4] had, separately and independently, argued that the Federal Reserve should raise its inflation target from 2 per cent to 4 per cent in order to give itself larger head room for conventional monetary easing and thereby avoid, or at any rate delay, recourse to unconventional monetary easing. Quantitative estimates have reinforced this argument by showing that at an inflation target of 4 per cent, the probability of the Fed Funds Rate touching zero is less than 1 per cent. The Fed has, however, resisted this call for a higher inflation target by arguing that this exposes the economy to the risk of higher inflation by unhinging inflation expectations.[5]

26. More recently, a higher inflation target debate played out in Japan in a more high profile fashion. In deference to the electoral commitment of the incoming government to provide a growth stimulus, the Bank of Japan raised its goal of 1% inflation to a target of 2% inflation which it hopes to achieve through unlimited bond purchase.

27. In the UK, a battle of ideas is playing out on how to revive the sagging economy. The Government has firmly embraced a fiscal consolidation plan, but the private sector is yet

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2 Ben S Bernanke, "Japanese Monetary Policy: A Case of Self-induced Paralysis", Institute for International Economics, Special Report 13, September 2000.

3 Olivier Blanchard, Giovanni Dell' Ariccia, and Paolo Mauro, "Rethinking Macroeconomic Policy", IMF Staff Position Note, February 12, 2010.

4 Paul Krugman, "Earth to Ben Bernanke: Chairman Bernanke Should Listen to Professor Bernanke", New York Times, August 24, 2012.

5 Esther L George, "The US Economy and Monetary Policy", Federal Reserve Bank of Kansas City.

to take up the slack left by the Government and demand is yet to revive. The burden of stimulating the economy has therefore fallen on the Bank of England (BoE), an inflation targeter, which found itself consistently overshooting its inflation target over several successive months till mid-2012.

28. This policy context has triggered a debate in the UK on whether inflation targeting is an appropriate policy stance in the face of unyielding recession. One option as suggested by Mark Carney, soon to be BoE Governor, is that central banks could consider targeting nominal GDP instead of inflation. Nominal GDP targeting, by reducing uncertainty about how long monetary policy will stay easy, allows a central bank to persist with an accommodative monetary stance to stimulate growth even if inflation is above its comfort level. This is not costless though. It increases uncertainty about future inflation and can therefore potentially unhinge inflation expectations from their anchor around the targeted inflation.

29. Even as these debates about a new normal for inflation are becoming more commonplace around the world, the context similarity between India and advanced economies should not be stretched. The concern in advanced economies is about how to continue with the stance of monetary easing even after the policy interest rates have hit the zero lower bound so as to minimize loss of employment and output. The concern in emerging economies in general, and India in particular, on the contrary, is an aspiration for higher growth aimed at poverty reduction, even if it entails higher, *albeit* not much higher, inflation. It is important to acknowledge this vital difference in evaluating the arguments for and against a higher “normal for inflation”.

Why is it important to recognise if there is a new normal for inflation?

30. It is important because not recognizing an upward long-term structural shift in “normal inflation” can lead to a flawed monetary policy stance with potentially heavy macroeconomic costs.

31. This can be understood in the paradigm of type-I and type-II errors in statistical analysis. If indeed there is a new normal and it is not recognized, this could lead to an overtightening of monetary policy, a type-II error. But there could be a type-I error too if the new normal is wrongly recognized and monetary conditions are kept accommodative for too long, thereby fuelling higher inflation. Theory also tells us that efforts to minimize one type of error result in maximizing the other type of error. So, where should the balance lie? Even if there is arguably a new normal for inflation, wouldn’t it be more prudent to err on the side of caution? And what will be the price to be paid for that prudence on the inflation front in terms of lost growth?

32. Central banks face a complex policy choice in managing the growth-inflation balance. Experience shows that policy mistakes cannot easily be reversed in short order, and typically not before heavy costs have been paid by way of welfare loss. At the same time, the probability of policy mistakes is high because it is difficult to get an accurate estimate of the potential growth rate of the economy in real time.

33. Economic history of the last 50 years, especially of the US, contains several instances where central banks are alleged to have made costly errors. The best known example is the Volcker disinflation policy of the early 1980s. Paul Volcker, the Fed Chairman of the time, is largely credited with restoring price stability in the US, but subsequently there have been questions about whether too high a price was paid for it by way of two recessions and a surge in unemployment. Was there, in fact, a new higher normal for US inflation that Volcker did not recognize? If indeed there was, how does it square with the low inflation experience of the US over the last two decades? This is a debate that is yet to be settled.

34. The importance of having an accurate estimate of the “normal values” of the fundamental economic variables of an economy – potential growth rate, natural rate of unemployment and threshold inflation – in order to accurately calibrate policy got reinforced

recently in the context of the US Fed's announcement in December 2012 that it will maintain its current easy monetary policy stance "as long as the unemployment rate remained above 6.5 per cent" provided inflation is only slightly above its target and long-term inflation expectations remain anchored. This has raised a question about whether the Fed has accepted 6.5 per cent as the new normal for unemployment. It has raised an even more important question about whether 6.5 per cent unemployment is, in fact, an underestimate in which case the Fed would run the risk of maintaining its easy stance for far too long, thereby stoking inflation.

New normal – counter arguments

35. Let me now put across the Reserve Bank's assessment and position on each of the arguments for new normal as summarized earlier.

(i) Wage-price spiral cannot sustain indefinitely

36. The thrust of our response to the wage-price spiral argument is that even if inclusive growth policies, liberal fiscal entitlements and heightened inflation expectations – driven primarily by food inflation – trigger a wage-price spiral, it cannot be sustained in the absence of an accommodative monetary policy. Admittedly, wage pressures, unaccompanied by productivity increases, start off as demand shocks, but soon transform to act more like supply shocks.

37. Like any other supply shock, exogenously imposed higher wages can be inflationary in the first round, but the bargaining power of labour will erode in time, and the necessary adjustment will take place to bring wages back in line with productivity levels. The recent high growth in rural wages also reflects a catch up with minimum wages, a necessary adjustment intended by the Government. After the initial catch-up, however, wage growth cannot be sustained without corresponding productivity increases. If not, firms will gradually lose their power to translate higher input prices to higher output prices, inevitably leading to a correction in the wage pressures.

38. Furthermore, we must recognize that the Government does not have the fiscal capacity to continue entitlements and welfare programmes at this level. The Government's embrace fiscal responsibility will act as a self-limiting check on the wage-price spiral.

(ii) Commodity price shocks are unlikely to persist

39. Even as the arguments in support of continued upward pressure on global commodity prices are compelling, there are some credible arguments to the contrary, drawing mainly from an alternate energy scenario going forward. The global energy scenario will change on three dimensions – efficiency, demand and supply.

40. On the efficiency front, regulatory and competitive pressures will ensure that gains from energy efficiency will continue to roll in, possibly at an accelerated pace. From the demand perspective, the impact of these efficiency gains on emerging economies will be larger, in the sense that the energy intensity of their GDP growth will be lower than that of advanced economies when the latter were at similar levels of GDP. China is, in fact, projected to move onto a less energy-intensive development path by 2020.

41. From the supply perspective, the shale revolution, first for gas and then for oil, is expected to contribute almost a fifth of the increase in global energy supply by 2030. A roughly similar positive contribution is likely from renewable sources of energy – expected to treble by 2030. Growing domestic production and near flat consumption may see the US become self-sufficient in energy by 2030. Supply from Iraq is projected to increase steadily, and by 2030 it is likely to become the second largest global oil exporter, overtaking Russia.

42. Add to all this, the lessons of experience. For over a century now, commodity prices have been prone to mean reversion. There is no reason why this time it should be very different.

43. Admittedly, gains on the energy front will translate to gains on the inflation front only if other policies are managed intelligently. In particular, demand for land from industrialization and urbanization should not be allowed to crowd out bio-fuel production. Simultaneously, agricultural productivity needs to increase so as to meet the food requirements of a growing population even if some land is ceded for bio-fuel cultivation.

44. The thrust of the Reserve Bank’s argument is that the current and projected trends for the global energy scenario do not provide a persuasive case for raising India’s “normal inflation”.

(iii) Global rebalancing will ensure benign inflation

45. The new normal argument that I cited earlier is that China’s ability to exert downward pressure on global prices will wane. It certainly will, but only gradually. Given the size of China’s economy, it will continue to be the world’s cheap manufacturer for at least the next decade, thereby keeping global inflation under check. Even as China moves up the value chain, the space vacated by it will be occupied by other emerging and developing economies. All this suggests that multiple poles of global growth and competitive pressures will ensure that global inflation remains benign for at least the next decade. The argument that India must recalibrate its inflation higher because global inflation is going to be higher loses its potency if, in fact, higher global inflation is not a credible threat.

(iv) QE – No Risk to global inflation in the medium-term

46. Let me now address the argument about advanced economies suffering higher inflation down the road because of QE. There is a view that this threat is being exaggerated. Advanced economy central banks, especially the US Fed, have repeatedly asserted that they have in place well thought through plans to unwind QE in a non-inflationary way. Also note that long term inflation expectations in advanced economies do not suggest any risk to price stability.

47. Most importantly, nothing hurts the election prospects of a democratic government more than rising prices. Political economy compulsions will therefore ensure that governments do not resort to inflating their way out of debt.

(v) The Philips Curve relationship does not provide a realistic policy option

48. Experience since the 1990s demonstrates that the secular growth-inflation trade-off suggested by the Philips curve does not hold at all levels of inflation. The relationship is indeed non-linear and reversible. There is a threshold level of inflation, below which it might be possible to exploit the growth-inflation trade-off. However, if inflation is above the threshold, it is decidedly inimical to growth as higher inflation does not raise, but actually lowers the growth rate.

49. Mohanty *et al.* (2011)[6] have estimated that the threshold inflation for India is in the range of 4.0 per cent to 5.5 per cent. Updated estimates, using the same methodology, yield a range of 4.4 per cent to 5.7 per cent, implying a mid-point rate of about 5.0 per cent. Even though an estimated threshold inflation rate need not be the optimal inflation target for a central bank, it nevertheless provides a reference point for calibrating the “normal inflation”. The surmise is that empirical research does not support the case for a new normal.

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[6] *Deepak Mohanty, A B Chakraborty, Abhiman Das and Joice John*, “Inflation Threshold in India: An Empirical Investigation” W P S (DEPR): 18 / 2011.

(vi) New normal on account of PPP convergence is not inevitable

50. Apart from all the empirical arguments, there is also an important conceptual argument against the "new normal" hypothesis. As India's integration with the world picks up pace over the next decade, it is important also that our inflation rate is in line with global inflation. A new normal based entirely on domestic considerations will result in a permanent wedge between domestic and global inflation which means a persistent real appreciation of currency. Real appreciation is unambiguously contractionary and militates against our growth aspiration. To support sustainable growth during a period when the economy is globalizing, our inflation rate needs to converge with the global inflation rate. This is the rationale behind the Reserve Bank's policy of calibrating its medium term inflation goal to global inflation.

51. This is an appropriate context for me to respond to the argument for a new normal based on the PPP convergence argument. Our view on this is that PPP convergence cannot be a policy goal, and accepting higher inflation to aid PPP catch up will be both futile and indefensible. As India's per capita income rises, PPP convergence will happen automatically. We need to make sure that rise in incomes is accompanied by productivity gains so that the process of PPP catch up is non-inflationary.

52. There is also no *a priori* reason to believe that the entire burden of adjustment on account of integration with the global economy will have to come by way of the price differential closing. Part, if not all, of the burden can be borne by exchange rate adjustment too as evidenced by the experience of Japan starting the 1960, when the yen appreciated by over 300 per cent to close the price gap. How the burden of adjustment is shared between price levels and exchange rates will depend on country circumstances – in particular the economy's structural constraints and market rigidities.

53. To support sustainable growth during a period when the economy is globalizing, our inflation rate needs to converge with the global inflation rate. We need to manage this convergence by calibrating the "inflation differential" over time rather than acquiescing in a new normal for inflation.

Conclusion

54. Admittedly, the average inflation rate in India over the last three years has trended up. Nevertheless, the context presents neither a necessary nor a sufficient condition for the Reserve Bank to revise its inflation goal. Not a necessary condition because, as indicated earlier, much of our inflation is driven by supply constraints which can be corrected by appropriate policies and their effective implementation. Accepting a new normal for inflation not only has no theoretical or empirical support, but entails the moral hazard of policy inaction in dealing with supply constraints. Not a sufficient condition because there is no empirical evidence to establish that the benefits of higher growth outweigh the costs of welfare loss associated with higher inflation.

55. Key to our collective national aspiration for sustained high economic growth is low and steady inflation. It is only under such an environment of price stability that investors and consumers can make informed choices and contribute to growth. The responsibility of the Reserve Bank in this regard is to anchor inflation expectations and ensure price stability. Neither theory nor empirical evidence presents a credible case for acquiescing in a new normal for inflation in India.