

India's monetary policy and its implications for growth and inflation

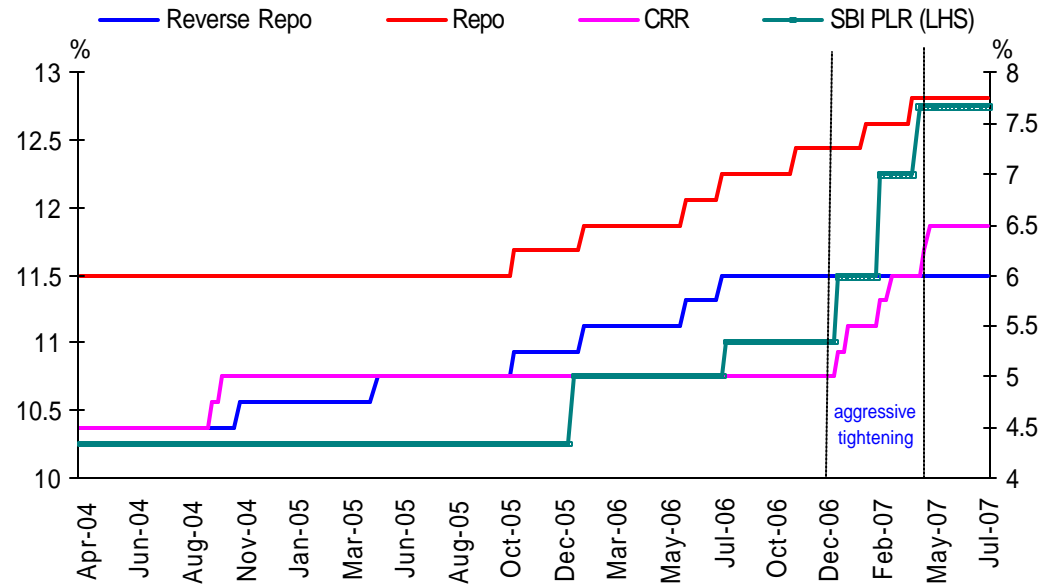
July 25, 2007

Kotak Mahindra Bank Research

Indranil Pan, Chief Economist
indranil.pan@kotak.com
022-66596354

Kaushik Das, Economist
kaushik.das@kotak.com
022-66596489

RBI has tightened monetary policy aggressively since December 2006

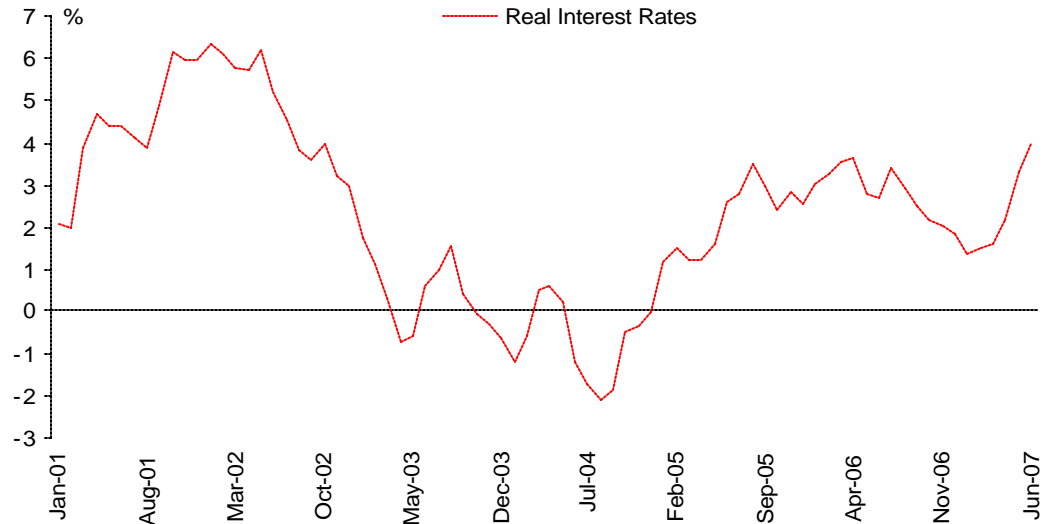


● **CRR was hiked by 150 bps since December 2006 in a short period of 4 months**

➤ **This led to significant increase in SBI PLR to as high as 12.75%, thus impacting borrowing costs of businesses**

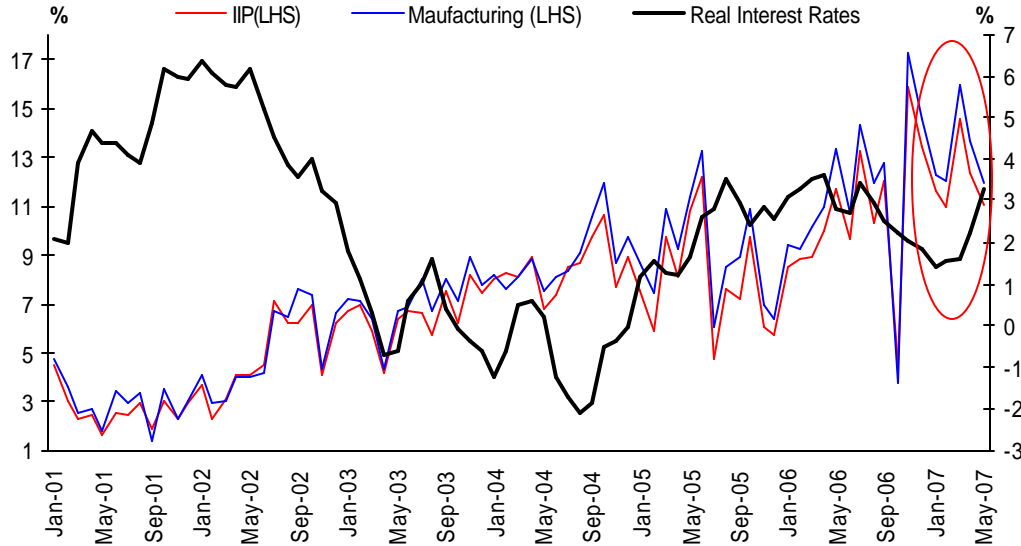
Source: Bloomberg , Kotak Mahindra Bank

➤ **Real interest rates (defined as 10-year G-sec minus WPI inflation) has moved up higher since Feb'07, but is still significantly lower than its 2001-02 peak**



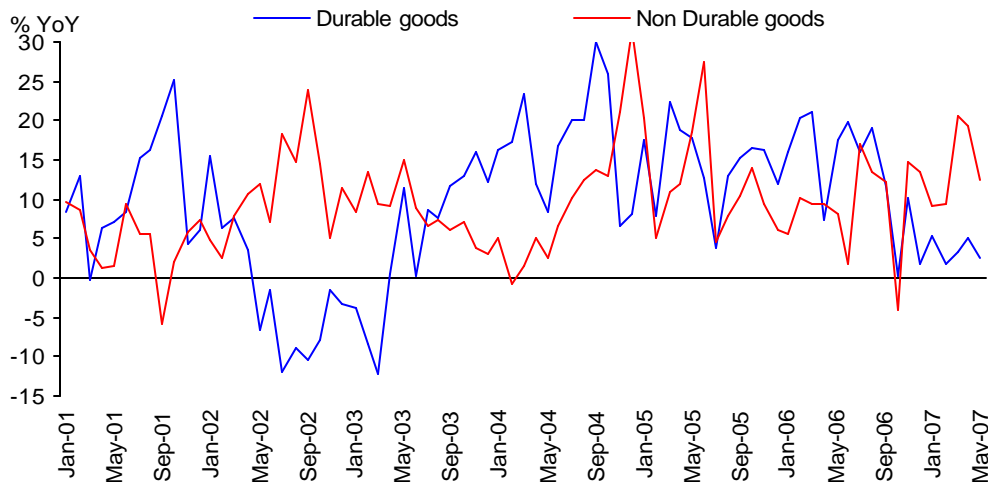
Source: Bloomberg , Kotak Mahindra Bank

Impact of monetary tightening on the supply side: pointing towards a soft landing



Source: Bloomberg , Kotak Mahindra Bank

- **Manufacturing growth slows from 16% in Mar'07; but is still growing at a double digit rate presently (11.9% in May'07)**

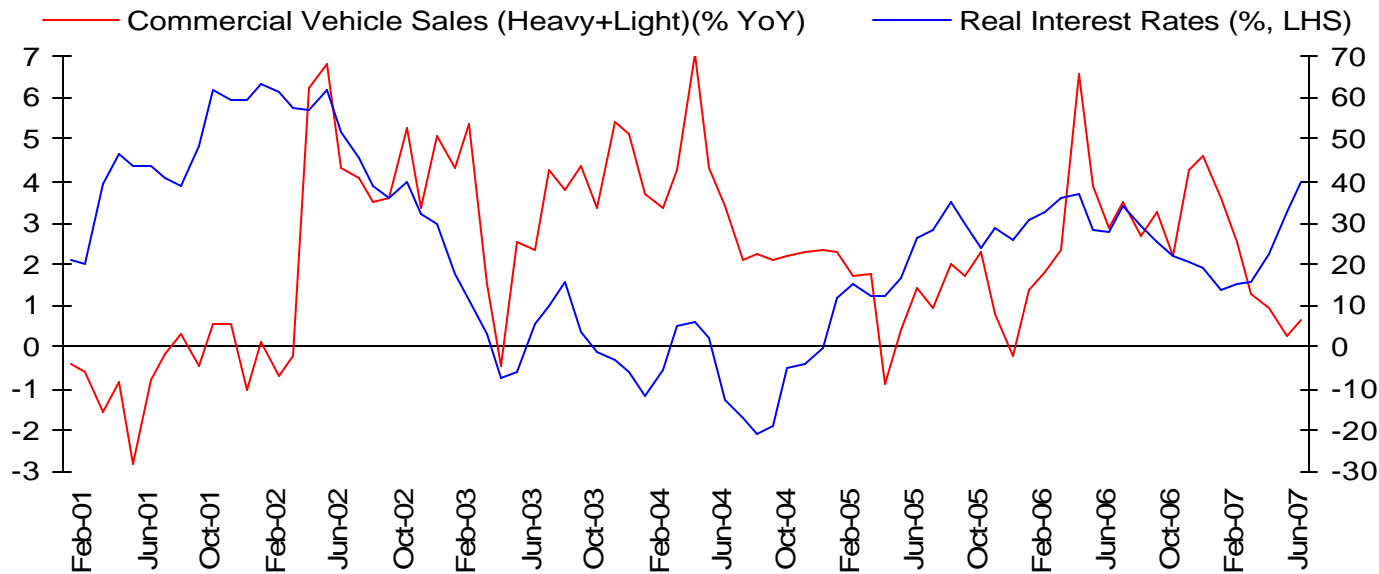
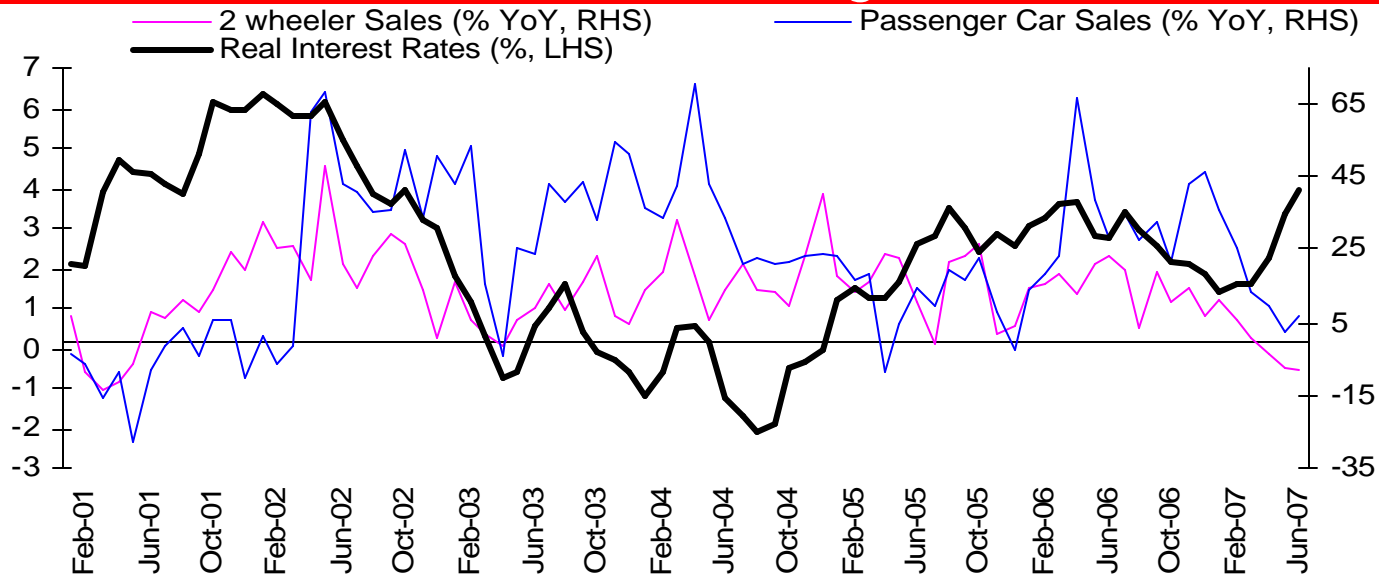


Source: Bloomberg , Kotak Mahindra Bank

- **The durable goods segment of the consumer goods sector shows a significant dip in growth**

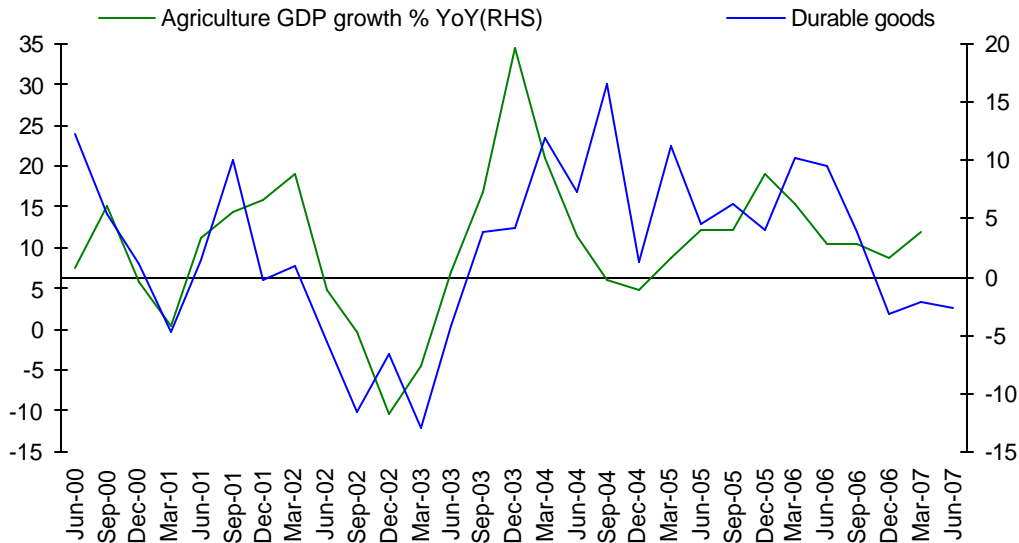
- **Consumer durables slowdown is mainly due to a falling growth in the interest sensitive automobile sector**

CV, 2-wheeler and passenger car sales growth move lower



Source: Bloomberg , Kotak Mahindra Bank

Agricultural sector also has an influence on consumer durables growth

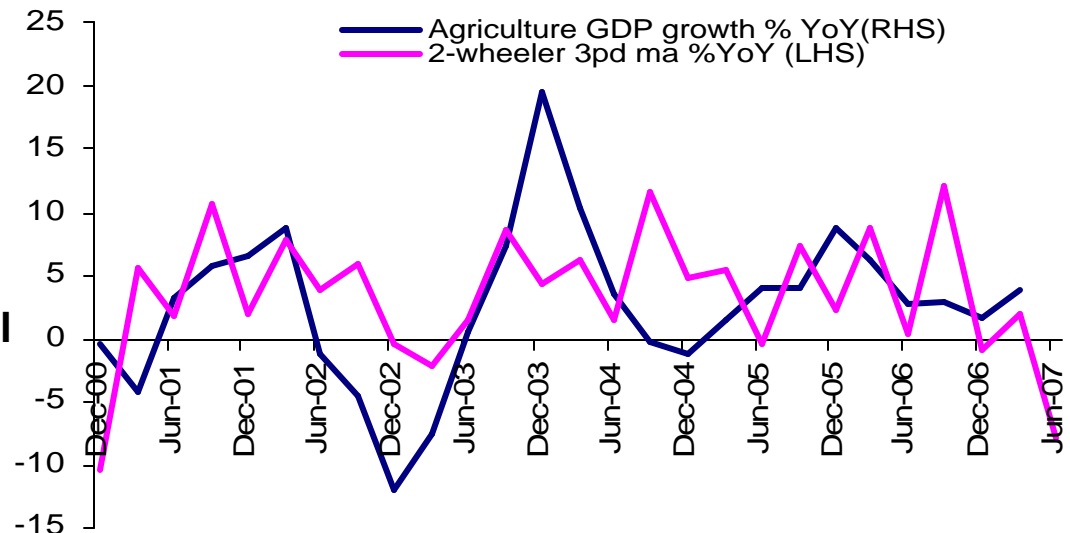


➤ Apart from interest rates, durable goods production generally lags agriculture sector performance

➤ The recent downturn in durables might prove short-lived even at higher interest rates if agricultural growth is strong

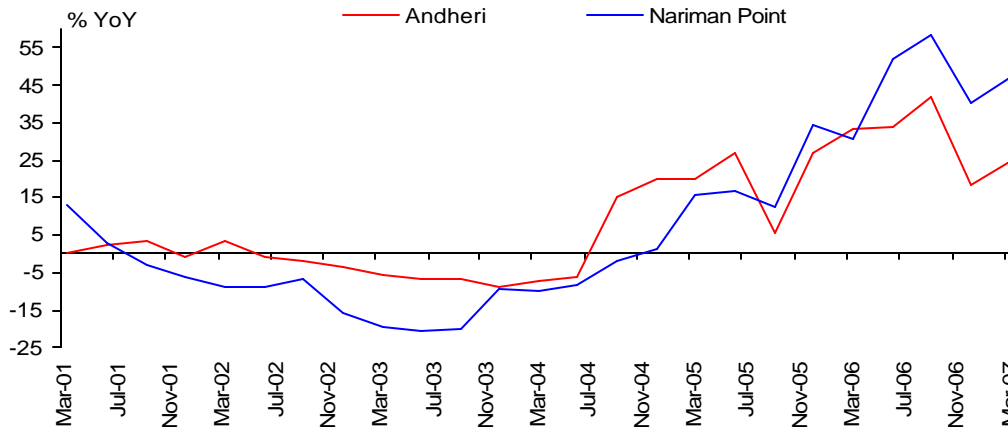
Source: Bloomberg , Kotak Mahindra Bank

➤ 2-wheeler production shows some correlation with agricultural fortunes



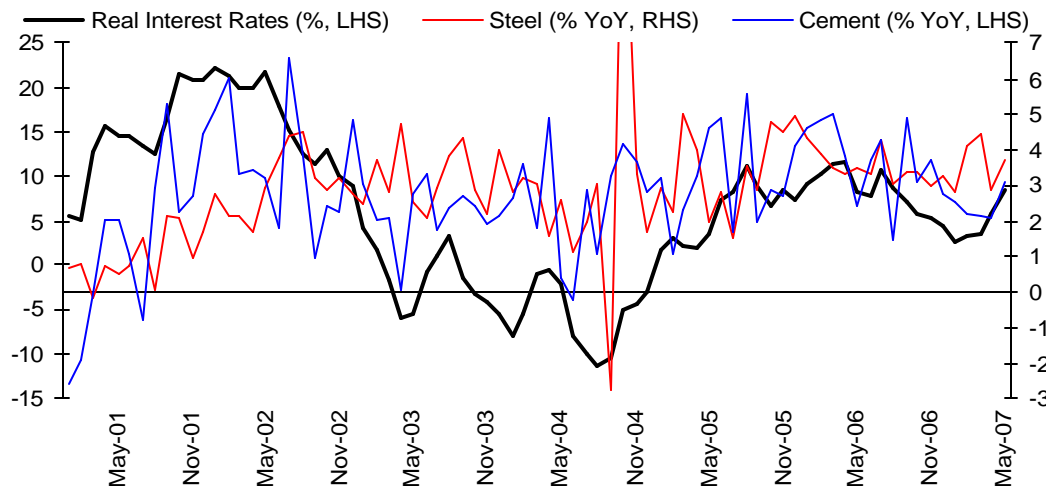
Source: Bloomberg , Kotak Mahindra Bank

Commercial real estate growth has come off its recent peaks



Source: Bloomberg , Kotak Mahindra Bank

Cement and steel sector growth seems to have plateaued



Source: Bloomberg , Kotak Mahindra Bank

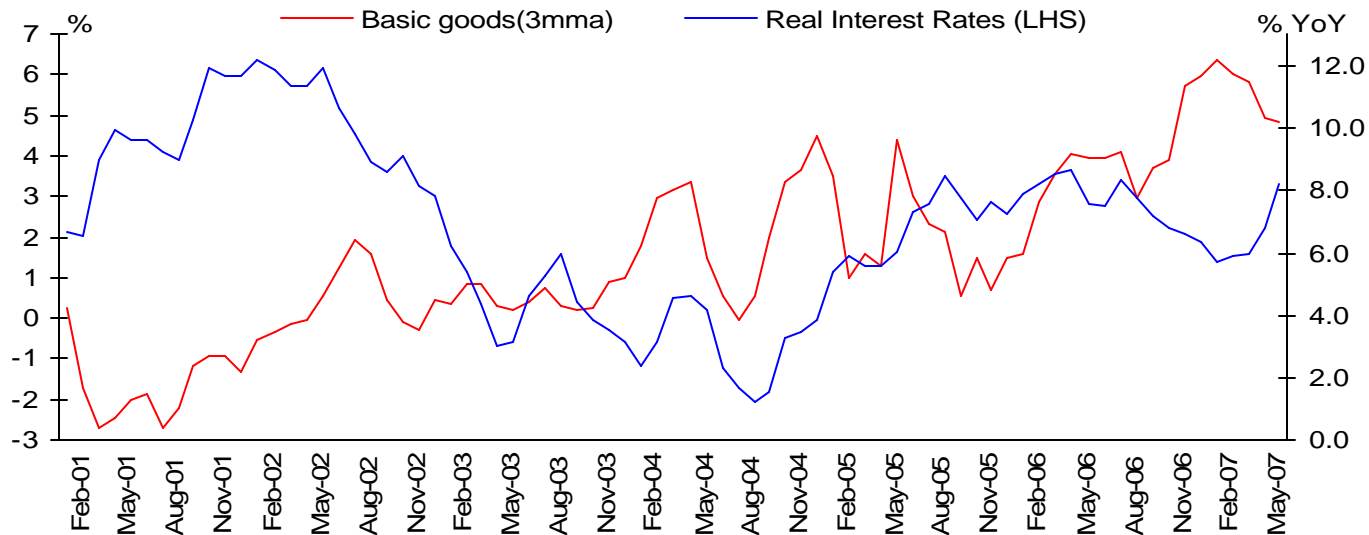
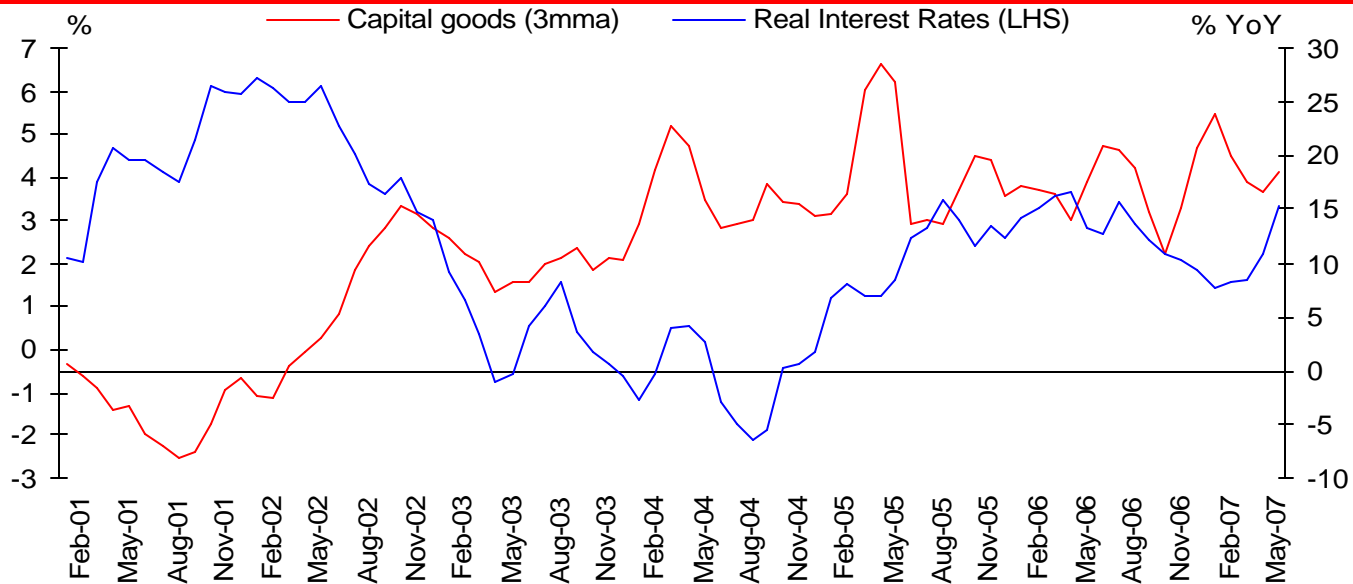
➤ Real estate prices down from their peaks; anecdotal evidences also point to activity slowing

➤ General interest rate tightening by RBI along with stricter regulatory norms for the real estate sector seems to be having the desired result

➤ Cement and Steel sector growths also appear to be stabilizing on a trend path basis

➤ Expenditure on infrastructure by the government will however limit any sharp dip in the cement and steel sector growth

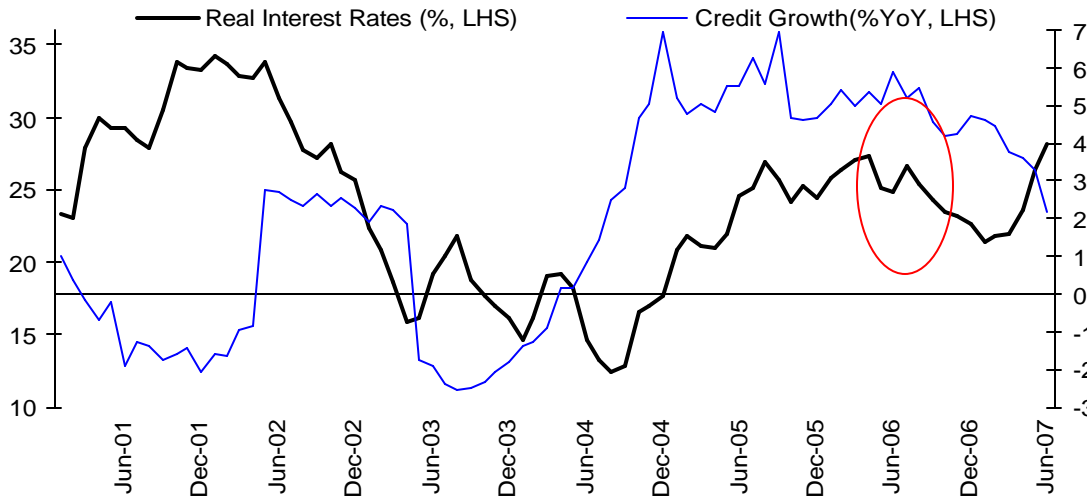
Capital and basic goods growth show some moderation



**The demand side story:
also suggesting a soft landing**

The demand side also seems to be moderating: credit growth is down to RBI's comfort zone

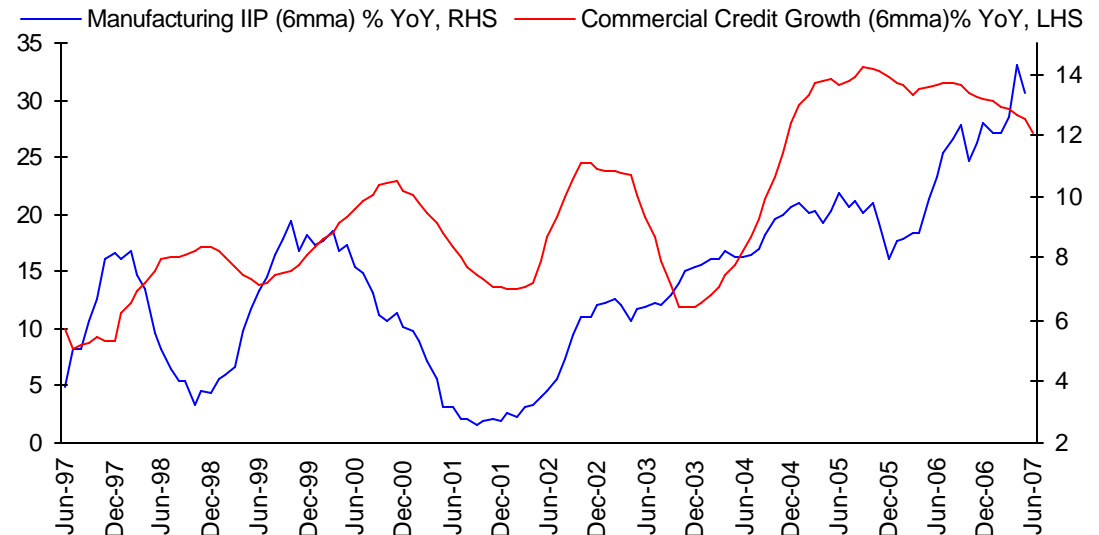
Rising real interest rates pull down credit growth



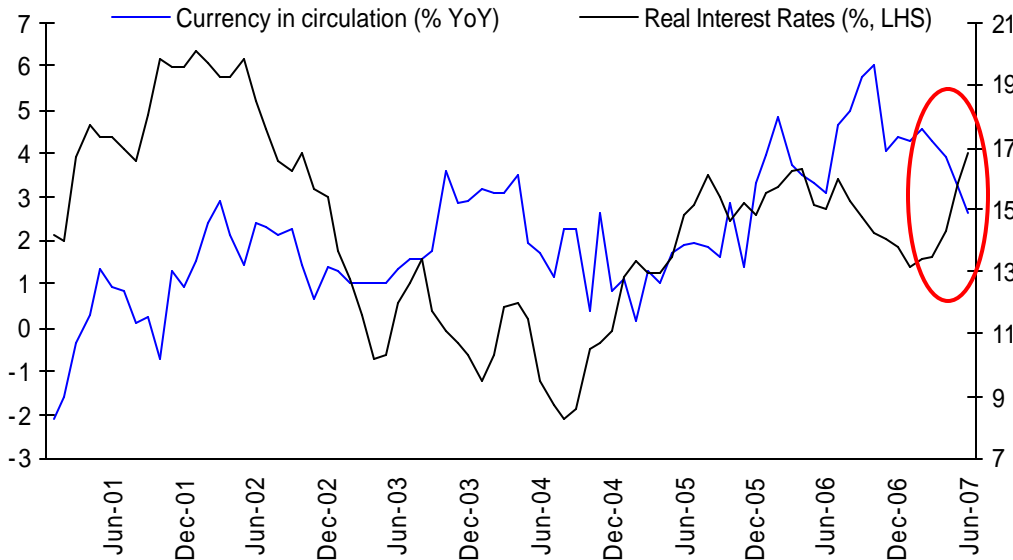
➤ **Credit growth reduces to around 24% y-o-y while RBI's stated comfort zone for 2007-08 is at 24-25%**

Source: Bloomberg , Kotak Mahindra Bank

➤ **Dip in commercial credit growth is also likely to pull down industrial production with a lag**



Source: Bloomberg , Kotak Mahindra Bank



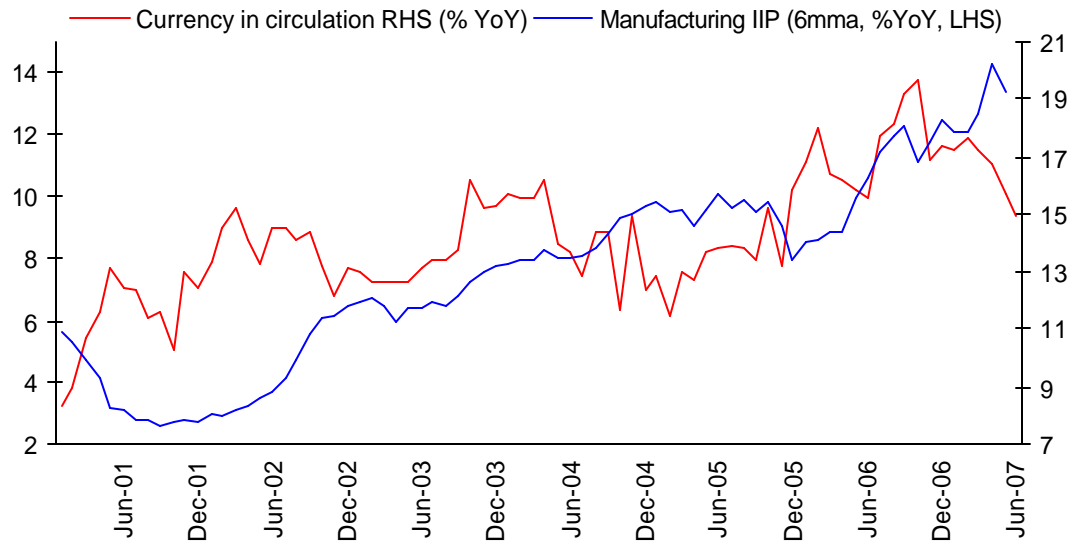
➤ **Currency in circulation (CIC) is an indicator of demand pull and this has moved down**

➤ **However, historically CIC is not very strongly correlated with real interest rates**

Source: Bloomberg , Kotak Mahindra Bank

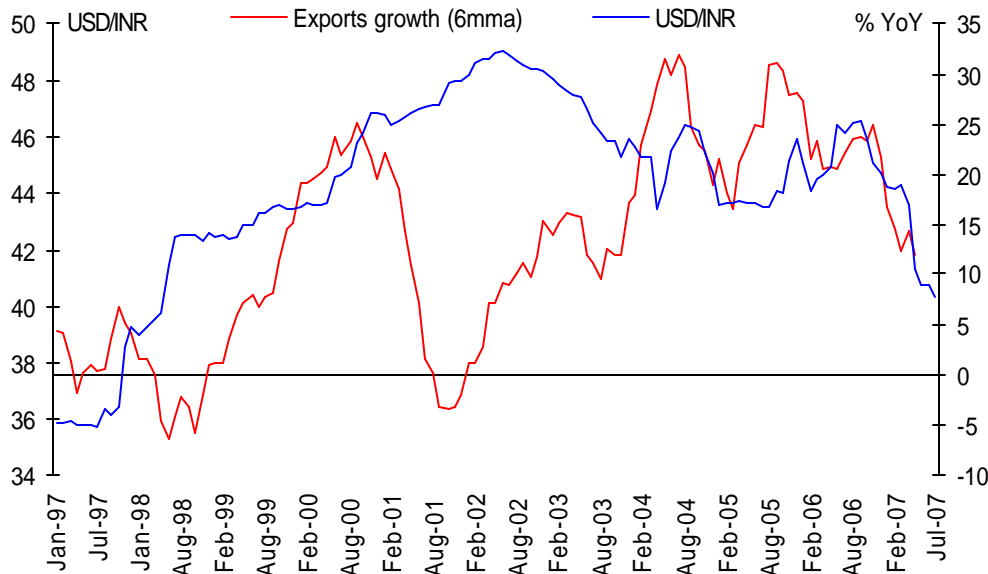
➤ **There appears to be a better correlation between CIC and manufacturing IIP**

➤ **A dip in CIC thus should lead to a moderation in manufacturing IIP**



Source: Bloomberg , Kotak Mahindra Bank

Slowdown in manufacturing sector to also come from moderation in exports growth

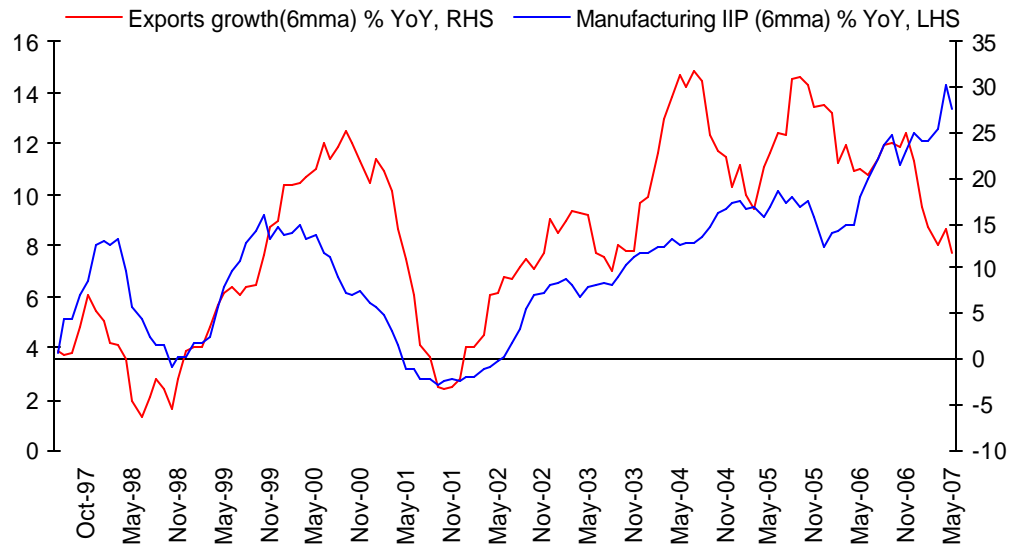


Source: Bloomberg , Kotak Mahindra Bank

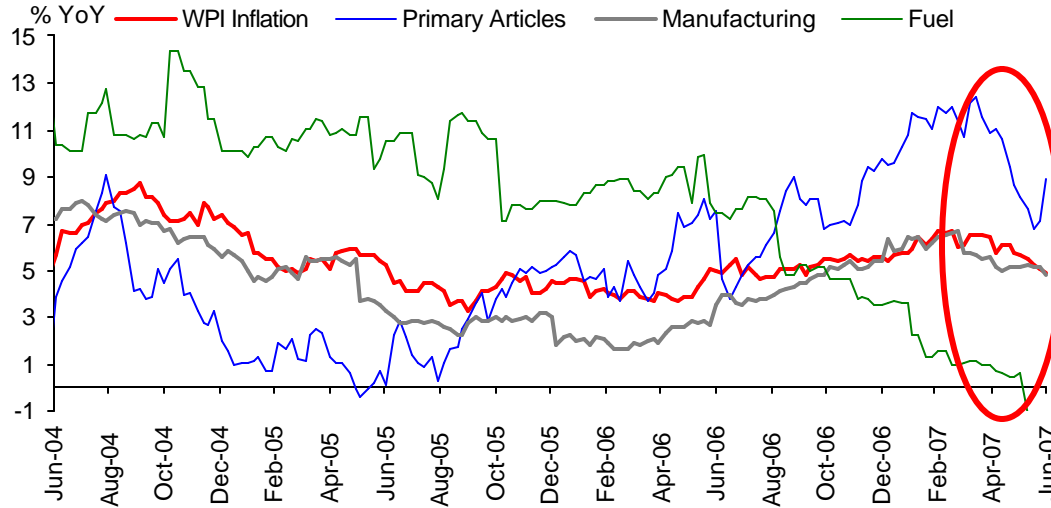
- Exports growth broadly associated with rupee depreciation
- Current phase of sharp rupee appreciation has already started to hurt exports growth
- Dips in exports growth are likely to continue going ahead as global growth also slows

➤ Export growth and manufacturing also appear to be correlated

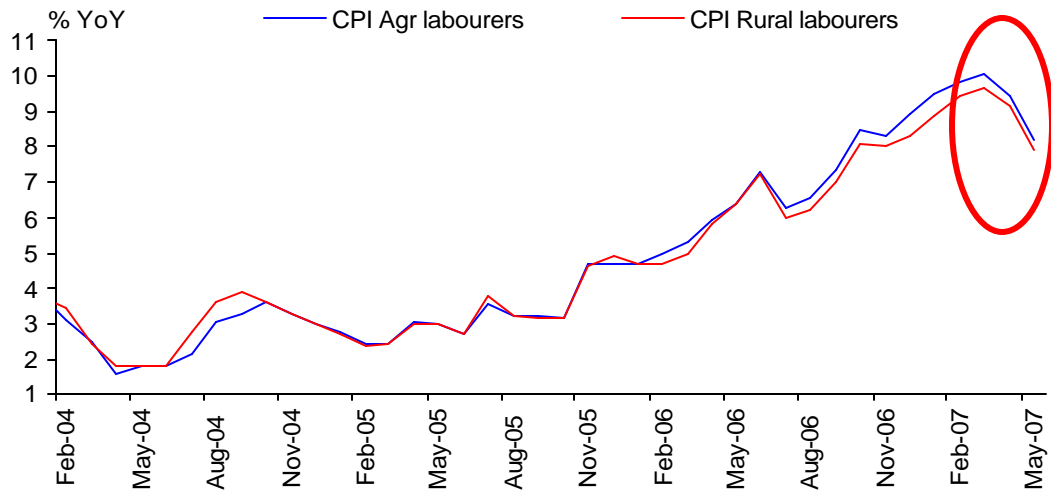
➤ Our expectation of more dips in exports lead us to believe that manufacturing growth will taper



Source: Bloomberg , Kotak Mahindra Bank



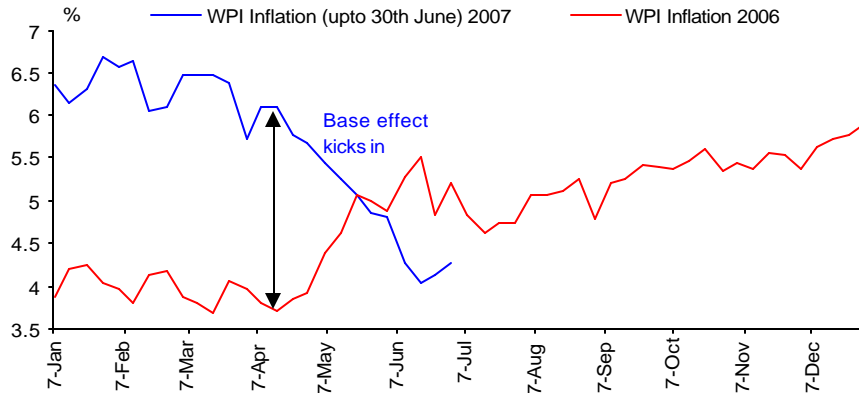
Source: Bloomberg , Kotak Mahindra Bank



Source: Bloomberg , Kotak Mahindra Bank

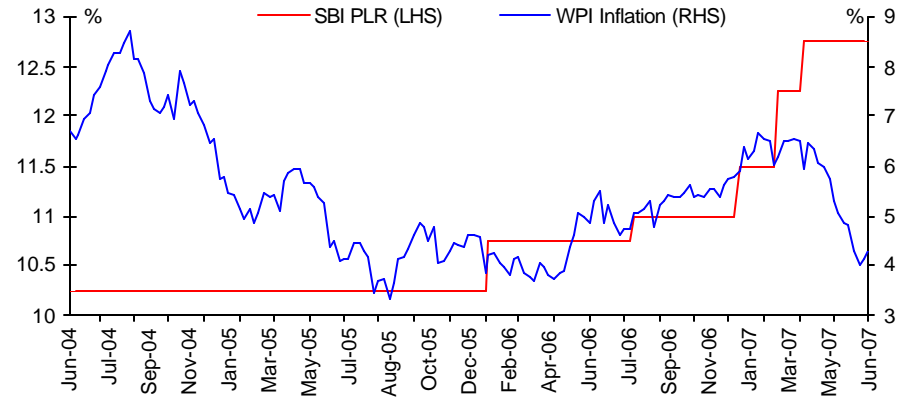
- **WPI inflation has come down to 4.27% from a peak of 6.7% in Jan'07**
- **The softening was led by dips in primary articles (food prices) inflation and fuel group inflation**
- **CPI inflation of agricultural and rural labourers have also come off its peak of around 10% in Mar'07 to 8% in May'07**
- **The softening of food articles inflation has led to the dips in the CPI for the above category**

A favourable base effect of the last year



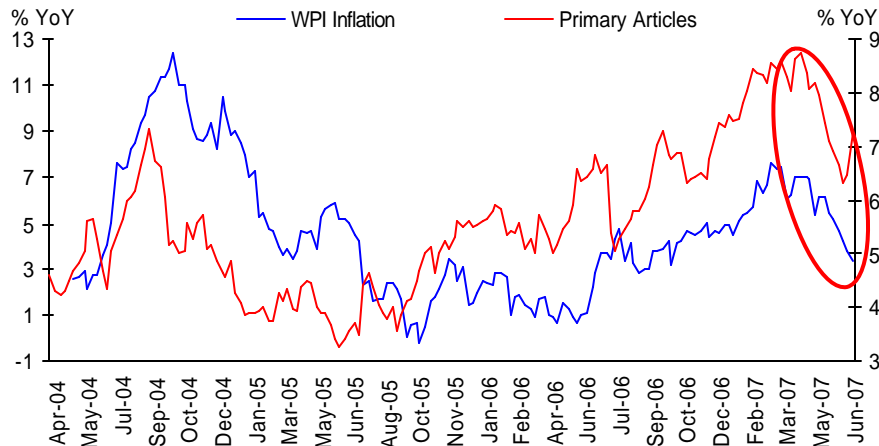
Source: Bloomberg , Kotak Mahindra Bank

Rising interest rates



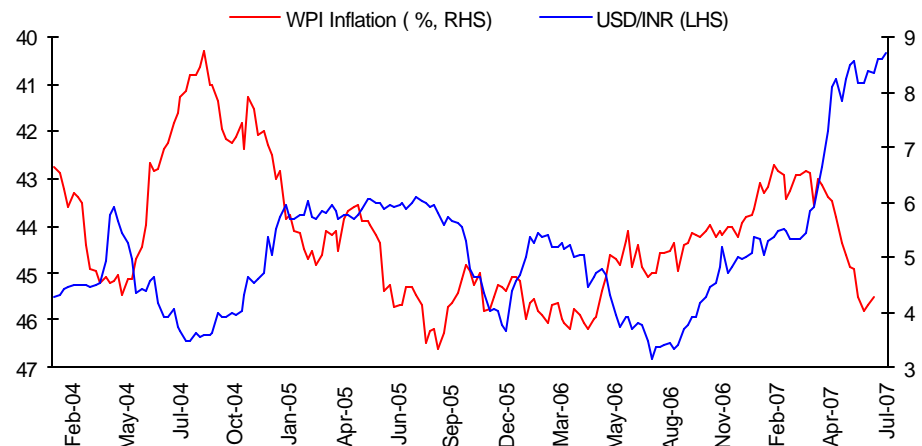
Source: Bloomberg , Kotak Mahindra Bank

A sharp decline in primary articles inflation



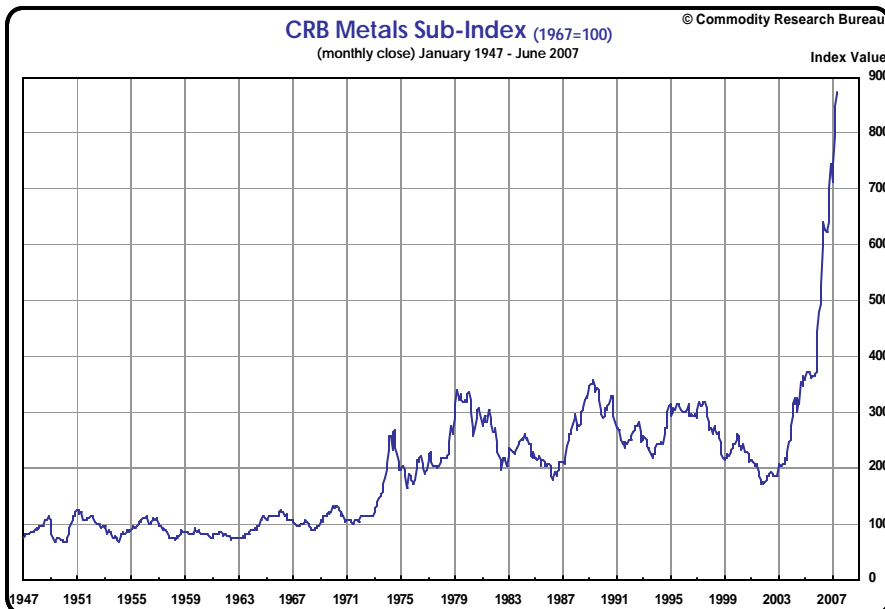
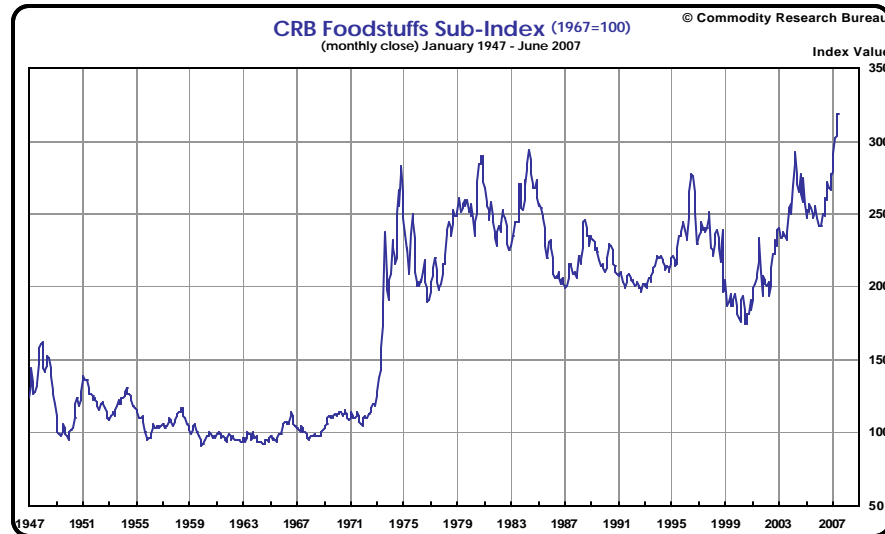
Source: Bloomberg , Kotak Mahindra Bank

A strong rupee

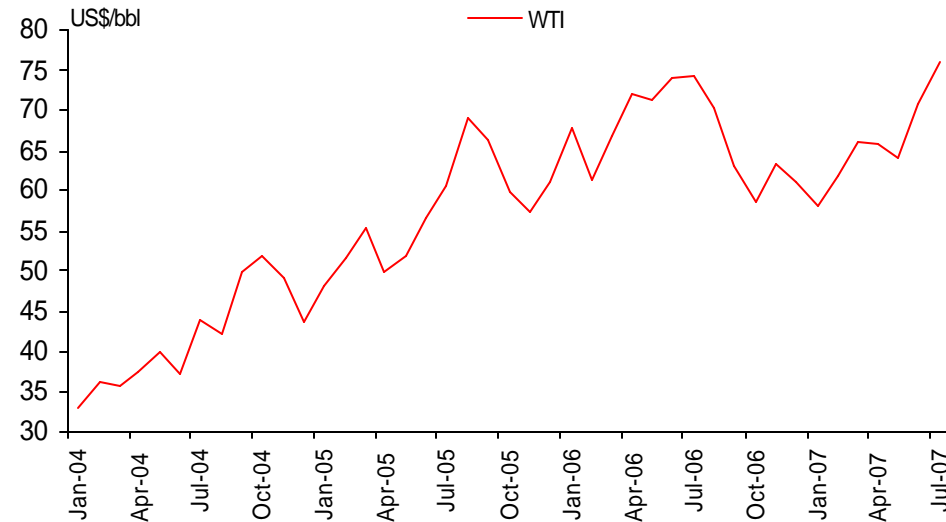


Source: Bloomberg , Kotak Mahindra Bank

- **The growth trend has definitely started to moderate**
 - The moderation has been led by dips in the interest sensitive sectors such as auto and real estate and is yet to spread across the board
 - With exports growth also showing a moderation, the slowdown in the production sector is likely to gradually spread to other sectors too
 - Monetary policy transmission operates with a significant lag and the full impact of the aggressive tightening by RBI between Dec 2006 and March 2007 is yet to be fully felt
- **The demand side indicators are also witnessing dips**
 - The most significant is a sharp dip in non-food credit off take, down by Rs 12,094cr in the fiscal so far against a rise of Rs 36,654cr in the same period last year
 - Headline WPI inflation has moderated and we identify monetary tightening as one of the reasons
- **The slowdown is however unlikely to be severe with global liquidity still pushing up the stock markets and keeping the feel-good factor intact**

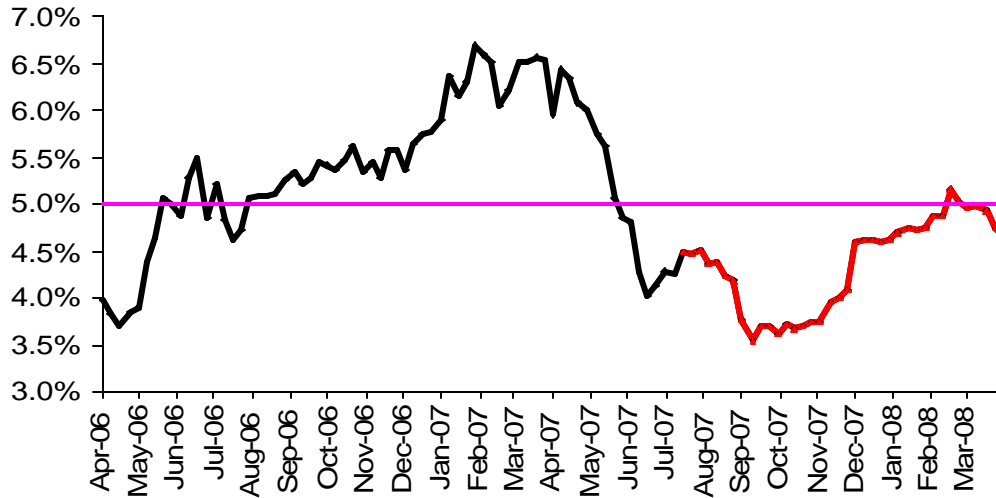


Source: crbtrader.com

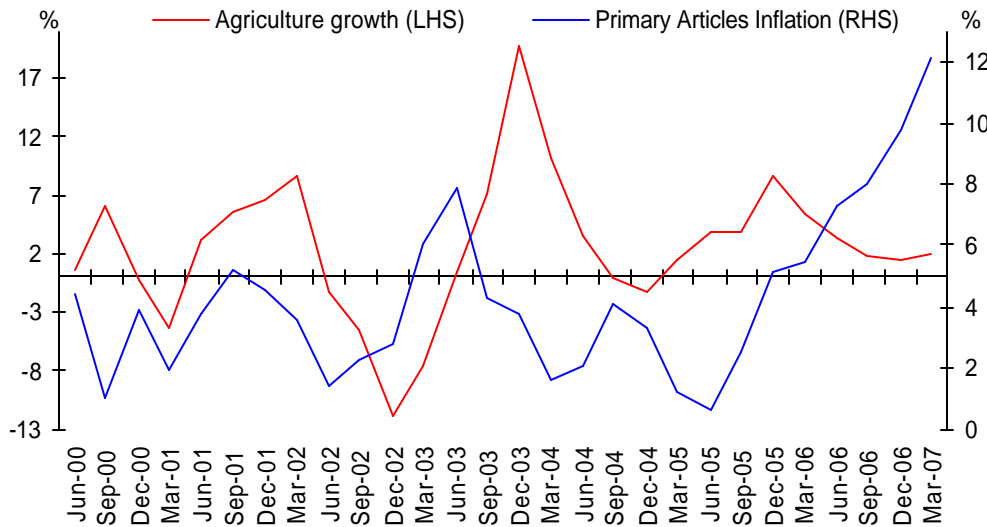


Source: Bloomberg , Kotak Mahindra Bank

- **All major Central Banks of the world continue to stay cautious on inflation and maintains a hawkish policy stance even as growth slows**
- **International crude oil prices have firmed up and are unlikely to reduce soon as demand for oil remains high**
- **The graphs indicate that globally price pressures are likely to sustain**

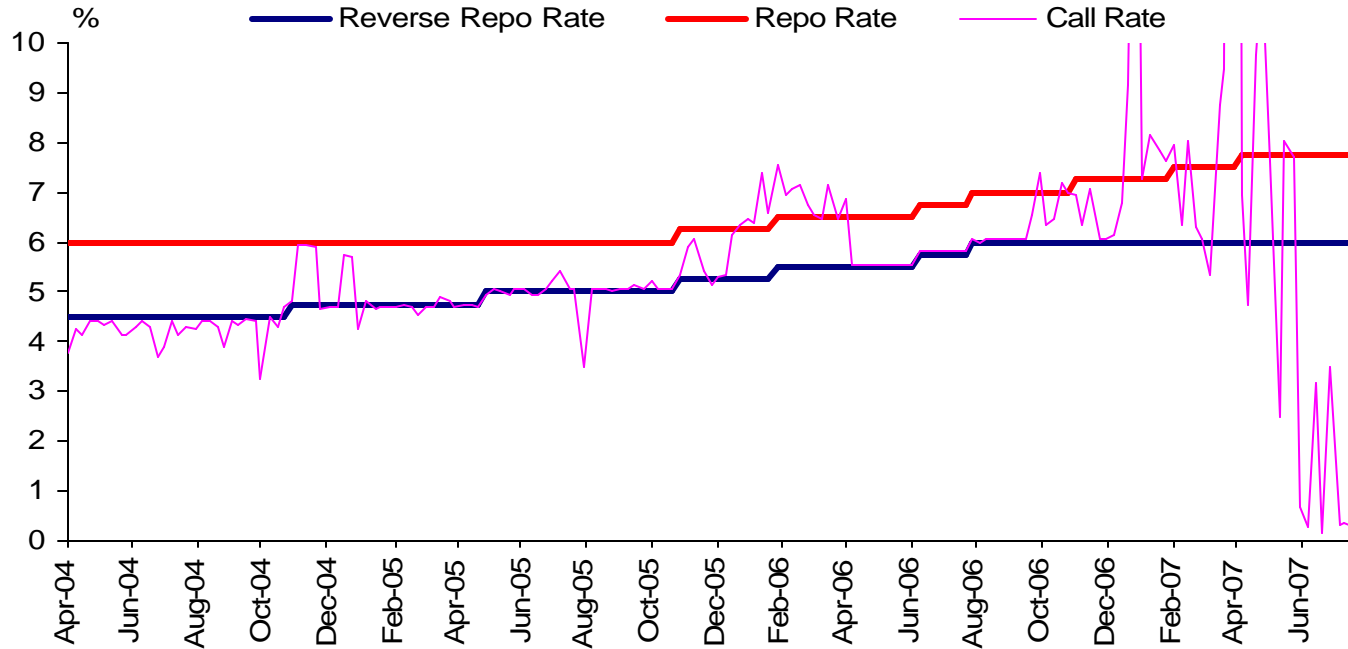


Source: Bloomberg , Kotak Mahindra Bank



Source: Bloomberg , Kotak Mahindra Bank

- We project inflation to move back to around 5% (the red line) in early 2008 and have assumed one round of domestic fuel price hike post state elections
- Globally firm food and metal prices is unlikely to prevent dips in domestic inflation
- The sharp increase in foreign capital flows is also likely to prove inflationary with a lag, if not sterilized
- Primary articles prices seen correlated with agriculture production with a lag
- Hence, there is always a risk of rise in primary articles inflation if monsoon fails and if agricultural production does not rise



Source: Bloomberg , Kotak Mahindra Bank

- **RBI has allowed overnight money rates to languish at near zero levels for a significant period, leading to a market belief that RBI has slackened its monetary policy stance**
- **This scenario risks the undoing of the previous tightening measures of RBI**
- **We expect RBI to correct this situation by doing away with the Rs 3,000 cr acceptance cap on Reverse Repo, thus leading to the overnight money market rates to correct back to the interest rate corridor**

- **There is possibly no case for any more policy tightening by RBI immediately**
 - **The lagged effect of the previous rate hikes are taking effect now in the form of moderation in the real sector growth**
 - **We expect GDP growth to moderate to 8.5% in FY08 from 9.4% in the last year**
- **RBI is likely to stay hawkish and maintain its cautious stance on inflation**
- **Even though we do not expect any harsh steps such as another CRR hike on July 31st, this possibility cannot be totally ruled out at a future date**
 - **The CRR option is likely to be used in the event of a necessity of the RBI to buy a large amount of foreign exchange at one go to prevent a sharp appreciation of the rupee**

In the preparation of the material contained in this document, Kotak Mahindra Bank Ltd. (Kotak Bank), has used information that is publicly available, including information developed inhouse. Some of the material used in the document may have been obtained from members/persons other than the Kotak Bank and/or its affiliates and which may have been made available to Kotak Bank and/or its affiliates. Information gathered & material used in this document is believed to be from reliable sources. Kotak Bank however does not warrant the accuracy, reasonableness and/or completeness of any information. For data reference to any third party in this material no such party will assume any liability for the same. Kotak Bank and/or any affiliate of Kotak Bank does not in any way through this material solicit any offer for purchase, sale or any financial transaction/commodities/products of any financial instrument dealt in this material. All recipients of this material should before dealing and or transacting in any of the products referred to in this material make their own investigation, seek appropriate professional advice.

We have included statements/opinions/recommendations in this document which contain words or phrases such as "will", "expect" "should" and similar expressions or variations of such expressions, that are "forward looking statements". Actual results may differ materially from those suggested by the forward looking statements due to risks or uncertainties associated with our expectations with respect to, but not limited to, exposure to market risks, general economic and political conditions in India and other countries globally, which have an impact on our services and / or investments, the monetary and interest policies of India, inflation, deflation, unanticipated turbulence in interest rates, foreign exchange rates, equity prices or other rates or prices, the performance of the financial markets in India and globally, changes in domestic and foreign laws, regulations and taxes and changes in competition in the industry. By their nature, certain market risk disclosures are only estimates and could be materially different from what actually occurs in the future. As a result, actual future gains or losses could materially differ from those that have been estimated.

Kotak Bank (including its affiliates) and any of its officers directors, personnel and employees, shall not liable for any loss, damage of any nature, including but not limited to direct, indirect, punitive, special, exemplary, consequential, as also any loss of profit in any way arising from the use of this material in any manner. The recipient alone shall be fully responsible/ are liable for any decision taken on the basis of this material. The investments discussed in this material may not be suitable for all investors. Any person subscribing to or investing in any product/financial instruments should do so on the basis of and after verifying the terms attached to such product/financial instrument. Financial products and instruments are subject to market risks and yields may fluctuate depending on various factors affecting capital/debt markets. Please note that past performance of the financial products and instruments does not necessarily indicate the future prospects and performance thereof.

Such past performance may or may not be sustained in future. Kotak Bank (including its affiliates) or its officers, directors, personnel and employees, including persons involved in the preparation or issuance of this material may; (a) from time to time, have long or short positions in, and buy or sell the securities mentioned herein or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation in the financial instruments/products/commodities discussed herein or act as advisor or lender/borrower in respect of such securities/financial instruments/products/commodities or have other potential conflict of interest with respect to any recommendation and related information and opinions. The said persons may have acted upon and/or in a manner contradictory with the information contained here. No part of this material may be duplicated in whole or in part in any form and or redistributed without the prior written consent of Kotak Bank. This material is strictly confidential to the recipient and should not be reproduced or disseminated to anyone else.



Thank You