India Banks: Undoing Financial Repression – Structural Reset of Economics

3 September, 2014



Undoing Financial Repression – Structural Reset of Economics

Fiscal profligacy by the GoI since FY09 resulted in ~35% of the banking sector's incremental deposit mobilization over this period funding Govt.'s borrowing requirements (vis-a-vis ~15% over FY02-07) due to which the banking sector currently has 28% of NDTL as SLR holdings against the mandated minimum of 22%. Bond yields rose from close to 5% in late 2008 to ~9% in late 2013 resulting in bond losses apart from impacting CD ratio and NIMs. In this note, we study the potential structural changes to the banking sector's economics over the ensuing 4-5 years due to a combination of a Govt. committed on fiscal consolidation and a RBI keen to reduce SLR requirements.

We conclude that a possible sub-3% fiscal deficit scenario in 4-5 years can incentivize RBI to cut SLR requirement to sub-18% and bring about ~200bps correction to bond yields resulting in non-linear improvement to loan growth, CD ratios, NIMs, treasury gains and absorption of credit costs heralding a new-normal scenario of accepted RoA trajectory for banks. For most Pvt banks, the gains in the overall SLR book (including HTM book) can offset the credit costs and result in RoA expansion. However, for PSU banks, gains on the bond book - even assuming a decline in bond yields to 6% can offset only 25%-40% of current levels of stressed assets (net NPAs and restructured assets). Our polarized view on the banking sector gets further strengthened post this analysis.

We draw comparison to a similar phase between 1999 and 2007, when fiscal deficit corrected from more than 6% to close to 2.5% of GDP. In that phase, bond yields fell from more than 12% to less than 6% and systemic SLR holdings fell from 40% of NDTL to 30% leading to a) CD ratios expanding from 45% to 69%, b) banking system NIMs moving from 3.1% to 3.6% and c) sizable bond market gains helping banks absorb almost the entire credit costs.

From a AFS book and modified duration perspective, KMB, YES, IIB, AXSB and KVB are better positioned amongst private peers while INBK, CBK, PNB and IOB stand to benefit in the PSU pack.

Key takeaways:

- **RBI to continue to cut SLR.** We estimate India's fiscal deficit to gradually narrow to 2.8% of GDP by FY20 led by higher tax revenue and lower subsidy burden (<u>refer slide 16</u>). As a result, net market borrowings to fall to 2.4% of GDP by FY20E from 4% of GDP in FY14, limiting supply of G-secs allowing RBI to further cut SLR for banks.
- NIMs to improve. Likely cut in SLR requirements to 18% of NDTL to propel systemic CD ratios to ~82% from 77% at present. This uptick in CD ratios should result in systemic NIMs expanding by ~20bps and RoA by ~10bps even without accounting for any change in spreads because of a potential drop in the cost of liabilities.
- Bond yields to decline. Despite SLR being cut to 18%, we estimate systemic SLR holdings to remain higher at ~22%, with the differential on account of the liquidity coverage ratio. We foresee the systemic demand supply equation changing in favor of supply from FY15, despite SLR holdings falling from 28% at present to 22% by FY19 (slide 6). Accordingly we believe bond yields are set to fall ~200bps over the ensuing 4-5 year period.



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Our banks have a number of obligations that pre-empt lending, and allow what is called 'lazy banking'.

In this context, we need to reduce the requirement for banks to invest in government securities in a calibrated way, to what is strictly needed from a prudential perspective.

As government finances improve, the scope for such reduction will increase.

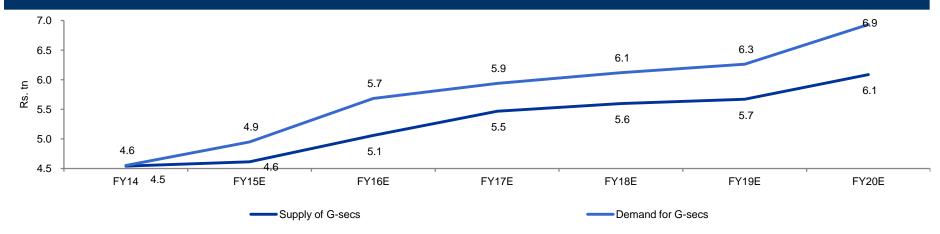
Financial repression refers to a set of governmental policies that regulate or manipulate a captive audience – majorly banks- into investing in government debt. This results in cheap funding and is a prime tool used by governments in indebted economies.



RBI to cut SLR based on the pace of reduction in fiscal deficit and net market borrowings

RBI to cut SLR in a phased manner depending on the pace of fiscal consolidation Banks' profitability to Lower net market improve borrowings • Govt. to cut subsidy Based on the reduction in net Tax revenue to increase on market borrowings, NIM expansion led by higher economic revival RBI to cut the SLR CD ratios, lower interest rates Net market borrowing Robust treasury gains to to come down selectively offset credit costs Fiscal deficit to **RBI cuts SLR** narrow

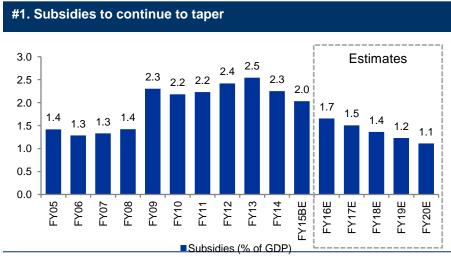
Demand for bonds to be higher than supply, despite SLR cuts due to pick up in financial savings. This realignment is set to drive yields lower.



Source: India Budget, Spark Capital Research

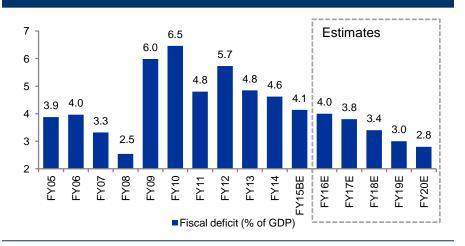


Fiscal deficit to narrow to 2.8% of GDP owing to lower expenditure and higher tax revenue

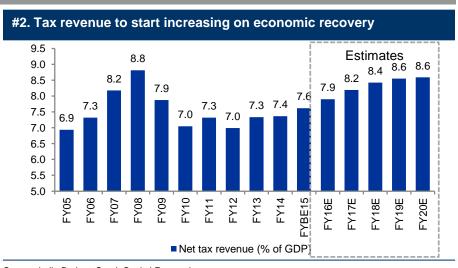


Source: India Budget, Spark Capital Research

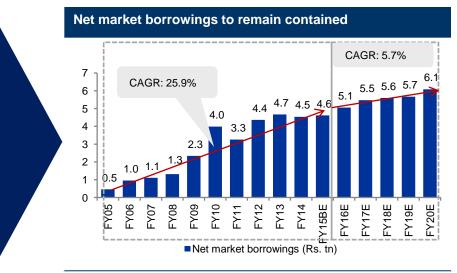
Leading to gradual reduction in fiscal deficit



Source: India Budget, Spark Capital Research



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Source: India Budget, Spark Capital Research



Demand and supply equation indicates lower bond yields despite SLR cuts

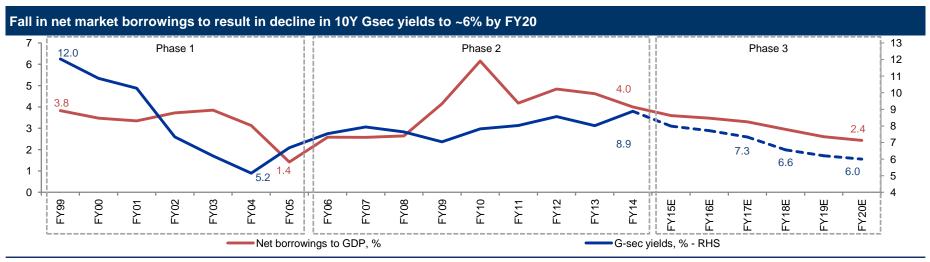
RBI can cut the SLR to 18% of NDTL by FY19 as lower fiscal deficit leads to lower net market borrowing

| | Demand and supply of G-secs | | | | | | | | | |
|--------------|--|--------|--------|---------|---------|---------|---------|---------|------|-----------------|
| | (Rs. bn) | FY14 | FY15E | FY16E | FY17E | FY18E | FY19E | FY20E | | |
| > | Fiscal deficit | 5,245 | 5,312 | 5,825 | 6,298 | 6,446 | 6,530 | 7,009 | | |
| Supply | Fiscal deficit (% of GDP) | 4.6 | 4.1 | 4.0 | 3.8 | 3.4 | 3.0 | 2.8 | | |
| ડિ | Total supply of G-secs or Net borrowings | 4,539 | 4,612 | 5,058 | 5,468 | 5,597 | 5,670 | 6,085 | | |
| | Demand model for banks | | | | | | | | | |
| | Deposits | 77,394 | 89,003 | 103,243 | 119,762 | 138,326 | 157,691 | 178,191 | _ | |
| | Deposits growth | 14.6 | 15.0 | 16.0 | 16.0 | 15.5 | 14.0 | 13.0 | | Actual SLR |
| | Systemic SLR (% of DTL) | 28.7 | 27.3 | 26.0 | 24.5 | 23.0 | 22.0 | 22.0 | | investments |
| | Systemic SLR | 22,216 | 24,298 | 26,843 | 29,342 | 31,815 | 34,692 | 38,489 | | |
| | Systemic SLR investment (Incremental) | 2,155 | 2,081 | 2,545 | 2,498 | 2,473 | 2,877 | 3,797 | _ | Mondotod |
| | Mandated SLR by RBI (% of NDTL) | 22.5 | 22.0 | 21.5 | 21.0 | 20.0 | 19.0 | 18.0 | | Mandated SLR |
| | Mandated SLR by RBI | 17,414 | 19,581 | 22,197 | 25,150 | 27,665 | 29,961 | 32,074 | | investments |
| | Mandated SLR investment (Incremental) | 2,056 | 2,167 | 2,617 | 2,953 | 2,515 | 2,296 | 2,113 | | IIIVCStillClits |
| | Institution-wise demand of bonds | | | | | | | | | |
| | Banks | 2,155 | 2,081 | 2,545 | 2,498 | 2,473 | 2,877 | 3,797 | | |
| pq | Insurance | 1,250 | 1,813 | 1,903 | 1,998 | 2,158 | 2,309 | 2,439 | | |
| ma | Pension funds | 450 | 495 | 550 | 622 | 659 | 719 | 775 | | |
| ۵ | MFs | 200 | 260 | 338 | 423 | 490 | 211 | 67 | | |
| Total Demand | FIIs | (25) | 300 | 345 | 397 | 337 | 145 | (145) | | |
| | RBI's OMO | 520 | - | - | - | - | - | - | | |
| | Total demand | 4,550 | 4,949 | 5,682 | 5,938 | 6,118 | 6,261 | 6,933 | | |
| | Demand -Supply | 11 | 337 | 624 | 470 | 521 | 591 | 848 | , | |

Bank deposits account for ~55% of household financial savings. We expect financial savings to pick up in next 4-5 years, leading to a sharp increase in the Banks Deposit base – from Rs. 77th to Rs. 158th in next five years. Hence, as the deposit base increases, demand for bonds from banks would increase despite SLR cuts.

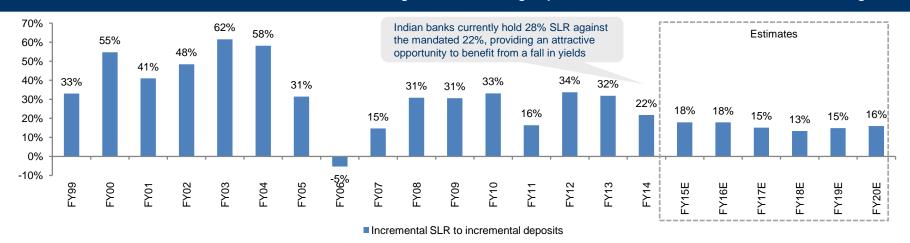


Bond yields to decline towards 6% in next 4-5 years



Source: RBI, Spark Research

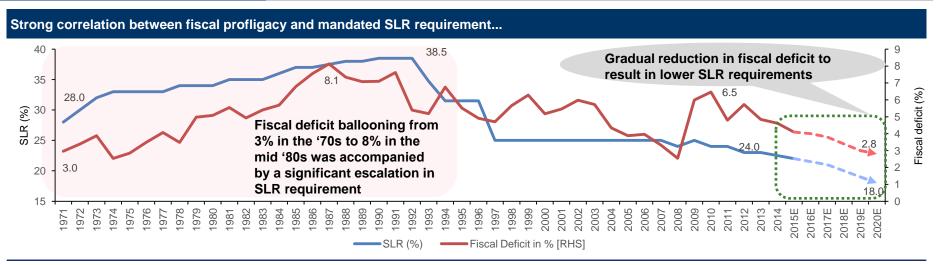
Banks would be able to cut SLR from the current 28% as funding Govt.'s borrowing requirements to come down on lower net borrowings



Source: Spark Capital Research

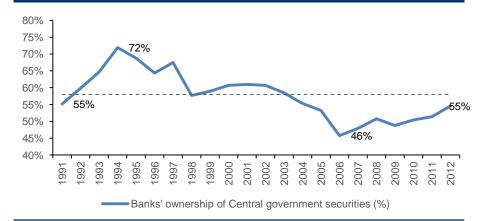


Indian banks have historically funded >50% of government borrowings



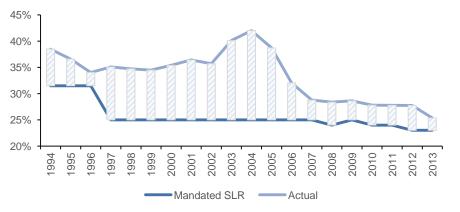
Source: RBI, Spark Research

... resulting in a captive market for government debt with Indian banks consistently holding >50%



Source: RBI, Spark Research

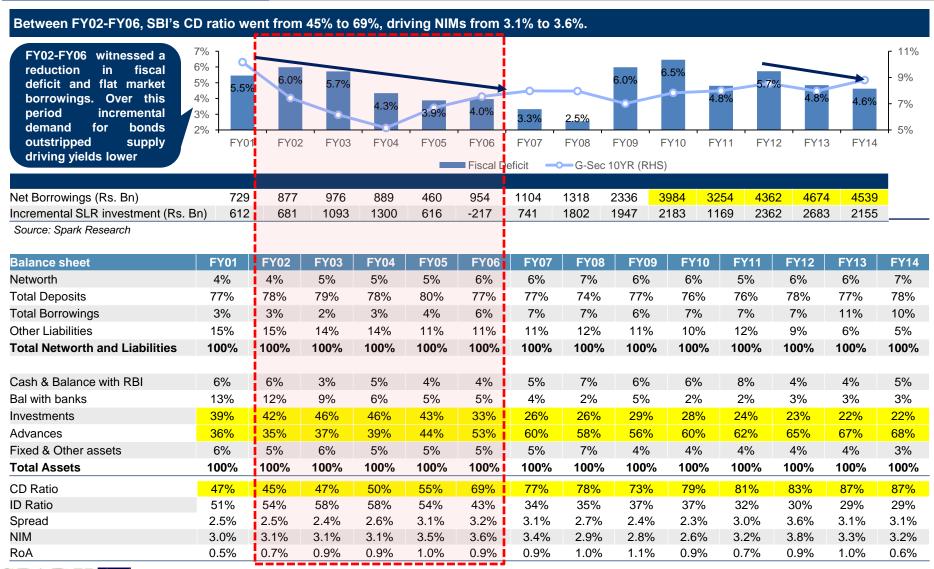
Indian banks have historically maintained ~4-7% excess SLR. Excess SLR is a function of credit demand, bond yields and liquidity.



Source: RBI, Spark Research



Lower fiscal deficit, higher CD ratios – impact on SBI's NIM





If SLR is cut to 18%, what would the impact on systemic CD ratios & NIMs be?

| We estimate a 20bps uption | ck in systemic | NIMs and | l ∼10bps i | mproveme | nt in RoAs | if SLR wa | s cut to 18% | 6 | |
|--------------------------------------|----------------|----------|------------|----------|------------|-----------|--------------|-------|-------|
| | As is | | | | Sce | narios | | | |
| SLR % (Mandated) | 22% | 30% | 24% | 20% | 18% | 16% | 14% | 12% | 10% |
| SLR % (actual) | 26% | 34% | 28% | 24% | 22% | 20% | 18% | 16% | 14% |
| SLR differential for LCR requirement | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% | 4% |
| CD ratio% | 77% | 69% | 75% | 79% | 81% | 84% | 86% | 88% | 90% |
| NIM % | 3.17% | 2.94% | 3.11% | 3.22% | 3.28% | 3.33% | 3.39% | 3.44% | 3.50% |
| RoA% | 0.72% | 0.59% | 0.69% | 0.75% | 0.78% | 0.81% | 0.84% | 0.88% | 0.91% |
| B/S | | | | | | | | | |
| Networth | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 'n |
| Deposits | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Borrowings | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Other Liabilities | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Networth and Liabilities | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Cash & balance with RBI | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Bal with banks | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Investments | 23 | 31 | 25 | 22 | 20 | 18 | 16 | 14 | 13 |
| Advances | 66 | 59 | 65 | 68 | 70 | 72 | 74 | 75 | 77 |
| Fixed & Other Assets | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Assets | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| P&L | | | | | | | | | |
| Interest earned | 9.0 | 8.8 | 8.9 | 9.0 | 9.1 | 9.1 | 9.2 | 9.2 | 9.3 |
| Interest expended | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 |
| NII | 2.7 | 2.5 | 2.6 | 2.7 | 2.8 | 2.8 | 2.9 | 2.9 | 3.0 |
| Other Income | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Total income | 3.7 | 3.5 | 3.6 | 3.7 | 3.8 | 3.8 | 3.9 | 3.9 | 4.0 |
| Operating expenses | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| PPOP | 1.9 | 1.7 | 1.8 | 1.9 | 2.0 | 2.0 | 2.1 | 2.1 | 2.2 |
| Provisions | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| PBT | 1.1 | 0.9 | 1.0 | 1.1 | 1.2 | 1.2 | 1.3 | 1.3 | 1.4 |
| Tax | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| PAT | 0.72 | 0.59 | 0.69 | 0.75 | 0.78 | 0.81 | 0.84 | 0.88 | 0.91 |

* YoA- Yield on Advances, Yol: Yield on Investments, CoD: Cost of Deposits, OI: Other income



Key Assumptions

Despite the RBI cutting SLR to 18% we estimate actual SLR holdings to remain higher by ~400bps, given the implementation of the liquidity coverage ratio

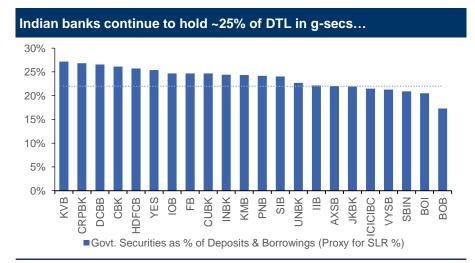
Systemic CD ratios can move from 77% at present to ~81% assuming a mandatory SLR requirement of 18%, driving NIMs and RoAs upwards by 20 and 10bos respectively

Assumptions*

YoA: 10.6% YoI: 8.0% CoD: 6.9% OI: 1% of assets Opex: 1.8% of assets Non-tax provisions: 0.8% of assets

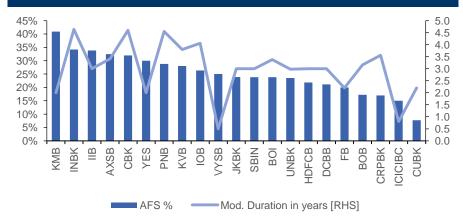
Tax rate: 33%

Banks' investment books attractively poised to benefit from a fall in yields



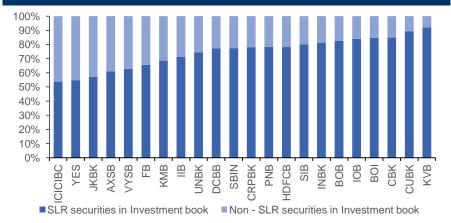
Source: Company, Spark Research

Most banks maintain ~20-25% of investments in AFS with a m.dur of 3



Source: Company, Spark Research

...leading to an investment book top heavy on SLR securities



Source: Company, Spark Research

- Indian banks currently hold 28% SLR against the mandated 22%, providing an attractive opportunity to benefit from a fall in yields
- Banks with a high AFS book and m.duration viz. KMB, IIB, AXSB and KVB are better positioned amongst private peers while CBK, PNB, INBK and IOB stand to benefit in the PSU pack



Potential drop in bond yields to offer a meaningful buffer to offset credit costs...

As bond yields ease, we estimate potential treasury gains to average 13-26% of NPA provisions for the system. Amongst private sector banks, JKBK, KMB, YES, DCBB, AXSB, KVB and FB stand to benefit the most, while INBK, CBK and PNB would benefit in the PSU pack.

| | | | | 100bps | decline | 150bps | decline | 200bps | decline |
|--------------|----------------------------|----------------------|----------------------------------|----------------------------|------------------------------------|----------------------------|------------------------------------|----------------------------|------------------------------------|
| | AFS Investments (Rs.bn) | Modified Duration | NPA Provisions Sum of FY15&16 | Potential gains (Rs.bn) | Gains as % of NPA Provisions | Potential gains (Rs.bn) | Gains as % of NPA Provisions | Potential gains (Rs.bn) | Gains as % of NPA Provisions |
| J KBK | 63 | 3.0 | 3 | 1.9 | 60% | 2.8 | 91% | 3.8 | 121% |
| KMB | 104 | 2.0 | 4 | 2.1 | 50% | 3.1 | 74% | 4.2 | 99% |
| YES | 123 | 2 | 8 | 2.5 | 30% | 3.7 | 45% | 4.9 | 60% |
| DCBB | 8 | 3.0 | 1 | 0.2 | 28% | 0.3 | 42% | 0.5 | 56% |
| AXSB | 369 | 3.4 | 47 | 12.6 | 27% | 18.9 | 40% | 25.2 | 54% |
| KVB | 37 | 3.8 | 5 | 1.4 | 26% | 2.1 | 39% | 2.8 | 52% |
| RB | 48 | 2.2 | 4 | 1.1 | 25% | 1.6 | 38% | 2.1 | 50% |
| IIB | 73 | 3.0 | 9 | 2.2 | 24% | 3.3 | 36% | 4.4 | 48% |
| INBK | 160 | 4.6 | 32 | 7.4 | 23% | 11.2 | 35% | 14.9 | 47% |
| HDFCB | 264 | 3.0 | 35 | 7.9 | 22% | 11.9 | 34% | 15.8 | 45% |
| СВК | 406 | 4.6 | 85 | 18.7 | 22% | 28.0 | 33% | 37.3 | 44% |
| PNB | 414 | 4.6 | 111 | 18.9 | 17% | 28.3 | 25% | 37.7 | 34% |
| UNBK | 221 | 3.0 | 52 | 6.6 | 13% | 9.9 | 19% | 13.2 | 25% |
| IOB | 185 | 4.1 | 61 | 7.5 | 12% | 11.3 | 19% | 15.0 | 25% |
| BOI | 272 | 3.4 | 95 | 9.2 | 10% | 13.8 | 15% | 18.4 | 19% |
| CRPBK | 113 | 3.6 | 42 | 4.0 | 10% | 6.0 | 14% | 8.0 | 19% |
| SBIN | 950 | 3.0 | 318 | 28.5 | 9% | 42.8 | 13% | 57.0 | 18% |
| вов | 200 | 3.2 | 77 | 6.3 | 8% | 9.5 | 12% | 12.7 | 17% |
| SIB | 10 | 3.1 | 4 | 0.3 | 7% | 0.5 | 11% | 0.6 | 14% |
| VYSB | 42 | 0.5 | 3 | 0.2 | 6% | 0.3 | 9% | 0.4 | 12% |
| CUBK | 5 | 2.2 | 3 | 0.1 | 4% | 0.2 | 6% | 0.2 | 8% |
| ICICIBC | 266 | 0.8 | 61 | 2.1 | 3% | 3.2 | 5% | 4.2 | 7% |
| System | 4,209 | | 1,052 | 139 | 13% | 209 | 20% | 278 | 26% |



... however gains will be limited relative to earlier phases

| Treasury | | | | | | | | | | | | | | |
|-------------------------|-------|------|-------|------|--------|--------|------|-------|------|------|------|------|------|------|
| gains/NPA provisions | FY01 | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 |
| AXSB | 235% | 160% | 268% | 125% | -1839% | 31% | -8% | 62% | 25% | 56% | 28% | 2% | 58% | 33% |
| HDFCB | -4% | 99% | 147% | 15% | -144% | -62% | -10% | 16% | 26% | 18% | -4% | -9% | 6% | 7% |
| CICIBC | 62% | 114% | 14% | 321% | -4% | -10% | 94% | 90% | 36% | 19% | -11% | -4% | 29% | 20% |
| IIB | 23% | 69% | 82% | 143% | -8% | 6% | 29% | 26% | 99% | 87% | 26% | 34% | 28% | -11% |
| KMB | | 72% | -70% | 547% | 94% | -76% | -15% | 11% | -1% | 12% | 38% | 205% | 108% | 4% |
| YES | | | | | | | | 1876% | 295% | 130% | -94% | 190% | 109% | 59% |
| ВОВ | 9% | 91% | 156% | 101% | -57% | -84% | -88% | 112% | 116% | 123% | 42% | 24% | 11% | 19% |
| BOI | 37% | 67% | 122% | 143% | -89% | 4% | 36% | 41% | 44% | 20% | 18% | -1% | 10% | 18% |
| CBK | 49% | 172% | 134% | 93% | 5% | -31% | -96% | 34% | 30% | 85% | 21% | 13% | 56% | -1% |
| CRPBK | 38% | 87% | 129% | 200% | -79% | 46% | 36% | 121% | 169% | 72% | 27% | 50% | 31% | -14% |
| NBK | 21% | 110% | 176% | 136% | 37% | -58% | -56% | 36% | -58% | 74% | 12% | -9% | 20% | 25% |
| IOB | 25% | 92% | 81% | 94% | 119% | 61% | 186% | 63% | 174% | 51% | 10% | 0% | 3% | 2% |
| PNB | 70% | 69% | 65% | 106% | 131% | -134% | -50% | 122% | 107% | 74% | 8% | 5% | 11% | -5% |
| SBIN | 22% | 7% | 49% | 70% | -47% | -2240% | 13% | 82% | 59% | 60% | 3% | -14% | 19% | 12% |
| UNBK | -8% | 45% | 114% | 68% | 110% | 20% | -2% | 44% | 66% | 99% | 37% | 26% | 18% | 19% |
| CUBK | | | 101% | 89% | -42% | 21% | -7% | 22% | 93% | 69% | -1% | 1% | 17% | 15% |
| DCBB | | 144% | 32% | 45% | -29% | 21% | 23% | 30% | -1% | 14% | 54% | 44% | 87% | 78% |
| FB | 18% | 72% | 84% | 82% | -51% | 23% | -13% | 23% | 17% | 50% | 7% | 21% | 131% | 20% |
| JKBK | 92% | 716% | 1558% | 763% | -517% | -94% | -10% | 175% | 37% | 142% | 40% | 26% | 85% | 58% |
| KVB | -127% | 316% | 320% | 42% | -197% | 113% | -54% | 1224% | 482% | 199% | 375% | -79% | 124% | -58% |
| SIB | 65% | 167% | 141% | 173% | -200% | 13% | 28% | 156% | 54% | 320% | 145% | 131% | 35% | 72% |
| VYSB | 14% | 170% | 216% | 271% | -248% | -69% | 41% | 65% | 41% | 35% | 52% | 16% | 26% | 57% |
| System | 29% | 68% | 81% | 103% | -11% | -99% | 11% | 65% | 52% | 52% | 10% | -1% | 21% | 11% |

Computing gains on the SLR book: Scenario #1, Bond yields dropping to 8% (55bps fall)

| Bank | Advances [A] | Investmen ts [B] | Other assets [C] | Total Assets [X=A+B+C] | Networth [D] | Other liabilities [E] | Total Liabilities [Y=D+E+F] | Stressed assets written off @ 45% LGD [G] | Advances net of written-off assets [P=A-G] | Gains in market value of Investment book [H] | Market value of Investment book [Q=B+H] | Market Value of Assets [Z=P+Q+C] | Accrual to Networth [(Z-X)/D] | Bond gains to written- off assets [G/H] |
|---------|-----------------|---------------------|---------------------|----------------------------------|-----------------|-----------------------------|---------------------------------------|--|--|--|---|----------------------------------|-------------------------------------|--|
| YES | 51 | 38 | 11 | 100 | 7 | 93 | 100 | 0 | 51 | 0 | 38 | 100 | 6% | 742% |
| JKBK | 59 | 33 | 8 | 100 | 7 | 93 | 100 | 0 | 59 | 0 | 34 | 100 | 5% | 717% |
| HDFCB | 62 | 25 | 14 | 100 | 9 | 91 | 100 | 0 | 62 | 0 | 25 | 100 | 3% | 353% |
| IIB | 63 | 25 | 12 | 100 | 10 | 90 | 100 | 0 | 63 | 0 | 25 | 100 | 2% | 181% |
| KMB | 61 | 29 | 10 | 100 | 14 | 86 | 100 | 0 | 60 | 0 | 30 | 100 | 1% | 122% |
| DCBB | 63 | 28 | 9 | 100 | 9 | 91 | 100 | 1 | 62 | 0 | 29 | 100 | 0% | 94% |
| VYSB | 59 | 28 | 13 | 100 | 12 | 88 | 100 | 0 | 59 | 0 | 28 | 100 | -1% | 84% |
| CUBK | 64 | 24 | 12 | 100 | 8 | 92 | 100 | 1 | 63 | 0 | 24 | 99 | -6% | 47% |
| KVB | 66 | 26 | 8 | 100 | 6 | 94 | 100 | 1 | 65 | 1 | 26 | 99 | -14% | 37% |
| AXSB | 60 | 30 | 10 | 100 | 10 | 90 | 100 | 1 | 59 | 0 | 30 | 99 | -7% | 36% |
| SIB | 66 | 26 | 8 | 100 | 6 | 94 | 100 | 1 | 64 | 0 | 27 | 99 | -17% | 31% |
| ICICIBC | 57 | 30 | 13 | 100 | 12 | 88 | 100 | 1 | 56 | 0 | 30 | 99 | -7% | 28% |
| FB | 58 | 32 | 9 | 100 | 9 | 91 | 100 | 2 | 56 | 0 | 33 | 98 | -17% | 23% |
| BOI | 65 | 20 | 15 | 100 | 5 | 95 | 100 | 2 | 63 | 0 | 20 | 98 | -34% | 19% |
| CRPBK | 62 | 30 | 8 | 100 | 5 | 95 | 100 | 3 | 59 | 1 | 30 | 98 | -52% | 18% |
| SBIN | 68 | 22 | 10 | 100 | 7 | 93 | 100 | 2 | 65 | 0 | 23 | 98 | -29% | 17% |
| UNBK | 65 | 26 | 9 | 100 | 5 | 95 | 100 | 3 | 62 | 0 | 27 | 98 | -46% | 16% |
| СВК | 61 | 26 | 13 | 100 | 5 | 95 | 100 | 3 | 58 | 0 | 26 | 98 | -51% | 16% |
| INBK | 65 | 25 | 10 | 100 | 6 | 94 | 100 | 3 | 62 | 0 | 25 | 97 | -41% | 15% |
| вов | 60 | 18 | 22 | 100 | 5 | 95 | 100 | 2 | 58 | 0 | 18 | 98 | -36% | 14% |
| IOB | 64 | 26 | 10 | 100 | 5 | 95 | 100 | 3 | 61 | 0 | 26 | 97 | -54% | 14% |
| PNB | 63 | 26 | 10 | 100 | 6 | 94 | 100 | 4 | 60 | 0 | 27 | 97 | -54% | 12% |

Assumptions: Mod. Duration of SLR book: 4, Stressed assets written off @ 45% Loss given default



Computing gains on the SLR book: Scenario #2, Bond yields dropping to 7% (155bps fall)

| Bank | Advances [A] | Investmen ts [B] | Other assets [C] | Total Assets [X=A+B+C] | Networth [D] | Other liabilities [E] | Total Liabilities [Y=D+E+F] | Stressed assets written off @ 45% LGD [G] | Advances net of written-off assets [P=A-G] | Gains in market value of Investment book [H] | Market value of Investment book [Q=B+H] | Market Value of Assets [Z=P+Q+C] | Accrual to Networth [(Z-X)/D] | Bond gains to written- off assets [G/H] |
|---------|-----------------|---------------------|------------------|----------------------------------|-----------------|-----------------------|---------------------------------------|--|---|---|---|---|-------------------------------------|--|
| YES | 51 | 38 | 11 | 100 | 7 | 93 | 100 | 0 | 51 | 1 | 39 | 101 | 19% | 2090% |
| JKBK | 59 | 33 | 8 | 100 | 7 | 93 | 100 | 0 | 59 | 1 | 34 | 101 | 15% | 2019% |
| HDFCB | 62 | 25 | 14 | 100 | 9 | 91 | 100 | 0 | 62 | 1 | 26 | 101 | 12% | 994% |
| IIB | 63 | 25 | 12 | 100 | 10 | 90 | 100 | 0 | 63 | 1 | 26 | 101 | 9% | 511% |
| KMB | 61 | 29 | 10 | 100 | 14 | 86 | 100 | 0 | 60 | 1 | 30 | 101 | 6% | 344% |
| DCBB | 63 | 28 | 9 | 100 | 9 | 91 | 100 | 1 | 62 | 1 | 29 | 101 | 10% | 266% |
| VYSB | 59 | 28 | 13 | 100 | 12 | 88 | 100 | 0 | 59 | 1 | 29 | 101 | 5% | 237% |
| CUBK | 64 | 24 | 12 | 100 | 8 | 92 | 100 | 1 | 63 | 1 | 25 | 100 | 4% | 133% |
| KVB | 66 | 26 | 8 | 100 | 6 | 94 | 100 | 1 | 65 | 1 | 27 | 100 | 1% | 105% |
| AXSB | 60 | 30 | 10 | 100 | 10 | 90 | 100 | 1 | 59 | 1 | 31 | 100 | 0% | 102% |
| SIB | 66 | 26 | 8 | 100 | 6 | 94 | 100 | 1 | 64 | 1 | 27 | 100 | -3% | 89% |
| ICICIBC | 57 | 30 | 13 | 100 | 12 | 88 | 100 | 1 | 56 | 1 | 31 | 100 | -2% | 78% |
| FB | 58 | 32 | 9 | 100 | 9 | 91 | 100 | 2 | 56 | 1 | 34 | 99 | -8% | 65% |
| BOI | 65 | 20 | 15 | 100 | 5 | 95 | 100 | 2 | 63 | 1 | 21 | 99 | -19% | 54% |
| CRPBK | 62 | 30 | 8 | 100 | 5 | 95 | 100 | 3 | 59 | 1 | 31 | 99 | -32% | 50% |
| SBIN | 68 | 22 | 10 | 100 | 7 | 93 | 100 | 2 | 65 | 1 | 23 | 99 | -18% | 47% |
| UNBK | 65 | 26 | 9 | 100 | 5 | 95 | 100 | 3 | 62 | 1 | 28 | 99 | -30% | 46% |
| СВК | 61 | 26 | 13 | 100 | 5 | 95 | 100 | 3 | 58 | 1 | 27 | 98 | -33% | 46% |
| INBK | 65 | 25 | 10 | 100 | 6 | 94 | 100 | 3 | 62 | 1 | 26 | 98 | -28% | 42% |
| вов | 60 | 18 | 22 | 100 | 5 | 95 | 100 | 2 | 58 | 1 | 19 | 99 | -25% | 40% |
| IOB | 64 | 26 | 10 | 100 | 5 | 95 | 100 | 3 | 61 | 1 | 27 | 98 | -38% | 40% |
| PNB | 63 | 26 | 10 | 100 | 6 | 94 | 100 | 4 | 60 | 1 | 27 | 97 | -41% | 33% |

Assumptions: Mod. Duration of SLR book: 4, Stressed assets written off @ 45% Loss given default



Computing gains on the SLR book: Scenario #3, Bond yields dropping to 6% (255bps fall)

| At vialds of 6% the losses fro | m stressed assets written-off i | is covered by bond gains for | r all private banks: ROI | I, CRPBK, SBIN & UNBK are the most cover | ad PSHe |
|------------------------------------|------------------------------------|-------------------------------|--------------------------|--|---------|
| At yields of 0 /0, the losses if 0 | iii siiesseu asseis Wiilleii-oii i | is covered by bolla gaills lo | ali private paliks, doi | i, CREBR, SBIN & UNBR are the most cover | eu rous |

| , ii jioilai | | | | | | | | | | , - , - | | | | |
|--------------|-----------------|------------------------|------------------------|----------------------------------|-----------------|-----------------------------|---------------------------------------|--|---|---|---|---|-------------------------------------|--|
| Bank | Advances [A] | Investmen ts [B] | Other assets [C] | Total Assets [X=A+B+C] | Networth [D] | Other liabilities [E] | Total Liabilities [Y=D+E+F] | Stressed assets written off @ 45% LGD [G] | Advances net of written-off assets [P=A-G] | Gains in market value of Investment book [H] | Market value of Investment book [Q=B+H] | Market Value of Assets [Z=P+Q+C] | Accrual to Networth [(Z-X)/D] | Bond gains to written- off assets [G/H] |
| YES | 51 | 38 | 11 | 100 | 7 | 93 | 100 | 0 | 51 | 2 | 40 | 102 | 31% | 3438% |
| JKBK | 59 | 33 | 8 | 100 | 7 | 93 | 100 | 0 | 59 | 2 | 35 | 102 | 26% | 3322% |
| HDFCB | 62 | 25 | 14 | 100 | 9 | 91 | 100 | 0 | 62 | 2 | 27 | 102 | 21% | 1636% |
| IIB | 63 | 25 | 12 | 100 | 10 | 90 | 100 | 0 | 63 | 2 | 27 | 102 | 16% | 840% |
| KMB | 61 | 29 | 10 | 100 | 14 | 86 | 100 | 0 | 60 | 2 | 31 | 102 | 12% | 566% |
| DCBB | 63 | 28 | 9 | 100 | 9 | 91 | 100 | 1 | 62 | 2 | 30 | 102 | 20% | 437% |
| VYSB | 59 | 28 | 13 | 100 | 12 | 88 | 100 | 0 | 59 | 2 | 29 | 101 | 11% | 389% |
| CUBK | 64 | 24 | 12 | 100 | 8 | 92 | 100 | 1 | 63 | 2 | 26 | 101 | 15% | 219% |
| KVB | 66 | 26 | 8 | 100 | 6 | 94 | 100 | 1 | 65 | 2 | 28 | 101 | 16% | 172% |
| AXSB | 60 | 30 | 10 | 100 | 10 | 90 | 100 | 1 | 59 | 2 | 31 | 101 | 7% | 168% |
| SIB | 66 | 26 | 8 | 100 | 6 | 94 | 100 | 1 | 64 | 2 | 28 | 101 | 11% | 146% |
| ICICIBC | 57 | 30 | 13 | 100 | 12 | 88 | 100 | 1 | 56 | 2 | 31 | 100 | 3% | 129% |
| FB | 58 | 32 | 9 | 100 | 9 | 91 | 100 | 2 | 56 | 2 | 34 | 100 | 1% | 106% |
| BOI | 65 | 20 | 15 | 100 | 5 | 95 | 100 | 2 | 63 | 2 | 22 | 100 | -5% | 89% |
| CRPBK | 62 | 30 | 8 | 100 | 5 | 95 | 100 | 3 | 59 | 2 | 32 | 99 | -11% | 82% |
| SBIN | 68 | 22 | 10 | 100 | 7 | 93 | 100 | 2 | 65 | 2 | 24 | 99 | -8% | 78% |
| UNBK | 65 | 26 | 9 | 100 | 5 | 95 | 100 | 3 | 62 | 2 | 29 | 99 | -13% | 76% |
| СВК | 61 | 26 | 13 | 100 | 5 | 95 | 100 | 3 | 58 | 2 | 28 | 99 | -15% | 75% |
| INBK | 65 | 25 | 10 | 100 | 6 | 94 | 100 | 3 | 62 | 2 | 27 | 99 | -15% | 69% |
| ВОВ | 60 | 18 | 22 | 100 | 5 | 95 | 100 | 2 | 58 | 1 | 19 | 99 | -14% | 67% |
| IOB | 64 | 26 | 10 | 100 | 5 | 95 | 100 | 3 | 61 | 2 | 28 | 99 | -21% | 66% |
| PNB | 63 | 26 | 10 | 100 | 6 | 94 | 100 | 4 | 60 | 2 | 28 | 98 | -28% | 55% |

Assumptions: Mod. Duration of SLR book: 4, Stressed assets written off @ 45% Loss given default



Model Portfolio

| Model Portfolio - Financials | | | | | | | | | | |
|------------------------------|---------------------|------------------------|----------|--|--|--|--|--|--|--|
| | Market Cap (Rs. bn) | Recommended Weights %) | Returns | | | | | | | |
| HDFCB | 2031 | 20 | Relative | | | | | | | |
| KMB | 799 | 20 | Relative | | | | | | | |
| IIB | 308 | 10 | Absolute | | | | | | | |
| YES | 237 | 10 | Absolute | | | | | | | |
| ICICIBC | 1800 | 10 | Relative | | | | | | | |
| POWF | 330 | 5 | Absolute | | | | | | | |
| FB | 103 | 5 | Absolute | | | | | | | |
| KVB | 56 | 5 | Absolute | | | | | | | |
| CIFC | 58 | 5 | Absolute | | | | | | | |
| JKBK | 72 | 5 | Absolute | | | | | | | |
| CUBK | 45 | 5 | Absolute | | | | | | | |

| Key Sells | | Buy on 20% | correction | Portfolio Changes | | |
|-----------|--------------------------------------|------------|---|-------------------|------------|--|
| | Investment Thesis | | Investment Thesis | What's in | What's out | |
| СВК | Capital and Asset Quality concerns | вов | Low exposure to Infra & metals, | | | |
| UNBK | Capital and Asset Quality concerns | SBI | Low exposure to Infra, Strong liability franchise | | | |
| MMFS | Slowing rural demand & Asset quality | AXSB | Improving liability and retail franchise | | | |

Source: Spark Capital research



Appendix 1

Thematic note Fiscal arithmetic: Lower fiscal deficit due to higher tax revenue and lower subsidy expenditure

Roadmap to fiscal consolidation: Economic recovery and lower crude oil prices to support

| | | | Fiscal c | leficit to narro | w ahead | | |
|----------------------------------|--------|--------|----------|------------------|---------|--------|--------|
| Rs. bn | FY14 | FY15BE | FY16E | FY17E | FY18E | FY19E | FY20E |
| Revenue receipts (i) | 10,293 | 11,898 | 13,861 | 16,262 | 19,098 | 22,171 | 25,411 |
| Net tax revenue | 8,360 | 9,773 | 11,502 | 13,573 | 15,975 | 18,611 | 21,496 |
| Non-tax revenue | 1,932 | 2,125 | 2,359 | 2,689 | 3,123 | 3,560 | 3,915 |
| Non debt capital receipts (ii) | 366 | 740 | 926 | 949 | 973 | 998 | 1,025 |
| Disinvestment of PSUs | 258 | 634 | 800 | 810 | 820 | 830 | 840 |
| Non plan expenditure (A) | 11,149 | 12,199 | 13,992 | 15,951 | 17,977 | 20,134 | 22,651 |
| Expenditure on subsidies | 2,455 | 2,514 | 2,412 | 2,494 | 2,583 | 2,678 | 2,779 |
| Food | 920 | 1,150 | 1,265 | 1,328 | 1,395 | 1,464 | 1,538 |
| Fertilizer | 680 | 730 | 766 | 804 | 845 | 887 | 931 |
| Oil | 855 | 634 | 381 | 362 | 343 | 326 | 310 |
| Other non plan expenditure | 8,695 | 9,685 | 11,580 | 13,457 | 15,394 | 17,456 | 19,872 |
| Plan expenditure (B) | 4,755 | 5,750 | 6,621 | 7,557 | 8,540 | 9,565 | 10,794 |
| Total expenditure (iii) = A + B | 15,904 | 17,949 | 20,613 | 23,508 | 26,517 | 29,699 | 33,445 |
| Fiscal deficit (iii-ii-i) | 5,245 | 5,312 | 5,825 | 6,298 | 6,446 | 6,530 | 7,009 |
| Fiscal deficit (% of GDP) | 4.6 | 4.1 | 4.0 | 3.8 | 3.4 | 3.0 | 2.8 |
| Net market borrowings | 4,539 | 4,612 | 5,058 | 5,468 | 5,597 | 5,670 | 6,085 |
| Net market borrowings (% of GDP) | 4.0 | 3.6 | 3.5 | 3.3 | 3.0 | 2.6 | 2.4 |

Source: India Budget, Spark Capital Research

Key Assumptions

Gradual economic recovery to lead to higher tax revenue

Assume disinvestment to continue at ~Rs.800bn per annum

Expect gradual pass through of LPG and kerosene prices. Food subsidy is likely to increase at 5% CAGR on Food Security Act

Higher provision from FY17 due to 7th pay commission

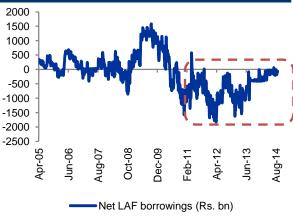
Assume avg. 13% increase in plan exp. as govt. focus shifts to productive spending

Lower fiscal deficit to result in lower net market borrowing



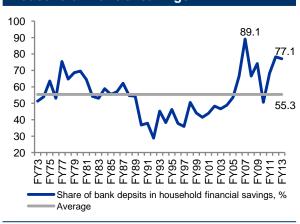
Shift in household savings towards financial savings to improve liquidity

Liquidity remained in deficit for 99% days for the last four years...



Source: RBI, Spark Capital Research

Bank deposits account for ~75% of household financial savings



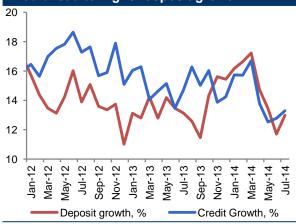
Source: RBI, Spark Capital Research

...due to a sharp decline in HH financial savings, but we expect it to increase...



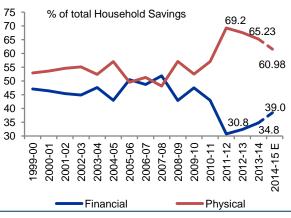
Source: RBI, Spark Capital Research

Thus, increase in HH financial savings would lead to higher deposit growth...



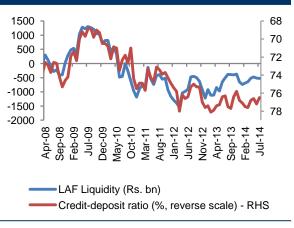
Source: RBI, Spark Capital Research

...due to a shift from physical to financial savings



Source: RBI, Spark Capital Research

...leading to increase in liquidity



Source: RBI, Spark Capital Research



| Absolute | Rating Interpretation |
|----------|--|
| Buy | Stock expected to provide positive returns of >15% over a 1-year horizon |
| Add | Stock expected to provide positive returns of >5% – <15% over a 1-year horizon |
| Reduce | Stock expected to provide returns of <5%10% over a 1-year horizon |
| Sell | Stock expected to fall >10% over a 1-year horizon |

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