Fighting Inflation

(Inaugural speech by Dr. Raghuram Rajan, Governor, Reserve Bank of India at FIMMDA-PDAI Annual Conference 2014, on February 26, 2014 at Mumbai)

Thank you for inviting me. The Fixed Income Money Market and Derivatives Association of India (FIMMDA) has been playing an important role in the Indian bond, money and derivatives markets. It has been working with the Reserve Bank in various capacities and has helped us address emerging challenges. I thank all of you for that. The sessions in the conference are all of current interest, and therefore I have chosen to speak on an issue, inflation, which is of paramount relevance to fixed income markets.

As you know, the Reserve Bank for India was constituted "to regulate the issue of Bank notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage". Implicit in these words are the core purposes of the RBI: to foster monetary and financial stability conducive to sustainable economic growth, and to ensure the development of an efficient and inclusive financial system.

Note that the RBI is committed to getting the strongest growth possible for India – there is no difference between us and North Block on this. We believe the best way we can foster sustainable growth in the current situation, other than through developing the financial sector, is through monetary stability -- by bringing down inflation over a reasonable period of time. More specifically, we intend to bring CPI inflation down to 8 percent by January 2015 and 6 percent by January 2016.

There are a number of points here that need elaborating. First, are we choosing to tackle inflation at the expense of growth? Most people believe there is a short run trade-off between growth and inflation. By raising interest rates, the RBI causes banks to raise rates and thus lowers demand; firms do not borrow as much to invest when rates are higher and individuals stop buying durable goods against credit and, instead, turn to save. Lower demand growth leads to a better match between demand and supply, and thus lower inflation for the goods being produced, but also lower growth.

Relatedly, if lower rates generate higher demand and higher inflation, people may produce more believing that they are getting more revenues, not realizing that high inflation reduces what they can buy out of the revenues. Following the saying,

"You can fool all the people some of the time", bursts of inflation can generate growth for some time. Thus in the short run, the argument goes, higher inflation leads to higher growth.

But as the public gets used to the higher level of inflation, the only way to fool the public again is to generate yet higher inflation. The result is an inflationary spiral which creates tremendous costs for the public. Therefore, economists have argued – and a number of Nobel prizes have been given for the ideas contained in the previous paragraphs – that the best way for the central bank to generate growth in the long run is for it to bring down inflation. Sooner or later, the public always understands what the central bank is doing, whether for the good or for the bad. And if the public starts expecting that inflation will stay low, the central bank can cut interest rates significantly, thus encouraging demand and growth. Indeed, the reason the Malaysian Central Bank can keep rates low today to foster growth is because it has fought the battle against inflation and convinced its citizens that, if need be, it will smote the inflationary beast again if it rears its head.

Put differently, in order to generate sustainable growth, we have to fight inflation first. Let me also add that greater public faith that inflation will be low will add stability to our currency, and prevent the kind of gyrations we saw last summer. Exchange rate stability is centrally in business interests.

If we have to bring down inflation, we have to start today. We cannot wait till the public's expectations of inflation get more entrenched, and the inflationary spiral gains momentum. This is why we have raised interest rates 3 times since September.

But what about industrialists who tell us to cut rates? I have yet to meet an industrialist who does not want lower rates, whatever the level of rates. But will a lower policy interest rate today give him more incentive to invest? We at the RBI think not. First, we don't believe the primary factor holding back investment today is high interest rates. Second, even if we cut rates, we don't believe banks, which are paying higher deposit rates, will cut their lending rates. The reason is that the depositor, given her high inflationary expectations, will not settle for less than the rates banks are paying her. Inflation is placing a floor on deposit rates, and thus on lending rates.

Currently, therefore, we do not believe the policy rate is at a level where it can affect demand, one way or the other. We do believe, however, that as inflation comes

down because of the weak economy and strong food production, the policy rate will become a stronger influence on bank interest rate setting, and will start influencing demand.

A more important source of our influence today, therefore, is expectations. If people believe we are serious about inflation, and their expectations of inflation start coming down, inflation will also come down. Of course, many people form expectations simply by extrapolating the most recent or most salient experience they have. So we also need to take advantage of the current episode of food price disinflation to bring down expectations – yet another reason for acting now.

Let us turn from answering those who want us to go slow to those who want us to do more. If we think inflation is so important, why don't we "do a Volcker" and try and bring down inflation quickly by raising rates sky high? Of course, if we do raise policy rates substantially, banks will also have to raise rates to match us. While this may lead to a collapse in demand and bring inflation down quickly, it will cause significant damage to the economy – remember the severe recession Volcker's Fed brought about and the Savings and Loan Crisis that followed? A developing country is not in the same resilient position as the United States. Rather than administer shock therapy to a weak economy, the RBI prefers to dis-inflate over time rather than abruptly, while being prepared to do what is necessary if the economy deviates from the projected inflation path. As of now, we believe the rate is appropriately set.

Then there are those who believe we are moving too independently. All we have done thus far is to adopt the reasonable suggestion of the Patel Committee that we focus on CPI inflation rather than WPI inflation as our primary objective. The Patel Committee has also suggested a time horizon to glide down to 6 percent inflation that seems doable without extreme hardship. If the eventual decision of the government, in consultation with the Reserve Bank, is to adopt the recommendations of the Mistry, CFSR, FSLRC and the Patel Committees, and focus on some form of an inflation objective, it would be good for the medium term inflation target to be set by the executive or the legislature, presumably based on advice from the Reserve Bank and other experts. The Patel Committee report is out there for public comment and debate, and once we collect and analyse comments, we will take an internal view and then start deliberations with the government. All this said, international experience suggests that, ideally, once the central bank's objective is given, and the

operational target fixed, the government should leave the technocrats in the central bank to do their job.

Finally, does the Patel Committee intend to turn the RBI into inflation "nutters" focussed on bringing down inflation to the exclusion of all else, including financial stability? Of course not! Medium term flexible inflation targetting means that the monetary policy committee focusses on inflation over the medium term, being concerned about too high, as well as too low, inflation. That means it may be willing to overlook temporary inflation spikes (such as, this November's inflation numbers) but also raise rates when sustained low interest rates and low inflation increase threats to financial stability – because a financial crisis could lead to deflation. In other words, the monetary policy committee will not put on blinkers and see just the inflation number. A number of emerging markets have adopted some form of targetting, while "non-targetters" like the Fed target inflation in all but name, including putting a numerical target to its goal of price stability.

In the remaining time, I want to present one more issue that has many commentators exercised – they say the real problem is food inflation, how do you expect to bring it down through the policy rate? The simple answer to such critics is that core CPI inflation, which excludes food and energy, has also been very high, reflecting the high inflation in services. Bringing that down is centrally within the RBI's ambit. But I will argue that policy is not irrelevant even in controlling food inflation, though clearly, the government also has an important role to play.

1. Role of food prices in the high inflation experience of recent years

Headline inflation measured by the new CPI has remained in double digits during April 2012 to January 2014, averaging 10 per cent over this period. Food inflation, which has a weight of 47.6 per cent in the index, has contributed the largest share of headline inflation (Chart 1). Food inflation itself has stayed in double digits throughout this period, edging down to 9.9 per cent only in January 2014.

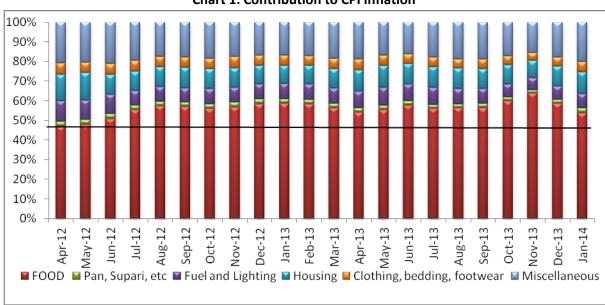


Chart 1: Contribution to CPI Inflation

2. Why are food prices high?

Although domestic production has increased steadily, barring reversals in 2009-10 and 2012-13, this has not been reflected in a softening of food prices. Let us try and understand why.

Growing prosperity and dietary shifts

Data on household consumption expenditure show that the share of food in overall consumption has been declining during the last decade (Chart 2), but at a milder pace than the significant relative increase in food prices. This suggests that demand is relatively less elastic to price changes.

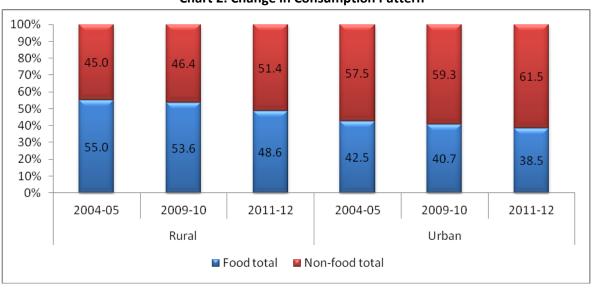
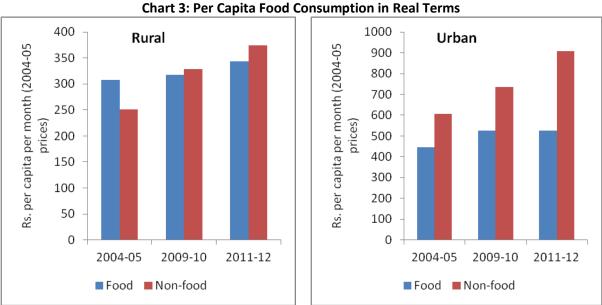


Chart 2: Change in Consumption Pattern

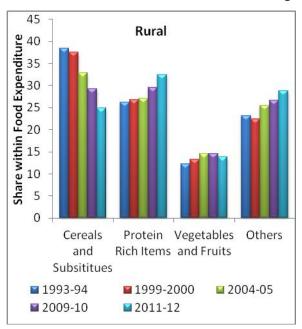
Despite the decline in overall consumption share, per capita food consumption in real terms has increased, particularly in rural areas (Chart 3).



Note: Deflators used are CPI-AL for Rural consumption and CPI-IW for urban consumption

There has also been a distinct shift in dietary patterns towards protein-rich items and other high value foods (Chart 4 and Chart 5). These items, in turn, have been contributing significantly to overall food price increases in the recent period.

Chart 4: Change in Dietary Pattern



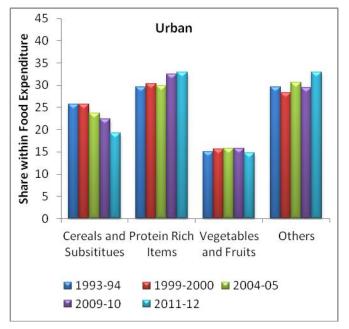
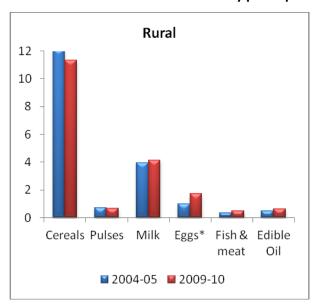
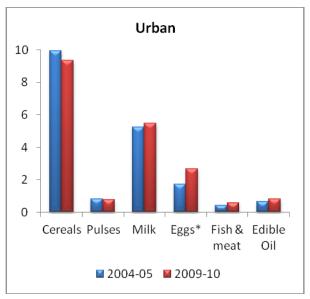


Chart 5: Monthly per Capita Quantity Consumed (in kgs)





Other Possible Causes of High Food Price Inflation

a. Minimum Support Price

One obvious cause for higher food price inflation that analysts have pointed to is higher minimum support prices (MSP). The minimum support price is set by the government on the recommendations of the CACP, based on a variety of factors

^{*} Egg consumption is in number

including primarily the cost of production and price trends in the market (domestic and international). The crops covered under MSP constitute more than a third of the category 'primary articles' in the WPI. Since minimum support prices are intended to be a floor for market prices, and have sometimes directly set the market price when increases have been substantial, for key crops the rate of price inflation seems to relate to the increase in MSP in recent years (Chart 6).

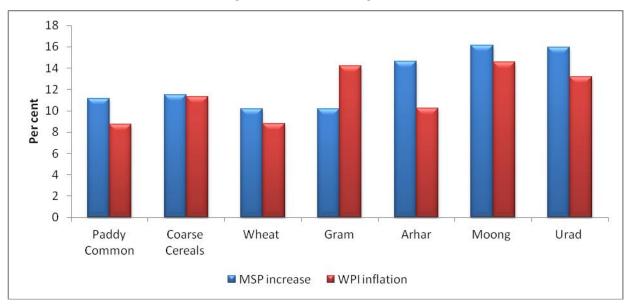
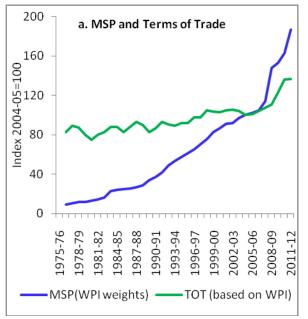
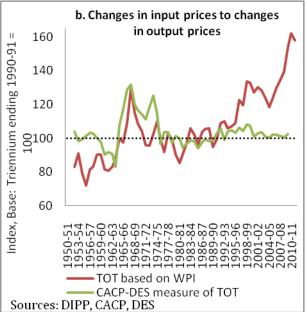


Chart 6: MSP change and Inflation during 2005-06 to 2012-13

Another way of saying this is that there has been a shift in the relative price of agricultural commodities, engineered by the rise in MSPs. If the idea is to get more food production to meet the rising demand we documented, this is just what is needed. In Chart 7 (a), we plot the ratio of WPI of food to WPI of non-food items. This suggests an appreciable improvement in terms of trade for agriculture.

Chart 7: MSP and Internal Terms of Trade of Agricultural Commodities





But when we look at the ratio of changes in input cost over the changes in the output price of agricultural commodities received on the basis of CACP data, it has remained flat, indicating that the gains from MSP increases have not accrued to the farm sector in full measure on account of rising costs of inputs. This may indicate why production growth has not been stronger. What could explain this?

One explanation could be that MSPs also drive input costs, so increasing MSPs is like a dog chasing its tail – it can never catch it. Another could be that since rice and wheat are the primary food commodities procured at the MSP, production is distorted towards rice and wheat, leading to a suboptimal production mix by farmers – too much rice and wheat, and too little of other needed commodities. Both these explanations would suggest the need for more moderation as the government sets the MSPs in coming months.

It is useful though, to look at the details of the cost increases. Prices of agricultural inputs, including wages, have recorded a sharp increase during 2008-09 through 2012-13 in comparison with the preceding five years (2004-05 to 2007-08) as shown below (Table 1). Perhaps the most significant increase has been in rural wages.

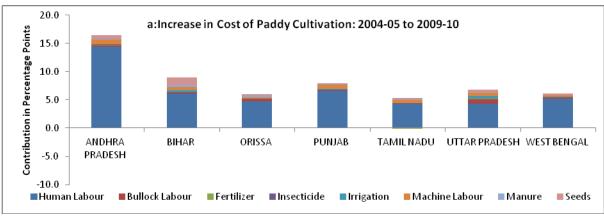
Table 1: Increases in Select Farm Input Prices

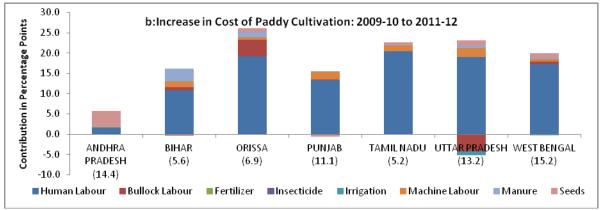
(Annual average, per cent)

	2004-05 to 2007-08	2008-09 to 2012-13			
Food Articles	7.3	11.4			
Fertilizers and Pesticides	1.7	7.8			
Fodder	1.3	19.5			
Gola (Cattle Feed)	12.2	10.2			
High Speed Diesel	4.5	8.0			
Electricity (Agricultural)	2.3	8.7			
Tractors	3.6	5.4			
Wages (Average)	6.2	17.3			
Source: Ministry of Commerce, Ministry of Labour					

For example, wage increases have accounted for the largest share of increase in paddy input costs (Chart 8).

Chart 8: Variable Cost of Paddy Cultivation





Nominal rural wages have grown at a sharp pace during the last five years. Because so many Indian workers are at subsistence wages, higher food prices do drive rural wages higher, and there is some evidence for this before 2007. From

2007 onwards, however, econometric tests suggest causality has flowed from wages to prices, underscoring the role of rural wages as a major determinant in food price increases. So why has rural wage growth been so strong?

b. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

A sharp pickup in rural wages was seen after the rural employment guarantee program (assuring 100 days of employment to every household whose adult members volunteer to do unskilled manual work) was enacted. MGNREGA may have contributed to the bargaining power of rural workers, but careful econometric studies suggest that it accounts for only a small fraction of the rural wage increase, and indeed, any effect is waning (Chart 9). That said, the indexation of MGNREGA wages suggests its effects in pushing rural wage inflation will not disappear entirely.

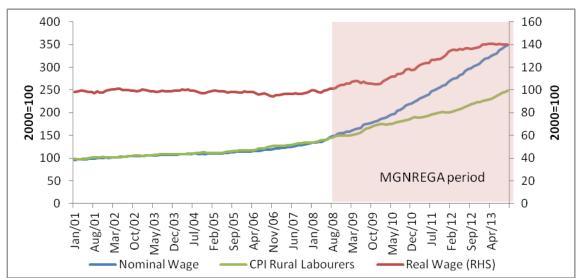
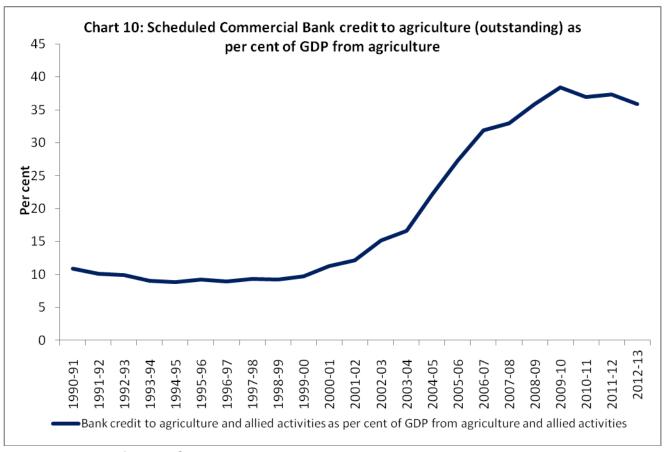


Chart 9: Comparative Movement of Wages and Prices in Rural India

Note: Wages pertain to rural male unskilled labourer

c. Rural Liquidity and Credit

There has been an increase in liquidity flowing to the agricultural sector, both from land sales, as well as from a rise in agricultural credit (Chart 10). More loans to agriculture have fostered substantial private investment in agriculture, but may also have pushed up rural wages.



d. Labour shifting to Construction

The labour force has been moving from agriculture to non-agriculture sectors, particularly construction. This would have the effect of pulling up rural labourers' wages (due to scarcity), especially in the labour supplying states. Total agricultural labour declined from 259 million in 2004-05 to 231 million in 2012-12. Agriculture, which accounted for 60 per cent of total employment in 1999-2000, now accounts for less than 50 per cent (Chart 11 and Table 2).

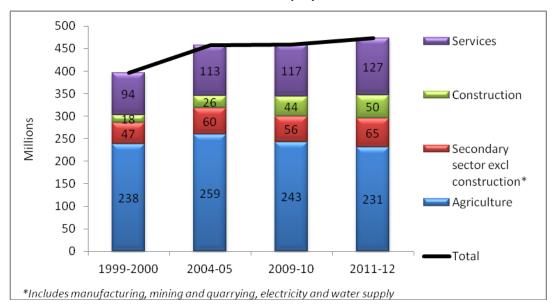


Chart 11: Sectoral Employment Pattern

Table 2: Sector-wise Share in Employment (Per cent)

Sectors	1999-2000	2004-05	2009-10	2011-12
Agriculture	60	57	53	49
Secondary sector excluding				
construction*	12	13	12	14
Construction	4	6	10	11
Services	24	25	25	27
Total	100	100	100	100

^{*}Includes manufacturing, mining and quarrying, electricity and water supply

Source: NSSO and 12th Plan Document

e. Female participation

One of the more interesting possible explanations for the rise in rural wages is the changing female participation in rural markets. The female participation rate is down in all the age categories. Improved living standards could lead rural families to withdraw women from the labour force (Chart 12). Also, higher prosperity could lead to greater investment in educating girls (for the age group 10 to 24) again leading to lower participation in the workforce.

(Rural Male) 70 100 60 80 50 **Per cent** 30 **Ber cent** 40 20 20 10 0 0 30-34 35-39 50-54 10-14 **1993-94 1999-00** 2004-05 2011-12 2009-10



Source: NSSO Employment and Unemployment Survey 2011-12.

3. To summarise

In sum then, when we examine food inflation, a substantial portion stems from an increase in food production costs, primarily rural wage inflation. Some of that is an increase in real wages, needed to attract labour to agriculture, away from construction, education, household work, or MGNREGA. If, however, wages elsewhere also go up, the necessary shift in relative wages to keep agricultural work attractive will not take place, and we will continue to have a wage spiral. Also, some of the agricultural wage growth may be because of more liquidity flowing into rural areas. Somewhat paradoxically, to contain food inflation and get a strong increase in food production, we need to

- (i) Contain the rise in wages elsewhere so that relative wages in agriculture can rise without too much overall increase in wages.
- (ii) Contain any unwarranted rise in rural wages as well as the rise in other agricultural input costs (though not through subsidies) so that the farmer gets a higher return.
- (iii) Allow food prices to be determined by the market and use minimum support prices to provide only a lower level of support so that production decisions do not get distorted or the price wage spiral

- accentuated. This means limiting the pace of MSP increases going forward.
- (iv) Reduce the wedge between what the farmer gets and what is paid by the household by reducing the role, number, and monopoly power of middlemen (amend APMC Acts), as well as by improving logistics.
- (v) Improve farm productivity through technology extension, irrigation, etc.

Note that of these steps, monetary policy has a direct role in (i) and (ii) by slowing the demand for labour and by anchoring inflation expectations and thereby moderating wage bargaining. Indeed, with the slowdown in the in the urban economy, there is some evidence now that rural wage growth is slowing (Chart 13), though a recent pick up is of concern.

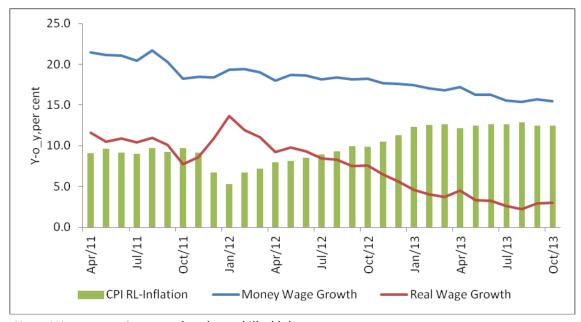


Chart 13: Wages and Inflation in Rural Areas

Note: Wages pertain to rural male unskilled labourer

Finally, our food prices have largely caught up with global prices (we were the world's largest rice exporter last year). Given that global food prices have been moderating, such moderation should feed through to domestic food prices – provided we do not intervene to prevent the feed-through of global prices, and do not intervene in limiting exports or imports.

Let me emphasise that the RBI welcomes rural prosperity and wants to help increase rural productivity through appropriate credit and investment. But recent

inflation has not helped strengthen the hand of the farmer, so the fight against inflation is also in the farmer's interest.

To sum up,

- As prosperity has increased the demand for food, we have needed more food production (or imports).
- Higher agricultural commodity prices should have incentivized farmers to produce significantly more.
- They have, but not enough. Part of the reason may be that farmer earnings are being eaten away by higher costs, most important of which is wages.
- To limit the rise in rural wages, given that it has to rise relative to other wages to attract labour into agriculture, wages elsewhere should not rise as much.
- Monetary policy is an appropriate tool with which to limit the rise in wages, especially urban ones.
- The slowdown in rural wage growth may be partly the consequence of tighter policy limiting wage rise elsewhere.
- Of course, monetary policy's effectiveness in containing other price and wage increases (such as, services prices, which are an important part of the CPI index)) is far less controversial.

To conclude, the RBI believes its fight against inflation will have traction, despite food being an important component of the CPI.
