

## Company Focus

28 September 2007 | 32 pages

# Central Bank Of India (CBI.BO)

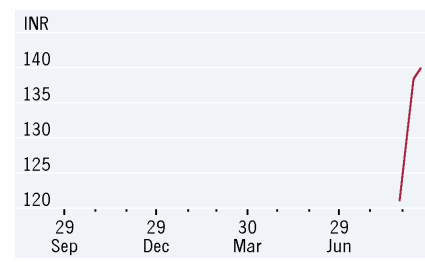
 Initiation of coverage 

## Initiating at Sell: Fundamentals Lag Stock Performance

- Initiating coverage at Sell** – We initiate coverage on Central Bank of India shares at Sell / High Risk (3H). The stock has returned over 40% from its offer price, and we believe the bank's relatively weaker profitability, asset quality, and technology platform limit potential upside.
- Industry outlook favorable** — We believe fundamental drivers for India's banks will remain attractive; the sector looks profitable, growing and healthy. Specifically we expect a) loans to grow a healthy but moderate 20-22% in FY08; b) stable margins, on relatively benign interest rates and liquidity; and c) limited asset quality deterioration, though this will be on the watch-list.
- Central Bank: Well positioned, strong distribution and deposit franchise** — Central Bank appears well positioned to capitalize on this growth through its strong pan-India distribution, above-industry deposit franchise and large corporate lending portfolio. We estimate pre-provision profits, earnings and loan growth of 16%, 13% and 18% over FY07-10E.
- But lags peers on asset quality, profitability and technology** — We expect profitability to remain structurally challenged amid competitive margins, low fees and higher NPLs and delinquencies relative to peers. Though management has taken corrective steps, we see only a gradual recovery.
- Valuation** — Rs130 TP based on EVA & supported by PBV of 1.2x FY09E, a slight discount to peers. We see it trading at lower end of PSU bank multiples.

Sell/High Risk	3H
Price (28 Sep 07)	Rs149.00
Target price	Rs130.00
Expected share price return	-12.8%
Expected dividend yield	2.3%
<b>Expected total return</b>	<b>-10.4%</b>
Market Cap	Rs60,217M US\$1,520M

### Price Performance (RIC: CBI.BO, BB: CBO1 IN)


**Figure 1. Statistical Abstract**

Year to	Net Profit	FD EPS	EPS Growth	P/E	P/BV	RoAE	ROAA	Div Yld
March 31	(Rs Mils.)	(Rs)	(%)	(X)	(X)	(%)	(%)	(%)
FY06	2,574	2.3	-28.0	63.3	5.6	7.7	0.4	0.3
FY07	4,978	15.4	570.7	9.4	1.9	15.5	0.6	2.1
FY08E	6,192	15.3	-0.2	9.5	1.6	17.3	0.6	2.4
FY09E	7,763	19.2	25.4	7.5	1.4	17.4	0.7	2.4
FY10E	8,984	22.2	15.7	6.5	1.2	17.6	0.7	2.8

Source: Citi Investment Research estimates

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

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Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
<b>Valuation Ratios</b>					
P/E adjusted (x)	65.1	21.7	8.8	7.8	6.7
P/E reported (x)	65.1	21.7	8.8	7.8	6.7
P/BV (x)	4.9	1.6	1.4	1.3	1.1
P/Adjusted BV diluted (x)	5.7	1.9	1.6	1.4	1.2
Dividend yield (%)	0.3	2.1	2.3	2.7	2.7
<b>Per Share Data (Rs)</b>					
EPS adjusted	2.29	6.87	17.00	19.21	22.23
EPS reported	2.29	6.87	17.00	19.21	22.23
BVPS	30.62	92.24	103.27	117.80	135.36
Tangible BVPS	30.62	92.24	103.27	117.80	135.36
Adjusted BVPS diluted	26.10	77.25	91.25	105.78	123.34
DPS	0.44	3.07	3.50	4.00	4.00
<b>Profit &amp; Loss (RsM)</b>					
Net interest income	23,801	24,744	28,524	31,980	36,509
Fees and commissions	3,028	3,505	3,925	4,318	4,750
Other operating Income	2,484	2,113	1,326	1,799	1,728
<b>Total operating income</b>	<b>29,313</b>	<b>30,362</b>	<b>33,775</b>	<b>38,097</b>	<b>42,987</b>
Total operating expenses	-17,162	-16,844	-18,293	-19,868	-21,855
<b>Oper. profit bef. provisions</b>	<b>12,151</b>	<b>13,519</b>	<b>15,483</b>	<b>18,229</b>	<b>21,132</b>
Bad debt provisions	-1,200	-3,266	-4,637	-5,138	-6,047
Non-operating/exceptionals	-7,192	-3,300	-1,000	-1,000	-1,250
<b>Pre-tax profit</b>	<b>3,759</b>	<b>6,953</b>	<b>9,845</b>	<b>12,090</b>	<b>13,834</b>
Tax	-1,185	-1,973	-2,954	-3,627	-4,150
Extraord./Min. Int./Pref. Div.	0	-2	-700	-700	-700
<b>Attributable profit</b>	<b>2,574</b>	<b>4,978</b>	<b>6,192</b>	<b>7,763</b>	<b>8,984</b>
Adjusted earnings	2,574	4,978	6,192	7,763	8,984
<b>Growth Rates (%)</b>					
EPS adjusted	-28.0	200.2	147.3	13.0	15.7
Oper. profit bef. prov.	-25.4	11.3	14.5	17.7	15.9
<b>Balance Sheet (RsM)</b>					
<b>Total assets</b>	<b>746,810</b>	<b>930,081</b>	<b>1,101,558</b>	<b>1,276,816</b>	<b>1,476,310</b>
Avg interest earning assets	697,088	813,485	986,032	1,157,131	1,342,574
Customer loans	391,955	536,966	637,820	746,307	873,243
Gross NPLs	26,840	25,720	26,159	30,803	36,173
<b>Liab. &amp; shar. funds</b>	<b>746,810</b>	<b>930,081</b>	<b>1,101,558</b>	<b>1,276,816</b>	<b>1,476,310</b>
Total customer deposits	664,826	827,763	984,643	1,151,043	1,335,210
Reserve for loan losses	17,120	19,012	21,454	25,158	29,500
Shareholders' equity	<b>34,420</b>	<b>37,898</b>	<b>49,736</b>	<b>55,610</b>	<b>62,704</b>
<b>Profitability/Solvency Ratios (%)</b>					
ROE adjusted	7.7	15.5	17.3	17.4	17.6
Net interest margin	3.41	3.04	2.89	2.76	2.72
Cost/income ratio	58.5	55.5	54.2	52.2	50.8
Cash cost/average assets	2.4	2.0	1.8	1.7	1.6
NPLs/customer loans	6.8	4.8	4.1	4.1	4.1
Reserve for loan losses/NPLs	63.8	73.9	82.0	81.7	81.6
Bad debt prov./avg. cust. loans	0.4	0.7	0.8	0.7	0.7
Loans/deposit ratio	59.0	64.9	64.8	64.8	65.4
Tier 1 capital ratio	7.2	6.3	7.8	7.5	7.2
Total capital ratio	11.0	10.4	11.3	10.4	10.3

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# Investment Thesis

## Initiating at Sell after strong stock performance

We believe that despite its strong positioning, Central Bank of India is relatively more vulnerable than peers as its fundamental profitability is lower, asset quality weaker and technology implementation lags. The stock also has had a strong run from its recent offer price of Rs102 (+40%). Our target price implies a 13% downside from current levels. We initiate at Sell / High Risk (3H).

## Favorable industry cycle

We believe fundamental drivers for India's banking sector should continue to be healthy. Specifically we expect: a) Loan growth to remain robust at the 20-22% levels in FY08. b) Margins should hold on easier liquidity and interest rates, albeit with some potential pressures 3-4 quarters down the line. c) Asset quality will be on the watch-list, but general health should remain sound. In sum, an attractive, profitable, and robustly growing sector.

## Central Bank: Positioned to grow

Central bank appears well positioned to benefit from India's growing financial sector opportunity. Its key strengths are: a) large balance sheet and strong pan-India distribution; b) relatively superior deposit franchise with above-industry low-cost deposit ratio; and c) relative insulation from interest rate increases, both from a funding cost and bond provisioning perspective. We estimate earnings and loan growth at 13% and 18% respectively in FY07-10E.

## But lags in profitability, asset quality and technology

Central Bank, however, lags its peers meaningfully in: a) Profitability – its ROA of 0.6% is meaningfully lower than the industry average of 1%. We believe profitability is structurally challenged on competitive margins, low fee incomes, and higher provisioning levels relative to peers; b) Asset quality – it has higher-than-industry NPL ratios and delinquencies; and c) technology – implementation has lagged peers and is a competitive disadvantage. Though mgmt is addressing these concerns, we see improvement as only gradual.

## Value Central Bank at a discount to peers

We value Central Bank at Rs130 per share based on our EVA model, which we believe better captures the long-term value of the business and is a standard valuation measure for our Indian banks coverage. We also benchmark valuations at a PBV of 1.2x FY09E (Rs127 per share), a slight discount to peers and a larger 15-20% discount to best-of-breed government banks.

## Where might we be wrong?

Central Bank could surprise us on: a) improvements in asset quality and delinquency, b) higher growth in fees, c) improvement in low-cost deposits and d) consistently higher sustainable profitability.

## Competitive Positioning

- Large distribution network – third-largest branch network with close to 3,200 branches
- Healthy deposit mix – with a higher-than-industry 42% low-cost deposit ratio
- Relatively insulated bond portfolio presents lower-than-peers earnings risk
- Asset quality lower than peers – delinquencies have tended to remain higher than best-in-class peers.
- Lags technology implementation – playing catch-up relative to peers

### Government banks dominate with 75% market share

Government-owned banks continue to be dominant in all aspects of the Indian banking industry, including distribution, deposits, loans, and assets. They control above 72% of assets, almost 73% of loans, as well as about 75% of deposits (as at March 2006).

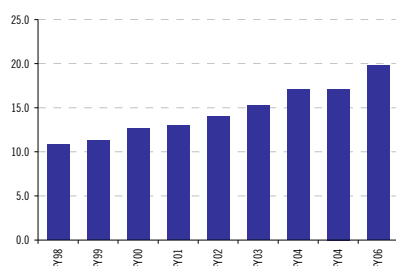
Government banks have historically ruled the roost

Figure 2. Government Banks Market Share

	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06
Assets	81.7	81	80.2	79.5	75.2	75.7	74.5	75.5	72.3
Deposits	82.6	82.6	81.9	81.4	80.3	79.6	77.9	78.2	75.0
Loans	80.1	80.4	79.4	78.9	74.5	74.2	73.2	74.3	72.9

Source: Reserve Bank of India — Trends & Progress of Banking in India — Various Years.

Figure 3. Private Sector Banks — Deposits Market Share Trend (FY1998-2006, %)



\*During FY2005, two private sector banks – GTB and IDBI Bank – were merged with government banks, which reduced the share of private sector banks.

Source: RBI

### New private-sector banks more competitive

New private-sector banks (established in 1994-1995) have performed impressively over the last few years. They have recorded growth, established large branch and ATM networks, and have led the market in new products and innovations. Profitability has followed.

In our view, the key strengths of the new private banks relative to government banks are:

- service quality
- technology—and the ability to improvise and increasingly data-mine
- product innovation
- greater management and operational flexibility
- lack of any legacy issues, whether related to operations or ownership.

The government banks have now awakened to the new competition, and are trying to bridge the gap. They have shown a willingness and ability to compete, but currently lag private sector banks in terms of product range, service levels and technology. Government banks have the following advantages:

- large distribution networks

- existing corporate and retail customers
- scale
- credibility of government backing.

In our opinion, these are significant advantages that have enabled government banks to maintain significant growth momentum. We also think that if government banks are able to aggressively implement technology initiatives and improve service levels, they should be able to compete with their private-sector peers. However, at this stage of the cycle, most new private sector banks have a competitive edge in mobilizing deposits.

### Government banks likely to lose market share—but slowly

Government banks have lost about 500-700bps in market share to the new generation private-sector banks over the last seven years. In our view, this is very modest given the large market share that government banks command, but we do expect this gradual shifting of market share to the private-sector banks to continue. Government banks are likely to remain dominant in the sector over the next 5-10 years given their currently large market share.

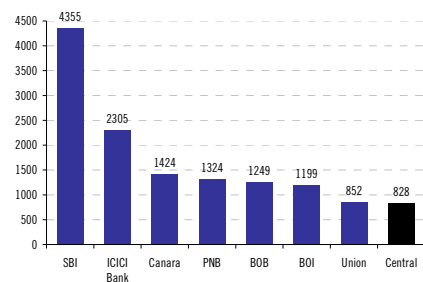
We do, however, believe the private sector banks will be more meaningful challengers in newer market segments and opportunities. In addition, we expect the newer private sector banks, particularly those with scale and distribution, to challenge the more profitable business segments currently dominated by government banks. This is particularly so on the liability side, for a number of reasons. We think private sector banks offer substantially superior service and technology standards in this area; business is often concentrated and can therefore be meaningfully challenged; and the emergence of financial services and distribution opportunities is changing the profitability profile of this segment.

### Central Bank: Wide distribution but relatively underleveraged

Central is the eighth-largest Indian bank, and the seventh-largest among government banks. This broadly positions it as a large-sized bank, with a deposit market share of about 3%.

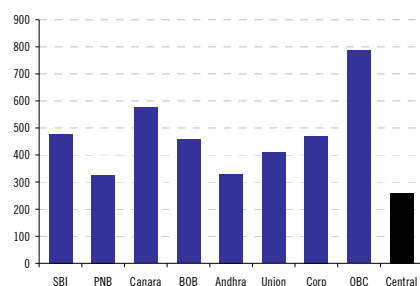
Private sector banks becoming a force to be reckoned with

**Figure 4. India – Largest Banks by Deposits (FY07, Rs bn)**



Source: Company Reports

**Figure 5. Government Banks - Deposits per Branch, FY07, Rsm**



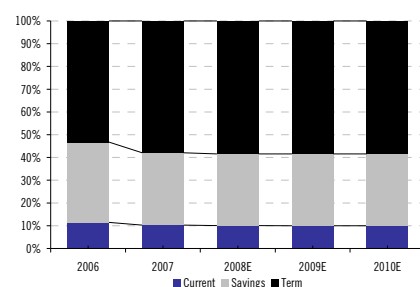
Source: Company Reports

Central has a wide distribution franchise with 3,194 branches, 34 satellite offices, 271 extension counters and 261 ATMs (at March 31, 2007). The branch network is the third largest in the country and is also well distributed across the country, though there is some concentration in Western/Central India. The bank also has a deep rural/semi-urban franchise, with about 66% of its branches in those areas.

Central Bank's branch network is relatively under-leveraged compared to peers due to its higher proportion of rural and semi-urban branches. Its average deposits per branch were about Rs260m as at March 2007, about a third of the best-of-breed government banks and about half the mean. However, with the roll-out of its technology platform over the medium term and a stronger management focus on the retail franchise, we believe, it could catch up with some of its peers. This would also be a significant boost to growth – both deposits and on the assets, especially retail.

Management plans to add to the distribution strength by adding about 100 branches and about 240 ATMs across the country over the next year. This along with other initiatives to deepen branch leverage, use of technology and adding alternative delivery channels such as internet banking, should sustain balance sheet growth over the medium term.

**Figure 6. Central Bank – Deposit Mix (Percent)**



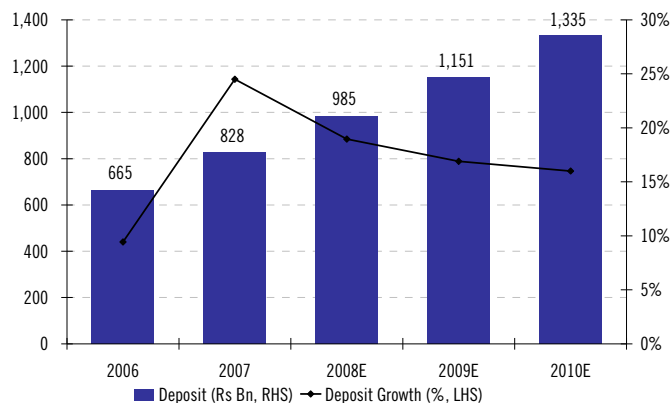
Source: Company Reports and CIR Estimates

### Healthy deposit mix

Central Bank's mix of deposits is healthy with low-cost deposits constituting about 42% of total deposits – better than industry peers. Even though its low-cost deposits ratio has declined from 47% in FY06 to 42% in FY07, it continues to remain healthy and is a key source of competitive advantage. The bank is planning to launch additional products and convenience services such as internet banking and utility bill payments; focus on targeting specific customer segments to improve the mix of low cost deposits further.

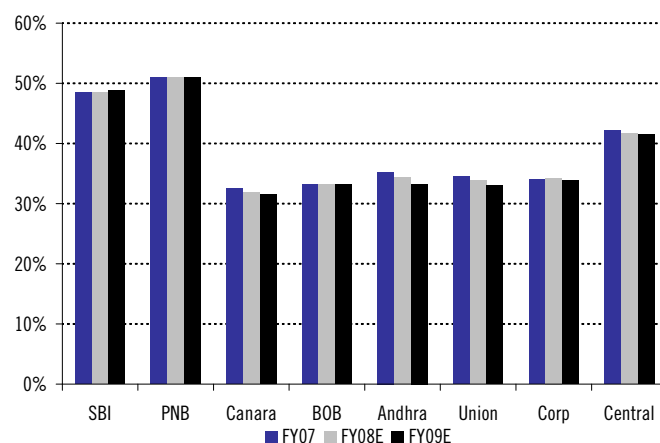
However, Central Bank faces significant competition as almost every bank across the sector is seeking to build these deposits. We expect the proportion of low-cost deposits to sustain current higher-than-industry levels over the next two years.

Figure 7. Central Bank – Deposits and Deposit Growth (Rsbn, %)



Source: Company Reports and CIR estimates

Figure 8. Govt. Banks – Comparison on Deposit Mix (% of CASA Deposits, %)



Source: Company Reports and CIR estimates

### Lower bond risk relative to peers

**Risk to earnings from the bond portfolio is comparatively lower as the AFS portfolio is insulated from increases in interest rates up to 8.4%**

Central Bank has historically had relatively high bond holdings compared to peers. Currently however, with SLR at about 28%, CBI's bond holding are in-line. The duration of Central Bank's total investment portfolio is broadly in line with industry, though high in absolute levels at about 5.0 years.

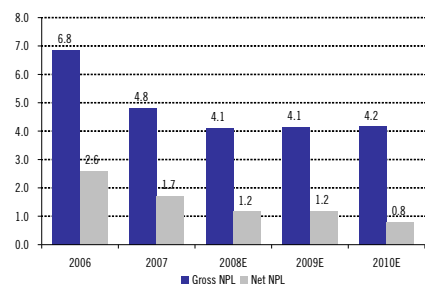
Central Bank holds about 71% of the investment portfolio in the Held-to-Maturity category, which does not need to be marked to market; therefore the relative risk to earnings is lower than peers. The AFS portion of the book runs a lower duration of 2.5 years. While this duration is in-line with peers, it is high in absolute terms and leaves the bank exposed to large adverse movements in interest rates beyond the available cushion.

Management suggests the AFS portfolio would have a significant cushion against rising yields at the current bond yields. We believe that interest rates are currently near peak and have not factored in significant depreciation on the investment portfolio in FY08-10E.



## Vulnerable asset quality and delinquencies are high

Figure 9. Central Bank – Gross, Net NPLs (%)



Source: Company Reports and CIR estimates

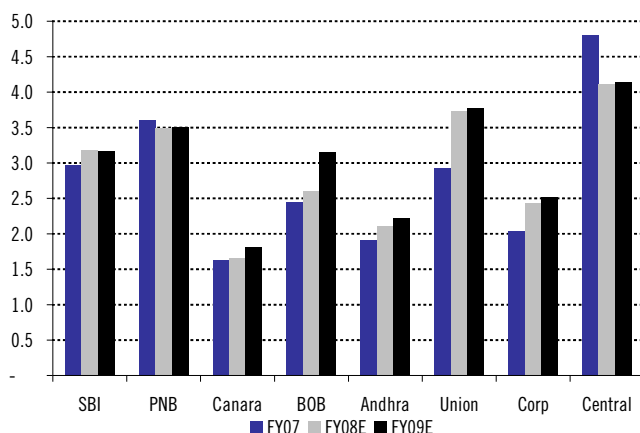
Central Bank's NPLs remain higher than industry levels; gross and net NPLs are at 4.8% and 1.7%, respectively (on March 31, 2007). Historically too, Central Bank's asset quality has been less favorable than the industry; gross NPLs were about 13% in FY04. Provision cover has been increasing, though has remained lower than the best in the industry – at about 64-69% over FY05-07. Due to its higher exposure to corporate assets, NPL accretion could be large and will tend to be lumpy in case of a reversal in asset quality environment.

Incremental delinquency (as a percentage of opening loans) also has tended to remain higher than best-in-class peers, though they have declined from about 3.5% in FY04 to 2.2% in FY07. Management is focusing strongly on improving recoveries and arresting slippages.

Central Bank also has a significant pool of total written-off accounts of about Rs32bn, which can boost earnings and also provide enhanced visibility to asset recoveries over the medium term.

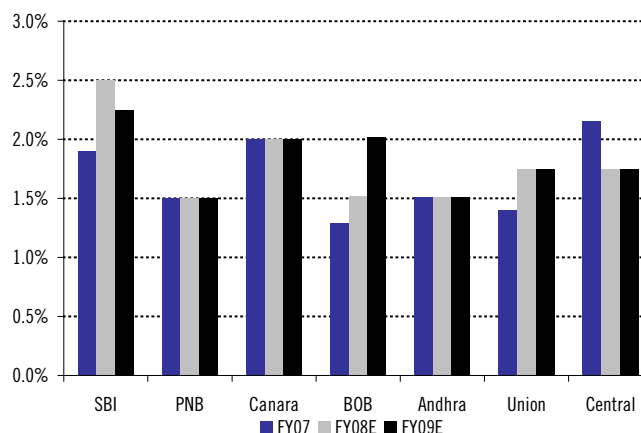
We expect the asset quality environment to remain healthy over the next 12-18 months. We expect Central Bank's gross and net NPLs to improve to 4.1% and 1.2% respectively in FY08-09E and loan loss coverage to improve to 72-73% levels.

Figure 10. Government Banks – Comparative Gross NPL Ratios, %



Source: Company Reports and CIR estimates

Figure 11. Government Banks – Slippage Ratios (Addition to NPLs as % of Opening Loans)



Source: Company Reports and CIR estimates

## Playing "catch up" in technology

Central Bank is behind the curve in terms of its technology rollout and is currently trying to catch up to its peer government banks in technology implementation.

It has now has about 500 (out of 3,194 branches) on its centralized banking platform, which represents about 15% of total branches and over 40% of its business. By comparison, most peers are in advanced stages of implementation of their centralized platforms, and a few have rolled out core banking over the bulk of their business.

Management intends to cover additional branches, representing about 80% of business, on the technology platform by the end of FY08. We expect the implementation of the technology platform to generate more avenues for fee income and likely to drive higher growth in core fee incomes.

### Low fee income

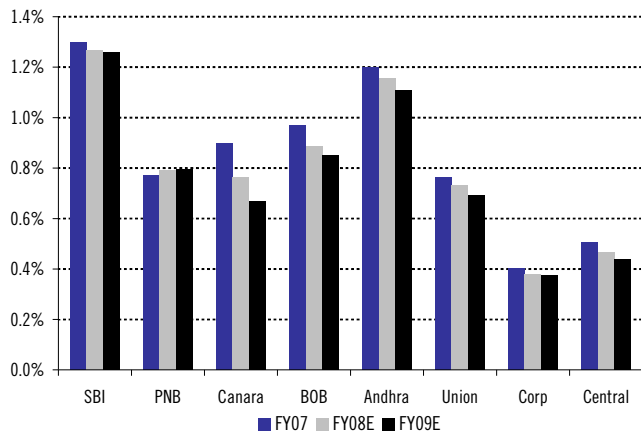
#### Fee income estimated at 11% CAGR in FY07-09E

Central Bank's fee income levels are below best-of-breed sector peers – fee income as a proportion of average assets was around 0.5% in FY05-07. Management is focusing on fee income growth, especially from wealth management and third-party distribution opportunities over the next 2-3 years. The bank has entered into tie-ups with various financial institutions for distribution of insurance and mutual funds through the bancassurance and third-party product distribution.

#### Fee income levels lag best-of-breed sector peers

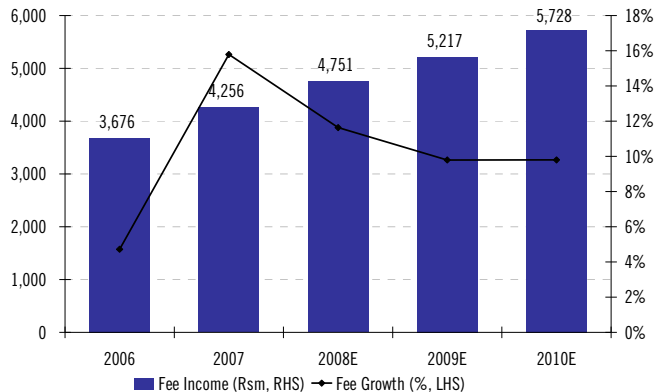
However, government banks lag private and foreign banks on fee income due to relatively weaker technology and limited product suites. We forecast the CAGR of fee income over FY07-10E to be 10%. We expect the proportion of fee income (as a percentage of average assets) to decline over the next 2-3 years, as Central Bank will face increased competition for fees both from government banks that are already on the core banking platform as well as the private-sector banks.

Figure 12. Government Banks – Comparison on Fees (% to Average Assets)



Source: Company Reports and CIR estimates

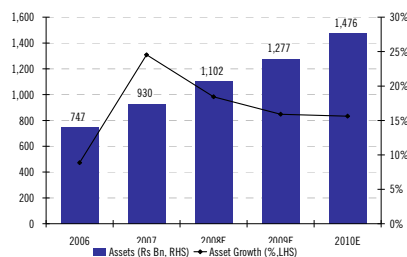
Figure 13. Central Bank – Fee Income and Growth, Rsm, %



Source: Company Reports and CIR estimates

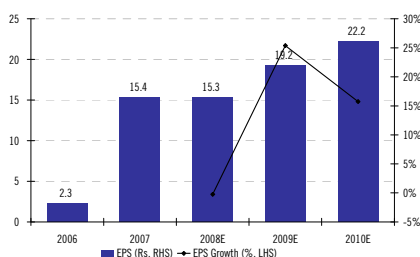
## Financials

**Figure 14. Central Bank - Assets and Asset Growth (Rsbn, %)**



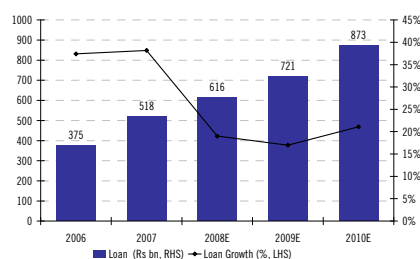
Source: Company Reports and CIR estimates

**Figure 15. Central Bank - EPS and EPS Growth (Rs, %)**



Source: Company Reports and CIR estimates

**Figure 16. Central Bank - Loans and Loan Growth (Rsbn, %)**



Source: Company Reports and CIR estimates

- Pre-provision profit growth of 16% CAGR over FY07-10E; earnings growth of 13% driven by loan growth, fee income growth and declining bond provisions.
- We forecast 18% CAGR growth in loans and deposits over FY07-10E, in-line with industry levels.
- Operating costs improving in-line with industry levels.
- Expect provisioning costs to remain largely stable on higher recovery efforts.
- Modest historical returns, but RoEs improving to 17% in FY08-09E.

### Healthy earnings growth

We forecast pre-provision profits growth of 16% CAGR over FY07-10E and net profit growth of a strong 22%. Earnings growth of 13% should be driven by healthy loan growth of 18% over FY07-10E, growing fee incomes and declining bond provisions.

Central bank also has a strong deposit franchise and a healthy deposit mix that reduces pressure on the bank to aggressively raise bulk deposits to fund growth.

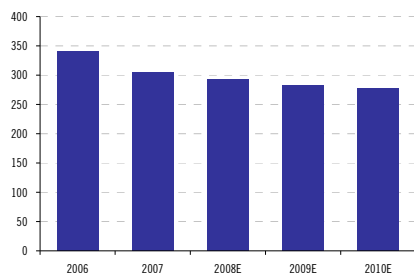
### Industry-level loan growth

Central Bank has grown loans at a robust pace over the past two years – at above-industry growth levels of 39% and 38% in FY06 and FY07, respectively. Growth has been strong across the retail segments with overall retail growing 41% yoy, housing loans growing at 47% and agricultural loans increasing at 25%.

Central Bank's retail portfolio as a proportion to total loans (11% of loans in March 2007), is however, one of the lowest amongst peers. In the past, Central Bank had focused more on the large and medium corporates for loan growth. Management is however, currently focusing on growing loans to infrastructure and retail segments along with loans to large corporates. We have estimated an 18% loan growth over FY07-10E, in line with our expectation for industry loan growth.

## Margins have dipped, but in-line with industry

Figure 17. Central Bank – NIMs (bps)



Source: Company Reports and CIR estimates

Central Bank's margins declined by about 28bps in FY07, and are now broadly in-line with the industry levels at slightly above 300bps in FY07. We forecast margins to moderate further by about 10bps over FY08-10E, and remain in-line with industry averages. Margins will likely be driven by a combination of 1) rising loan yields; 2) continued decline in investment yields; and 3) a rise in deposits costs driven by increasing competition for funding and rising term deposit rates.

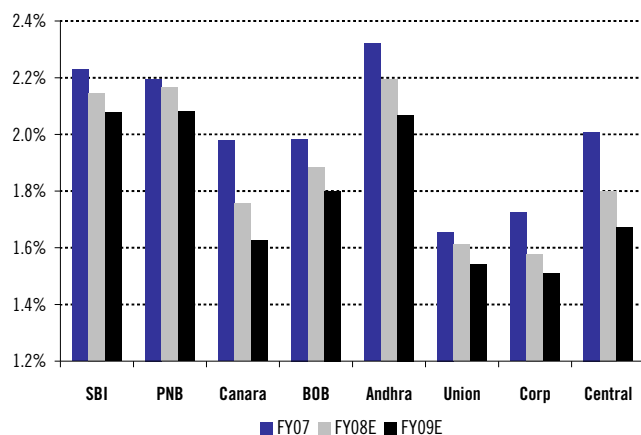
## Operating costs improving; in-line with industry

Central Bank's costs to average assets ratio has shown a declining trend over the last two years (2.0% in FY07 from 2.6% in FY05), and we expect costs to decline further to about 1.6% by FY10E. The cost to operating income ratio at Central Bank has been marginally above sector averages – at about 51-59% in FY05-07. We expect the cost to income ratio to show improvement and move towards industry averages.

Costs appear relatively inflexible, as the proportion of staff costs remains high

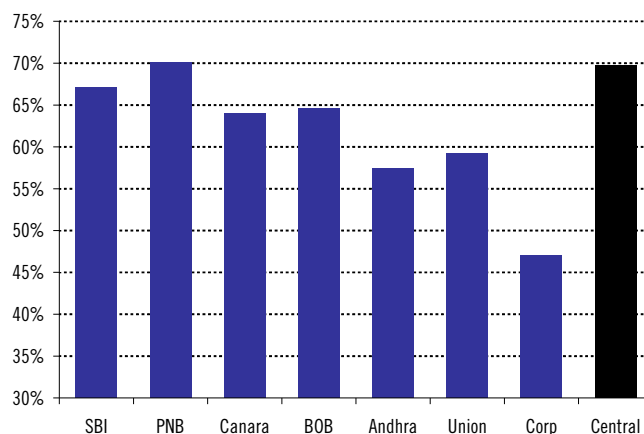
The cost structure has also shown slight improvement with the proportion of staff costs (in total costs) declining from 76% in FY04 to 70% in FY07. However, costs appear relatively inflexible as the proportion of employee costs remains high.

Figure 18. Government Banks – Comparison on Operating Costs (% to Average Assets)



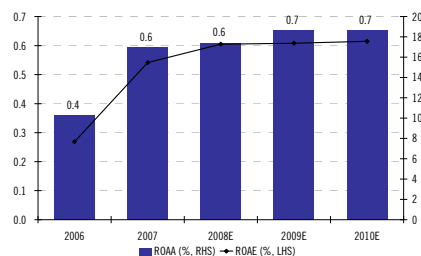
Source: Company Reports and CIR estimates

Figure 19. Government Banks – Comparison on Employee Costs (as proportion of Operating Expenses), FY07



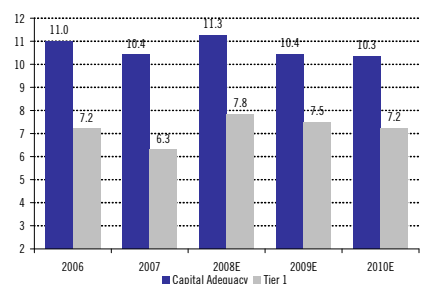
Source: Company Reports and CIR estimates

Figure 20. Central Bank – ROA and ROE (%)



Source: Company Reports and CIR estimates

Figure 21. Central Bank – Capital Adequacy (%)



Source: Company Reports and CIR estimates

## Historically modest profitability

Central Bank's profitability has historically been lower than industry; RoAs were 0.4-0.6% over FY05-07. Although returns have improved in FY07, they remain below industry averages on lower fee income to average assets which are around 0.5% (vs. industry levels of about 1%). We expect Central Bank to improve RoAs but remain lower than industry at about 0.7% over FY08-10E.

Central Bank's RoEs have been boosted and will likely continue to be driven by below-industry capital levels. It had RoEs of between 8-15% over FY05-07; although low in absolute terms, these were better comparisons to industry levels than the corresponding RoA levels. We expect Central Bank's RoEs to improve further and come in-line with some of the better government banks to around 17% levels in FY08-10E on higher leverage relative to peers.

## Modest capital levels

Central Bank has maintained modest Tier I capital levels over the past 3-4 years – Tier I was about 6-7% over FY05-07. Its current capital adequacy is slightly over 12% with a Tier 1 ratio of close to 9%.

High growth, provisions on account of employee benefits and regulatory requirements on Basle 2 will put pressure on capital; management estimates about 100-115bps capital erosion on shifting to Basle 2. Also management suggests they are readying the bank to shift to Basle 2 requirements from March 08 (though currently regulations permit them to do so from March 09).

Central Bank also has Rs8bn of perpetual non-cumulative preference capital from the government with a coupon linked to the RBI repo rate (repo + 100bps). In addition, we also believe management should have access to Tier II capital.

Figure 22. Government Banks – Comparative ROA Decomposition, FY07, Percent

	Andhra	BOB	Canara	Corp Bk	OBC	PNB	SBI	Union	Central
Net interest income	3.0	3.0	2.8	3.0	2.7	3.2	3.0	2.9	3.0
Fee based income	0.5	0.6	0.4	0.5	0.6	0.7	1.0	0.5	0.5
Treasury Income	0.1	0.1	(0.0)	0.3	0.2	0.2	0.1	0.1	0.2
Total Other Income	0.6	0.4	0.5	0.6	0.1	0.1	0.3	0.3	0.0
<b>Operating revenue</b>	<b>4.2</b>	<b>4.0</b>	<b>3.7</b>	<b>4.3</b>	<b>3.6</b>	<b>4.2</b>	<b>4.4</b>	<b>3.8</b>	<b>3.6</b>
Operating expenses	2.1	2.0	1.8	1.7	1.6	2.2	2.2	1.5	2.0
<b>Operating profit</b>	<b>2.1</b>	<b>2.0</b>	<b>1.9</b>	<b>2.6</b>	<b>2.0</b>	<b>2.0</b>	<b>2.2</b>	<b>2.2</b>	<b>1.6</b>
Loan loss provisions	0.3	0.3	0.3	0.7	(0.3)	0.2	0.3	0.3	0.4
Other provisions	0.4	0.4	0.5	0.2	0.5	0.4	0.5	0.5	0.4
Tax	0.4	0.5	0.3	0.6	0.4	0.4	0.6	0.6	0.2
<b>Net profit (ROA)</b>	<b>1.0</b>	<b>0.8</b>	<b>0.8</b>	<b>1.2</b>	<b>1.3</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.6</b>
Assets / Equity	14.6	15.6	19.5	13.1	13.5	15.2	18.0	19.7	26.1
<b>ROE</b>	<b>14.6</b>	<b>12.4</b>	<b>16.3</b>	<b>15.0</b>	<b>17.9</b>	<b>14.3</b>	<b>15.4</b>	<b>17.3</b>	<b>15.5</b>

Source: Citi Investment Research

**Figure 23. Central Bank – ROA Decomposition, FY06-10E, Percent**

	FY06	FY07	FY08E	FY09E	FY10E
Net interest income	3.3	3.0	2.8	2.7	2.7
Fee based income	0.5	0.5	0.4	0.4	0.4
Treasury Income	0.3	0.2	0.0	0.1	0.1
Other Income	0.1	0.0	0.0	0.0	0.0
<b>Operating revenue</b>	<b>4.1</b>	<b>3.6</b>	<b>3.3</b>	<b>3.2</b>	<b>3.2</b>
Operating expenses	2.4	2.0	1.8	1.7	1.7
<b>Operating profit</b>	<b>1.7</b>	<b>1.6</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>
Loan loss provisions	0.2	0.4	0.5	0.4	0.4
Other provisions	1.0	0.4	0.2	0.1	0.1
Tax	0.2	0.2	0.3	0.3	0.3
<b>Net profit (ROA)</b>	<b>0.4</b>	<b>0.6</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>
Assets / Equity	21.4	26.1	28.4	26.6	26.6
<b>ROE</b>	<b>7.7</b>	<b>15.5</b>	<b>17.3</b>	<b>17.4</b>	<b>17.4</b>

Source: Citi Investment Research estimates

**Figure 24. Central Bank – Key Financial Ratios (FY06 – 10E, Percent)**

Financial Ratios (%)	FY06	FY07	FY08E	FY09E	FY10E
ROAA	0.4	0.6	0.7	0.7	0.7
ROAE	7.7	15.5	17.3	17.4	17.6
NPL / Total Loans	6.8	4.8	4.1	4.1	4.1
Loan Loss Reserve / Loans	4.4	3.5	3.4	3.4	3.4
General Provision / Loans	0.0	0.4	0.4	0.4	0.4
Specific Provision / NPL	63.8	65.9	72.6	72.3	72.2
Equity / Loans	8.8	5.6	6.5	6.4	6.3
Equity / Assets	4.5	3.2	3.7	3.7	3.6
Loans / Assets	51.3	56.6	56.8	57.3	58.0

Source: Company Reports and Citi Investment Research estimates

**Figure 25. Central Bank – Key Operating Ratios (FY06 – 10E, Percent)**

Operating Ratios (%)	FY06	FY07	FY08E	FY09E	FY10E
Tax Rate	31.5	28.4	30.0	30.0	30.0
Interest Exp. / Interest Income	55.8	60.3	63.3	65.0	66.4
Non Int. Income / Total Income	9.3	8.3	6.3	6.3	5.6
Cost / Income	58.5	55.5	54.2	52.2	50.8
Loan Charges / Preprov. Profit	9.9	24.2	30.0	28.2	28.6

Source: Company Reports and Citi Investment Research estimates

**Figure 26. Central Bank – Key Assumptions (FY06 – 10E, Percent)**

	FY06	FY07	FY08E	FY09E	FY10E
Loan Growth	37.4	38.2	19.0	17.0	17.0
Deposit Growth	9.7	25.1	18.9	16.9	16.0
Loan Yield	8.0	8.2	9.2	9.2	9.5
Deposit Cost	4.5	4.8	5.2	5.4	5.6
NIM	341	304	292	282	278
Capital Adequacy	11.0	10.4	11.3	10.4	10.3

Source: Company Reports and Citi Investment Research estimates

## Valuation

- **Indian bank stocks have traded in a wide range over the past 10 years** – private banks have commanded significant premiums to government banks.
- **Government banks trade within a narrow band** at FY07E P/BV of 1.0x-1.5x; this could change, but likely not dramatically given favorable asset growth and quality, as well as adequate funding and support from stabilizing margins.
- **We value Central Bank at Rs130 based on EVA model** – also benchmark valuations at 1.2x FY09E PBV which is at the lower end of PSU banks
- Valuations in India's banking sector exhibited several notable characteristics.

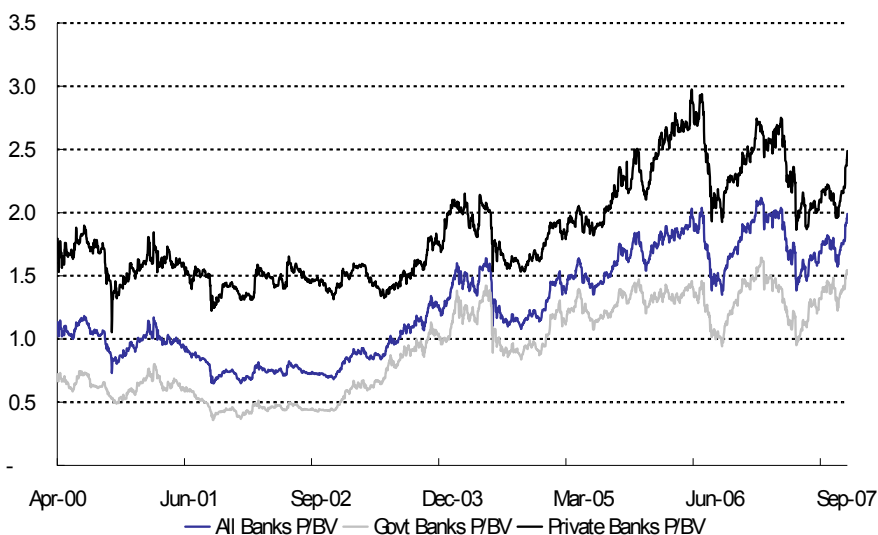
### Wide-ranging valuations

Prospects for the economy are a key driver of valuations

Valuations have fluctuated markedly, driven by significant changes in the health and growth prospects of the banking sector, as well as dramatic changes in the economy. In the late 1990s, valuations were low because asset quality concerns were high and the growth outlook poor. Currently, though, asset quality is improving and the growth outlook is robust. Prospects for the economy are a key driver of valuations, particularly for government banks, and we expect this sensitivity to continue.

We expect the private sector banks to maintain a valuation premium over business cycles

Figure 27. India Banks – Price to Book (x)



Source: Citigroup Investment Research

### Dichotomy between government banks and the well-run new private banks

Well-run private sector banks have traded at large premiums to government banks. In our opinion, this premium has been driven by a combination of

growth potential, competitiveness, management and ownership, as well as balance-sheet quality (selectively). We expect the private sector banks to maintain a valuation premium over business cycles, though the gap could narrow when growth is positive and asset quality is strong and widen when growth and credit are more difficult.

Greater valuation divergence among banks is likely over the next few years...

### Government banks trade within a narrow band

Historically, government banks have traded within a relatively narrow band, primarily because they have relatively similar business mixes, earnings characteristics, asset quality issues, management capabilities and operational structures. We see this changing, however, as greater management autonomy and initiatives are resulting in increasingly different management styles, strategies, and technology capabilities. Greater valuation divergence among banks is likely over the next few years, although basic ownership, operational independence, and flexibility issues will probably result in government banks' valuations remaining broadly within a band.

Figure 28. India Banks – Comparative Valuations (FY09E)

26-Sep-07	RIC	Price (Rs)	Price Target (Rs)	CIR Rating	P/E (x)	P/B (x)	ROE (%)	ROA (%)	Div. Yield (%)	Market Cap (US\$m)	2-year EPS growth
<b>Private Sector Banks</b>											
Centurion Bank	CENB.BO	43.5	45.0	2M	40.8	3.8	11.3%	0.9%	0.0	1,870	33.4%
Federal Bank	FED.BO	372.0	438.0	1M	7.5	1.4	21.1%	1.3%	0.9	804	45.6%
ICICI Bank	ICBK.BO	1028.2	1235.0	1L	19.5	2.2	11.7%	1.1%	1.1	28,460	23.5%
Kotak Mahindra Bank	KTKM.BO	922.0	825.0	2M	36.2	5.3	15.9%	2.0%	0.1	7,623	22.8%
AXIS Bank	AXBK.BO	760.0	675.0	2L	20.6	2.7	14.2%	1.2%	0.5	6,853	26.6%
Infrastructure Development Finance	IDFC.BO	143.2	140.0	1M	22.5	3.0	13.9%	2.9%	0.8	4,686	19.2%
Yes Bank	YESB.BO	197.6	230.0	1M	24.2	3.8	17.1%	0.9%	0.0	1,399	54.4%
<b>Average</b>					<b>23.1</b>	<b>2.9</b>	<b>13.2%</b>	<b>1.4%</b>	<b>0.8</b>		<b>25.0%</b>
<b>Government Banks</b>											
Andhra Bank	ADBK.BO	101.6	107.0	1L	7.1	1.2	18.4%	1.2%	4.1	1,246	25.1%
Bank of Baroda	BOB.BO	319.3	390.0	1M	6.6	1.0	16.7%	1.0%	1.9	2,941	31.3%
Corporation Bank	CRBK.BO	382.0	455.0	1M	6.9	1.1	17.2%	1.2%	2.6	1,386	21.8%
Canara Bank	CNBK.BO	272.0	295.0	1M	6.6	1.1	17.1%	0.8%	2.4	2,820	12.2%
Oriental Bank	ORBC.BO	242.5	285.0	2M	6.3	0.9	16.1%	1.2%	1.9	1,536	27.1%
Punjab National Bank	PNBK.BO	539.0	608.0	1M	7.7	1.2	16.9%	1.2%	1.5	4,298	24.8%
State Bank of India	SBI.BO	1850.0	1825.0	1L	15.3	2.4	16.6%	0.9%	0.9	24,625	18.5%
Central Bank Of India	CBI.BO	144.7	130.0	3H	6.9	1.5	18.9%	0.7%	2.8	24,625	12.5%
Union Bank Of India	UNBK.BO	159.0	180.0	1L	6.5	1.1	19.0%	1.0%	2.5	2,031	21.3%
<b>Average</b>					<b>10.0</b>	<b>1.7</b>	<b>17.6%</b>	<b>0.9%</b>	<b>1.9</b>		<b>17.4%</b>

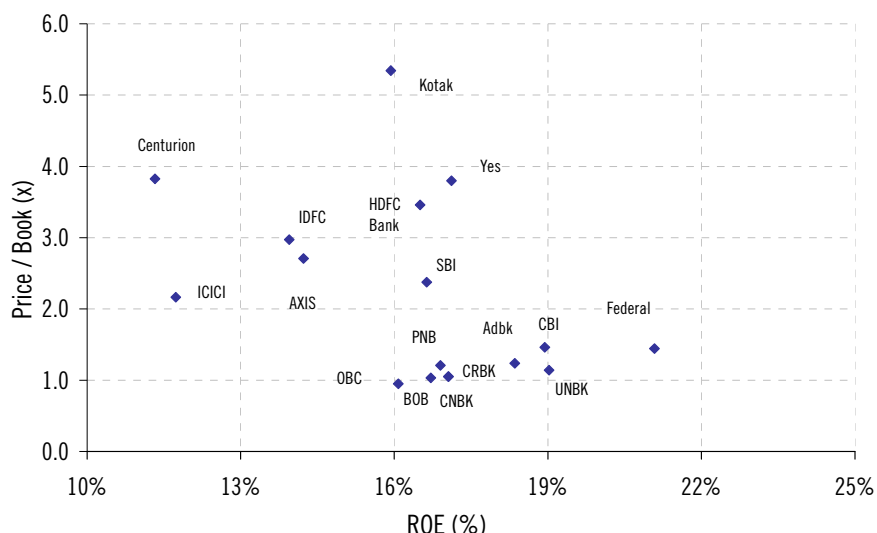
Source: Citi Investment Research estimates

... although government bank valuations likely to stay within a band

In our view, the performance of government bank stocks tends to be closely linked to the broader economy. A positive outlook for the economy should disproportionately boost valuations, and vice versa. Given the current economic backdrop, we expect loan demand to moderate from the current high levels to a sustainable 18-22% for another 2-3 years. More importantly, asset quality should remain healthy, despite aggressive loan growth. Funding for banks will be tighter and more challenging, but should be ample enough to support market growth. In sum, we believe the current positive cycle should support valuations for the entire sector.



Figure 29. PBV vs. ROE (FY09E, Times, Percent)



Source: Citi Investment Research estimates

### Value Central Bank at Rs130 based on EVA model

Discount to peers is warranted by lower-than-sector profitability, relatively weaker asset quality and lower fee income franchise

We value Central Bank at Rs130 per share based on our EVA model, which we believe better captures the long-term value of the business and is a standard valuation measure for our Indian banking coverage. The key assumptions for our EVA model are: a) industry average interest long term spreads at 2.2%; b) longer-term loan loss provisioning levels of 100bps – in line with peers; and c) lower equity-to-assets ratio of 4.2x as compared to industry average of 6.5x, as Central Bank is relatively more leveraged than peers. Our EVA valuation is premised on an 8% risk-free rate, consistent with our assumptions for other Indian banks.

Alternatively, we benchmark Central Bank valuations at a price-to-book (P/BV) of 1.2x FY09E, which is at a slight discount to our target multiples for peer government banks and a larger 15-20% discount to best-of-breed government banks. This methodology implies a value of Rs127 per share of Central Bank.

We believe this discount is warranted given Central's 1) lower-than-peers' profitability levels; 2) lower-than-industry asset quality and relatively higher delinquency levels; and 3) slower-than-peers technology roll-out which inhibits faster growth in fee incomes in the near term.

## Risks

We rate Central Bank shares as High Risk based on our quantitative risk-rating system, which tracks 260-day historical share price volatility.

Upside risks which could cause the shares to continue to trade above our target price include:

- Greater-than-expected improvements in asset quality and delinquency
- Higher-than-estimated growth in fees
- Improvement in low-cost deposits
- Consistently higher sustainable profitability.

Downside risks include:

- **Reversal in loan growth and asset quality** — Central Bank has a relatively smaller exposure to consumer loan segments, and mid-tier corporates might be more vulnerable compared to peers in an economic downturn, leaving Central Bank at a higher risk relative to peers.
- **Modest historical returns**— Historical returns for the bank have been modest; return on average assets ranged between 0.4 - 0.6% during FY05-07 and return on average equity was between 8-15% over the same period.
- **Technology implementation lagging peers** — Central Bank has been relatively slower than government bank peers in implementation of technology. Though it has aggressive rollout plans for the same, it will be playing catch-up to peers, and any delays in implementations could lower potential fee income growth.
- **Rising interest rates** — A sharp rise in interest rates would erode significant economic value from the bond portfolio, and would result in large MTM losses from the AFS portfolio. The bond portfolio accounts for 28% of Central Bank's deposits. Risk to the P&L is however relatively lower as the AFS portfolio (about 29% of total investments), is insulated to rising interest rates. Central Bank's earnings would however, be exposed to large changes in interest rates beyond the available cushion. There could also be economic losses on the held-to-maturity portion of bond portfolio which though do not affect reported profits but have a negative bearing on the economic value nonetheless.
- **Government ownership** – While Central Bank has management and operational autonomy, the government is the primary and controlling shareholder and its policy objectives and decision-making may not always align with the best interests of minority shareholders.

## Ownership, Management and Regulations

- Minimum 51% government ownership—voting rights restricted to 1%
- Government banks likely to start consolidating— with governmental support to remain
- Government banks have increased operational autonomy, but more is needed
- Experienced management, new Chairperson and Managing Director

The structure of the Indian banking market is characterized by: a) too many banks—about 90, a number of which are of reasonable scale; and b) predominant market hold by the government banks—accounting for almost 75% the banking system. The private banking sector is largely sub-scale, while the foreign banking sector is restricted to a few banks of moderate scale. Both these segments have significant restrictions on ownership and voting rights, with high entry barriers.

### Government control

#### Ownership in government banks is restricted

The Indian banking system has 27 government-owned banks – 19 owned directly by the government itself, and eight belonging to the State Bank group through the RBI—SBI itself, and seven associate banks. The government is required by law to own a minimum of 51% in the government banks (and 55% in SBI through the RBI). A change in this regulation would need parliamentary approval. The previous government had announced its intention to reduce the minimum government ownership to 33% in these banks, but the current government has publicly stated its intent to retain minimum ownership at 51%. We do not expect minimum ownership to be reduced to 33% in the medium-term, and expect this could be an impediment to some banks raising capital over the next two to three years. Foreign ownership is capped at 20% in government banks, and voting rights at 1%.

#### Consolidation ongoing theme

The regulatory component, and the government's role in the banking sector, is high. This is on account of the high direct government ownership in the sector, and because it continues to be relatively overregulated. (The Indian banking sector has, however, witnessed significant progress and success in deregulating the sector since the early 1990s.)

India has too many sub-scale banks, in our view, and consolidation is likely to be an ongoing theme. We expect relatively significant consolidation in the government banking sector, given the dominant size of these banks. The government also seems keen on mergers and amalgamations within the government banks, so that they can gain scale, become more competitive, and avoid the pitfalls of fragmentation. The government has also indicated that merger initiatives should be driven by bank management rather than by the government itself, and that it would be supportive of such measures. We do

expect these types of developments in the next two to three years, and Central, given its relatively large scale and pan-India presence, could well be involved in such activity. Current regulations do not allow acquisition of a government bank by domestic or foreign banks. We do not see this changing till FY09.

### **Operational control—some autonomy, but some way to go**

The government recently issued a blueprint for increasing the operational autonomy of government banks. The increased autonomy is related to: a) pursuing new lines of business; b) expanding overseas; c) rationalizing branches; d) addressing human resource issues including recruitment, compensation and management structures; e) traveling internationally; and a few others.

This measure should markedly reduce the need for these banks to seek government approval for regular business and operational decision-making. It also provides the framework for banks to evolve their own management structures. Over time, this should result in a greater level of differentiation among government banks. Currently there is a high level of homogeneity within the government banking sector. In our view, it is the better-managed government banks that should be relatively larger beneficiaries of this increased autonomy.

We do not, however, believe this document enables any employee reduction/rationalization options. This would offer substantial cost savings, but remains a contentious issue. This blueprint also does not address issues of strategic impact: mergers, capital raising, overall compensation structures or top management appointments. We believe these will continue to be routed through the government, given the government's direct ownership stake.

A key concern of the banking system—overview of the Government's Vigilance Commissioner (CVC) on decisions made by bank managers—does not appear to have been addressed. If banks were to be removed from the purview of the CVC, would probably result in more initiative from bank managers.

### **Management**

Central Bank has an experienced middle and senior management team, which has grown with the bank and has been relatively stable. The organization is structured around functional (credit, investments, information technology, human resources, audit, risk management) and geographical lines. A General Manager heads each function and also coordinates for a particular geography. All of these General Managers report into an Executive Director, who is also a member of the Board. We believe the structure and management is equipped to maintain the bank's expected growth, and the bank has strong systems and procedures.

In our opinion, the management capabilities are in line with peer Government Banks, though it has lagged behind some of the larger banks in technology implementation. Central Bank's management structure and systems and processes are, on the whole, undifferentiated from other government banks.

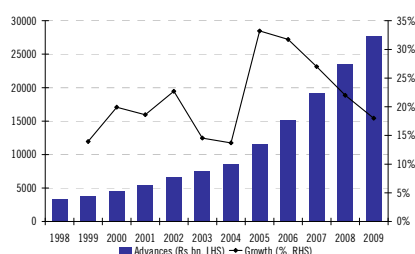
Demand healthy, funding adequate –  
industry fundamentals look comfortable

## Banking Industry Outlook

- **Moderate but still healthy loan growth** — Loan growth is expected to moderate to a healthy 20-22%.
- **Healthy asset quality cycle** – Incremental deterioration but overall robust, supported by fundamental improvements in the regulatory and institutional framework.
- **Higher interest rate environment** – Recent regulatory measures to increase rates and reduce liquidity have been swift and ahead of expectations; possible risk of more tightening to come.
- **Margins likely to be supported** — Higher lending rates, favorable asset-liability duration gap and flat yield curves (as they steepen) should support margins.
- **High deposit growth and evolving liabilities** – Deposit growth running at historical highs with large emerging distribution opportunities.

### Loan growth — likely to moderate, but should remain robust

Figure 30. Banks – Loan Growth, FY99-09E, (%)



Source: RBI, Citigroup Investment Research

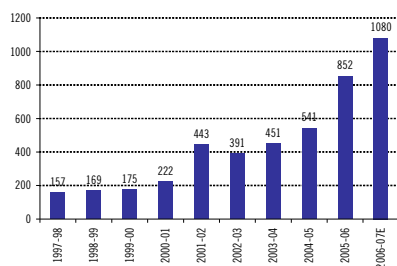
#### Historically strong loan growth

Over the past eight years, India's banking market has expanded at a CAGR of 18.5%, with an annual growth band of 12-33%. At about 10%, India has one of the lowest consumer credit-to-GDP ratios globally, even after annual loan growth of 35-40% in the past 4-5 years. The Indian banking system has witnessed average loan growth of over 30% over the last three years. This is set to slow, and we estimate loan growth should moderate to about 20-22% in FY08, and further to about 18-20% over FY09.

#### Likely to moderate, but remain robust

Our view of moderating loan growth – to 20-22% levels – is not very different from what we argued earlier. We believe, however, that there is a qualitative difference in our expectation. In September 2006, our view of slower growth was largely premised on a funding constraint (banks not being able to mobilize adequate deposits); we now believe growth will moderate, but from the demand side.

**Figure 31. Capex Trend — CIR Coverage Universe (FY98-FY07E, Rs bn)**



Source: Citigroup Investment Research

Why should the pace of loan demand slacken? We believe the primary drivers of lower loan growth would be:

- Easing in consumer demand – particularly mortgages and other asset-backed loans, given affordability issues
- Some shifting of corporate demand to offshore borrowing, partly on account of the currency's recent strength
- An expected slackening in consumer demand could impact immediate investments
- The sheer expansion of credit over the last three years – levels of credit penetration in India are now no longer very low

Could the bottom fall out of loan demand? We think not. This is because corporate demand remains robust, and given the relatively large investment pipeline, we infer that large segments of the corporate market are prepared to borrow at the currently higher rates.

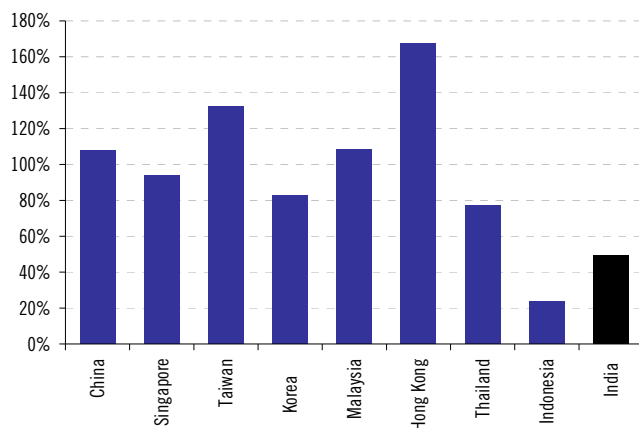
### Consumer credit likely to slow down more

We would argue the demand outlook for consumer credit could be at greater risk; particularly in mortgages and auto finance (asset-backed segments). This is because these segments are price sensitive (reflected in thin spreads that banks earn), affordability is likely to have become an issue (particularly for mortgages, where property prices have risen sharply), and these segments have witnessed relatively higher financing penetration. While we anticipate a slowdown, we would expect consumer demand to average about 15-20% pa; but there remains meaningful risk of a more pronounced slowdown in the near term

### But India remains under-penetrated ...

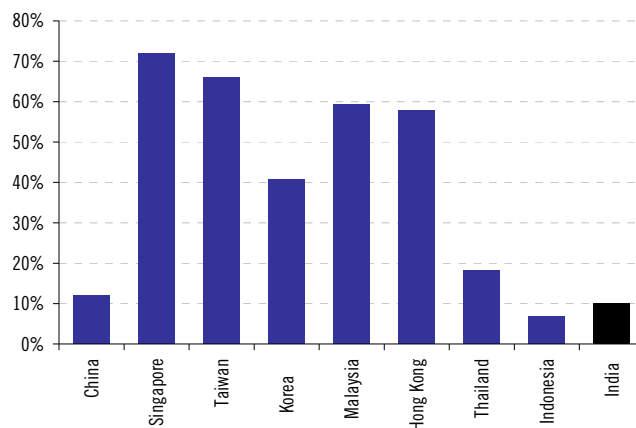
However, the market remains under-penetrated, with a loan/GDP ratio of less than 45% – substantially lower than for other Asian markets – suggesting the outlook for loan growth is strong and sustainable. Loan growth was over 30% in FY06, with demand strong from both consumers and corporates. Asset quality remains robust; the economy continues to expand, underleveraged corporates are in the initial phase of a capex cycle and consumer borrowing is low relative to the region, even after 4-5 years of rapid growth. Overall, we believe India's banking sector is in the midst of a healthy growth cycle, which we believe will be sustained for 18-24 months.

**Figure 32. Comparison of Loan-to-GDP Ratio (December 2006, Percent): Under-penetrated**



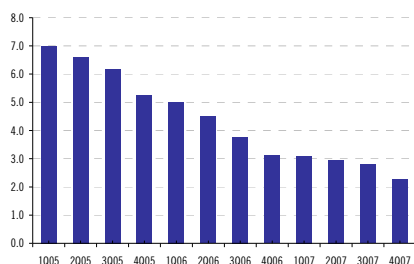
Source: Citi Investment Research

**Figure 33. Consumer Credit to GDP (December 2006, Percent)—Long Way to Go**



Source: Citi Investment Research

**Figure 34. India Banks - Gross NPLs (Percent)**



Source: Citi Investment Research

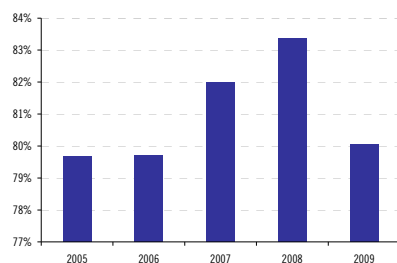
### Asset quality – Watch time, but not a tipping point

Asset quality has been the sweetest spot of the banking sector for the past three years, in our view. We do not expect this to change meaningfully despite relatively high growth rates witnessed in the past few years. Our positive view is premised on the following: a) the economic environment remains vibrant; b) the bulk of lending has been demand driven; and c) bank managers have remained relatively careful about lending despite strong growth and optimism on the macro-economic front.

That said, we believe the biggest risk of higher interest rates, to banks, lies in the negative impact on asset quality. This is typically because, on the consumer side; higher interest payments, overextended borrowing by consumers, and a potentially slower economy, create assets risks. On the corporate side, higher interest payments lower coverage levels, inevitably raise breakeven levels, and with a relatively slower economy, pressure asset quality. The impact of higher rates also played out very starkly in India over 1995-2000, when the asset environment deteriorated sharply after a few years of high interest rates (though other factors likely contributed as well).

So, have rates moved up enough to hurt asset quality meaningfully? We would argue that rates in themselves – up 200-500bp over the last year across product and borrower classes – have moved up enough to warrant meaningful caution. And it is a view that has been echoed by quite a few bank managements.

**Figure 35. Indian Banks Loan Loss Coverage (%)**



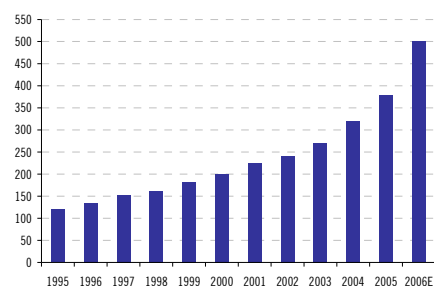
Source: Citigroup Investment Research

But are there mitigating and offsetting factors that would moderate the impact of higher rates. We believe these include, on the consumer side:

- Strong and broad-based income growth – market estimates suggest the private sector has witnessed wage growth over the last two years
- A substantial expansion in job creation
- Still relatively low aggregate levels of consumer leverage in the economy
- Relatively large level of asset backing for consumer lending.

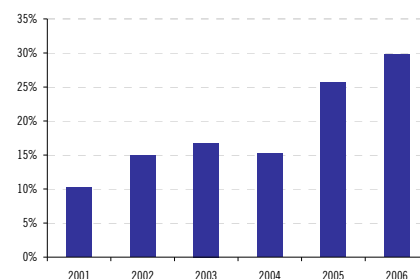
We believe these are meaningful offsets; and should limit asset quality damage that higher interest in themselves would have done.

**Figure 36. Rising Average Salary (Rs Thousand).**



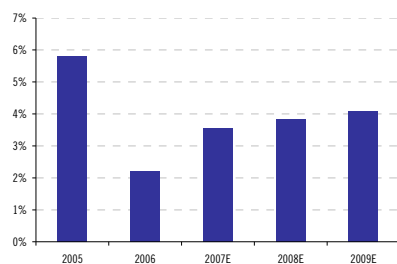
Source: HDFC

**Figure 37. Household Advances to Savings (%)**



Source: RBI

**Figure 38. Provisioning Charges % of Total Loans Increasing**



Source: Citigroup Investment Research

On the corporate book, believe asset quality pressures are likely to be less than on the consumer book, in the current growth and rate environment. This is because:

- The economy is growing rapidly – our economist estimates GDP growth should remain 9%+ in spite of higher rates
- Investment momentum remains strong – capital formation % of GDP is up to 32% and we see it at-least sustaining at current levels
- Leverage levels in the corporate sector remain relatively low (16.3% on CIR’s coverage universe), and interest coverage levels remain relatively high.

We believe a combination of the above and the relatively easy access to capital (public and private markets), should limit asset damage.

We believe the risks that are embedded are not so much the impact of higher rates on balance-sheets and overall growth, but potentially more in terms of aggressive roll-outs which could create execution issues, parts of the SME market where leverage levels and business risks could be higher and do not get captured in available data, and potentially in asset-backed financing, where weak asset prices could undermine collateral.



**Regulatory framework is now in place and should develop rapidly**

At the aggregate though, we would augur that asset deterioration levels are likely to inch up; this would be an area of much greater focus for banks, and the asset recovery cycle recovery in evidence is probably done. We also expect P&L provisioning to rise almost across the board (in part as it comes of a low base). We do not however believe the asset quality cycle has reversed, is on the brink, or would be a dominant theme over the next 12-18 months. In effect, while asset quality will be high on the watch list, it is unlikely to damage balance-sheets or P&L's, is not likely to shift focus away from lending or fee businesses, and should not be a drain on capital.

**Significantly stronger institutional framework**

Further, to keep asset quality in check, more fundamental changes are also currently under way, particularly: the development of an institutional structure and processes for credit rating and screening, asset maintenance, and recoveries. Although these initiatives are relatively new and not yet comprehensive across the sector, the regulatory framework is now in place and should develop rapidly. Improved credit inputs and recoverability of collateral should raise the risk appetite of the banking sector.

Specific initiatives include:

- **Asset Recovery Law:** A relatively new asset recovery law (SARFAESI Act) improves the rights and ability of banks to recover bad debts and collateral.
- **Asset Recovery Companies and Businesses:** Asset recovery companies have been established in India. One of the larger companies has already had some success in aggregating and selling down bad assets. While this business still needs to build scale and gain momentum, this policy framework may improve the ability of banks to exit bad assets.
- **Credit bureau:** Although it became operational only recently, the credit bureau has a strong technology platform and will be increasingly important in providing credit histories and screenings for the banking sector. With consumer lending growing so rapidly, the lack of adequate credit histories would raise the specter of risks being ignored in the chase for loan growth.

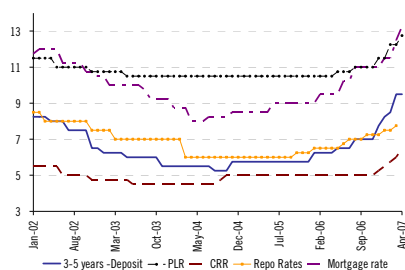
**Higher Interest Rates – and their effects**

RBI, concerned with consistently high inflation (averaging 6+%) and a possibly overheated growth environment, has:

- Progressively raised interest rates (2.25% over 12 months)
- Sucked out liquidity by raising the CRR (200bp in 12 months)
- Raised the cost of CRR reserves
- Raised provisioning and risk weightage on lending to specific sectors.

The actual measures have collectively been ahead of what the market appears to have expected; the timing, between credit policy announcements and within a short time frame, has also surprised.

**Figure 39. Macro Interest Rates**



Source: RBI, SBI, HDFC

While the measures are relatively recent and have been progressively raised, they have not impacted banks yet – loan growth is down a bit but still running at 27.6% yoy; deposit growth has remained relatively buoyant at about 23%; and the pace of overall economic growth remains a high 9.3%. But will these measures take effect, and meaningfully unwind the banking and broader economic environment? We argue that there will be an impact – but only a modest one, which should moderate growth from current level, but not structurally damage it.

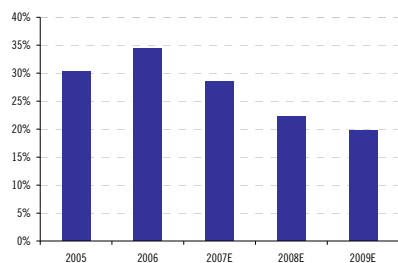
We believe RBI's policy bias – towards risk mitigation – is likely to stay until there is a visible and slightly sustained cooling off. If however inflation and perceived overheated scenario sustains, we believe the RBI could take incremental measures. This could include more of the same (higher rates and CRR), and could extend to quantitative restrictions on lending to some segments, restricting foreign borrowings or other measures to cool down growth levels.

In effect, we do not underestimate the risks of higher rates and further policy measures, but believe the RBI is now largely done with these measures.

**But, the sector should still grow, remain profitable and healthy**

The RBI's actions – and structurally higher interest rates – will likely slow the sector, potentially pressure margins and risk asset quality. But we do not believe measures effected so far will damage or undermine the growth outlook, or health of the sector. We also believe the stepdown in growth and some erosion in asset quality has in large measure been factored in by the market for a while. This is because the system was not expected to have the liquidity / deposit growth to fund higher than 20% loan growth, and growth restraints would have come from the supply side. We now believe growth will be slower, because loan demand will also slow. So, while we expect a relative slowdown; it will now be demand and supply driven. The impact on growth would be similar to what has already been factored in. Effectively, our key estimates for the sector are the following:

**Figure 40. Loan Growth - FY05-FY09E (Percent)**



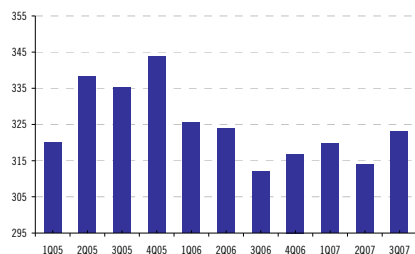
Source: RBI, Citi Investment Research

**Figure 41. Key Estimates**

	FY08E	FY09E
<b>All banks</b>		
Loan growth	25%	21%
Earnings Growth	24%	22%
ROE	17%	18%
NIM	3.23%	3.14%
Asset Quality	2.57%	2.63%
<b>Government banks</b>		
Loan growth	20%	17%
Earnings Growth	21%	20%
ROE	16%	17%
NIM	2.97%	2.94%
Asset Quality (NPA)	2.86%	2.92%

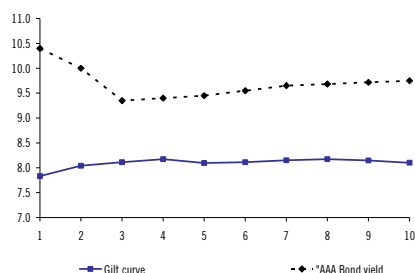
Source: Citi Investment Research estimates

Figure 42. India Banks - NIMs (bps)



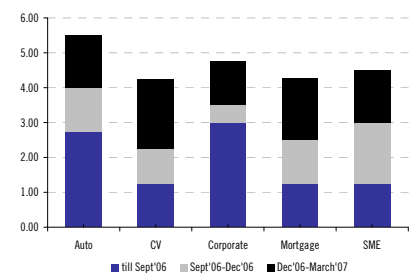
Source: Citi Investment Research

Figure 43. Yield Curve –Gilts & AAA rated Corporate Bonds



Source: Citi Investment Research

Figure 45. Product Price Increases over Different Periods



Source: Citi Investment Research

## Margins – Should be ok, post asset pricing moves

Higher interest rates are usually supportive of bank margins in India and globally. This is typically because rate increase transmissions tends to be more pronounced on assets, a share of deposits are often fixed rate or low cost, and managements typically seek to create a profit cushion to cover for risks on growth and asset quality.

The broader Indian market however reacted with meaningful margin concern as the RBI started raising rates aggressively and ahead of expectations. This is because a) Rate increases were initially led by deposit rates increases; and were not adequately backed by lending rate increases; b) Relatively static yield curve suggested that incremental Government Bond investments (for meeting SLR requirements) were not being profitable; and c) Government banks were perceived to be wary of raising lending rates, on account of perceived government pressure.

All these are legitimate concerns and would have impacted margins negatively, had they played out. However, they have not really played out, as a) Banks have raised lending rates fairly aggressive – while government banks have lagged the private peers, the increases have been substantial, and should support margins; b) the yield curve has flattened sharply, and should boost yields, at least for a meaningful part of incremental bond portfolio investments; and c) Indian banks – particularly the government banks – have large low and fixed-cost deposits, which support margins disproportionately in a rising rate environment. In addition, given loan books run a relatively lower maturity profile than term deposits, higher rates boost margins upfront (partly offset by the loss of margins on the investment portfolio).

We do see marginal profitability for banks at about the 300bp level; largely in line with the current levels of margins that the average bank is generating.

Figure 44. Government Banks NIM (bps)

Government Banks NIM (Bps, LHS)	1Q06	2Q06	3Q06	4Q06	1Q07	2Q07	3Q07
	332	329	314	323	329	317	327

Source: Citi Investment Research

In effect, we believe near-term margins for the banks – the government ones in particular – should be ok. Pressure, if any, should be limited – or be driven by structural issues other than by recent interest rate developments. We do however believe this could lead to some level of pressure 3-4 quarters on, particularly when the bulk of deposit rate re-pricing takes effect. We would however augur the extent of margin pressure would range between 5-15bp, rather than a more dramatic level.

## Liability growth and an expanding distribution pie

Over the past few years, India's banking system has enjoyed a liquidity surplus on account of:

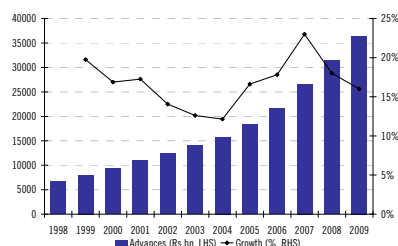
- A high level of domestic savings
- A large share of savings directed to bank deposits
- The closed capital account

We expect marked changes in household savings profiles to result in deposit mobilization becoming more of a challenge for banks and significant opportunities opening up in wealth management for banks, either directly or through the distribution of these products.

### Deposit mobilization more challenging

Industry-wide levels of deposits have expanded at an eight-year CAGR of 17%. Growth is likely to be under downward pressure, due to a slight shift into other savings instruments (whose share has risen over the past five years); disintermediation by mutual funds; and relatively unattractive real rates of return on banking deposits and increasing consumerism (which will mean more spending and less saving). In short, bank deposit growth will likely be more challenging going forward than it has been in recent years.

**Figure 46. India Banks — Deposits & Deposit Growth (FY1998-2007E, Rs bn, %)**



Source: RBI and CIR estimates

### Distribution opportunities and wealth management

Changes in savings profiles are spurring growth in non-bank savings and investments products, including mutual funds, insurance, and other linked products. A few banks are directly participating in this opportunity through subsidiary ventures in asset management, insurance, and broking. At the same time, banks have a significant opportunity in the distribution of these products, given their access to large customer bases, perceived credit worthiness compared with existing distributors and that they have the technology to manage such transactions. In short, liability and wealth management offer a significant opportunity to India's banks.

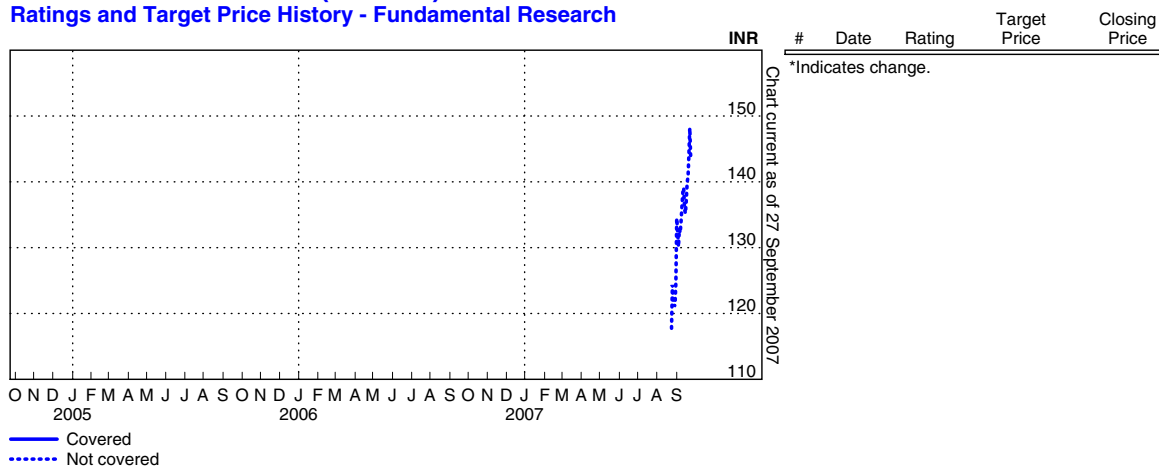
# Appendix A-1

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