20 August 2009 | 12 pages

India Banks

Equity

Before Rates Rise, Stocks Fall

- **Bond yields and bank stocks: gearing for rate hikes** — India's bond yields are moving up: short/long end of the yield curve has moved 20-100bps over the last quarter, the 1-10-yr bond spread is now at a record high, and CIRA estimates an aggressive 125bps tightening cycle starting May 2010 (consensus: 150-200bps). Indian bank stocks have started moving down: 3% underperformance in last 1M. Is it too early for stocks to move down? History suggests no. Stocks start doing poorly much before rates actually go up, and now is the time to position for it.

- **Don't wait for the hike: 6 months ahead is not early enough** — If you want to time it and play it, here are four things to watch for: a) Repo rate hikes – rather than lending/deposit rates, or the CRR – impacts stocks most; b) Biggest impact is 6M before actual hikes(14% underperformance over 2005-08), underperformance moderates as we get closer to actual hikes; c) Stocks outperform post rate hike: +5% outperformance 3M post hike; and d) PSU Banks are more sensitive, fall more before a hike, and rise more later. History often repeats, will it this time?

- **Rate hikes: Good for the P&L, bad for balance sheet** — Fundamentally, banks' NIMs are supported by rising rates (ALM mismatch, shorter asset duration); however, this is offset by a) value erosion in fixed income book (30% of assets), and some P&L impact; b) lower expected loan growth; and c) higher asset risk perceptions. Effectively, P&L gains are more than offset by balance-sheet pains.

- **Caution, the better part of valour** — Historically, rising rates have hurt bank stocks despite robust growth, asset quality outlook. With a less certain loan growth and quality outlook this time, we remain cautious near term, particularly on PSU banks.

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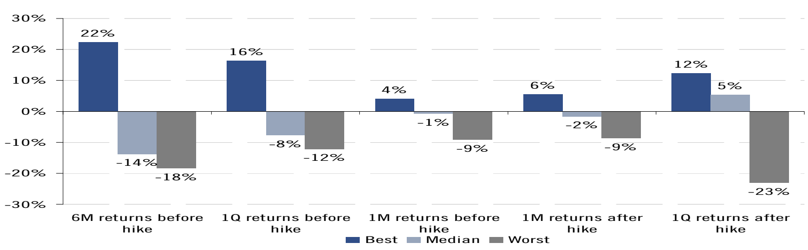
Figure 1. REPO Hikes and Bankex Relative Performance since 2005 (Percent)



Source: Citi Investment Research and Analysis

See Appendix A-1 for Analyst Certification and important disclosures.

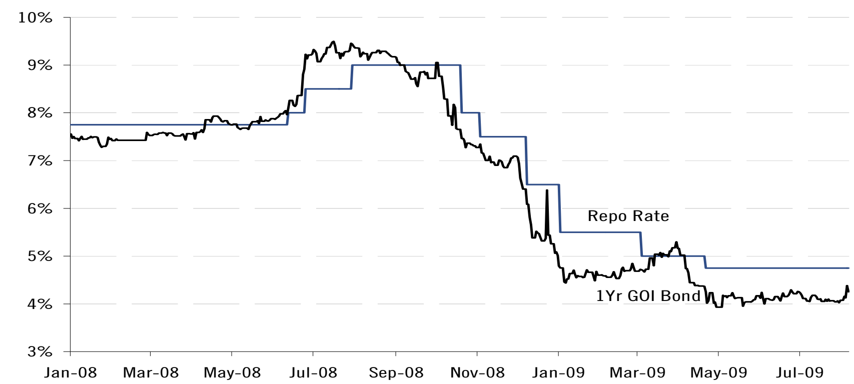
Positioned for a Rate Hike?

1-Year Government Bond yields have closely tracked changes in policy rates and have been a leading indicator of such changes in the past....

Current uptick in rates appears to be a move toward the current policy rates rather than firmly implying a near-term rate hike

Our economist *Rohini Malkani* is calling for a 125bps hike in policy rates beginning May 2010

Figure 2. REPO Rates and 1-Year Government Bond Yields (Percent)

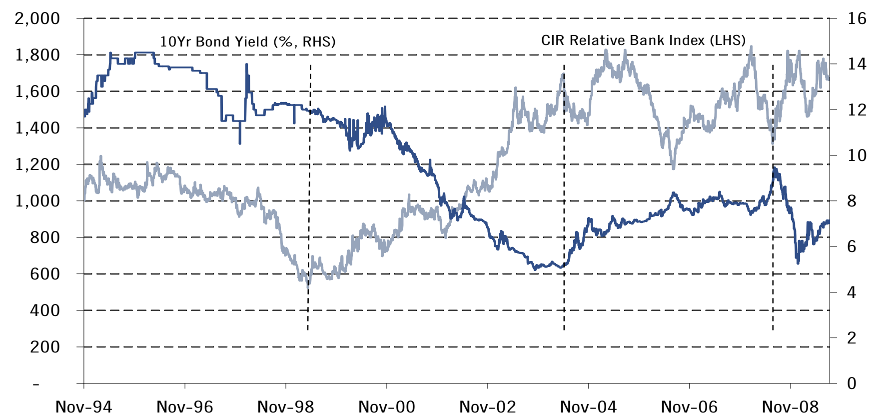


Source: Bloomberg, RBI

Historically banks have underperformed in rising rate environments...

Weak asset quality and low growth environment would exert further pressures on stock performance – current outlook remains uncertain on both

Figure 3. CIR Bank Index Performance (Relative to Sensex) and Bond Yields (Percent)



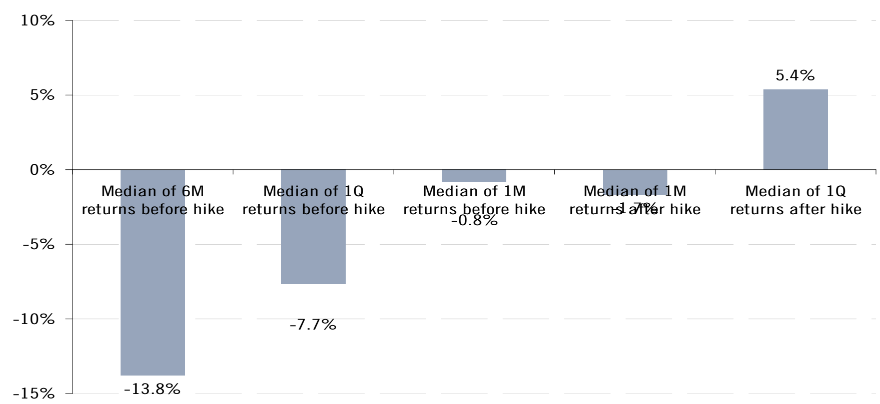
Source: Citi Investment Research and Analysis, Bloomberg

On average, banks underperform going into a rate hike

Stock performances suggest - the earlier we can anticipate the hike, the lesser the pain.

Post rate hikes, however, banks outperform – though the impact is relatively lower

Figure 4. Bankex Relative Performance (Median) Before and After REPO Hikes since 2005



Source: Citi Investment Research and Analysis

In 6/10 previous cases, banks have underperformed significantly 6m before policy rate hikes...

While the instances on underperformance rise 3m later, the extent falls with time – suggesting markets are quite efficient at rate hikes

In 7/10 cases banks have outperformed 3m post the rate hike...

There is, however, significant divergence between the best and the worst performances

Figure 5. Detailed Table of Bankex Performance (Relative to Sensex) and REPO Hikes

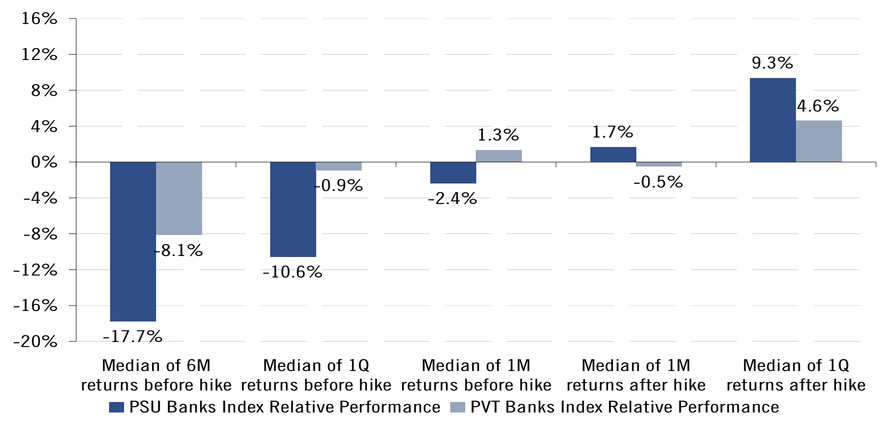
			BANKEX Relative Performance (%)				
Date	REPO Post-Hike (%)	Extent of Hike (bps)	6 Months Before	1 Qtr. Before	1 Month Before	1 Month After	1 Qtr. After
26-Oct-05	6.25	25	0.3	-8.4	-2.8	-4.5	-8.1
24-Jan-06	6.50	25	-17.9	-8.1	-2.8	-8.7	-23.1
09-Jun-06	6.75	25	-17.1	-7.2	-1.6	-8.4	0.4
25-Jul-06	7.00	25	-18.3	1.3	2.9	2.4	12.3
31-Oct-06	7.25	25	8.4	16.4	3.3	5.1	2.8
31-Jan-07	7.50	25	22.4	3.3	0.3	-2.6	-3.6
31-Mar-07	7.75	25	3.4	-2.5	0.0	-0.9	10.4
12-Jun-08	8.00	25	-14.0	-12.2	-9.2	-2.4	7.9
25-Jun-08	8.50	50	-13.5	-9.6	-5.4	3.9	9.6
30-Jul-08	9.00	50	-18.4	-8.7	4.1	5.5	9.1
Mean Returns (%)			**-6.5**	**-3.6**	**-1.1**	**-1.1**	**1.8**
Median Returns (%)			**-13.8**	**-7.7**	**-0.8**	**-1.7**	**5.4**

Source: RBI, Bloomberg, Citi Investment Research and Analysis

PSU Banks are more leveraged to the changes in interest rates – likely through their longer duration bond portfolio

Past data indicates PSU Banks significantly underperform the privates before rate hikes and vice versa after the event

Figure 6. PSU and Private Banks Relative Performances Before and After REPO Hikes



Source: Citi Investment Research and Analysis

PSU banks have underperformed in 8/10 cases (6M prior, for the early birds) and in 9/10 cases (3M prior).

Data suggests closer you are to the rate cut the more likelihood of PSU Banks underperforming – though the extent of it is sharply lower.

As with the overall sector, PSU banks also tend to outperform post rate hikes – though the volatility of individual instances of returns are significantly higher

Figure 7. Detailed Table of PSU Banks Performance (Relative to Sensex) and REPO Hikes

			CIR PSU Bank Index Relative Performance (%)				
Date	REPO Post-Hike (%)	Extent of Hike (bps)	Pre 6M	Pre 1Q	Pre 1M	Post 1M	Post 1Q
26-Oct-05	6.25	25	-2.0	-9.3	-2.3	-6.5	-13.9
24-Jan-06	6.50	25	-24.5	-13.9	-2.5	-12.5	-25.5
09-Jun-06	6.75	25	-23.0	-9.9	-2.7	-15.2	0.0
25-Jul-06	7.00	25	-28.2	-7.5	-2.2	8.5	18.8
31-Oct-06	7.25	25	5.3	16.6	-2.0	3.4	-10.6
31-Jan-07	7.50	25	6.0	-11.2	-7.4	-5.2	-2.5
31-Mar-07	7.75	25	-17.5	-12.0	-1.7	3.8	27.0
12-Jun-08	8.00	25	-18.0	-13.7	-9.4	1.5	18.7
25-Jun-08	8.50	50	-17.9	-12.8	-9.4	17.4	28.3
30-Jul-08	9.00	50	-13.0	-4.3	15.5	1.8	19.8
Mean Returns (%)			**-13.3**	**-7.8**	**-2.4**	**-0.3**	**6.0**
Median Returns (%)			**-17.7**	**-10.6**	**-2.4**	**1.7**	**9.3**

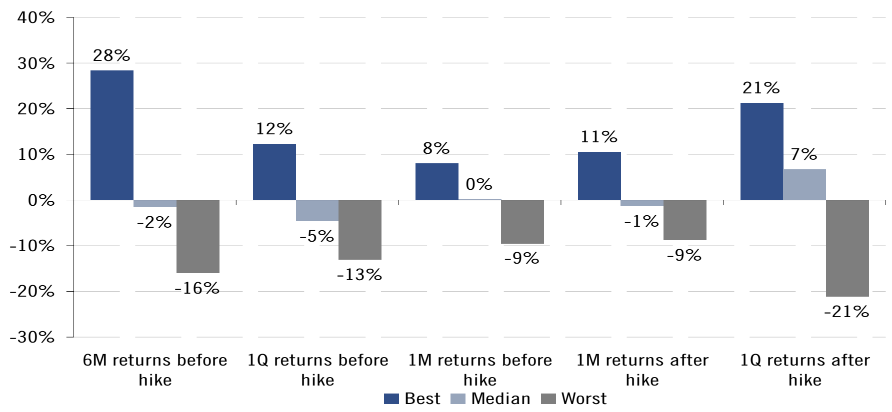
Source: Citi Investment Research and Analysis

The trend of stock outperformance/ underperformance is similar in the case of a CRR hike

However, the strength of the performance (either direction) is more muted relative to a REPO hike

We do not expect CRR hikes near term – as the government is more likely to err on the side of higher growth given low/ negative inflation levels currently

Figure 8. CRR Hikes and CIR Bank Index Relative Performance since 1997 (Percent)



Source: Citi Investment Research and Analysis

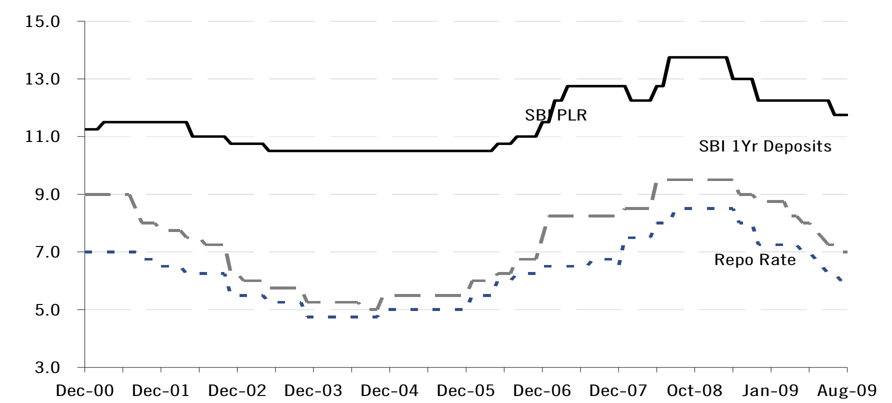
Fundamental Impact of Rate Hikes

Changes in policy rates impact lending and borrowing rates – but with a lag

Typically lending rates react first (with 2-3M) followed by deposit rates (3-6M)

This will, however, also be impacted by the prevailing liquidity and credit growth environments

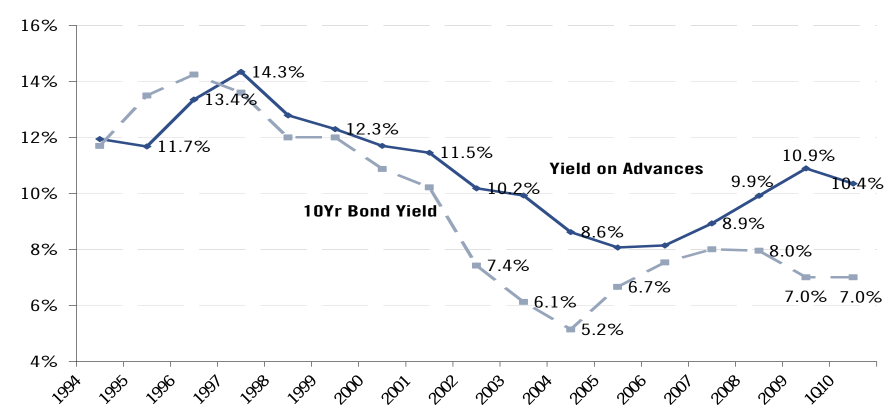
Figure 9. REPO Rate, SBI PLR and Deposit Rates (%)



Source: Citi Investment Research and Analysis

While yields rose in FY09, they have started moderating sharply in the current year....rate hikes would reverse this, and align it with the direction of bond yields...this will moderate yield pressure, though could be with a slight lag

Figure 10. Yield on Advances and 10-Year Bond Yield (%)

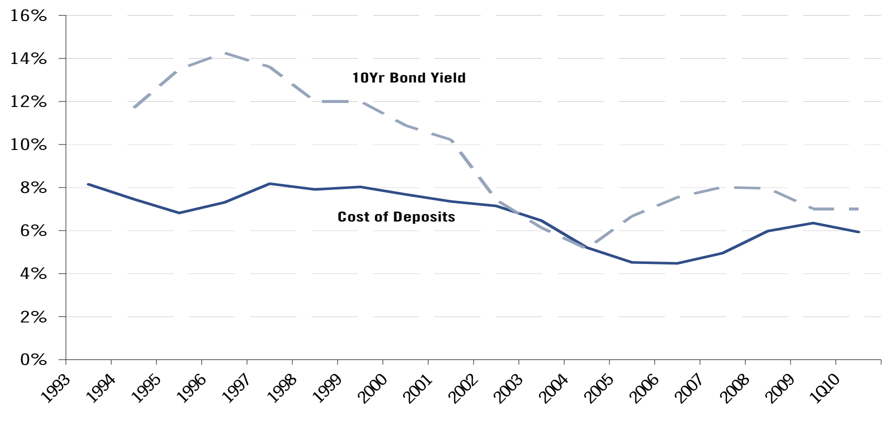


Source: Citi Investment Research and Analysis

Cost of funds have started to come down, especially driven by significant excess liquidity in the system as well as recent aggressive deposit rate cuts

We expect deposit rates to reduce further, especially in 2H10 and be a support for NIMs (albeit of a low level)

Figure 11. Cost of Deposits and 10-Year Bond Yield (%)



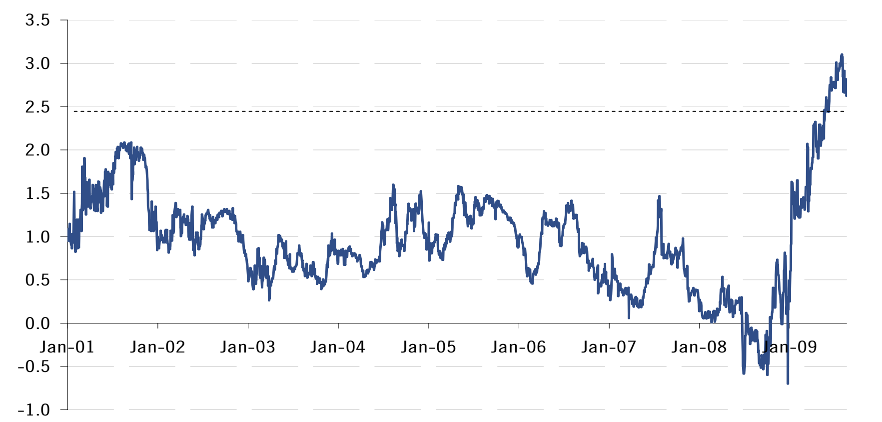
Source: Citi Investment Research and Analysis

India's sovereign yield curve has steepened significantly – more than any other time in the last decade

This liquidity driven steepness of the yield curve has sharply increased the incremental loan spreads banks are currently enjoying (riding the yield curve)

However, this is showing initial signs of contracting and could pressure NIMs if it contracts further

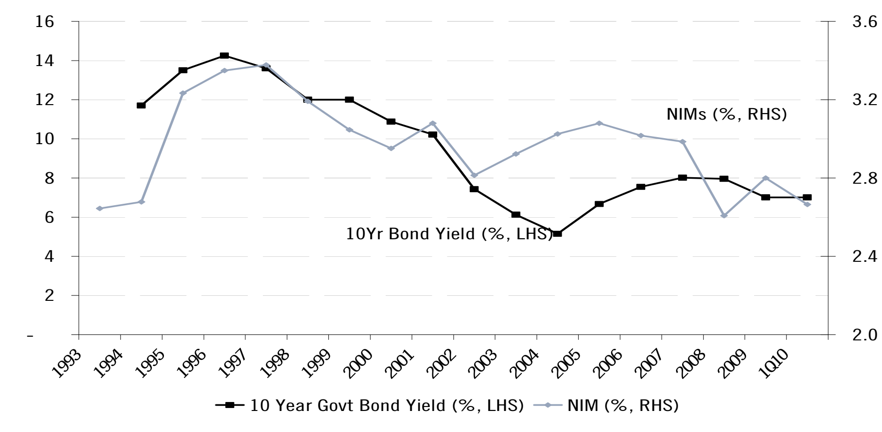
Figure 12. India – 10-Year – 1-Year Spread (%)



Source: Bloomberg

NIMs for banks have been higher despite lower interest rates, this is largely driven by the historically high 'steepness' of the domestic yield curve, increasing the loan spreads enjoyed by banks…this could well sustain, given our view of greater rate pressure on the long end

Figure 13. Net Interest Margins and 10 Year Bond Yield (%)



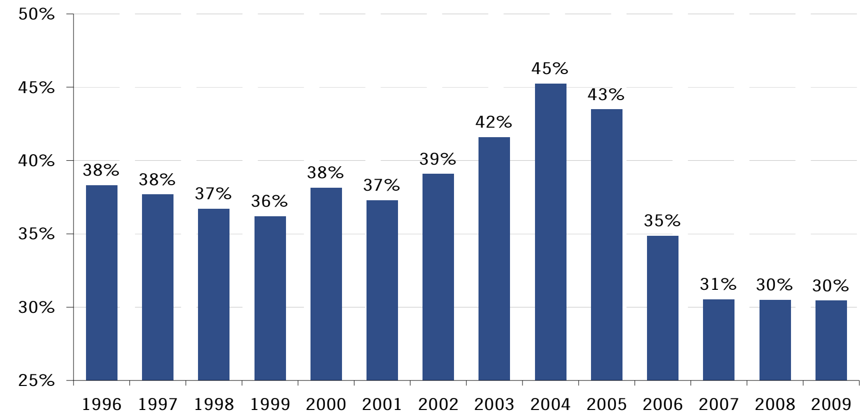
Source: Citi Investment Research and Analysis

While banks' bond portfolios have come down over the years - reducing earnings sensitivity to bond yields

Bonds are still a significant portion of balance sheets (30%)

Any increase in yields will reduce asset values and impact the income statements as well (though these are largely protected through higher HTM portfolios (not required to be marked to market)

Figure 14. SLR Bonds to Deposits (%)

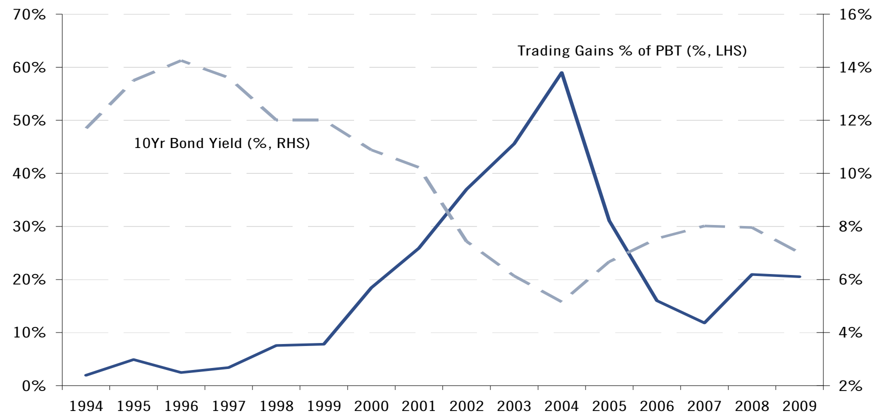


Source: Citi Investment Research and Analysis

Trading gains have been a significant portion of banks earnings recently (over 20% of pre-tax profits)

Rise in bond yields will, however, pressure earnings as trading gains are likely to reduce significantly

Figure 15. Trading Gains As % of PBT and 10-Year Bond Yields (%)



Source: Citi Investment Research and Analysis

Government owned banks are more sensitive to changes in interest rates –

a) impact of a rise in NIMs on earnings are relatively higher for PSU Banks (Positive if rates rise)

b) impact of rise in bond yields on earnings and book values are also higher (Negative if rates rise) and more than offset the positives from rise in NIMs

Figure 16. Sensitivity of PSU Bank Earnings and Book Value to Rate Changes

PSU Banks	Impact on FY10E PAT for a rise in NIMs (%)	CASA (%)	Impact on FY10E PBT for a rise in bond portfolio yields (%)	Impact on FY10E Book Value for a rise in bond portfolio yields (%)
	10 bps rise in NIMs	FY09	50 bps Rise in Yields	50 bps Rise in Yields
SBI	9.6%	41.6%	-5.8%	-1.3%
PNB	7.6%	38.8%	-2.5%	-0.7%
BOB	10.1%	29.6%	-5.4%	-1.3%
Canara	10.2%	30.2%	-9.4%	-1.0%
Union	9.2%	30.1%	-7.4%	-1.9%
Corporation	8.5%	31.4%	-3.8%	-1.0%
Oriental	10.9%	25.9%	-9.5%	-2.0%
Andhra	9.8%	31.4%	-5.1%	-1.3%
Central	22.0%	33.4%	-11.6%	-2.0%

Source: Citi Investment Research and Analysis

Private banks have lesser sensitivity of earnings due to rise in NIMs

However, the offsetting impact of bond portfolio write-downs are also significantly lower due to their lower investment durations

Figure 17. Sensitivity of Private Bank Earnings to Rate Changes

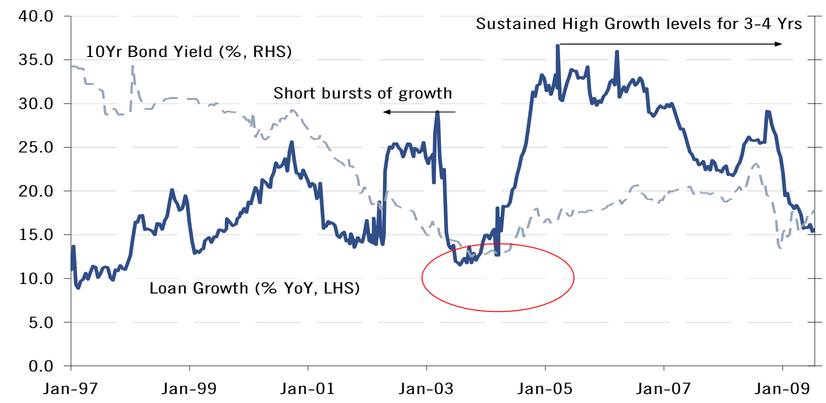
Bank	Change in PAT (%) for a rise in NIMs	CASA (%)
	10 bps rise in NIMs	FY09
ICICI Bank	8.7%	28.7%
HDFC Bank	6.4%	44.4%
Axis Bank	6.9%	43.1%
Kotak	3.9%	31.8%
IDFC	3.0%	NM
Yes Bank	6.9%	8.4%
Federal Bank	7.0%	24.5%

Source: Citi Investment Research and Analysis

Loan growth levels for industry have come down sharply (from its peak levels)

Higher interest rates are theoretically a negative influence on loan growth and higher rates could moderate any likely growth upsides

Figure 18. Loan Growth (%, LHS) and 10-Year Government Yield (%, RHS)

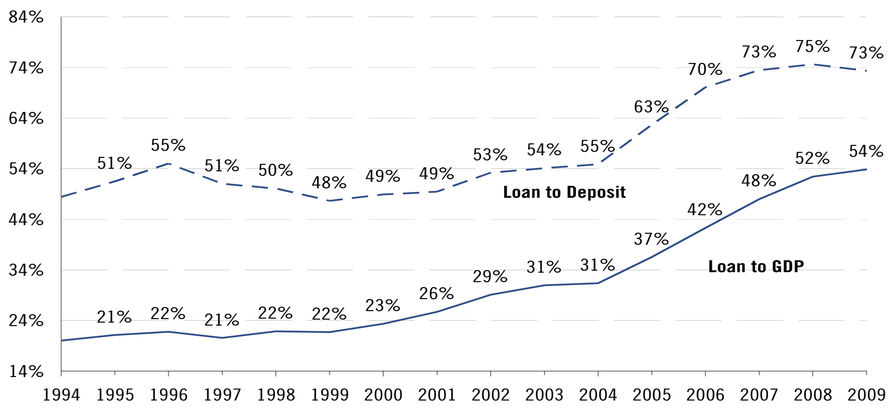


Source: Citi Investment Research and Analysis

In the past, loan growth was also driven by lower credit penetration levels, despite rising rates

With credit/GDP ratios now almost 2x that in early 2000s – a pickup in credit growth could be more moderate than history suggests

Figure 19. India: Loan to Deposit (%) and Loan to GDP (%) Ratios



Source: Citi Investment Research and Analysis

Figure 20. Indian Banks – CIRA Valuations

	RIC Code	Price (Rs) 20-Aug	TP (Rs)	Rating	P/E (x) 2010	P/B (x) 2010	ROE (%) 2010	ROA (%) 2010	Div. Yld 2010	M-Cap USD Mn	EPS Grth. 2010	EPS Grth. 2011	BVPS Grth. 2010	BVPS Grth. 2011
Private Sector Banks														
ICICI Bank	ICBK.BO	719.5	830	2M	19.8	1.5	8.1%	1.1%	1.5%	16,476	9%	27%	5%	7%
HDFC Bank	HDBK.BO	1480.6	1618	2L	21.1	3.6	18.9%	1.5%	0.6%	12,996	27%	32%	18%	21%
AXIS Bank	AXBK.BO	843.1	920	1M	13.8	2.5	19.9%	1.4%	1.2%	6,241	22%	27%	18%	20%
Kotak Mahindra Bank	KTKM.BO	701.7	639	3H	25.7	3.3	13.7%	2.2%	0.1%	5,003	45%	11%	14%	14%
Infrastructure Development Finance	IDFC.BO	130.7	104	3M	17.1	2.4	15.1%	3.0%	1.0%	3,482	32%	15%	13%	13%
Yes Bank	YESB.BO	159.9	164	1M	13.7	2.4	19.2%	1.5%	0.0%	977	14%	25%	21%	22%
Federal Bank	FED.BO	217.3	314	1M	6.3	0.8	12.8%	1.4%	2.1%	764	17%	13%	11%	12%
Government Banks														
State Bank of India	SBI.BO	1753.6	2122	1L	10.7	1.7	16.8%	1.0%	1.7%	22,901	14%	27%	14%	17%
Punjab National Bank	PNBK.BO	664.6	780	1M	6.1	1.3	21.3%	1.3%	3.0%	4,310	11%	15%	20%	20%
Bank of Baroda	BOB.BO	425.3	495	2M	6.7	1.2	16.7%	1.0%	2.1%	3,186	4%	17%	17%	17%
Canara Bank	CNBK.BO	262.4	310	1M	4.9	0.9	16.9%	1.0%	3.0%	2,213	7%	30%	18%	21%
Union Bank Of India	UNBK.BO	205.1	226	3L	5.7	1.2	19.0%	1.0%	2.4%	2,131	5%	11%	22%	20%
Oriental Bank of Commerce	ORBC.BO	165.5	250	1H	3.8	0.6	15.6%	0.9%	4.4%	853	19%	23%	13%	15%
Corporation Bank	CRBK.BO	372.3	425	1H	5.0	0.9	19.9%	1.1%	3.5%	1,098	19%	15%	18%	18%
Andhra Bank	ADBK.BO	89.1	87	3M	5.9	1.0	18.8%	1.0%	5.1%	889	12%	20%	13%	15%
Central Bank Of India	CBI.BO	99.0	78	3M	6.9	1.0	10.0%	0.4%	1.0%	823	12%	12%	15%	15%

Source: Citi Investment Research and Analysis

Appendix A-1

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% of companies in each rating category that are investment banking clients	46%	45%	39%

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