

India Banks

NPL cycle peaking?

Equities

India
Diversified Financial

Share of stressed debt remains high, but recognition is accelerating

Our study of trends in the financials of 5,000 listed corporates suggests that the share of weak corporates (<1 EBITDA/interest ratio) remained high during most of FY16, including Q4 FY16. The share of weak loans in the steel and power sectors has fallen, while that for the infrastructure sector has risen in recent quarters. Our sample study of government documents on 200 corporates suggests that YES Bank (YES), AXIS Bank and ICICI Bank have a relatively higher share of loan approvals to corporates with credit ratings below investment grade compared to their GNPL as of FY16.

Our deep-dive study suggests NPLs could peak in FY17

Based on our analysis of 14,000 corporates (90% of corporate debt), we estimate around 14.6% of system loans are stressed, of which 9.1% is already recognised as non-performing loans or NPLs (including write-offs) and the remaining 5.5% are fragile, but not NPL currently. Our bottom-up study reveals that power/metals might contribute 1.0%/1.5% to GNPL, in addition to existing NPL. We run a sensitivity analysis on the remaining 5.5% of loans and expect GNPL formation to decline 25% YoY in FY17, with a sharper decline of 40% YoY in FY18. We expect the system GNPL ratio to rise to 8.7% in FY17 before falling to 7.8% in FY18.

Stress in power and steel sectors may lead to an additional 2.5% in GNPL

With help from the UBS Utilities team (Gopal Ritolia and Sourabh Taparia), we ran a bottom-up analysis of 114 private sector power projects and believe around 34,000 MW of capacity (~US\$15bn of debt from banks) is fragile for various reasons. 5.7% of power loans are already GNPL, which may increase to 17% if issues surrounding these projects are not resolved, in our view. We believe power might only add 100-120bp to system GNPL or 40-65bp in credit costs (percentage of total loans) in FY17/18. The steel sector has improved in recent months, but we think it might still generate an additional 120-200bp in GNPL due to excess leverage and weak international prices.

State Bank of India (SBI) is ahead in NPL recognition—upgrade to Buy rating

While we expect the sector to muddle through in FY17, we believe SBI is ahead in NPL recognition and could positively surprise on GNPL formation. We raise our price target for SBI from Rs210.00 to Rs300.00, and upgrade it from Neutral to Buy rating. We most prefer SBI, HDFC Bank and LIC Housing Finance (LICHF), and least prefer YES and Punjab National Bank (PNB). We raise our price target for PNB from Rs65.00 to Rs100.00 to factor in a decline in GNPL formation and higher stressed loan recognition.

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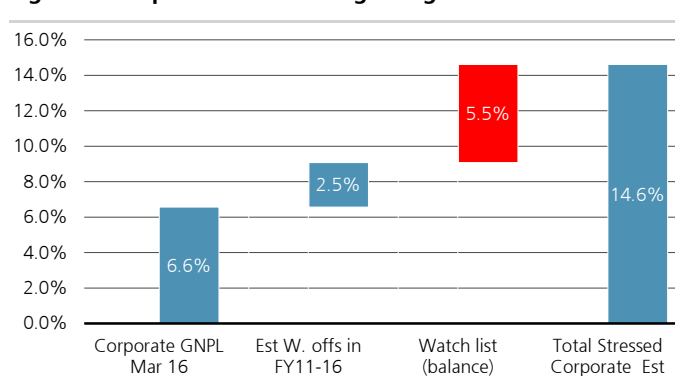
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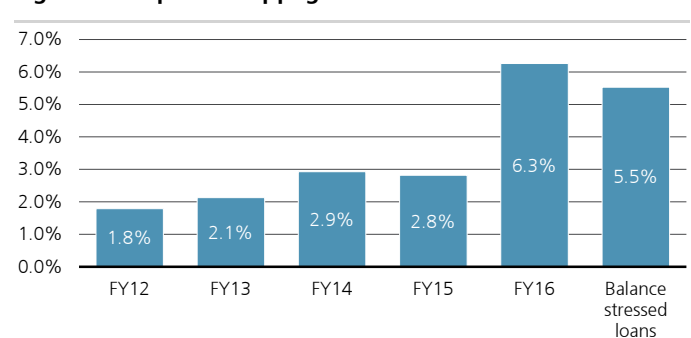
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Figure 1: Corporate stress being recognised as NPLs



Source: RBI, UBS estimates

Figure 2: Corporate slippages should decline in FY17-18E



Source: RBI, UBS estimates

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India Banks

UBS Research THESIS MAP MOST FAVORED

LEAST FAVORED

SBI, HDFC Bank, LIC Housing Finance

Yes Bank, Punjab National Bank

PIVOTAL QUESTIONS

Q: Have NPL concerns peaked for Indian banks?

Not yet, but we believe we are closer to peak of the NPL cycle. We expect GNPL formation to decline YoY in FY17 and GNPL ratios to decline in FY18. Based on our bottom-up study, 5.5% of loans are under stress and may turn into NPL.

[more→](#)

Q: Can we expect >15% top-line growth for the banking sector over the next three years?

This is less likely given a weak investment pipeline. System loan growth may remain at 12-14% in the next three years, mainly driven by the retail and SME segments. We expect private banks to grow by an average of 17%, while state-owned enterprise (SOE) banks may grow in the low double-digits over the same period.

[more→](#)

Q: How is the sector positioned against digital competition?

Indian consumers appear keen to embrace digital banking (mobile and online banking), as shown by our survey, and banks are responding fast to digital competition to protect their deposits and fee businesses—however, not all are moving at the same pace.

[more→](#)

WHAT'S PRICED IN?

Most banks are now trading near the five-year average P/BV (except SOE banks), which indicates that investors are less concerned about NPLs now than three months ago. Our analysis suggests that high provisions will continue in FY17, but may start declining from FY18 onwards.

[more→](#)

UBS VIEW

We believe NPL risk remains the key near-term catalyst and stocks would sustain their re-ratings only if the underlying trends improve. We have seen greater NPL recognition in FY16, which if continued in FY17 would lead to a peak of the NPL cycle. We would also differentiate between the banks that are ahead in NPL recognition and those that are lagging at this point.

EVIDENCE

Based on our analysis of 14,000 companies (90% of corporate debt), we estimate 14.6% of system loans are stressed, of which 9.1% are already recognised as NPL. We also ran a bottom-up analysis of >100 private sector projects and believe 34,000 MW of power projects with around US\$15bn in debt from banks are under stress. We think the NPL recognition cycle could peak in FY17 and banks should report improvements in asset quality from FY18 onwards.

Why read this report?

In this report, we attempt to ascertain when NPLs will peak in India and which bank/s would be the first to report this peaking. Based on our bottom-up analysis of 14,000 corporates (90% of corporate debt), we estimate that loans of around US\$165bn (14.6% of system loans) are fragile based on their interest coverage ratios, credit ratings or loan restructuring (after excluding strong promoter groups, but including NPLs).

Some banks have declared watchlists of stressed loans that form 2-11% of their loan books, and we attempt to arrive at the probability for defaults on such lists by assigning credit ratings to each bank's exposure. Further to our deep-dive analysis of 100 sample companies last year ([Deep dive into lending practices – differentials not priced in](#)), we have analysed 100 more companies (covering an aggregate debt of >US\$150bn) that have high leverage, weak financials, below investment grade ratings, or low cash interest coverage ratios, and compared the results with declared corporate GNPL/watchlists.

With the help of the UBS Utilities team, Gopal Ritolia and Sourabh Taparia, we ran a bottom-up analysis of almost all power sector projects (114 coal/gas-based projects) with a capacity of around 80,000 MW to identify the fragile projects and estimate the banks' exposure to corporates owning those.

With the help of UBS Asia Basic Materials analyst, William Vanderpump, we also studied the stressed cases in the steel sector to estimate the remaining fragile debt and banks' exposure to fragile borrowers based on credit ratings.

We attempt to address the following questions.

- How much more NPLs can we expect from the power and steel sectors?
- How and when would the NPL cycle peak for the system and what are the banks' positioning within that?
- Which banks are ahead/behind in recognising NPLs compared to stress on the balance sheet?

Figure 3: Valuation summary

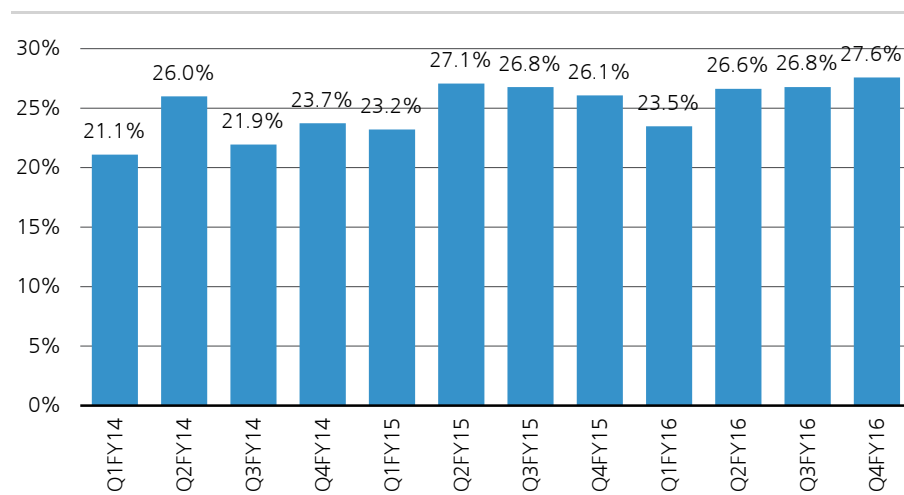
	Rating	Price #	PT (Rs)	Market		EPS (Rs)			PER (X) at CMP			PBR (X) at CMP			RoE (%)	
				Upside	Cap	CAGR			5yr			5yr				
				%	Rs Bn	FY17E	FY18E	16-18E	FY17E	FY18E	Avg	FY17E	FY18E	Avg	FY17E	FY18E
SBI	Buy	225.60	300.00	33	1684	14	25	36.0	16.5	9.2	12.5	1.16	1.06	1.4	7.2	12.1
HDFC Bank	Buy	1,228.45	1,550.00	26	3093	60	77	25.8	20.4	15.9	18.5	3.68	3.12	3.3	19.4	21.2
LICHF	Buy	502.60	600.00	19	254	42	52	23.9	12.0	9.6	11.0	2.4	2.0	1.9	21.3	22.4
KMB	Buy	760.80	840.00	10	1389	18	23	42.3	42.5	33.0		5.15	4.48	4.4	12.9	14.5
PFC	Buy	207.30	290.00	40	274	55	59	7.7	3.8	3.5	6.0	0.7	0.6	1.0	18.2	17.1
REC	Buy	199.05	290.00	46	197	72	77	10.9	2.8	2.6	5.7	0.6	0.5	1.2	22.4	20.5
ICICI Bank	Neutral	261.90	260.00	(1)	1516	18	20	9.4	14.4	13.1	14.1	1.61	1.48	1.7	11.6	11.8
IndusInd Bank	Neutral	1,136.45	1,200.00	6	593	50	62	24.6	22.8	18.3	15.2	3.32	2.88	2.4	15.5	16.8
BOB	Neutral	152.25	150.00	(1)	337	10	17	n/a	15.4	8.9	4.2	0.81	0.75	1.0	5.3	8.7
IBFSL	Neutral (CBE)	714.20	775.00	9	239	66	77	17.5	10.7	9.3	5.9	2.4	2.2	1.6	24.1	24.7
PNB	Sell	123.70	100.00	(19)	229	8	13	n/a	15.2	9.6	3.7	0.62	0.59	0.8	4.1	6.3
Yes	Sell	1,154.50	650.00	(44)	483	64	77	12.6	18.2	15.1	10.2	3.06	2.62	2.0	18.0	18.7

Note: Above data as of 21 July 2016.

Source: Bloomberg, Company data, UBS estimates

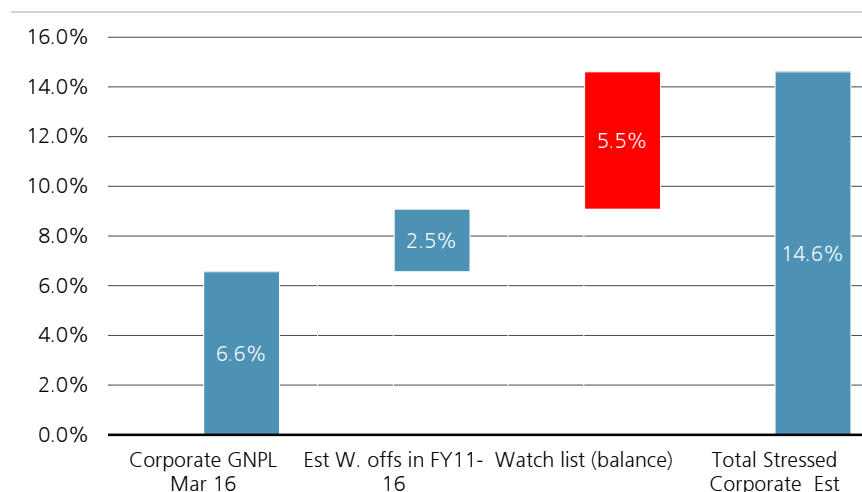
Nine charts that tell the story

Figure 4: Debt with cash interest coverage ratios (ICR) of <1 has not changed much since FY15



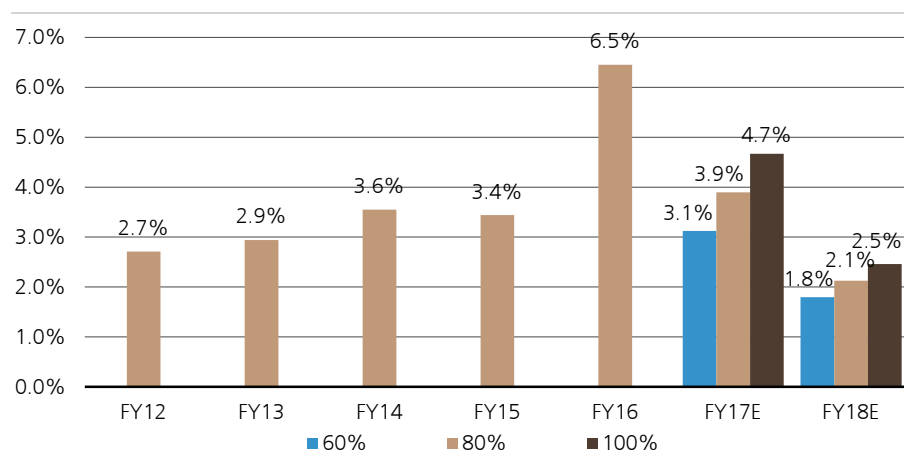
Source: Capitaline, UBS

Figure 5: Stress yet to be recognised in 5.5% of system loans



Source: RBI, UBS estimates

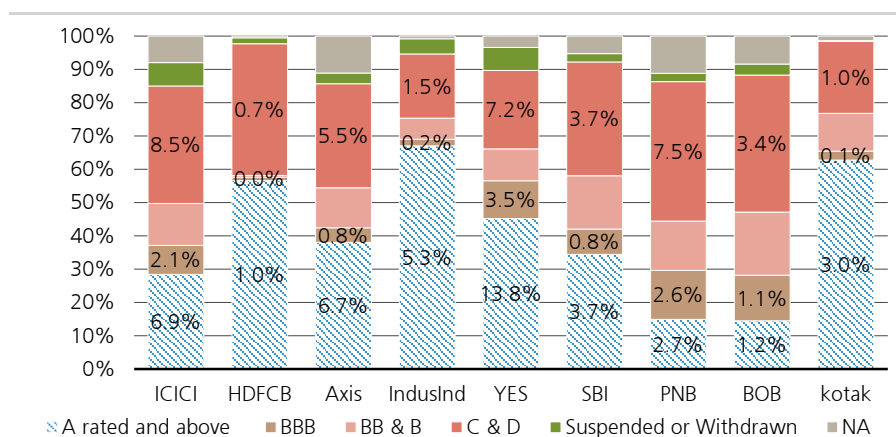
Figure 6: GNPL formation in various scenarios of default to watchlist*



*Assuming 70% turns into NPL in FY17 and 30% in FY18 in our base case.

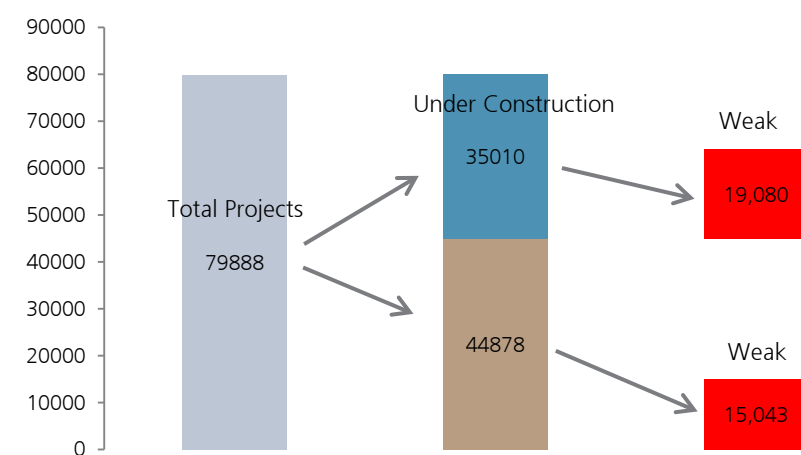
Source: RBI, UBS estimates

Figure 7: Credit rating mix of loans by banks to our sample of 200 companies



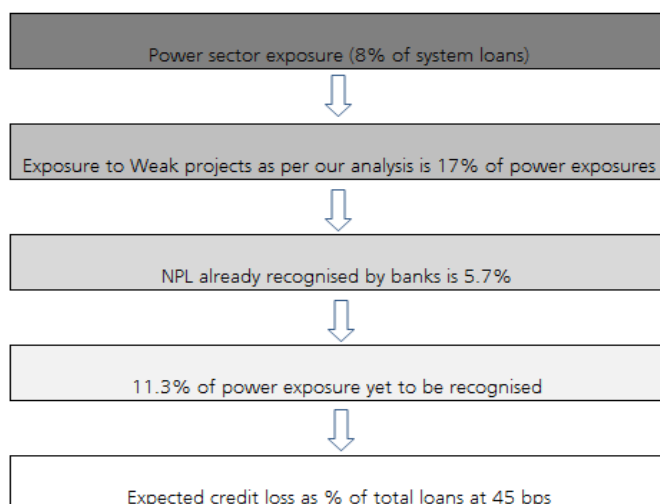
Source: MCA, Capitaline, UBS estimates

Figure 8: 34000MW Power Projects might face debt serviceability issues



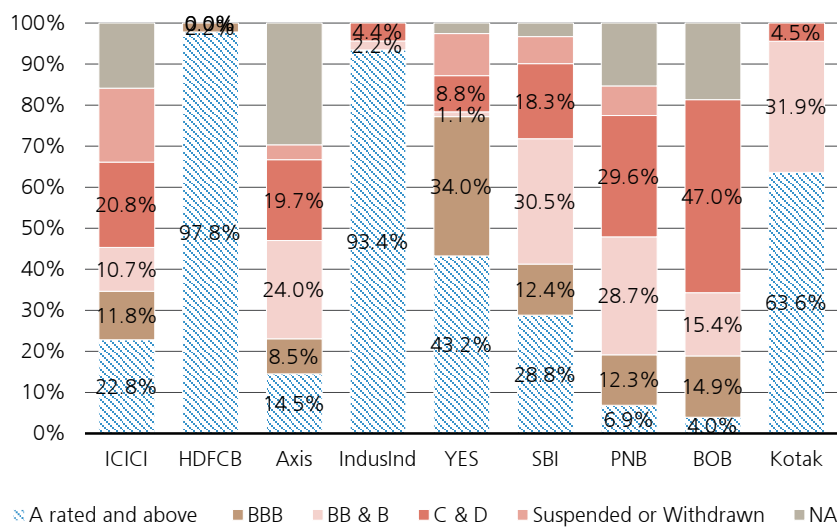
Source: CEA, UBS

Figure 9: The power sector might generate an additional 100bp in GNPL or 45-50bp in credit cost



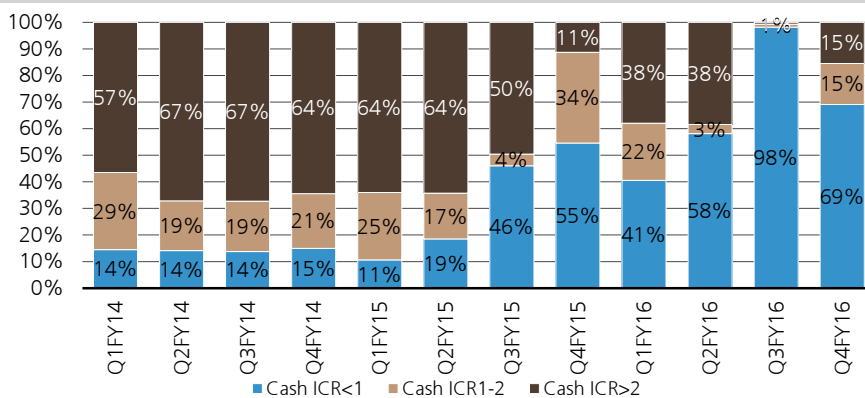
Source: Company data, UBS estimates

Figure 10: Power—ratings breakdown of corporates with weak projects



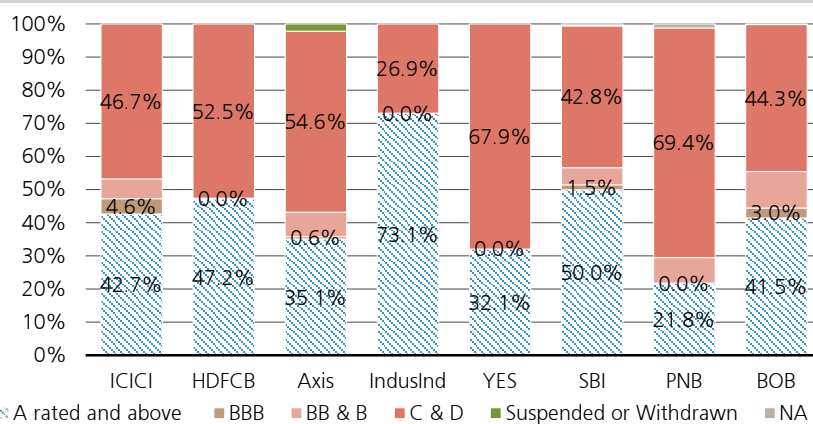
Source: MCA, Capitaline, UBS estimates

Figure 11: Steel sector—share of weak debt declined in Q4, but not massively



Source: Capitaline, UBS

Figure 12: Steel sector—credit rating mix of banks (FY16E)



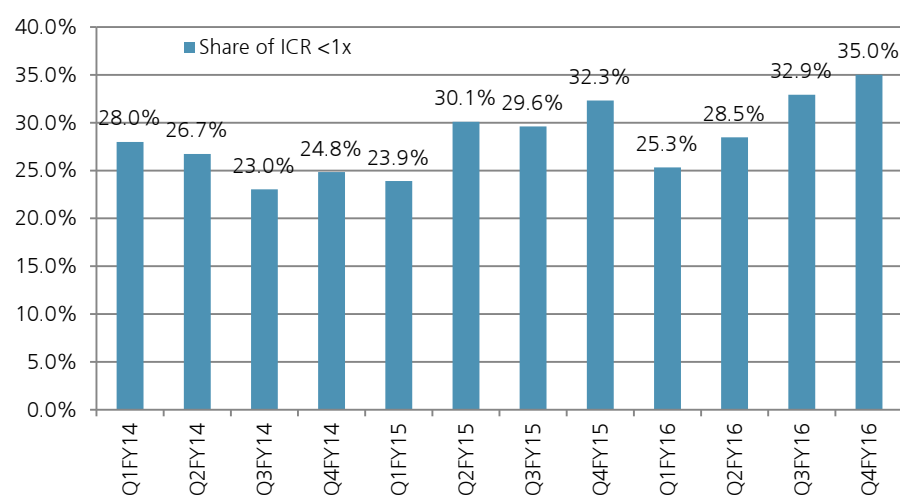
Source: Capitaline, MCA, UBS estimates

What happened to system stress in Q4 FY16?

In our bottom-up analysis of corporates' quarterly financial trends (5,000 companies, which translates to around 40% of system corporate lending), we found stress levels (corporates with EBITDA/interest ratios of <1) remained high during most of FY16 and has risen further in Q4 FY16.

If we present data as it is for companies with EBITDA/interest ratios of <1x (cash ICR), then we see a consistent increase in weak credit over the last four quarters, with no respite in Q4 FY16 as well.

Figure 13: Trends in corporates with less than 1x cash ICR (unadjusted)



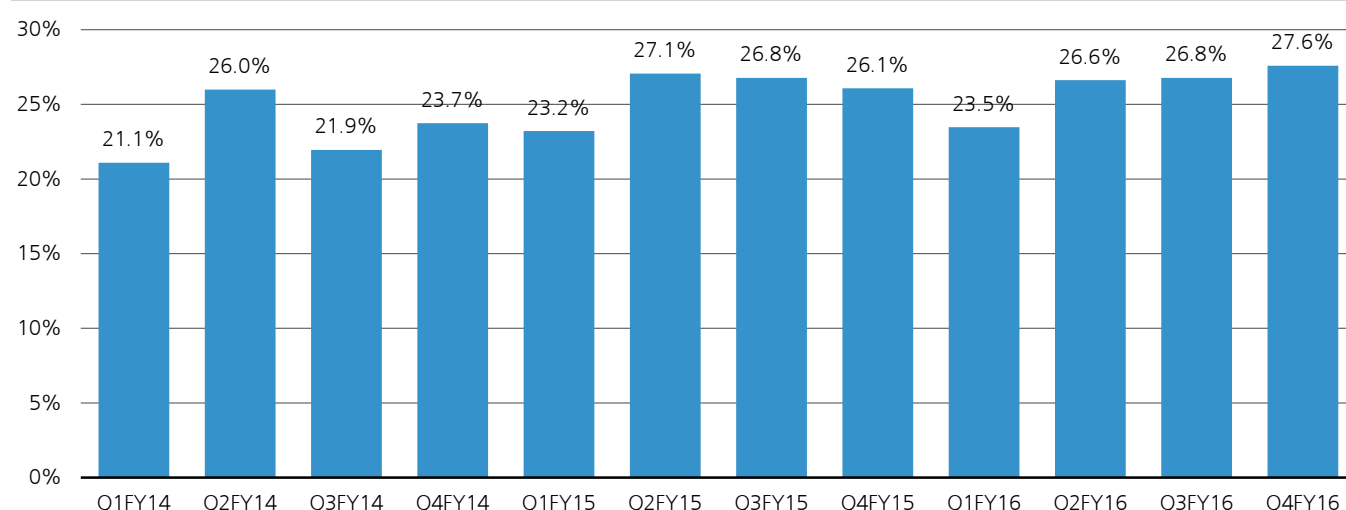
Source: Capitaline, UBS

Raw data for 5,000 companies suggests the share of debt with cash ICR of 1x is rising sharply

From the above-mentioned data set, if we remove SOEs and strong promoter groups to arrive at more vulnerable borrowers (Figure 13), we observe that the share of weak corporates is not rising as sharply as in the above chart (Figure 12).

Adjusted for SOE/strong promoter groups, the share of stressed debt is not rising as sharply as in Figure 12

Figure 14: Share of debt with cash ICR of <1—adjusted for strong promoter groups and SOEs

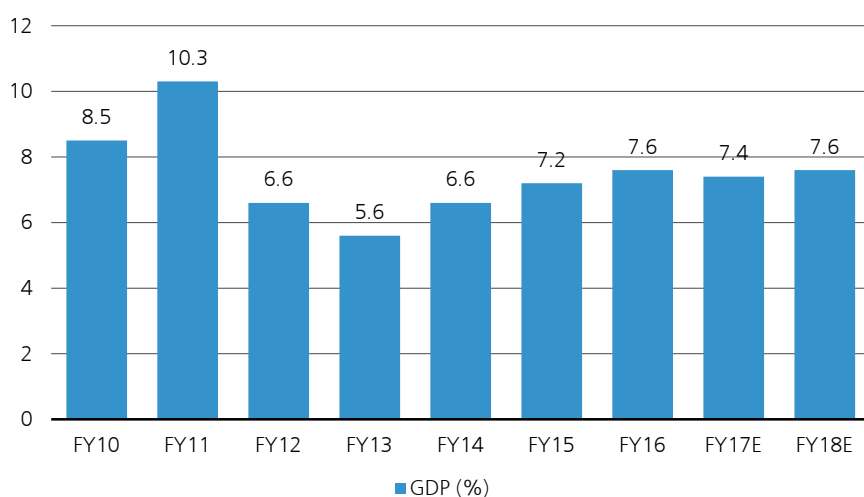


Source: Capitaline, UBS estimates

A macro recovery is expected to be gradual

UBS's Strategy and Economics team expects a gradual economic recovery in India with 7.4%/7.6% GDP growth in FY17/FY18. The team expects the recent improvement in high frequency data to be unsustainable. Cement, power and two-wheelers' growth has been strong since January-February 2016, helped by a low base last year. Recent updates for these indicators show that headline YoY growth has started to roll over in cement, diesel consumption, power, and two-wheelers. Coal production growth also slowed in April-May 2016 from the highs of 5% YoY in January-February ([link](#)).

Figure 15: GDP growth (%)



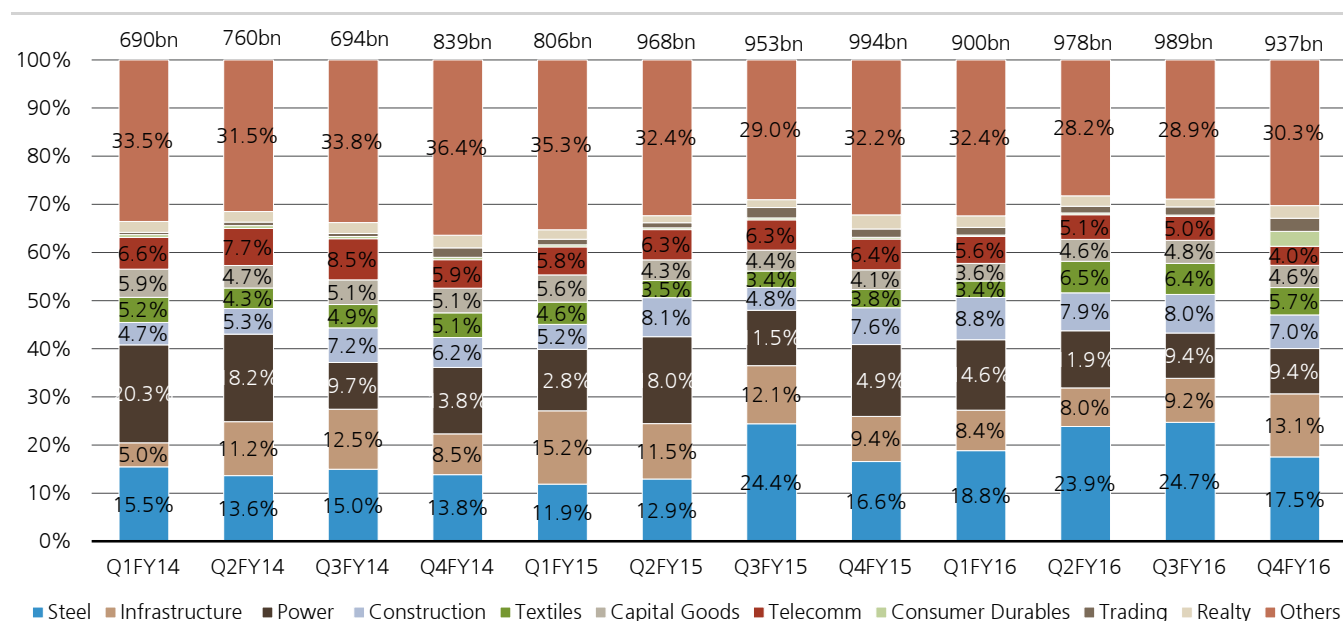
Source: Mospi, UBS estimates

Which segments are still deteriorating?

While there were improvements in a few segments during Q4 FY16, system-level stress has remained high at FY15 levels (Figure 4). As depicted in Figure 4, the share of the steel sector in stressed debt has fallen to 17.5% in Q4 FY16 compared to the previous two quarters (~24%), while that for infrastructure has risen to 13.1% in Q4 FY16 from 8-9% in Q2-Q3. The share of power sector corporates has also declined during the year, from 14.9% in Q4 FY15 to 9.4% in Q4 FY16.

Share of the steel sector has declined, while that for infrastructure has risen

Figure 16: System-level breakdown of stressed loans



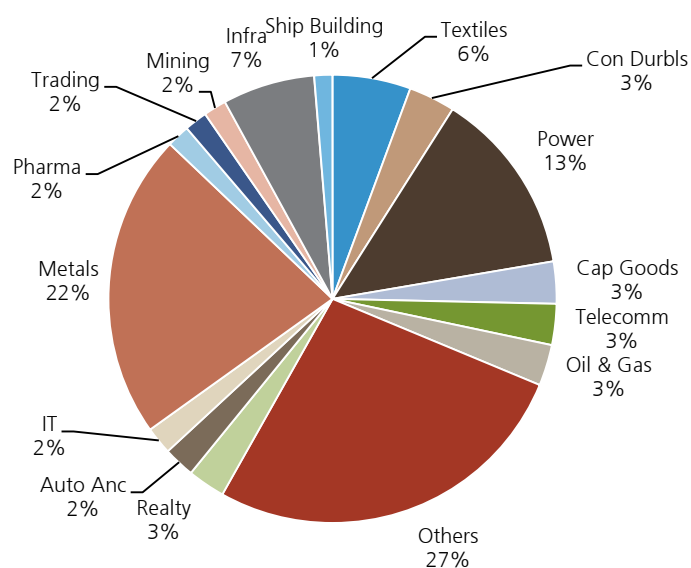
Source: Capitaline, UBS estimates

What is the total size of weak debt to corporates?

According to our bottom-up analysis of 14,000 corporates (90% of corporate debt), we estimate that loans of around US\$165bn (14.6% of system loans) are weak based on their interest coverage ratios, credit ratings or loan restructuring (after excluding strong promoter groups). Of this, we estimate around 60% of debt is already recognised as NPL or written off, and the remaining has yet to be resolved or recognised.

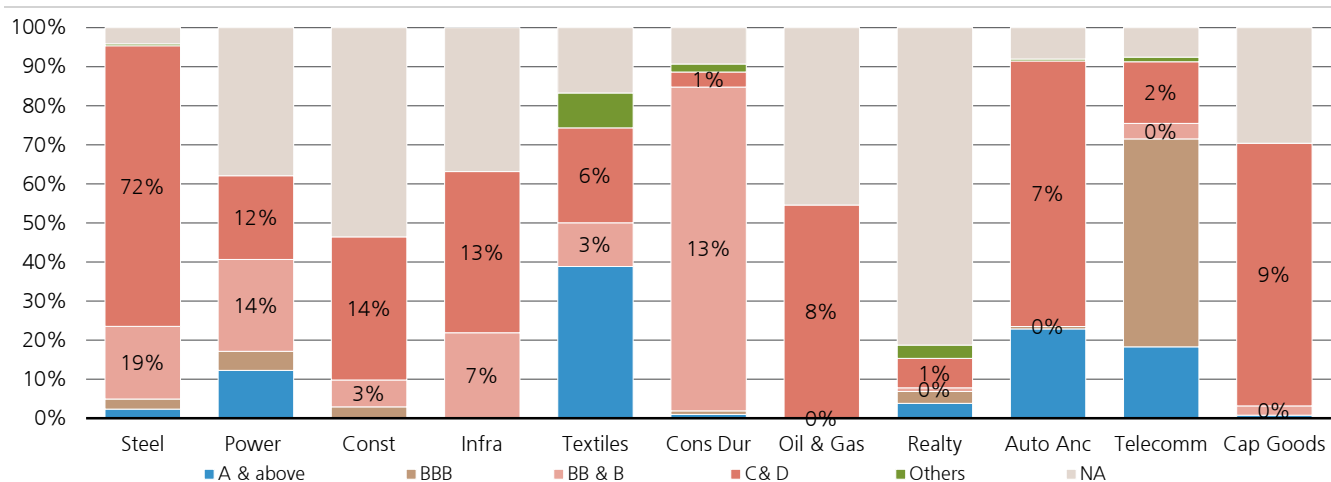
Based on our study, we observed that the metal, power, infrastructure, and textile sectors were key contributors to the aggregate stressed debt. Credit ratings for most of these companies identified as stressed are below investment grade, suspended, withdrawn, or data is not available.

Figure 17: Breakdown of stressed corporates by sector



Source: Capitaline, UBS estimates

Figure 18: Breakdown of stressed corporates based on credit ratings



Source: Capitaline, UBS estimates

How are corporates with large debts faring?

As we analyse the three-year performance for a sample of 23 large corporates, we see debt-to-EBITDA falling in some cases and cash ICR rising in other cases. Please note that some of the corporates in this list have healthy financial ratios. Furthermore, 12 out of 23 companies have reported some improvement in their debt servicing capabilities or a decline in leverage ratios over the past two years, while others showed a deterioration or no change. We treat these as initial signs of an improvement in system asset quality—though not significant enough to stop the provisioning cycle of banks as yet, in our view.

12 out of 23 companies reported some improvement in their debt servicing capabilities or a decline in leverage ratios over the past 2 years

Figure 19: Three-year performance of 23 large leveraged corporates

Company	Debt			Debt/EBITDA			ICR			Improvement
	FY14	FY15	FY16	FY14	FY15	FY16	FY14	FY15	FY16	
JP Associates	589,113	592,008	595,926	9.0	9.4	12.3	1.1	0.9	0.6	N
JP Power	238,431	265,253	222,553	11.5	9.3	8.5	1.4	1.3	1.1	Y
GVK Power	201,377	208,138	237,217	18.9	25.2	14.4	1.2	0.6	0.8	Y
Alok Industries	149,986	146,148	197,511	3.5	3.6	(6.6)	1.5	1.2	(1.1)	N
Lanco Consol	342,975	368,654	416,969	20.5	16.8	18.1	0.6	0.7	0.9	Y
Aban Offshore	112,994	132,042	-	5.1	5.4	-	2.0	2.2	2.0	N
Reliance Comm	363,180	305,350	323,620	4.7	4.5	4.4	2.6	2.5	2.6	Y
Electrosteel	82,730	92,482	87,554	(179.2)	323.9	70.1	0.3	0.1	0.2	Y
Jaypee Infra	76,330	66,091	85,533	5.8	4.9	70.4	1.5	1.5	0.5	N
Monnet Ispat	100,809	108,093	110,810	21.8	72.7	(29.2)	1.9	0.2	(0.4)	N
IVRCL	75,190	82,696	78,897	26.4	(52.0)	(20.2)	0.4	(0.2)	(0.4)	N
Shree Renuka	77,277	64,216	56,390	7.8	(36.7)	(25.0)	1.0	(0.2)	(0.2)	Y
Adani Power	389,381	405,283	482,609	8.1	7.8	5.5	1.2	1.1	1.5	Y
Gammon India	102,839	100,276	49,393	267.0	39.9	3.7	0.1	0.4	1.3	Y
Videocon	359,866	339,939	332,542	32.7	2.4	16.5	0.3	2.8	0.6	N
GMR	358,663	410,332	438,829	12.4	14.2	9.3	1.0	0.8	1.2	Y
Bhushan	317,542	389,903	427,916	11.7	17.9	20.3	1.6	0.9	0.5	N
JSPL	332,146	413,272	435,193	6.0	10.9	12.8	4.7	1.5	1.0	N
KSK Energy	126,919	164,696	185,620	18.8	31.0	11.2	0.9	0.5	0.9	Y
RattanIndia Power	99,215	106,705	127,216	97.7	122.9	10.1	0.8	0.2	1.1	Y
Suzlon Energy	127,163	128,195	105,067	(10.1)	(1.9)	6.1	(0.6)	(3.2)	1.4	Y
Videocon	359,866	339,939	332,542	32.7	2.4	16.5	0.3	2.8	0.6	N
Essar Steel	375,599	349,287	na	8.5	5.6	na	0.9	1.4	na	NA

Note: Data is on a consolidated basis.

Source: Company data, Bloomberg, UBS

How much debt is yet to be recognised as NPL?

GNPL formation may fall 25% YoY in FY17 and 40% YoY in FY18

Out of 14.6% of system loans, around 9.1% is already been recognised as NPL (including write offs) and balance 5.5% of loans remains at risk of becoming NPL over next 12-24 months as per our estimates.

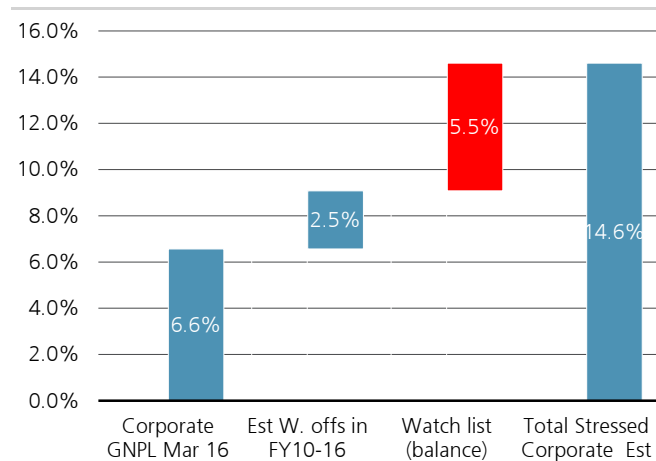
We believe bulk (70%) of these weak loans would be tackled or recognized in FY17 and balance in FY18.

We run sensitivity on the system level watch list with 60%, 80%, 100% probability of default to get FY17 Gross NPL formations of 3.1%, 3.9% and 4.7% respectively compared to 6.5% estimated GNPL formation seen in FY16 (Figure 6).

In our base case, we expect GNPL formation to decline 25% YoY in FY17, and expect sharper decline of 40% YoY in FY18. We expect NPL ratio to rise to 8.7% in FY17 before it falls to 7.8% in FY18.

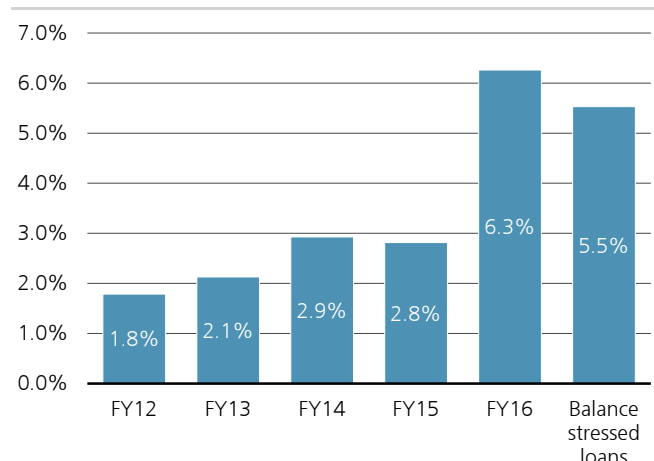
Key risk to our analysis - If we have missed any leveraged corporate/s which is not part of Capitaline database, our system level stress numbers may be understated to that extent. We might be overstating the stress if we have included any healthy corporate seeing temporary weakness on EBITDA (we have tried to not include healthy/strong parentage corporates as part of stressed bucket). We have assumed 70% of NPL recognition to happen in FY17 and 30% in FY18, if recognition of NPL is delayed or preponed then we might see different results than present in charts below.

Figure 20: Corporate stress getting recognised as NPL



Source: RBI, UBS estimates

Figure 21: Corporate slippages to decline in FY17-18



Source: RBI, UBS estimates

Scenario analysis

60% probability of default scenario (A)

In scenario A, economy recovers faster than expected, deleveraging cycle accelerates further and key stressed sectors start seeing demand/margins recovery. In such scenario (A), 60% of watch list turns NPL and if we assume 70% NPL happens in FY17 and 30% in FY18, then we get 3.1% and 1.8% as Gross NPL formation in FY17 and FY18 respectively. Gross NPL formation in FY18 at 1.8% would be lowest in last 5 years in this scenario. GNPL ratio may fall to 7.1% in FY18 after rising to 8% in FY17 in such scenario.

(A) GNPL ratio may fall to 7.1% in FY18 after rising to 8% in FY17 in such scenario.

80% probability of default scenario: (B)

In scenario B (our base case), economy recovers gradually with GDP growth of 7.4% in FY17 and 7.6% in FY18, interest rates remain low (with a downward bias) deleveraging cycle continues at current pace, and current regulatory protection to key sector remain.

In such scenario (B), 80% of watch list turns NPL and if we assume 70% NPL happens in FY17 and 30% in FY18, then we get 3.9% and 2.1% as Gross NPL formation in FY17 and FY18 respectively versus 6.5% in FY16.

(B) GNPL ratio may fall to 7.8% in FY18 after rising to 8.7% in FY17 in such scenario.

In this scenario, FY17 GNPL formation would be significantly lower than 6.5% of FY16 and FY18 GNPL formation could be even lower than 2.7% seen in FY12. GNPL ratio may fall to 7.8% in FY18 after rising to 8.7% in FY17 in such scenario.

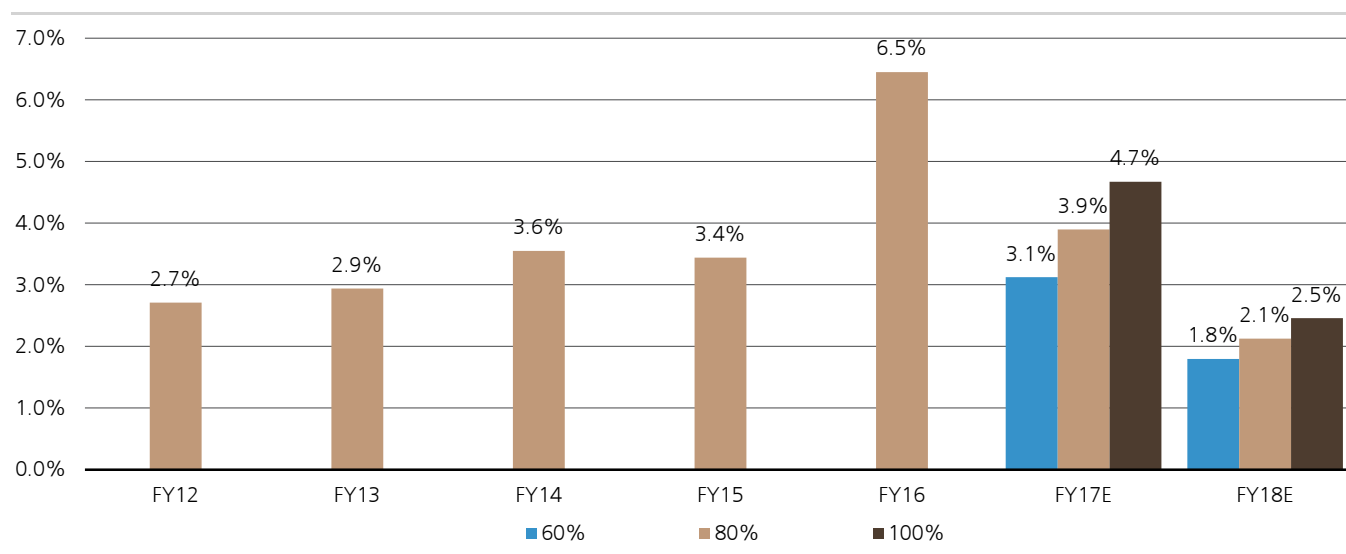
We have kept NPL formation assumption from Retail/Agriculture constant at 80bp (of total loans) in all scenarios.

100% probability of default scenario: (C)

If 100% of watch list turns NPL, keeping other assumption constant as above we may get 4.7% and 2.5% Gross NPL formation in FY17 and FY18 respectively, which would still be lower than FY16 GNPL formation. In this scenario, GNPL ratio may rise to 9.4% in FY17 before falling to 8.9% in FY18.

(C) GNPL ratio may rise to 9.4% in FY17 before falling to 8.9% in FY18.

Figure 22: GNPL Formation in various scenarios of default to watch list*

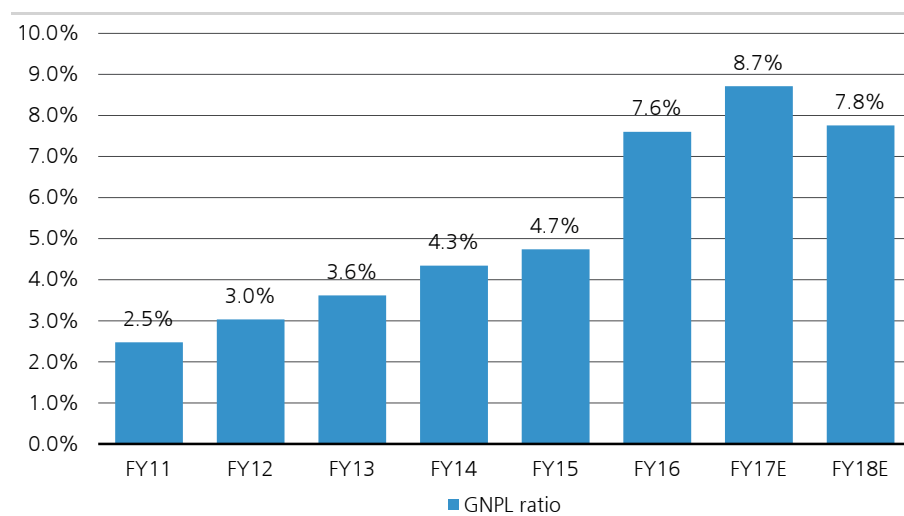


Source: RBI, UBS estimates

Note – assuming 70% turns NPL in FY17 and 30% in FY18 in base case

In scenario A (60% PD), GNPL ratio in FY17 may peak at 8.0% in FY17 and thereafter fall to 7.1% in FY18. While in scenario C (100% PD), GNPL ratio in FY17 may peak at 9.4% in FY17 and thereafter fall to 8.9% in FY18.

Figure 23: System GNPL Ratio to increase in FY17 before falling in FY18



Source: RBI, UBS estimates

In scenario A & C, system GNPL may peak at 8.0% and 9.4% respectively Vs our base case of 8.7% in FY17

Sensitivity on the UBS estimated watchlists

We estimate banks yet to be recognized weak loan based on MCA data, banks' declared watch-lists, and standard restructured loans.

If we assume no more deterioration in system debt and 70% of each banks weak lending to be recognized or resolved in FY17 and 30% in FY18 then we may see sharp decline in GNPL formation of SOE banks (PNB, BOB, SBI) while it might rise for private sector corporate lenders (like YES, AXIS).

Figure 24: Sensitivity of GNPL formation to probability of default on UBS estimated watchlists

GNPL Formation (% of opening loans)	FY16	Slippages in FY17 @ 70%			Slippages in FY18 @ 30%		
		60%	80%	100%	60%	80%	100%
BOB	7.3%	2.9%	3.9%	4.9%	1.1%	1.5%	1.9%
PNB	10.2%	2.7%	3.6%	4.4%	1.1%	1.4%	1.8%
SBI	4.8%	1.7%	2.3%	2.9%	0.7%	0.9%	1.1%
AXIS	1.7%	3.7%	5.0%	6.2%	1.3%	1.8%	2.2%
ICICI	3.8%	5.1%	6.8%	8.5%	1.9%	2.5%	3.2%
YES	0.5%	2.4%	3.1%	3.9%	0.8%	1.1%	1.3%
FB	2.8%	1.5%	2.0%	2.5%	0.6%	0.7%	0.9%

Source: Company data, UBS estimates

Figure 25: Sensitivity of GNPL to probability of default on watchlist

	FY16	FY17 (A)	FY18 (A)	FY17 (B)	FY18 (B)	FY17 (C)	FY18 (C)
GNPL ratio (%)	60%	60%	60%	80%	80%	100%	100%
BOB	10.0	10.4	9.6	11.3	10.9	12.2	12.2
PNB	12.9	12.8	11.4	13.6	12.6	14.4	13.8
SBI	6.5	6.0	4.8	6.5	5.6	7.0	6.3
AXIS	1.7	4.0	4.3	5.0	5.7	6.0	7.2
ICICI	5.8	8.5	9.4	10.0	11.5	11.5	13.6
YES	0.8	2.7	2.8	3.3	3.7	4.0	4.6
FB	2.8	2.5	1.5	2.9	2.1	3.3	2.7

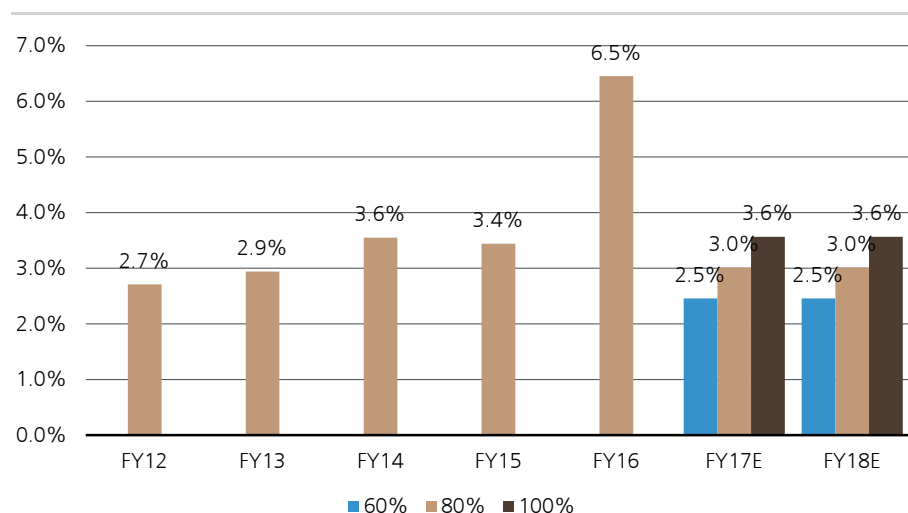
Source: Company data, UBS estimates

What if banks delay NPL recognition further?

Instead of 70% watch list debt getting stress tested (recognised or resolved) in FY17, if we assume 50% being stress tested in FY17 and balance 50% in FY18, then GNPL formation might fall to 2.5% (60% PD), 3.0% (80% PD) and 3.6% (100% PD) in FY17 under scenario A, B, and C respectively. However, GNPL ratio may not peak in FY17 and might rise gradually from 7.6% in FY16 to 7.9% in FY17 and 8.1% in FY18 under scenario B.

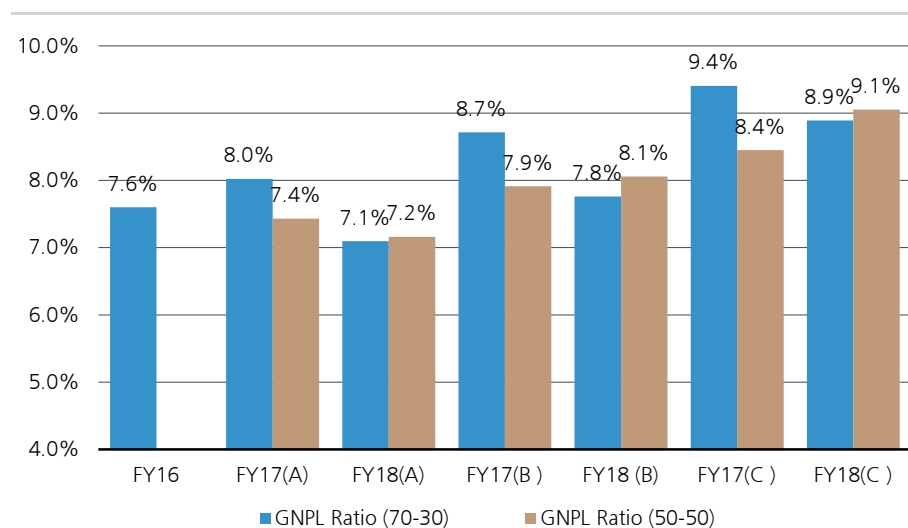
In this situation, where banks delay recognition of stress, we fear the NPL cycle peaks in FY18 unless scenario A plays out with only 60% of default from the watch list.

Figure 26: If we assume 50% of watch list is tested in FY17 and 50% in FY18



Source: RBI, UBS estimates

Figure 27: System GNPL ratio under various scenarios

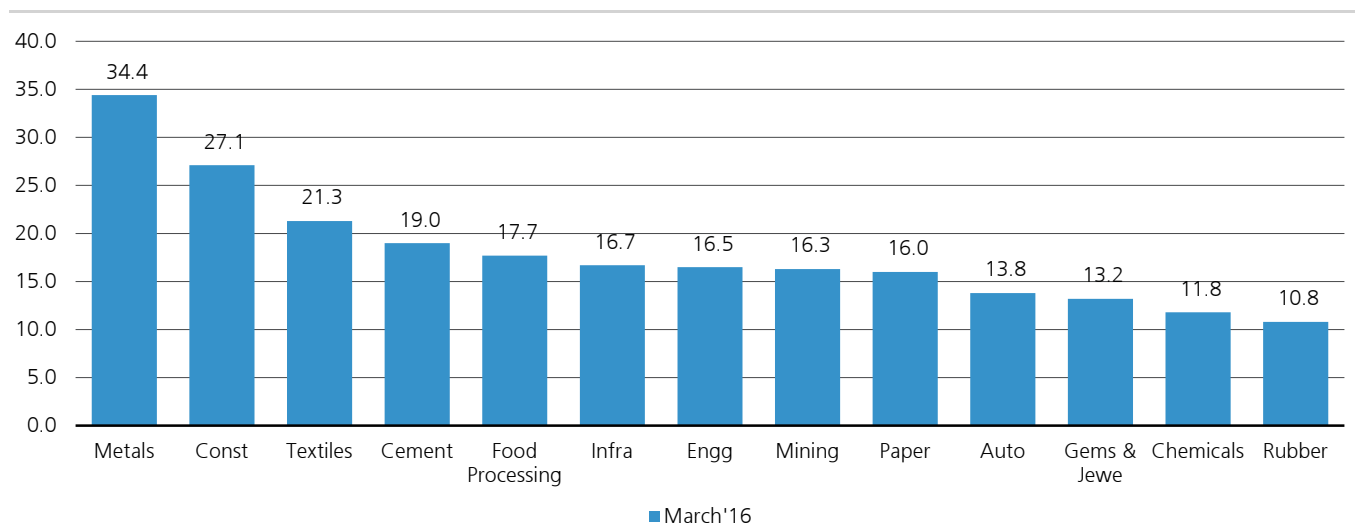


Source: RBI, UBS estimates

Which sectors have stressed debt but still unrecognised?

At system level, roughly one third of Basic Metals and one fourth of construction, and one fifth of textile and cement are stressed (either NPL or restructured) as per recent RBI report ([link](#)).

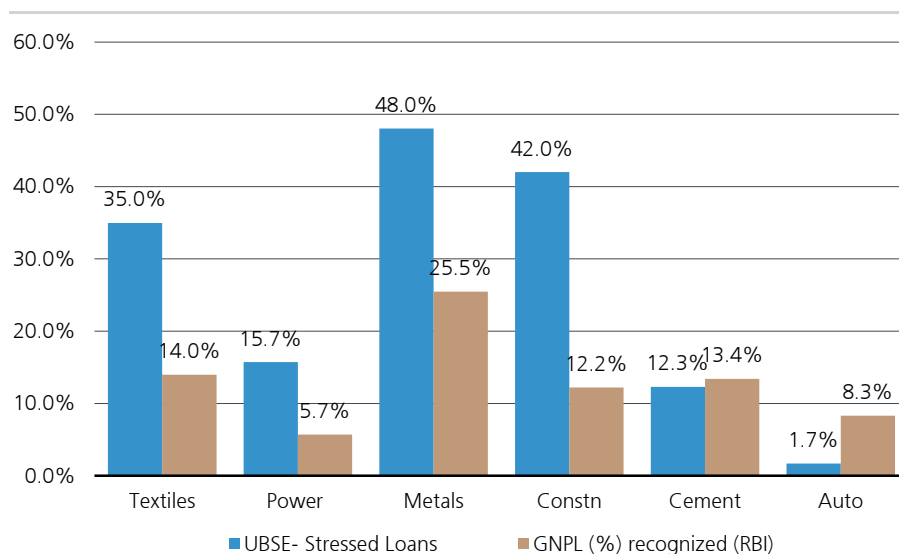
Figure 28: Stressed assets breakdown across industries (as % of sector loans)



Source: RBI

As per our bottom up study on estimated stress in each of the key sector, we believe around 20-30% of debt in metals, power, construction and textiles is still fragile and need to be resolved or recognised as NPL in FY17-18.

Figure 29: GNPL recognised versus UBS estimates of stress



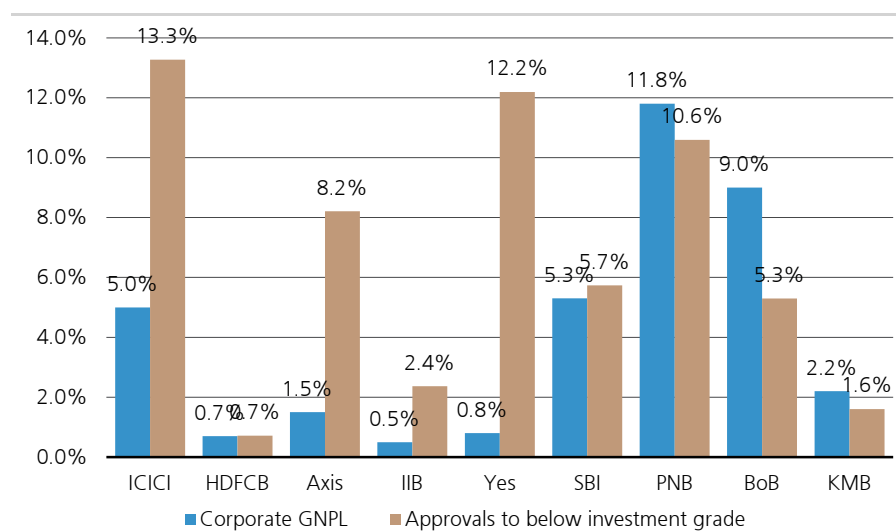
Source: RBI, UBS estimates

20-30% of debt in metals, power, construction and textiles is still fragile and need to be resolved or recognised as NPL in FY17-18.

YES, ICICI and AXIS have relatively higher gap between estimated loans approvals to corporate below investment grade and estimated existing GNPL in corporate sector.

YES, ICICI and Axis have relatively higher gaps

Figure 30: Loan approvals to corporates below investment grade versus est Corporate GNPL



Note: The key limitation of our sample analysis is that it does not include small- and mid-sized corporates' data.
Source: MCA, Company data, UBS estimates

MCA data study on 200 companies

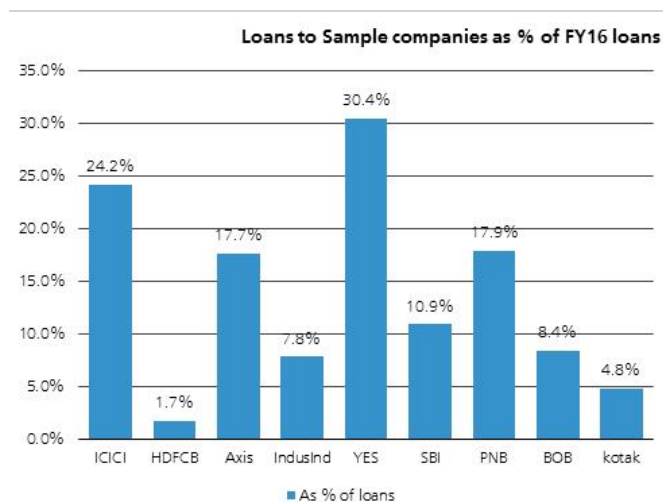
Further to our deep dive analysis of 100 sample companies last year ([link](#)), we added 100 more companies which have either high leverage or weak financials or below investment grade ratings or low Cash Interest coverage ratio. We don't expect all the sample companies to default in the near term which is also reflected in credit rating mix in figure 14. Our sample covers borrowers with around 30% of corporate debt in India across all major sectors.

YES, ICICI and PNB seem to have relatively higher share of loan approvals to below investment grade corporates, while HDFC Bank and Kotak seem to have relatively lower share.

Methodology and limitations to our study of MCA data is part of the Appendix.

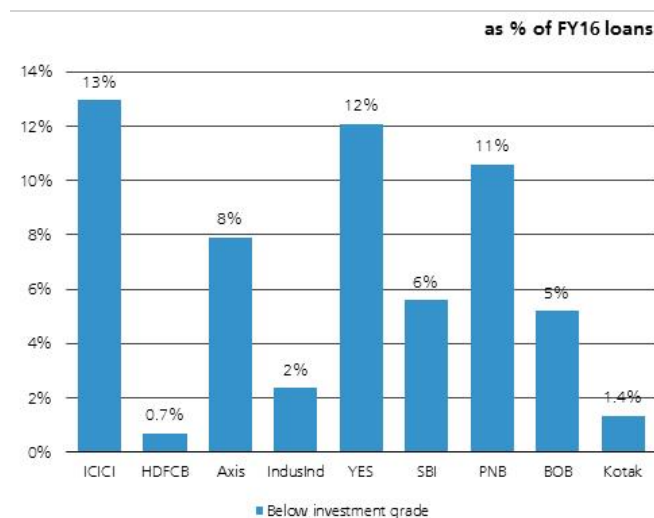
Our sample covers borrowers with around 30% of corporate debt in India across all major sectors.

Figure 31: Loan approvals to our sample set of 200 companies (all sample companies are not weak)



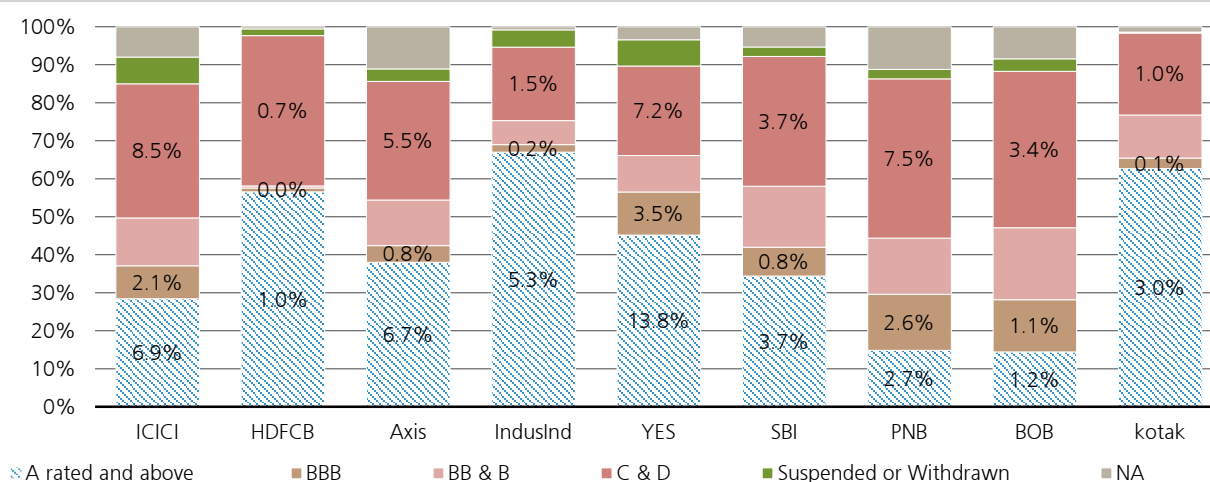
Source: MCA, UBS Research

Figure 32: Loan approvals to corporates with rating below investment grade



Source: MCA, UBS Research

Figure 33: Credit rating mix of loans by banks to our sample of 200 companies



Source: Capitaline, UBS estimates

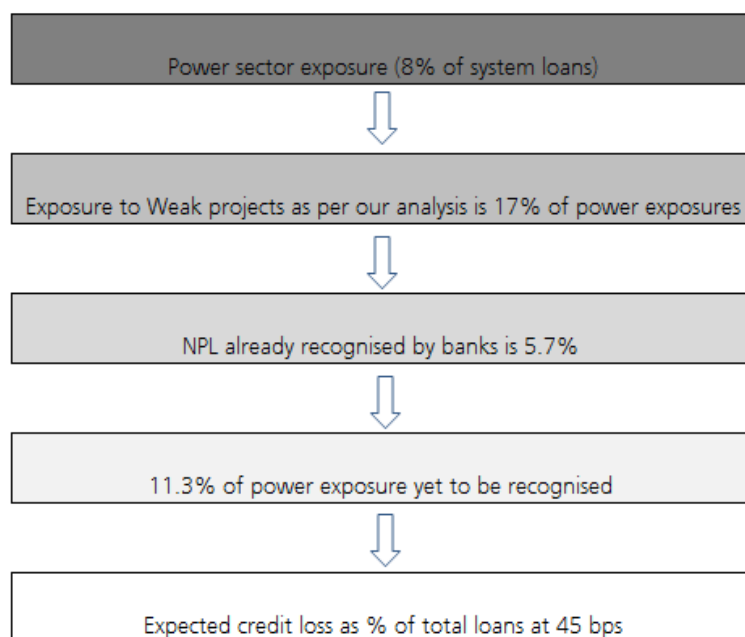
Power Sector – Project level analysis

With the help of UBS Utilities team (Gopal Ritolia and Sourabh Taparia), we did a bottom up analysis of 114 power sector projects (coal and gas based) with capacity of around 80000 MW.

SBI, AXIS, BOB exposure to corporates with weak power projects is lesser than expected

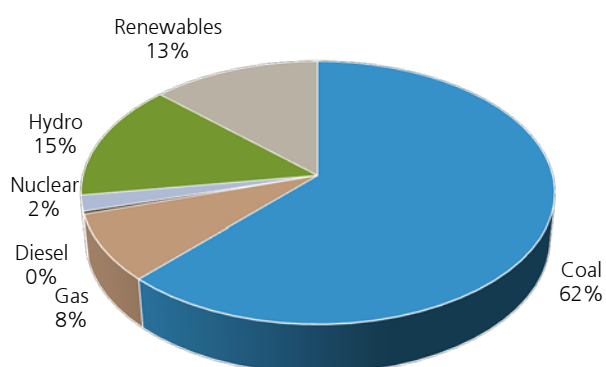
India has installed power capacity of around 300 GW, of which around 120 GW is owned/operated by the private sector players, of which around 40GW is based on renewable sources.

Figure 34: Power Sector might lead to 100bp GNPL addition or 45-50 bp credit loss for banks



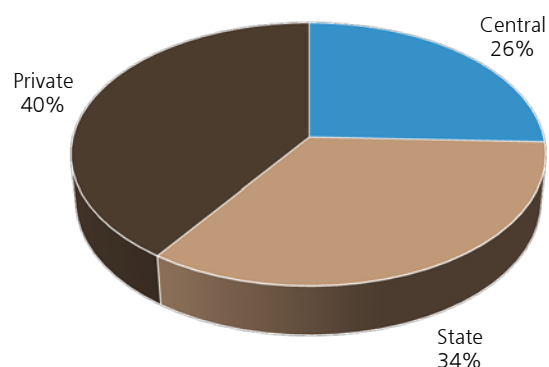
Source: Company data, UBS estimates

Figure 35: Breakdown of power capacity in India ~ 300GW



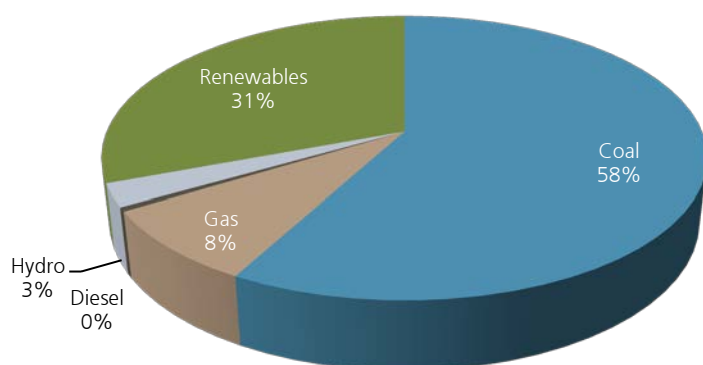
Source: CEA, UBS estimates

Figure 36: Power capacity as per ownership ~300GW



Source: CEA, UBS estimates

Figure 37: Breakdown of private players capacity ~120 GW



Source: CEA, UBS estimates

Our bottom-up analysis suggests that around 34000 MW capacity is under stress either due to lack of power purchase agreements (PPA) or issues around fuel availability (at reasonable cost), or overleveraging. Of the projects identified as weak, around 42% are already commissioned, while 58% are under various stages of construction.

The power sector may add another 1.1% of NPLs to the system

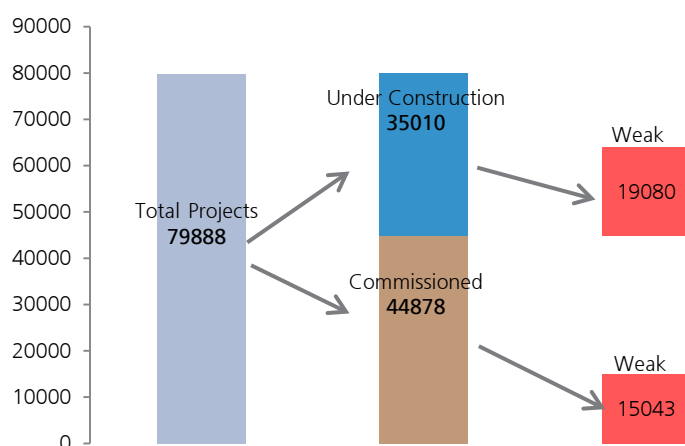
As per our estimate, US\$15bn loans are borrowed from banks on these weak projects representing 1.5% of system loans or 17% of power sector lending.

Some of these projects may already be NPL by banks. At system level GNPL in power sector is at 5.7% of its loans (as per RBI data), which may increase to 17% if issues around these projects are not resolved, in our view. In that scenario, lenders may need to take additional GNPL of 110bp or credit cost of 45-55bp (of total loans) in FY17-18.

We believe banks are restructuring viable power projects through 5-25 refinance mechanism and might opt for S4A in some cases thereby keeping GNPL formation number lower than 110bp as estimated by us.

As per our estimate, US\$15bn loans are borrowed from banks on these weak projects representing 1.5% of system loans or 17% of power sector lending.

Figure 38: Thermal Power Projects reviewed (MW)



Source: CEA, UBS Research

As per our analysis, projects located in Chattishgarh, Orrisa and Maharastra have relatively higher share.

Figure 39: Stressed power sector projects (Coal & Gas)

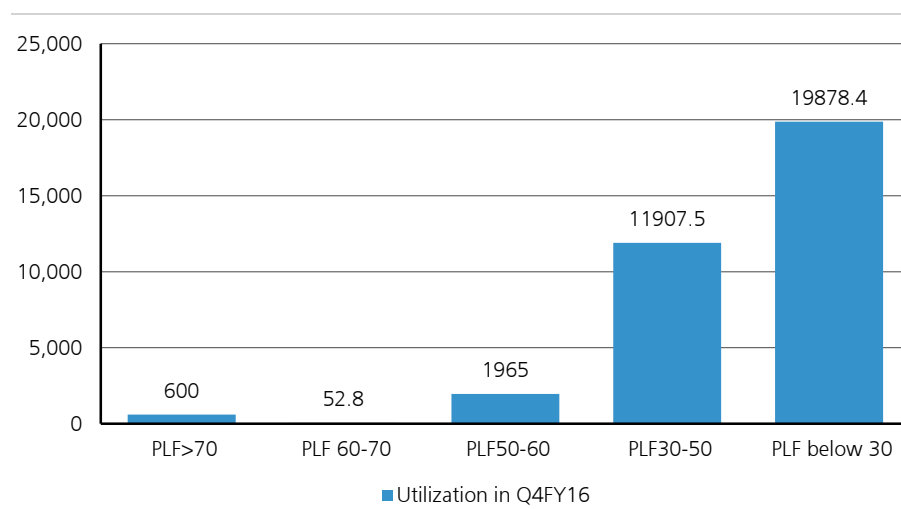
Particulars	Capacity (MW)	Commissioned (MW)	Under Construction (MW)	Total Exp (Rs m)
Chattisgarh	8,480	5,260	3,220	440,208
TN	3,885	2,100	1,785	196,635
Orissa	6,520	2,750	3,770	285,322
MP	3,725	2,420	1,305	224,254
Maharashtra	5,010	390	4,620	86,554
Gujarat	1,583	1,583	-	73,206
AP	660	-	660	37,526
Bihar	2,640	-	2,640	66,000
Punjab	540	540	-	36,650
Jharkhand	1,080	-	1,080	53,270
Total	34,123	15,043	19,080	1,499,625

Source: CEA, UBS

Utilisation levels low for 25-40% of private capacity

Of the projects analysed by us, around 25% of private sector projects (thermal & gas) were running below 30% PLF and around 15% capacity was operating between 30-50% during Q4 FY16. These was despite improvement in PLF for 8580 MW capacity in Q4 FY16 over FY16 (Figure 40).

Figure 40: Capacity Utilization (PLF) in Q4 FY16 - Private sector players



Source: CEA, UBS

Figure 41: Power projects where PLF increased in Q4 FY16 Vs FY16

Promoter/ Company	CATEGORY / REGIONS / STATE / STATIONS	Monitored Capacity (MW)	PLF (FY16)	PLF (Q4 FY16)
J.P.Power Ventures	PRAYAGRAJ TPP	660	4.0	15.9
Dainik Bhaskar Power Lts	BARADARHA TPS	1200	23.6	39.2
GMR Group	RAIKHEDA TPP	685	12.7	29.6
Korba West Power Co. Ltd.	AVANTHA BHANDAR	600	20.1	80.6
ACB India Ltd	SVPL TPP	63	10.7	31.4
Gujarat Industries Power Co Ltd	BARODA CCPP	160	16.2	23.4
CLP India Private Ltd	PEGUTHAN CCPP	655	15.6	21.6
Torrent Power	SUGEN CCPP	1147.5	34.9	44.6
BLA Power Ltd	NIWARI TPP	45	36.2	54.7
Bina Power Supply Co.	BINA TPS	500	29.9	39.1
Dhariwal Infracore (P) Ltd	DHARIWAL TPP	600	7.0	23.5
Hinduja National Power Corp. Ltd	VIZAG TPP	520	10.4	38.2
Lanco Infratech	KONDAPALLI CCPP	350	15.8	25.6
Kondapalli Power Pvt. Ltd.	KONDAPALLI ST-3 CCPP	742	9.5	18.0
IL&FS Tamil Nadu Power	ITPCL TPP	600	20.6	57.1
Pioneer Gas Power Plant	VALANTARVY CCPP	52.8	42.9	60.6
Total		8580.3		

Source: CEA, UBS

How are banks positioned in power sector?

Based on loan approvals data from Ministry of Corporate Affairs (MCA), we further analysed exposure of banks to private sector companies which owns some of these weak/leveraged power projects. This analysis is not precise however indicative of the exposures banks may have to weak projects.

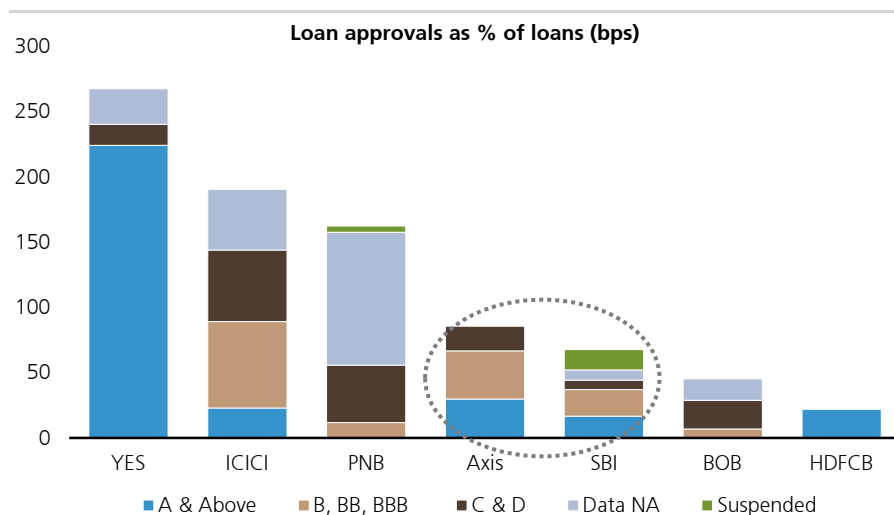
Figure 41 depicts that YES Bank and ICICI seem to have 260bp and 180bp of loan approvals (as % of loans) to corporates with weak power projects. Further we believe YES, HDFC Bank and AXIS seem to have better rated corporates within the weak power projects.

Exposure of SBI and AXIS to weak power names seems to be roughly in line with their watch lists, in our view.

Please note that we are analysing loan approvals to corporates owning one or more of the weak projects (as identified by us) as we don't have project specific exposures.

Exposure of SBI and AXIS to weak power names seems to be roughly in line with their watch lists, in our view.

Figure 42: Ratings breakdown of corporate with weak power projects



Source: RoC, UBS estimates

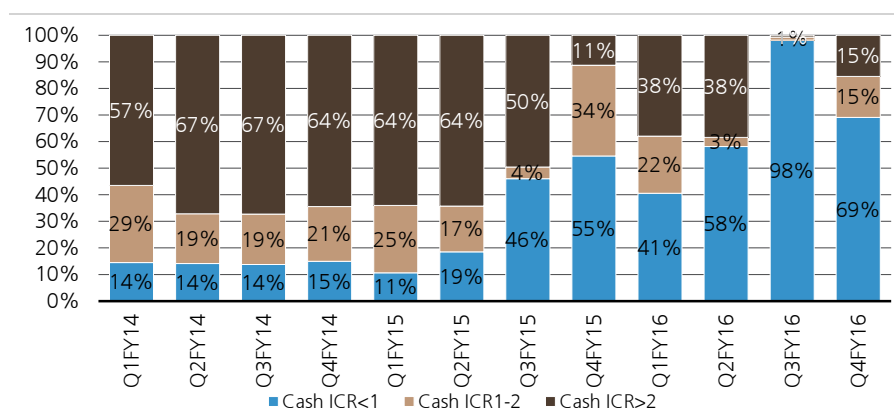
Steel Sector – Recovering from the abyss

Our discussion with steel players and quarterly financial data suggest improved cashflows due to better capacity utilisation post Minimum Import Price (MIP), and the rally in international prices, is helping them service interest. The share of stressed debt (EBITDA/Interest <1) has fallen from 98% in Q3FY16 to 69% in Q4 FY16 and is expected to improve further as the full impact of MIP is felt in Q1FY17.

The key risk to improvement in steel sector would be dis-continuation of MIP once the 6month window expires in August 2016. We also note the sector is closely correlated to international prices (whose improvement coincided with the introduction of MIP, making it difficult to disaggregate). International prices are driven by China outlook and the UBS house view into H2 remains [highly cautious](#)

Banks may still need to take additional 120-200bp (as % of total loans) as fresh GNPL

Figure 43: Movement of Stressed debt in Steel sector

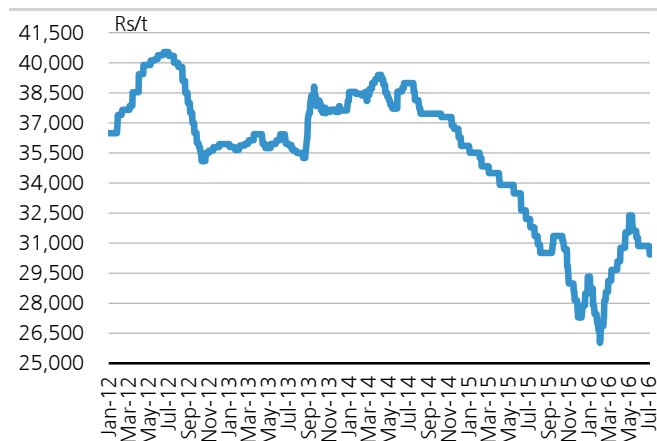


Source: Capitaline, UBS

How is steel positioned into H2?

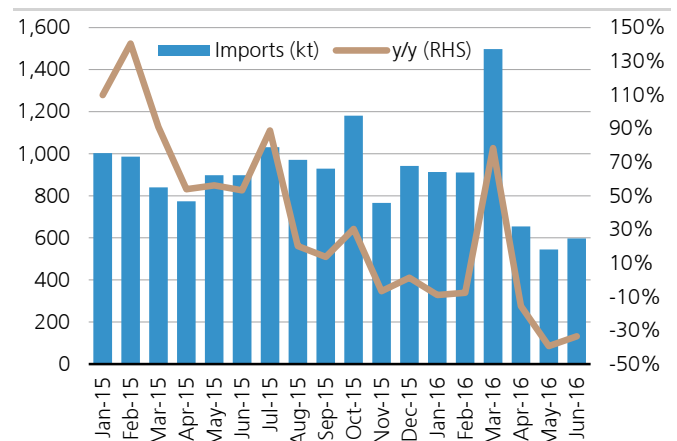
We think the sector is clearly better positioned than it was in Q12016. Stronger data from the key property sector in China, the impact of stimulus measures and optimism around capacity reduction has driven a significant pricing rebound. We believe the demand environment in India remains solid, steel imports have started to reduce and company outlooks are more robust.

Figure 44: India HRC Price



Source: SteelGuru; Note: Data pertains to HRC 2.5mm Ex-works Mum

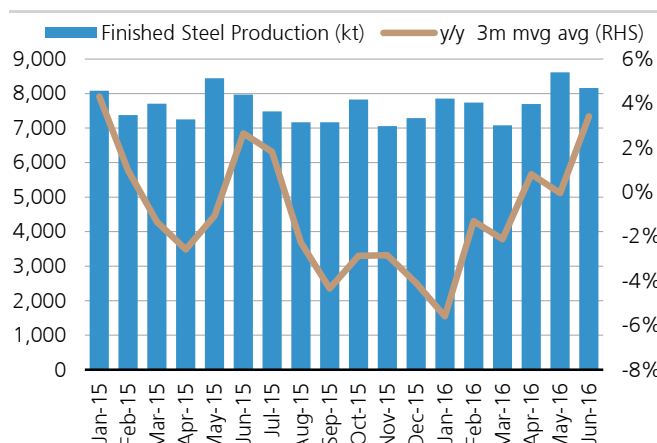
Figure 45: Finished Steel Imports



Source: JPC

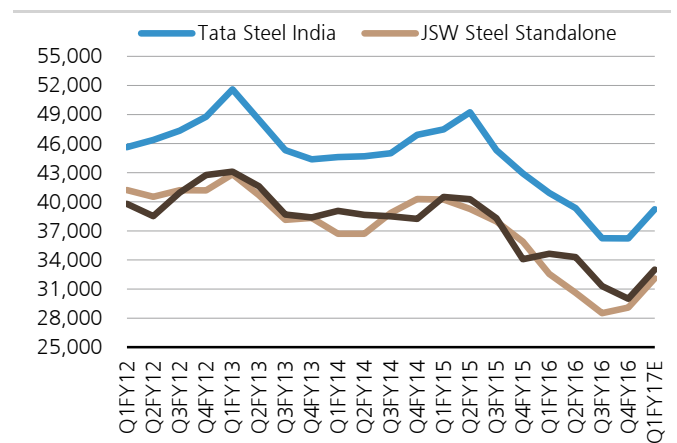
Yet the price chart above also shows a cooling in market conditions since the peak in early May. Again this mirrors trends in international prices, which have stalled somewhat into the weaker seasonal period. We expect Indian steel companies to realise the pricing increase seen in the March quarter and show strong results in the June quarter which will be reported in the coming weeks. We expect some optimism around volume growth at the larger players (Tata, JSW, JSPL and SAIL) which continues to be strong at the leading players due to a slightly better demand environment and new capacity coming on stream. But we would be surprised if market participants were prepared to bank on a reacceleration in the pricing outlook given the international backdrop and local trends. We believe there is less visibility over short-term trading conditions in the small/mid-tier segment of the industry. This segment should benefit from firmer market pricing, but less so from volume growth in our view.

Figure 46: Finished Steel Production



Source: JPC

Figure 47: Realisation trends (Rs/t)

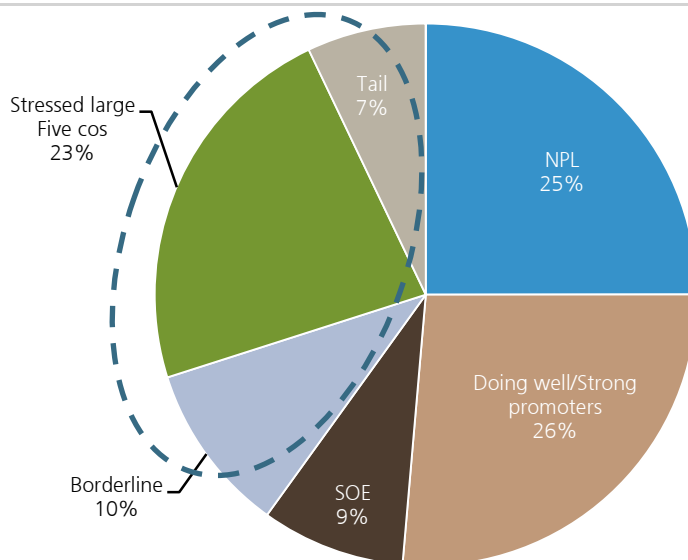


Source: Company data.

How much of stress in steel is recognised?

Around 25% of Basic metals exposure of banks is already NPL and around 10% is standard restructured as per RBI reports. As per our bottom up analysis, roughly 60% of steel sector debt is either NPL or with strong promoter groups/SOE. Of the balance 40%, 10% debt is towards borderline cases while 30% might require hair cut loss over next 12 months either through asset sell, or through new RBI scheme for structuring sustainable debt (SSSSA) if international steel prices remain weak.

Figure 48: Steel Sector is around 4.7% of system loans



Source: Capitaline, UBS estimates

We believe banks would try to structure most of the troubled steel debt under S4A since it allows income recognition on the sustainable debt portion.

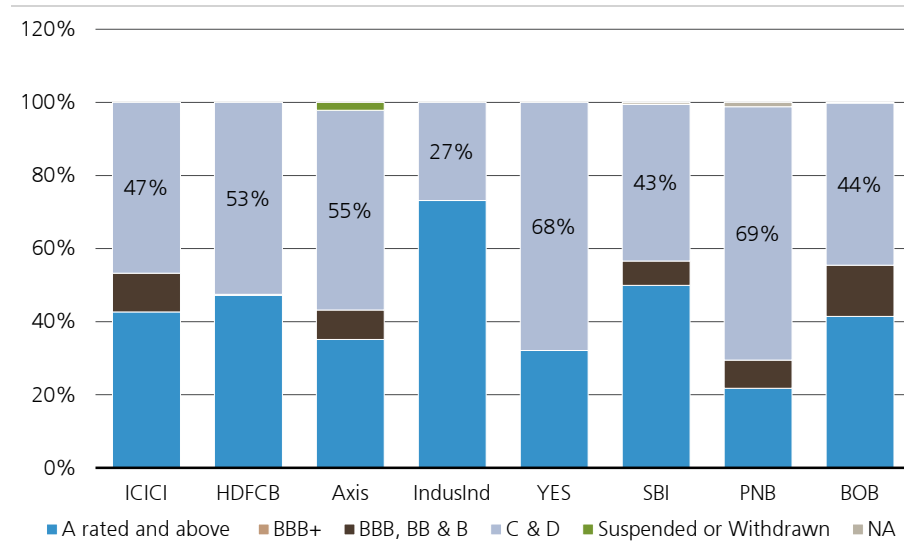
Overall, if we assume government in some form continues MIP, the haircut loss could be limited. In our estimates banks may need to take additional 120-200 bp (as % of total loans) as GNPL and credit loss of 60-120 bp on steel sector exposures.

How are banks positioned in steel sector?

We analysed loan approvals for sample of steel companies and tried to map them against credit ratings of underlying companies. We found roughly 50% of debt we analysed is rated below investment grade. Banks under our coverage have 40-60% loan approvals to corporates below investment grade ratings. While the absolute exposures may vary, based on our sample study IndusInd and SBI seem to have higher share of A & above rated corporates, while PNB and YES Bank have higher share of below investment grade corporates.

IndusInd and SBI seem to have higher share of A & above rated corporates, while PNB and YES Bank have higher share of below investment grade corporates.

Figure 49: Banks—credit ratings breakdown of our sample Steel cases



PNB and SBI have already reported 50% and 35% of steel exposure as NPLs

Source: MCA, UBS estimates

WHAT'S PRICED IN?

[return](#) ↑

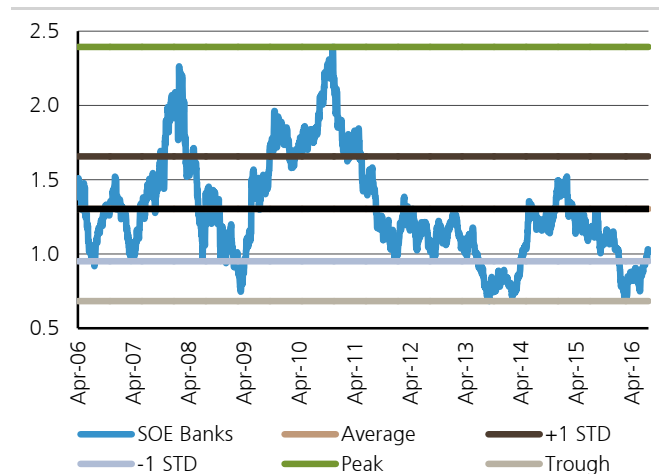
Banking stocks are trading near historical averages, with most private sector banks trading above 5/10 year P/BV multiples and SOE banks trading below 5/10y historical averages.

SBI is trading below its 5/10 year historical average P/BV valuations due to NPL concerns and weak profitability while most private sector corp lenders are trading above 5y average P/BV. In previous 2 cycles (2003-07 and 2008-12), the stock had re-rated to 2.8x P/BV from bottom of 0.9x P/BV, which we believe is possible again as the economic cycle sustains improvement. Currently SBI trades at 1.2x 1 year forward P/BV (without adjusting for subs value), which offers favorable risk-reward in our view.

Among SOE banks PNB and BOB have rallied recently and are near 5 year average P/BV, which reflects increased confidence around NPL movements going forward.

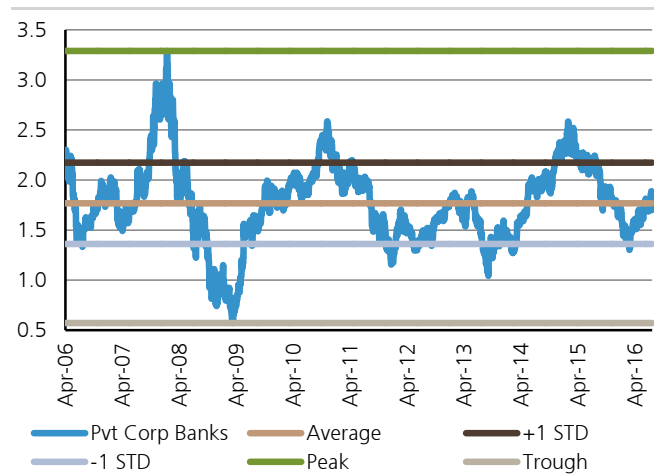
In previous 2 cycles (2003-07 and 2008-12), the SBI had re-rated to 2.8x P/BV from bottom of 0.9x P/BV

Figure 50: SOE Banks – P/BV still below average



Source: Bloomberg, UBS

Figure 51: Private sector corporate lenders – P/BV



Source: Bloomberg, UBS

Figure 52: Historical valuations—where we are versus historical prices

Banks	1 yr fwd	Average	Trough	Peak	Difference From 5 yr (%)			Average	Trough	Peak	Difference From 10 yr (%)		
	P/ BV	5 year			Average	Trough	Peak	10 year			Average	Trough	Peak
BOB	0.9	0.9	0.5	1.3	3	-41	50	0.9	0.4	1.7	9	-49	94
PNB	0.7	0.8	0.4	1.4	14	-48	106	1.0	0.4	1.9	52	-48	176
SBI	1.2	1.3	0.8	1.9	10	-34	60	1.6	0.8	3.0	33	-34	148
AXIS	2.2	1.8	0.9	2.9	-20	-60	33	2.0	0.7	4.6	-8	-68	106
HDFCB	3.7	3.3	2.5	4.2	-10	-33	14	3.3	1.7	5.3	-9	-53	44
ICICI	1.6	1.7	1.1	2.6	6	-31	59	1.8	0.6	3.3	10	-65	100
IIB	3.3	2.5	1.6	3.2	-25	-50	-2	2.1	0.5	3.2	-37	-86	-2
KMB	5.2	4.5	3.5	5.8	-14	-34	10	3.4	0.4	5.8	-36	-92	10
FB	1.2	1.2	0.5	1.6	-6	-56	33	1.1	0.4	1.6	-15	-65	33
YESB	3.1	2.0	1.0	3.0	-37	-69	-5	2.2	0.5	5.0	-28	-85	61
NBFCs													
HDFC	5.5	4.7	3.5	6.3	-15	-37	15	4.7	2.2	7.0	-15	-60	26
LICHF	2.5	1.9	1.0	2.8	-21	-58	14	1.6	0.5	2.9	-33	-80	19
SHTF	2.4	1.9	1.3	2.8	-21	-46	15	2.0	1.1	3.9	-16	-56	62
IBFSL	2.4	1.7	0.7	3.0	-29	-69	25	1.8	0.6	7.1	-23	-77	198
PFC	0.7	0.8	0.4	1.4	30	-33	109	1.3	0.4	3.1	94	-33	373
REC	0.6	1.0	0.4	1.5	65	-25	153	1.2	0.4	2.9	107	-25	396
MMFS	2.6	2.3	1.5	3.4	-12	-43	28	2.0	1.0	3.4	-22	-61	28
SKS	5.5	3.4	1.5	10.4	-38	-73	89	4.0	1.5	11.0	-28	-73	100

Note: Above data as of 21 July 2016.

Source: Bloomberg, UBS estimates

Figure 53: Historical P/BV- SBI

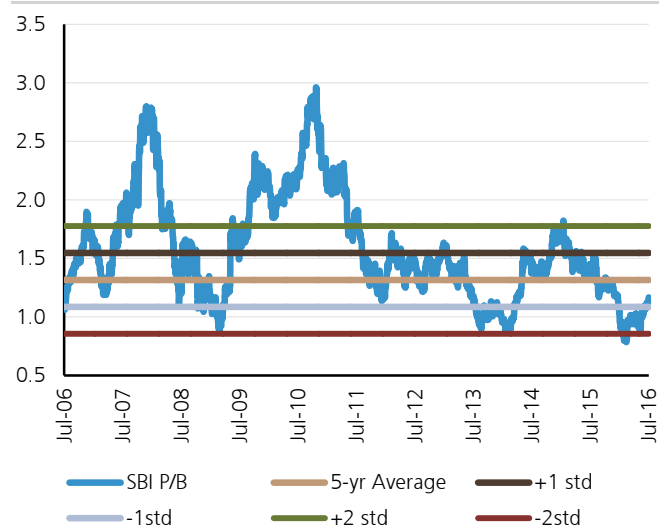


Figure 54: Historical P/BV- PNB

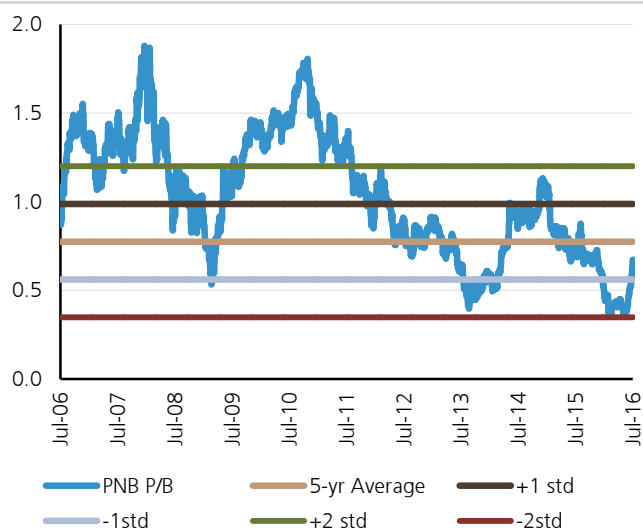


Figure 55: Historical P/BV- BOB

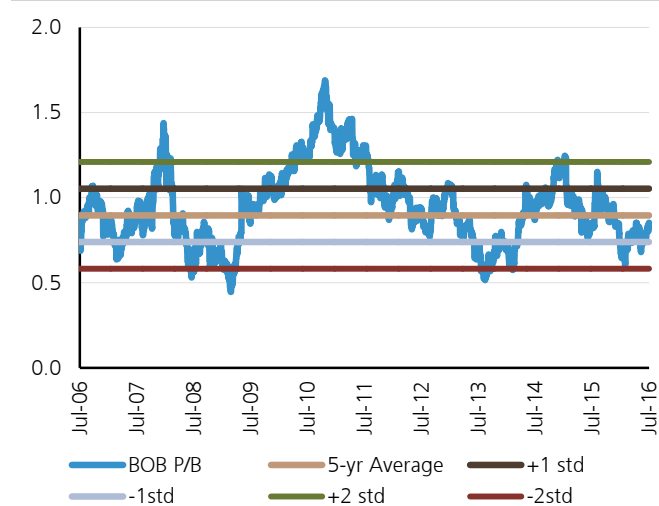


Figure 56: Historical P/BV- ICICI

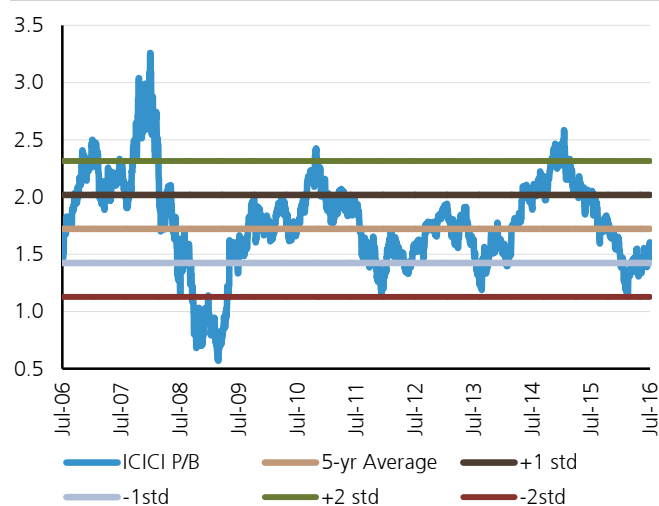


Figure 57: Historical P/BV- Axis

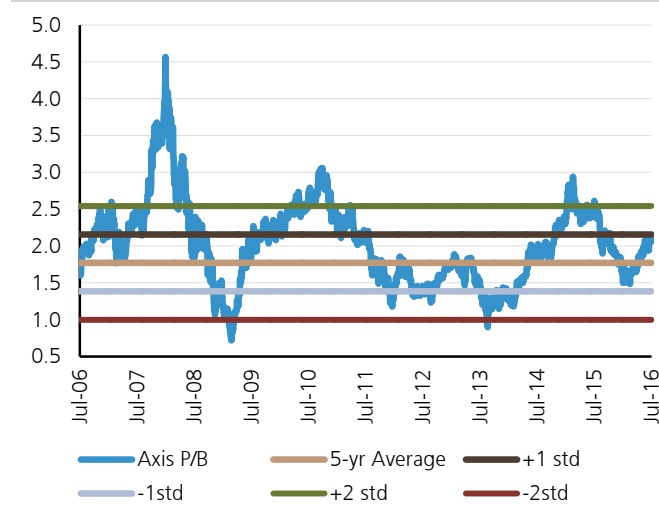


Figure 58: Historical P/BV- YES

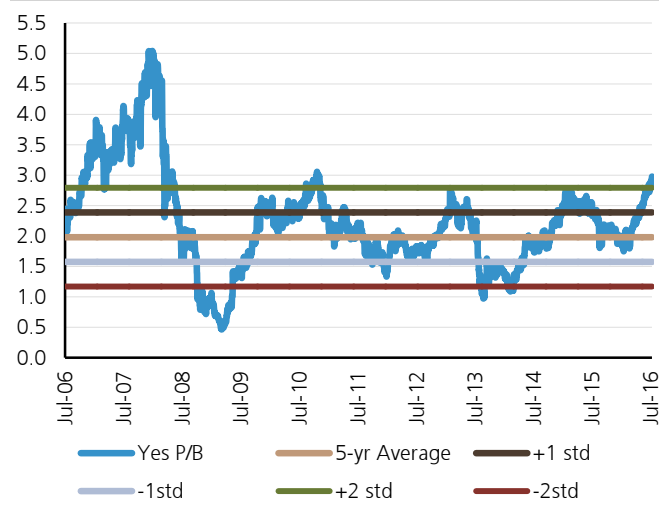


Figure 59: Changes in estimates

Particulars	PT		Rating		EPS (Rs) FY17E			EPS (Rs) FY18E		
	New	Old	New	Old	New	Old	Change (%)	New	Old	Change (%)
SBI	300	210	Buy	Neutral	13.7	12.8	7.0	24.6	22	11.8
PNB	100	65	Sell	Sell	8.1	3.3	145.5	12.9	10.4	24.0

Source: UBS estimates

Figure 60: GNPL and credit costs

	GNPL Ratio			Credit Cost		
	FY16	FY17E	FY18E	FY16	FY17E	FY18E
BOB	10.0	10.5	9.7	3.8	1.4	1.3
PNB	12.9	13.3	12.2	2.5	2.3	2.0
SBI	6.5	6.6	5.8	2.1	1.8	1.0
AXIS	2.0	2.9	3.3	1.1	1.4	1.3
HDFCB	0.9	1.0	1.0	0.7	0.7	0.7
ICICI	5.8	7.4	7.2	2.0	2.0	1.5
IIB	0.9	1.0	1.1	0.7	0.6	0.6
KMB	2.6	2.4	2.2	1.0	0.5	0.5
YES	0.8	1.8	2.4	0.7	1.0	0.9
FB	2.8	3.3	3.6	0.8	0.7	0.6

Source: Company data, UBS estimates

Figure 61: UBS versus consensus earnings estimates

Particulars	FY17E			FY18E		
	UBS	Consensus	Variance (%)	UBS	Consensus	Variance (%)
SBI	13.7	16.2	-15.4%	24.6	22.6	8.8%
BOB	9.9	11.6	-14.7%	17.1	18.3	-6.6%
PNB	8.1	9.3	-12.9%	12.9	16.5	-21.8%
HDFCB	60.4	58.7	2.9%	77.3	72.1	7.2%
Axis	38.3	36.7	4.4%	44.2	44.1	0.2%
ICICI	18.2	18.3	-0.5%	20.1	21.8	-7.8%
KMB	17.9	19.7	-9.1%	23.1	25.3	-8.7%
IIB	49.8	49.7	0.2%	62	63	-1.6%
Yes	63.6	72.6	-12.4%	76.6	90.7	-15.5%
Fed Bk	4.8	4.4	9.1%	6	5.9	1.7%

Source: Bloomberg, UBS estimates

Company Pages

State Bank of India

NPL close to peak—ROE set to improve

NPL formation peaked in Q4 FY16; we expect a significant decline in FY17

We believe the current NPL cycle that started in FY11 is nearing its peak for SBI, given the bank has already taken >10% of its total loans as NPL, as per our estimates. The bank wrote off Rs450bn in corporate NPLs in FY13-16, which translates to 6% of its FY16 loans to corporates and SME. We expect GNPL formation to fall >50% from 4.8% in FY16 to 2.8%/2.0% in FY17/FY18. Average credit costs have remained high at 1.56% over FY11-16 (2.1% in FY16), significant higher than the average of 0.6% over FY05-10. We expect credit costs to remain high at 1.8% in FY17 due to aging related provisions. However, with a sharp decline in GNPL formation, we expect credit costs to decline to 1.0%/0.8% in FY18/FY19. Its provision coverage ratio (including write-offs) is also likely to improve to 66% in FY18E (from 60% in FY16).

Our power sector study suggests improving trends in the 'stressed bucket'

Overall stress in the system is not declining according to our bottom-up study of 2,000 companies' quarterly financials. However, our joint study with the UBS Utilities team suggests limited impact from weak private sector projects on SBI. We estimate SBI's exposure to corporates with weak projects is limited to 1% of its loans in FY16. Stressed loans included in the FY17 watchlist for power is also low at Rs47.5bn (compared to overall exposure to the power sector), which is in line with our study.

We expect a market share improvement; ROE could rise to ~14% in FY19E

We believe SBI will gain from a likely shift of market share from capital-starved mid-sized SOE banks. Within SOE banks, SBI's market share has already improved by ~200bp in FY16. Its ROE has fallen during the current cycle from 15% in FY10 to 7.3% in FY16E, and could remain low at 7.6% in FY17E. However, with normalising credit costs, we expect this to rebound to 12.0%/14.0% in FY18/FY19.

Valuation: risk-reward profile is favourable; upgrade from Neutral to Buy

The stock is trading below its historical average valuations due to NPL concerns and weak profitability. During the previous two cycles (2003-07 and 2008-12), the stock re-rated to 2.8x P/BV from a bottom of 0.9x P/BV. It is trading at 1.2x one-year forward P/BV (without adjusting for subsidiaries' value), which we think gives it a favourable risk-reward profile. We raise our price target from Rs210.00 to Rs300.00 and upgrade our rating from Neutral to Buy. We use a sum-of-the-parts based methodology to derive our price target.

Equities

India
Banks, Ex-S&L

12-month rating **Buy**
Prior: Neutral

12m price target **Rs300.00**
Prior: Rs210.00

Price **Rs225.60**

RIC: SBI.BO **BBG:** SBIN IB

Trading data and key metrics

52-wk range	Rs288.25-151.90
Market cap.	Rs1,684bn/US\$25.1bn
Shares o/s	7,466m (ORD)
Free float	41%
Avg. daily volume ('000)	26,639
Avg. daily value (m)	Rs5,394.4
Common s/h equity (03/16E)	Rs1,443bn
P/BV (03/16E)	1.2x
Tier 1 ratio	10%

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/16E	13.33	13.33	0	15.95
03/17E	12.78	13.71	7	18.57
03/18E	22.04	24.64	12	24.07

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Highlights (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Revenues	613,275	672,719	781,812	848,902	879,357	950,930	1,079,163	1,211,612
Profit before tax	199,510	161,740	193,140	137,741	152,045	273,259	353,070	400,086
Net earnings (local GAAP)	141,051	108,912	131,016	99,507	106,432	191,281	247,150	280,062
Net earnings (UBS)	141,051	108,912	131,016	99,507	106,432	191,281	247,148	280,058
Tier 1 ratio %	9.5	9.7	9.6	9.9	9.4	9.3	8.5	7.8
EPS (UBS, diluted) (Rs)	20.62	14.59	17.55	13.33	13.71	24.64	31.84	36.08
Profitability/valuation	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
ROE (UBS) %	15.4	10.0	10.6	7.3	7.2	12.1	14.1	14.3
P/POP (diluted)	4.6	4.3	5.1	3.9	4.0	3.9	3.4	3.0
P/BV x	1.5	1.1	1.6	1.2	1.2	1.1	0.9	0.8
P/BV (UBS) x	1.5	1.1	1.6	1.2	1.2	1.1	0.9	0.8
P/E (UBS, diluted)	10.5	12.3	15.2	16.9	16.5	9.2	7.1	6.3
Net dividend yield %	1.9	1.7	1.3	1.8	1.8	2.2	2.7	2.7

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs225.60 on 21 Jul 2016 22:39 HKT

UBS Research THESIS MAP a guide to our thinking and what's where in this report**PIVOTAL QUESTIONS****Q: Have we seen a peak in NPLs for SBI?**

Most likely. We believe the peak in GNPL formation is behind us. SBI has recognised around 10% of its loans as NPLs in FY13-16, leaving 3-4% of yet to be recognised/resolved (YTR) exposure, as per our estimates. We expect loan loss provisions to remain high in FY17 at 175bp of loans, but decline to 90bp in FY18.

Q: Can SBI lose market share on retail liabilities?

Less likely. Among the SOE banks, SBI has the strongest liability franchise and its engagement in digital channels is also better than its peers', according to our study. We believe SBI will take away market share from its smaller SOE peers due to its better product offerings. SBI's mobile app downloads have improved recently, but compared to the private sector and foreign banks, SBI lags on 'new age' channels such as the digital channel.

Q: Will SBI need to raise capital in the next 12 months?

Not necessarily. SBI reported a 9.92% Tier I ratio as of March 2016, above the regulatory minimum. The bank has room to unlock value from its non-core assets and subsidiaries, which can enhance its Tier I capital in the next 12-18 months. With pressure of NPLs receding, we believe SBI will be sufficiently capitalised for the next 12 months.

UBS VIEW

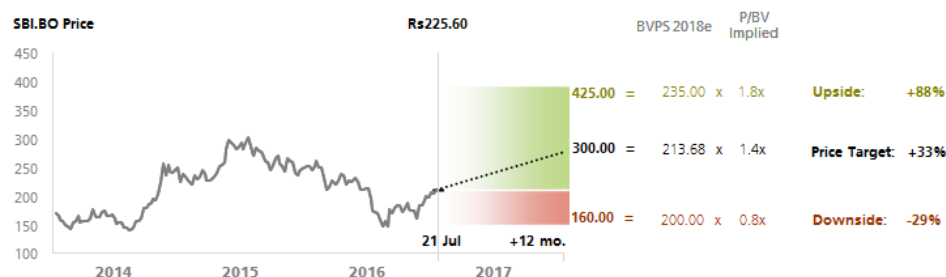
While we think SBI is best-placed among the SOE banks, its asset quality risks remain high and large exposure to stressed corporates could lead to high provisions in the next 12-18 months. SBI's profitability could remain under pressure, with ROE of <11% in FY16E/FY17E. We expect revenue growth to stay weak and provisions to remain high.

EVIDENCE

Our analysis of loan approvals by Indian banks to stressed corporates and power projects indicates that SBI has lower exposure to these corporates (compared to other SOE banks or banks with large corporate books). An analysis of the loan market share for SOE banks indicate that SBI has gained ground among the SOE banks.

WHAT'S PRICED IN?

The stock is trading slightly under 1 SD below its five-year average, which we believe is largely due to asset quality concerns and a sharp decline in profitability. Our proprietary valuation tool indicates that the market is assigning negative value to long-term growth.

[more →](#)**UPSIDE / DOWNSIDE SPECTRUM****Value drivers**

Rs425.00 upside

Rs300.00 base

Rs160.00 downside

Source: UBS estimates

Loan growth

15.0%

12.8%

8.0%

Credit costs

1.4%

1.6%

1.9%

Net interest margins

3.0%

2.8%

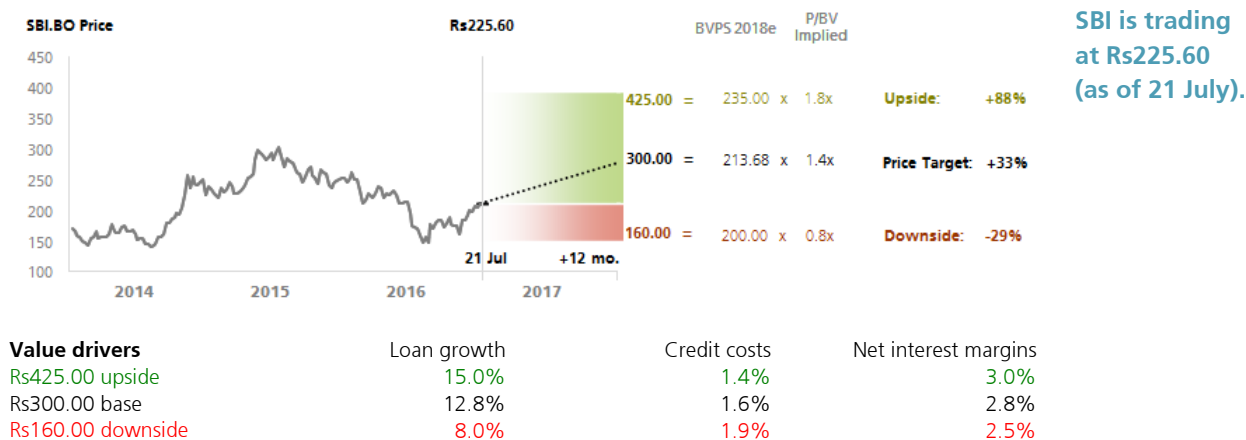
2.5%

[more →](#)**COMPANY DESCRIPTION**

State Bank of India (SBI) is India's largest domestic bank and a market leader in retail advances. SBI owns 75-100% stakes in five associate banks.

[more →](#)

UPSIDE / DOWNSIDE SPECTRUM

[return](#) ↑

Source: UBS estimates

Risk to the current share price is heavily skewed (2.65:1) to the upside.SBI is trading at **Rs225.60** (as of 21 July).

Upside (Rs425.00): In our upside scenario, we assume a rapid improvement in the overall economy, leading to better loan growth and lower NPL pressure. We assume a 15% loan CAGR in FY15-18, a NIM improvement to 3%, a lower credit cost of 1.4%, and a GNPL ratio improvement to 5.5% by FY18. In this case, we would derive a sum-of-the-parts based valuation of Rs425.00 per share.

Base (Rs300.00): We assume a 12.8% loan CAGR over FY15-18 and that asset quality will improve marginally as GNPL declines to 6.3%. We assume credit costs of 1.6% and a 16% earnings CAGR in FY15-18. Our valuation for the standalone bank is based on a residual income model and imply 1.35x one-year forward P/BV and Rs54.00 per share value for the subsidiaries.

Figure 62: Residual income model

Particulars	FY15	FY16-20E	FY20-35E	Terminal
Year end EPS (Rs)	16.6	36.2	226.5	
% growth/CAGR		16.8	13.0	5.0
Year end DPS (Rs)	3.5	7.2	68.0	
Year end BVPS (Rs)	158.9	254.4	1412.3	
% growth/CAGR		9.9	12.1	
Year end Residual income (Rs/share)	-6.9	-1.7	21.2	
PV of year end residual income (Rs/share)	-6.9	-0.8	1.2	
Avg ROE (%)	10.9	11.3	16.3	
BVPS – FY17				197
PV of residual Income (Rs)				49
Fair value of the standalone bank (Rs)				246
Value of Subsidiaries				56
Price Target (Rs)				300

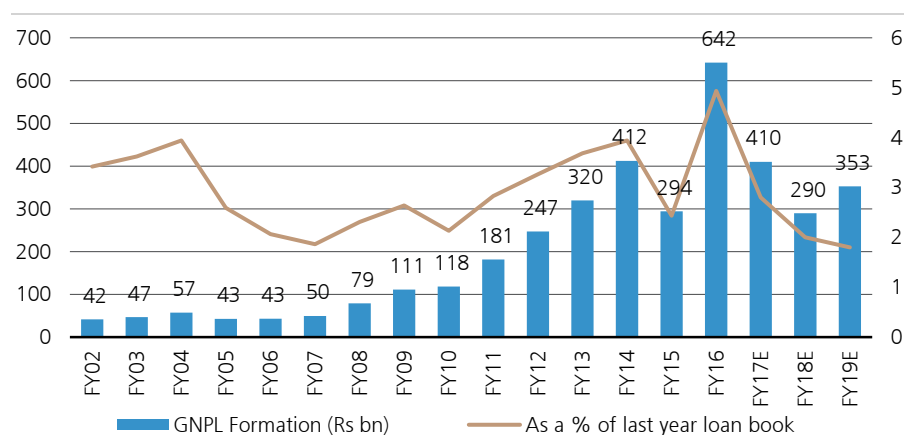
Source: UBS estimates

Downside (Rs160.00): In our downside scenario, we assume economic growth will slow further, leading to a 8% loan CAGR in FY15-18. We assume GNPL of 7% by end-FY18, resulting in an average credit cost of 1.9% and NIM of 2.5% over FY15-18. In this case, we would derive a valuation of Rs160.00 per share.

Have we seen a peak in NPLs for SBI?

Most likely. SBI has recognised loans of Rs1,668bn as GNPLs over FY13-16, equal to 11.4% of its FY16 loan book. GNPL formation increased significantly in H2 FY16, driven by the RBI's asset quality review. Our estimates indicate that following the high GNPL formation in FY13-16, SBI's yet to be recognised/resolved stressed loans are now only 3-4% of its total loans. While GNPL formation could remain high in FY17E at Rs410bn as more stressed loans are recognised, we believe it would decline significantly from FY18 onwards.

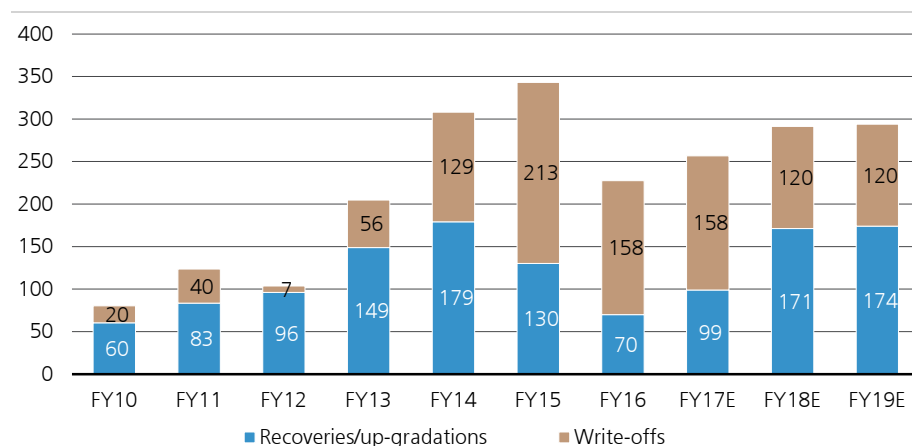
Figure 63: GNPL formation likely to decline >50% by FY18E



Source: Company data, UBS estimates

Recoveries and up-gradations have also been low in FY16 due to a subdued economy and the slower resolution of GNPLs, while write-offs have increased significantly. We estimate that SBI has written off Rs450bn in corporate NPLs during FY13-16, translating to 6% of its FY16 loans to corporates and SMEs. After accounting for loans that were written off, more than 15% of loans to the corporate and SME sectors are already recognised as GNPL.

Figure 64: Recoveries/upgradations and write-offs

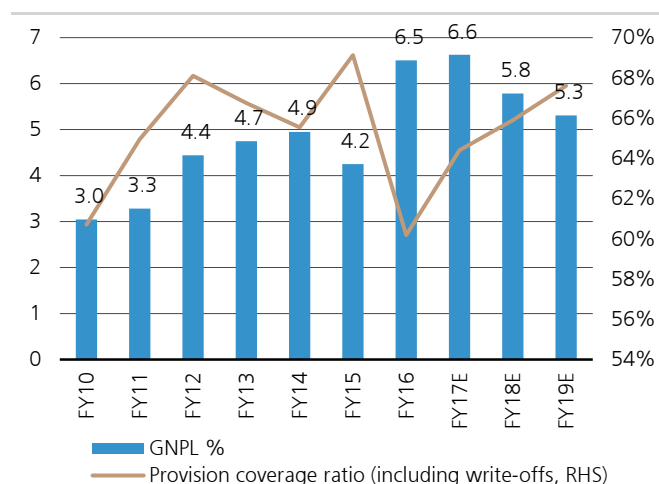


Source: Company data, UBS estimates

With banks now focusing on the resolution of stressed loans and a few large corporates looking to improve their financial health through divestments etc., we expect recoveries/upgradations to pick up in the next 6-12 months. Coupled with a decline in GNPL formation, this should result in a sharp decline in GNPLs from FY18 onwards, in our view. We expect GNPLs to remain largely stable at 6.6% in FY17 and then decline to 5.8%/5.3% in FY18/FY19.

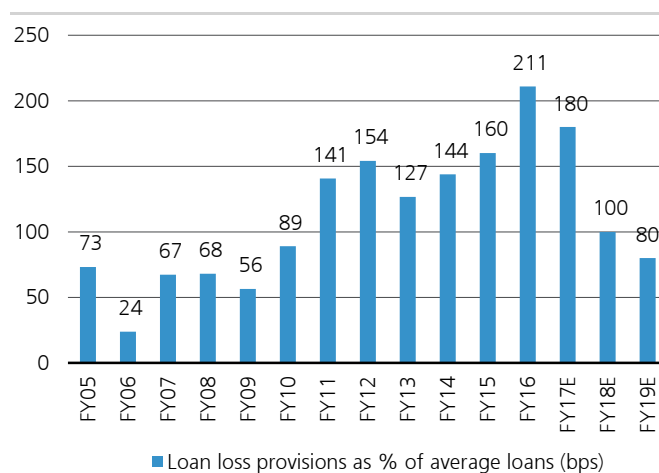
Average credit costs have remained high at 1.56% over FY11-16 (2.1% in FY16), much higher than the average of 0.6% over FY05-10. We expect credit costs to remain high at 1.8% in FY17 due to aging related provisions. However, with a sharp decline in GNPL formation, we estimate credit costs will decline to 1.0% in FY18 and 0.8% in FY19. Its provision coverage ratio (including write-offs) is also likely to improve to 66% in FY18E (from 60% in FY16).

Figure 65: GNPLs to decline significantly from FY18E onwards



Source: Company data, UBS estimates

Figure 66: Credit costs could start normalising from FY18E onwards



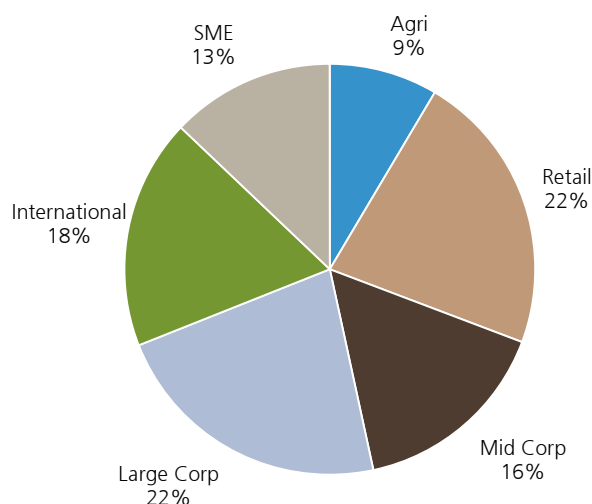
Source: Company data, UBS estimates

Our power sector study suggests improving trends in the 'stressed bucket' and low exposure to stressed loans for SBI

Iron/steel and power are two large sectors that are stressed. SBI's exposure to the iron/steel and power sectors was 6.9% and 8.8% of its FY16 loan book, respectively. While the recognition of stressed loans in the iron/steel picked up significantly for Indian banks (including SBI) in H2 FY16, that for the power sector has not happened yet and remains a concern.

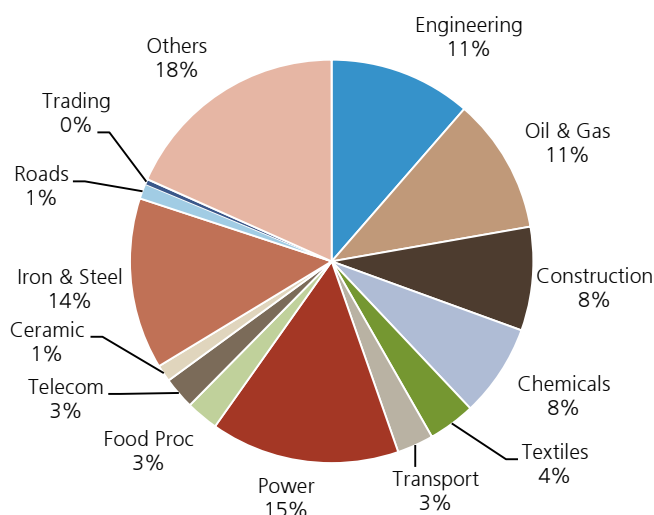
However, our joint study with the UBS Utilities team suggests there will be limited impact from weak private sector projects on SBI. We estimate SBI's exposure to corporates with weak projects is limited to 1% of its loans in FY16. Stressed loans included in the FY17 watchlist for the power sector is also low at Rs47.5bn (compared to its overall exposure to the power sector), in line with our study.

Figure 67: SBI—exposure by industry (FY16)



Source: Company data

Figure 68: Composition of watchlist



Source: Company data

We expect a market share improvement; ROE could increase to ~14% in FY19E

We believe SBI will gain from a likely shift of market share from capital-starved mid-sized SOE banks. Within SOE banks, SBI's market share has already improved by ~200bp in FY16. Its ROE has fallen during the current cycle from 15% in FY10 to 7.3% in FY16E, and could remain low at 7.6% in FY17E. However, with normalising credit costs, we expect this to rebound to 12.0%/14.0% in FY18/ FY19.

Figure 69: DuPont analysis

Particulars	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16E	FY17E	FY18E	FY19E
Net Interest Income/Assets	2.6%	2.4%	3.0%	3.5%	3.2%	3.0%	3.0%	2.8%	2.6%	2.6%	2.6%
Non Interest Income/Assets	1.6%	1.5%	1.4%	1.2%	1.2%	1.1%	1.2%	1.4%	1.3%	1.1%	1.1%
Operating Expense/Assets	-2.0%	-2.1%	-2.1%	-2.1%	-2.1%	-2.2%	-2.1%	-2.0%	-2.0%	-2.0%	-2.0%
Provisions/Assets	-0.5%	-0.5%	-0.9%	-1.1%	-0.8%	-1.0%	-1.1%	-1.4%	-1.3%	-0.7%	-0.6%
Taxes/Assets	-0.6%	-0.5%	-0.6%	-0.6%	-0.4%	-0.3%	-0.3%	-0.2%	-0.2%	-0.3%	-0.4%
ROA	1.1%	0.9%	0.8%	1.0%	1.0%	0.7%	0.7%	0.5%	0.5%	0.8%	0.9%
Equity/Assets	6.7%	6.4%	6.0%	6.1%	6.6%	6.7%	6.6%	6.7%	6.6%	6.2%	6.1%
ROE	17.1%	14.8%	12.6%	15.7%	15.4%	10.0%	10.6%	7.3%	7.2%	12.1%	14.1%

Source: Company data, UBS estimates

COMPANY DESCRIPTION

[return](#) ↑

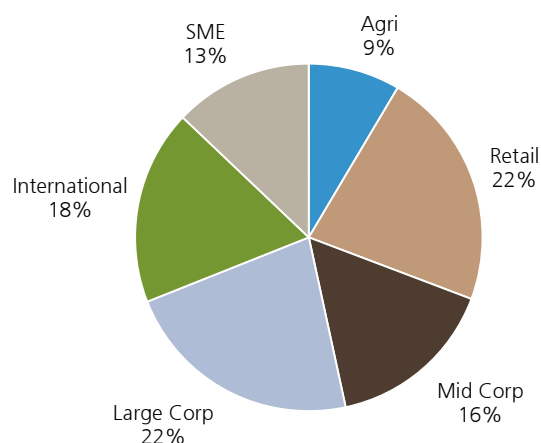
Market Cap	US\$25.1bn
Shares Outstanding	7.466m (COM)
Industry and outlook	Banking
Region	India
Website	www.sbi.co.in

State Bank of India (SBI) is India's largest domestic bank and a market leader in retail advances. SBI owns 75-100% stakes in five associate banks. It has a network of over 16,377 branches and over 55,700 ATMs. As of March 2016, SBI recorded a deposit base of Rs17.3trn and gross advances of Rs14.64trn. The company reported a Tier 1 capital ratio of 9.92% in March 2016. SBI also owns non-banking businesses, such as life insurance and asset management.

Industry outlook

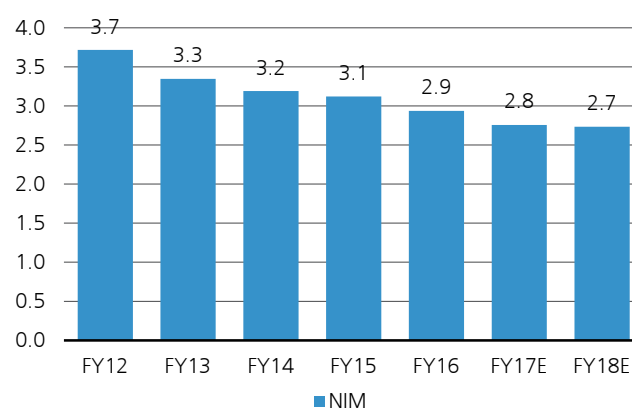
Credit growth for the banking sector has remained soft at around 10% as corporate sector demand is still subdued. With a likely improvement in India's GDP growth, we expect credit growth to increase gradually. Retail asset quality has remained stable during the current cycle. However, a few banks are witnessing greater pressure in the corporate segment, given a sharp slowdown and higher leverage on corporate balance sheets.

Breakdown of FY16 domestic loan book (%)



Source: Company data

Trends in NIM (%)



Source: Company data

State Bank of India (SBI.BO)

	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Profit & Loss (Rsm)										
Net income interest	443,313	492,822	550,153	568,818	3.4	587,509	3.3	660,021	761,631	856,136
Total non interest income	169,962	179,897	231,660	280,084	20.9	291,848	4.2	290,908	317,532	355,476
Total income	613,275	672,719	781,812	848,902	8.6	879,357	3.6	950,930	1,079,163	1,211,612
Total cash expenses	(281,448)	(343,919)	(375,611)	(403,255)	-7.4	(428,956)	-6.4	(482,816)	(545,946)	(607,282)
Pre-depreciation operating profit	331,827	328,800	406,201	445,646	9.7	450,401	1.1	468,114	533,218	604,330
Depreciation & amort (excl. goodwill)	(11,396)	(13,339)	(11,165)	(14,568)	-30.5	(17,165)	-17.8	(17,529)	(17,885)	(18,305)
Operating profit pre provisions	320,431	315,461	395,036	431,078	9.1	433,236	0.5	450,585	515,333	586,026
Total provisions	(120,921)	(153,721)	(201,896)	(293,337)	-45.3	(281,190)	4.1	(177,326)	(162,264)	(185,942)
Operating profit post provisions	199,510	161,740	193,140	137,741	-28.7	152,045	10.4	273,259	353,069	400,084
Income from associates & JVs (pre-tax)	0	0	0	0	-	0	-	0	0	0
Other pre-tax items	0	0	0	0	-	0	-	0	0	0
Profit before tax (UBS)	199,510	161,740	193,140	137,741	-28.7	152,045	10.4	273,259	353,069	400,084
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	1	2
Profit before tax	199,510	161,740	193,140	137,741	-28.7	152,045	10.4	273,259	353,070	400,086
Tax	(58,459)	(52,827)	(62,124)	(38,234)	38.5	(45,614)	-19.3	(81,978)	(105,921)	(120,026)
Profit after tax	141,051	108,912	131,016	99,507	-24.0	106,432	7.0	191,281	247,149	280,060
Other post-tax items	0	0	0	0	-	0	-	0	1	2
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	141,051	108,912	131,016	99,507	-24.0	106,432	7.0	191,281	247,150	280,062
Net earnings (before pref divs)	141,051	108,912	131,016	99,507	-24.0	106,432	7.0	191,281	247,150	280,062
Net earnings (UBS)	141,051	108,912	131,016	99,507	-24.0	106,432	7.0	191,281	247,148	280,058
Per share (Rs)										
EPS (local GAAP, basic)	20.62	14.59	17.55	12.82	-27.0	13.71	7.0	24.64	31.84	36.08
EPS (UBS, diluted)	20.62	14.59	17.55	13.33	-24.1	13.71	2.9	24.64	31.84	36.08
PPOP (diluted)	46.84	42.25	52.91	57.74	9.1	55.81	-3.3	58.04	66.38	75.49
Net DPS	4.15	3.00	3.55	4.00	12.8	4.00	0.0	5.00	6.00	6.00
BVPS	144.56	158.43	172.04	185.85	8.0	194.88	4.9	213.68	238.49	267.55
BVPS (UBS)	144.56	158.43	172.04	185.85	8.0	194.88	4.9	213.68	238.49	267.55
Balance sheet (Rsm)										
Banking assets (year end)	15,662,111	17,922,346	20,480,798	22,590,630	10.3	25,256,202	11.8	28,490,286	32,187,528	36,390,888
Banking assets (average)	14,508,651	16,792,228	19,201,572	21,535,714	12.2	23,923,416	11.1	26,873,244	30,338,907	34,289,208
Total assets (year end)	15,662,111	17,922,346	20,480,798	22,590,630	10.3	25,256,202	11.8	28,490,286	32,187,528	36,390,888
Risk weighted assets (RWA) (year end)	10,009,440	11,268,630	12,205,520	14,157,600	16.0	15,662,498	10.6	17,550,416	21,402,562	26,228,636
Risk weighted assets (RWA) (average)	9,199,051	10,639,035	11,737,075	13,181,560	12.3	14,910,049	13.1	16,606,457	19,476,489	23,815,599
Customer loans	10,456,166	12,098,287	13,000,264	14,637,004	12.6	16,393,445	12.0	18,688,527	21,398,363	24,608,118
Customer loans (average)	9,565,977	11,277,226	12,549,276	13,818,634	10.1	15,515,224	12.3	17,540,986	20,043,445	23,003,241
Interest earning assets (average)	14,375,636	16,640,167	19,024,317	21,339,300	12.2	23,737,937	11.2	26,710,366	30,188,988	34,151,785
Customer deposits	12,027,396	13,944,085	15,767,932	17,307,224	9.8	19,384,091	12.0	22,097,864	25,191,566	28,718,386
Common s/h equity (year end)	988,837	1,182,823	1,284,382	1,442,744	12.3	1,512,849	4.9	1,658,722	1,851,381	2,076,951
Common s/h equity (average)	914,174	1,085,830	1,233,602	1,363,563	10.5	1,477,797	8.4	1,585,786	1,755,052	1,964,166
Total SHF (equity, pref & MI) (year end)	988,837	1,182,822	1,284,382	1,442,744	12.3	1,512,849	4.9	1,658,722	1,851,381	2,076,951
Total SHF (equity, pref & MI) (average)	914,174	1,085,830	1,233,602	1,363,563	10.5	1,477,797	8.4	1,585,786	1,755,052	1,964,166
Net tangible assets	988,837	1,182,822	1,284,382	1,442,744	12.3	1,512,849	4.9	1,658,722	1,851,381	2,076,951
Balance sheet structure (%)										
Loans / banking assets (year end)	66.8	67.5	63.5	64.8	2.1	64.9	0.2	65.6	66.5	67.6
Deposits / banking assets (year end)	76.8	77.8	77.0	76.6	-0.5	76.7	0.2	77.6	78.3	78.9
Loans / deposits	86.9	86.8	82.4	84.6	2.6	84.6	0.0	84.6	84.9	85.7
Total SHF / banking assets (year end)	6.3	6.6	6.3	6.4	1.8	6.0	-6.2	5.8	5.8	5.7

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

State Bank of India (SBI.BO)

	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Capital adequacy (Rsm)								
Tier 1 capital	949,896	1,095,311	1,171,730	1,404,434	1,476,145	1,625,359	1,822,431	2,053,168
Total capital	1,293,220	1,401,818	1,464,662	1,857,477	1,890,502	2,056,142	2,275,286	2,529,874
Risk weighted assets (RWA) (year end)	10,009,440	11,268,630	12,205,520	14,157,600	15,662,498	17,550,416	21,402,562	26,228,636
Core tier 1 ratio %	9.2	9.5	9.4	9.7	9.2	9.1	8.4	7.7
Tier 1 ratio %	9.5	9.7	9.6	9.9	9.4	9.3	8.5	7.8
Total capital ratio %	12.9	12.4	12.0	13.1	12.1	11.7	10.6	9.6
Tangible equity	988,837	1,182,822	1,284,382	1,442,744	1,512,849	1,658,722	1,851,381	2,076,951
Equity / assets %	6.3	6.6	6.3	6.4	6.0	5.8	5.8	5.7
Tangible equity to tangible assets %	6.3	6.6	6.3	6.4	6.0	5.8	5.8	5.7
Asset quality (Rsm)								
Non performing assets	511,896	616,055	567,255	981,735	1,134,956	1,133,562	1,192,365	1,271,015
Total risk reserves	292,331	305,094	291,349	423,665	525,275	562,905	592,413	643,600
NPLs / loans %	4.8	5.0	4.3	6.5	6.7	5.9	5.4	5.0
NPL coverage %	57.1	49.5	51.4	43.2	46.3	49.7	49.7	50.6
Provision charge / average loans %	1.3	1.4	1.6	2.1	1.8	1.0	0.8	0.8
Net NPAs / shareholders funds %	22.2	26.3	21.5	38.7	40.3	34.4	32.4	30.2
Profitability (%)								
Net interest margin (avg assets)	3.06	2.93	2.87	2.64	2.46	2.46	2.51	2.50
Provisions / operating profit	37.7	48.7	51.1	68.0	64.9	39.4	31.5	31.7
ROE (UBS earnings)	15.4	10.0	10.6	7.3	7.2	12.1	14.1	14.3
RoAdjE (UBS earnings & equity)	15.4	10.0	10.6	7.3	7.2	12.1	14.1	14.3
RoRWA (UBS)	1.53	1.02	1.12	0.75	0.71	1.15	1.27	1.18
RoA (UBS earnings)	0.97	0.65	0.68	0.46	0.44	0.71	0.81	0.82
Productivity (%)								
Cost income ratio	47.8	53.1	49.5	49.2	50.7	52.6	52.2	51.6
Cost / average assets	2.02	2.13	2.01	1.94	1.86	1.86	1.86	1.82
Compensation expense ratio	36.5	41.6	37.3	36.8	37.8	39.7	39.6	39.2
Growth (%)								
Revenue	7.6	9.7	16.2	8.6	3.6	8.1	13.5	12.3
Operating profit pre provisions	3.7	-1.6	25.2	9.1	0.5	4.0	14.4	13.7
Net earnings (UBS)	20.5	-22.8	20.3	-24.0	7.0	79.7	29.2	13.3
Net DPS	18.6	-27.7	18.2	12.8	0.0	25.0	20.0	0.0
Total assets (year end)	17.3	14.4	14.3	10.3	11.8	12.8	13.0	13.1
Customer loans	20.5	15.7	7.5	12.6	12.0	14.0	14.5	15.0
Customer deposits	15.2	15.9	13.1	9.8	12.0	14.0	14.0	14.0
Value (x)								
Market cap/revenues	2.4	1.9	2.6	2.0	1.9	1.8	1.6	1.4
Market cap/deposits	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
P/PPOP (diluted)	4.6	4.3	5.1	3.9	4.0	3.9	3.4	3.0
P/E (local GAAP, basic)	10.5	12.3	15.2	17.6	16.5	9.2	7.1	6.3
P/E (UBS, diluted)	10.5	12.3	15.2	16.9	16.5	9.2	7.1	6.3
Net dividend yield %	1.9	1.7	1.3	1.8	1.8	2.2	2.7	2.7
P/BV x	1.5	1.1	1.6	1.2	1.2	1.1	0.9	0.8
P/BV (UBS) x	1.5	1.1	1.6	1.2	1.2	1.1	0.9	0.8

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Punjab National Bank

Low ROE could restrict a re-rating

Credit costs to remain high in the medium term

PNB has reported a sharp increase in GNPLs (up from 2.9% in FY12 to 12.9% in FY16) as stressed loan recognition has picked up (GNPL formation was very high at 4.6% of its opening loan book in FY15 and 10.8% in FY16). While the pace of NPL additions could slow significantly from a high base, and recoveries could pick up due to the resolution of some NPL accounts, we remain concerned over the bank's low provision coverage (excluding write-offs, provision coverage was only 36.5% at end-FY16). Our analysis of stressed private sector power projects also indicates that PNB has high loan approvals to these projects. Coupled with high restructured loans (Rs201bn or 5% of its FY16 loan book), we believe this would keep GNPLs high at >10% by FY18E. We believe aging related provisions are also likely to keep credit costs high at ~150bp in FY17E and ~130bp in FY18E, which could continue to be a drag on its profitability.

PPOP growth to remain low; weak digital franchise could impact CASA

We expect PNB's loan growth to remain low at 9% in FY17 as its capital position remains weak and corporate demand is still subdued. High GNPLs would also keep pressure on margins—consequently, we expect growth in pre-provision profit (PPOP) to remain subdued at a 4.5% CAGR over FY16-19. Our analysis indicates that PNB lags the leading private sector banks as well as SBI by a wide margin in its digital banking roll-out and mobile app downloads. Higher competition from payment banks and financial technology (fintech) companies as well as the rapid shift towards online channels for transactions could drive a significant market share loss in current and savings accounts (CASA) in the next 5-10 years ([link](#)).

ROE could remain low at 6% by FY18E

We raise our FY17/FY18 earnings estimates by 146%/24% (from a low base) as we factor in lower credit costs. However, despite a sharp decline in credit costs, we expect ROE to remain low at 4.2%/6.4% in FY17/FY18.

Valuation: maintain Sell; raise price target from Rs65.00 to Rs100.00

We raise our price target from Rs65.00 to Rs100.00 (implies 0.5x FY17E P/BV) as we factor in a decline in GNPL formation and higher stressed loan recognition. We maintain our Sell rating on PNB. We believe asset quality pressure and a weak digital franchise would significantly impact its medium-term profitability. We derive our price target from a residual income model.

Equities

India
Banks, Ex-S&L

12-month rating

Sell

12m price target

Rs100.00
Prior: Rs65.00

Price

Rs123.70
RIC: PNBK.BO **BBG:** PNB IB

Trading data and key metrics

52-wk range	Rs173.05-71.30
Market cap.	Rs229bn/US\$3.41bn
Shares o/s	1,855m (ORD)
Free float	40%
Avg. daily volume ('000)	14,853
Avg. daily value (m)	Rs1,459.5
Common s/h equity (03/16E)	Rs383bn
P/BV (03/16E)	0.6x
Tier 1 ratio	8%

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/16E	(21.43)	(21.43)	NM	(19.32)
03/17E	3.31	8.13	NM	12.88
03/18E	10.41	12.93	24	16.02

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Highlights (Rsm)	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Revenues	189,688	199,399	230,133	218,438	241,239	261,357	283,649	311,868
Profit before tax	65,215	46,905	39,573	(57,379)	22,814	36,270	62,296	68,857
Net earnings (local GAAP)	47,474	33,426	30,616	(39,744)	15,970	25,389	43,607	48,200
Net earnings (UBS)	47,474	33,426	30,616	(39,744)	15,970	25,389	43,607	48,200
Tier 1 ratio %	9.8	8.9	9.4	8.5	8.2	7.9	7.9	7.9
EPS (UBS, diluted) (Rs)	26.86	18.91	16.51	(21.43)	8.13	12.93	22.21	24.55
Profitability/valuation	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
ROE (UBS) %	15.7	9.7	8.2	(10.3)	4.1	6.3	10.1	10.3
P/PPOP (diluted)	2.6	2.0	2.8	1.9	2.0	1.9	1.7	1.6
P/BV x	0.9	0.6	0.9	0.6	0.6	0.6	0.5	0.5
P/BV (UBS) x	0.9	0.6	0.9	0.6	0.6	0.6	0.5	0.5
P/E (UBS, diluted)	6.0	6.4	11.3	(5.8)	15.2	9.6	5.6	5.0
Net dividend yield %	3.4	1.7	1.8	0.0	1.0	1.6	2.7	3.0

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs123.70 on 21 Jul 2016 22:39 HKT

UBS Research THESIS MAP a guide to our thinking and what's where in this report

PIVOTAL QUESTIONS

Q: Have its asset quality issues bottomed out?

No. Our analysis of loan approvals to leveraged corporates indicates that PNB has relatively high loan approvals to large leveraged corporates. NPL risks from the corporate segment and a risk of relapse from the restructured book (5% of loans) remain.

["Deep Dive" 7/7/2015 →](#)

Q: Is the retail liability franchise vulnerable to competition?

Yes, PNB has one of the highest savings account (SA) deposit market shares in the sector, which we believe is at risk due to a shift in customer preferences for digital and alternate channels. Our analysis of ATM/POS transactions and franchise SA deposits as a percentage of reported SA deposits indicates that PNB's savings deposit base is likely to be under pressure.

["Evidence Lab" 1/16/2016 →](#)

Q: Can SOE reforms impact the long-term return ratio?

Yes, reforms such as the creation of bank holding companies, independent boards, allowing stock options, and bankruptcy laws can enhance SOE banks' long-term return ratios. However, a delay in the implementation of reforms will likely push the benefits by a few years.

UBS VIEW

We believe that a recovery in ROEs is unlikely to occur in the near term given the high 18% exposure to stressed sectors and likely stress on its margins. High stock of existing NPLs and low provision coverage would mean high P&L provisions capping any ROA improvements. A market share loss in low-cost retail deposits could also put pressure on its long-term profitability.

EVIDENCE

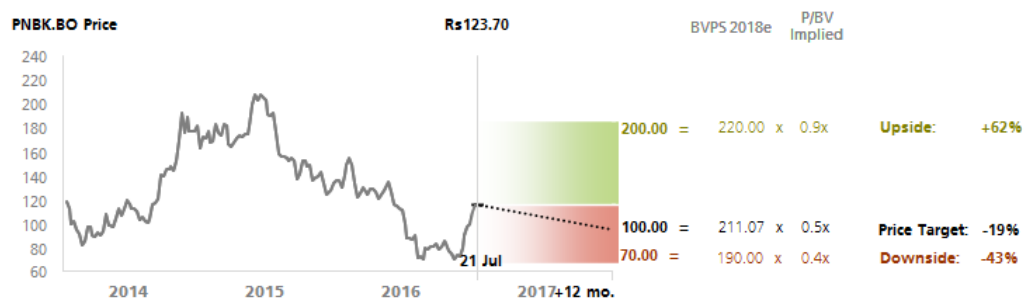
PNB has 12% of its loans as NPLs, which reduces its ability to earn NII and keeps provisioning high due to low provision coverage. A UBS Evidence Lab survey of retail deposit franchises ([link](#)) suggests weak relative positioning in digital channels creating the risk of market share losses.

WHAT'S PRICED IN?

The stock has rallied 85% from its trough in the last two months due to expectations of lower NPL going forward, which we believe may not be sustainable. We believe pressure on profitability due to lower PPOP and high provisioning is not fully factored in. Moreover, weaker digital offerings and poor customer engagement on the alternate channels could lead to a loss in the retail liability franchise, which has not been fully priced in.

[more →](#)

UPSIDE / DOWNSIDE SPECTRUM



Value drivers

Rs200.00 upside
Rs100.00 target
Rs70.00 downside

Loan growth

15.0%
9.0%
7.0%

Credit costs

1.5%
2.2%
2.8%

Net interest margins

3.0%
2.6%
2.4%

Source: UBS estimates

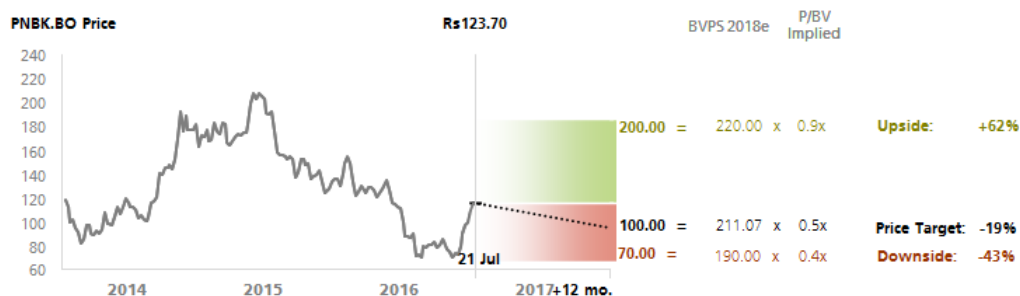
[more →](#)

COMPANY DESCRIPTION

Punjab National Bank is one of the biggest public sector banks in India, with a large presence in the northern states.

[more →](#)

UPSIDE / DOWNSIDE SPECTRUM

[return](#) ↑

**PNB is trading
at Rs123.70 (as of 21
July)**

Value drivers

Loan growth

Credit costs

Net interest margins

Rs200.00 upside

15.0%

1.5%

3.0%

Rs100.00 target

9.0%

2.2%

2.6%

Rs70.00 downside

7.0%

2.8%

2.4%

Source: UBS estimates

Risk to the current share price is heavily skewed (2.85:1) to the upside.

PNB is trading at **Rs123.70** (as of 21 July).

Upside (Rs200.00): In our upside scenario, we expect asset quality pressures to decline significantly. We assume a rapid improvement in the overall economy leading to better growth in advances and lower NPL pressure. We assume a 12% loan CAGR in FY16-18, an improvement in NIMs to 3.0% and lower credit costs of 1.5%. In this case, we would derive a valuation of Rs200.00 per share.

Base (Rs100.00): We assume a 9% loan CAGR over FY16-18. We assume credit costs would average 2.2% and NIM will average 2.6% over FY17E-18. Our Rs100.00/share valuation for the bank is derived from a three-stage residual income model: 1) for FY16-20, where we expect a 40% earnings CAGR over FY17-20; 2) for FY21-35, where we forecast a 5% earnings CAGR; and 3) terminal growth of 5%.

Figure 70: Residual income model

Particulars	FY15	FY16-20E	FY20-35E	Terminal
Year end EPS (Rs)	16.5	24.5	102.5	
% growth/CAGR		8.3	10.0	5.0
Year end DPS (Rs)	3.3	3.7	0.0	
Year end BVPS (Rs)	203.2	244.8	861.8	
% growth/CAGR		3.8	8.8	
Year end Residual income (Rs/share)	(13.0)	(10.7)	(21.4)	
PV of year end residual income (Rs/share)	(13.0)	(5.3)	(1.3)	
Avg ROE (%)	8.4	4.2	11.5	
BVPS current year				188.9
PV of residual Income (Rs)				(87.1)
Price Target (Rs)				101.8

Source: UBS estimates

Downside (Rs70.00): We assume ROE would be low at 7% in FY17. Given asset quality pressures and low ROE, the stock could trade at five-year trough multiples. In this case, we have a fair value estimate of Rs70.00 per share, which implies 0.5x FY17E P/BV.

COMPANY DESCRIPTION

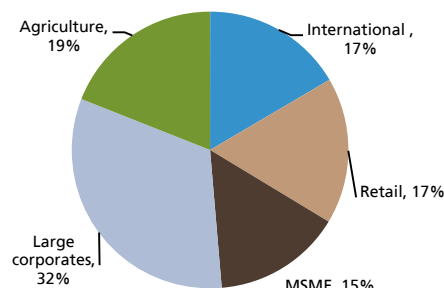
[return](#) ↑

Market Cap	Rs229bn
Shares Outstanding	1,855m
Industry and outlook	Banking
Region	India
Website	www.pnbindia.in

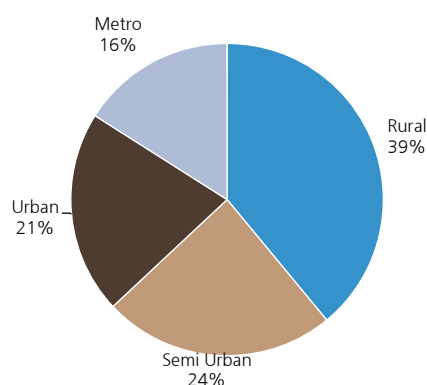
Punjab National Bank is one of the biggest public sector banks in India, with a large presence in the northern states. The bank has a network of 6,759 branches and a domestic current account/savings account ratio of 41.6% as of end-March 2016. It has an overseas presence in nine countries, a loan book of Rs4.12tn and a deposit base of Rs5.53tn as of end-March 2016.

Industry outlook

Credit growth for the banking sector has remained soft at around 10% as corporate sector demand is still subdued. With a likely improvement in India's GDP growth, we expect credit growth to improve gradually. Retail asset quality has remained stable during the current cycle. However, a few banks are witnessing greater pressure in the corporate segment, given a sharp slowdown and higher leverage on corporate balance sheets.

Breakdown of FY16 domestic loan book (%)

Source: Company data

FY16 breakdown of branches by category

Source: Company data

Punjab National Bank (PNBK.BO)

	03/13	03/14	03/15	03/16E	% ch	03/17E	% ch	03/18E	03/19E	03/20E
Profit & Loss (Rsm)										
Net income interest	148,490	161,460	165,556	153,118	-7.5	159,334	4.1	178,940	196,275	218,794
Total non interest income	41,198	37,940	64,578	65,320	1.1	81,906	25.4	82,418	87,374	93,074
Total income	189,688	199,399	230,133	218,438	-5.1	241,239	10.4	261,357	283,649	311,868
Total cash expenses	(78,466)	(89,858)	(101,213)	(95,899)	5.3	(115,858)	-20.8	(127,562)	(140,106)	(153,964)
Pre-depreciation operating profit	111,222	109,541	128,920	122,538	-5.0	125,381	2.3	133,796	143,542	157,904
Depreciation & amort (excl. goodwill)	(3,185)	(3,524)	(3,702)	(3,825)	-3.3	(3,939)	-3.0	(4,010)	(4,096)	(4,181)
Operating profit pre provisions	108,037	106,017	125,218	118,713	-5.2	121,442	2.3	129,785	139,447	153,723
Total provisions	(42,823)	(59,112)	(85,645)	(176,092)	-105.6	(98,628)	44.0	(93,515)	(77,150)	(84,865)
Operating profit post provisions	65,215	46,905	39,573	(57,379)	-	22,814	-	36,270	62,296	68,857
Income from associates & JVs (pre-tax)	0	0	0	0	-	0	-	0	0	0
Other pre-tax items	0	0	0	0	-	0	-	0	0	0
Profit before tax (UBS)	65,215	46,905	39,573	(57,379)	-	22,814	-	36,270	62,296	68,857
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	65,215	46,905	39,573	(57,379)	-	22,814	-	36,270	62,296	68,857
Tax	(17,741)	(13,479)	(8,957)	17,635	-	(6,844)	-	(10,881)	(18,689)	(20,657)
Profit after tax	47,474	33,426	30,616	(39,744)	-	15,970	-	25,389	43,607	48,200
Other post-tax items	0	0	0	0	-	0	-	0	0	0
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	47,474	33,426	30,616	(39,744)	-	15,970	-	25,389	43,607	48,200
Net earnings (before pref divs)	47,474	33,426	30,616	(39,744)	-	15,970	-	25,389	43,607	48,200
Net earnings (UBS)	47,474	33,426	30,616	(39,744)	-	15,970	-	25,389	43,607	48,200
Per share (Rs)										
EPS (local GAAP, basic)	26.86	18.91	16.51	(20.24)	-	8.13	-	12.93	22.21	24.55
EPS (UBS, diluted)	26.86	18.91	16.51	(21.43)	-	8.13	-	12.93	22.21	24.55
PPOP (diluted)	61.13	59.99	67.52	64.01	-5.2	61.85	-3.4	66.10	71.02	78.29
Net DPS	5.40	2.00	3.30	0.00	-	1.22	-	1.94	3.33	3.68
BVPS	184.89	203.10	210.72	195.10	-7.4	201.06	3.1	211.07	228.80	248.53
BVPS (UBS)	184.89	203.10	210.72	195.10	-7.4	201.06	3.1	211.07	228.80	248.53
Balance sheet (Rsm)										
Banking assets (year end)	4,788,770	5,504,199	6,033,336	6,673,905	10.6	7,125,865	6.8	7,712,102	8,363,006	9,071,475
Banking assets (average)	4,685,355	5,146,485	5,768,768	6,353,620	10.1	6,899,885	8.6	7,418,984	8,037,554	8,717,240
Total assets (year end)	4,788,770	5,504,199	6,033,336	6,673,905	10.6	7,125,865	6.8	7,712,102	8,363,006	9,071,475
Risk weighted assets (RWA) (year end)	3,243,800	3,725,480	3,952,810	4,248,680	7.5	4,575,616	7.7	4,983,263	5,441,512	5,947,506
Risk weighted assets (RWA) (average)	3,081,495	3,484,640	3,839,145	4,100,745	6.8	4,412,148	7.6	4,779,439	5,212,387	5,694,509
Customer loans	3,087,252	3,492,691	3,805,344	4,123,258	8.4	4,453,119	8.0	4,898,431	5,388,274	5,927,101
Customer loans (average)	3,012,500	3,289,972	3,649,018	3,964,301	8.6	4,288,188	8.2	4,675,775	5,143,352	5,657,687
Interest earning assets (average)	4,638,486	5,096,486	5,714,820	6,288,839	10.0	6,836,949	8.7	7,367,491	7,988,588	8,670,886
Customer deposits	3,915,601	4,513,967	5,013,786	5,530,511	10.3	6,088,227	10.1	6,654,820	7,270,903	7,940,629
Common s/h equity (year end)	326,769	358,953	390,795	383,101	-2.0	394,803	3.1	414,447	449,268	488,011
Common s/h equity (average)	302,470	342,861	374,874	386,948	3.2	388,952	0.5	404,625	431,858	468,639
Total SHF (equity, pref & MI) (year end)	326,769	358,953	390,795	383,101	-2.0	394,803	3.1	414,447	449,268	488,011
Total SHF (equity, pref & MI) (average)	302,470	342,861	374,874	386,948	3.2	388,952	0.5	404,625	431,858	468,639
Net tangible assets	326,769	358,953	390,795	383,101	-2.0	394,803	3.1	414,447	449,268	488,011
Balance sheet structure (%)										
Loans / banking assets (year end)	64.5	63.5	63.1	61.8	-2.0	62.5	1.2	63.5	64.4	65.3
Deposits / banking assets (year end)	81.8	82.0	83.1	82.9	-0.3	85.4	3.1	86.3	86.9	87.5
Loans / deposits	78.8	77.4	75.9	74.6	-1.8	73.1	-1.9	73.6	74.1	74.6
Total SHF / banking assets (year end)	6.8	6.5	6.5	5.7	-11.4	5.5	-3.5	5.4	5.4	5.4

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Punjab National Bank (PNBK.BO)

	03/13	03/14	03/15	03/16E	03/17E	03/18E	03/19E	03/20E
Capital adequacy (Rsm)								
Tier 1 capital	316,642	330,590	369,910	360,199	373,206	393,885	429,403	468,661
Total capital	412,727	429,260	485,460	482,229	487,879	508,197	543,396	582,375
Risk weighted assets (RWA) (year end)	3,243,800	3,725,480	3,952,810	4,248,680	4,575,616	4,983,263	5,441,512	5,947,506
Core tier 1 ratio %	9.1	8.5	9.0	8.2	7.9	7.7	7.7	7.7
Tier 1 ratio %	9.8	8.9	9.4	8.5	8.2	7.9	7.9	7.9
Total capital ratio %	12.7	11.5	12.3	11.4	10.7	10.2	10.0	9.8
Tangible equity	326,769	358,953	390,795	383,101	394,803	414,447	449,268	488,011
Equity / assets %	6.8	6.5	6.5	5.7	5.5	5.4	5.4	5.4
Tangible equity to tangible assets %	6.8	6.5	6.5	5.7	5.5	5.4	5.4	5.4
Asset quality (Rsm)								
Non performing assets	134,658	188,800	256,948	558,188	631,368	643,925	648,634	672,249
Total risk reserves	62,293	89,630	102,983	203,958	272,960	326,937	363,802	407,937
NPLs / loans %	4.3	5.3	6.6	12.9	13.4	12.3	11.3	10.6
NPL coverage %	46.3	47.5	40.1	36.5	43.2	50.8	56.1	60.7
Provision charge / average loans %	1.4	1.8	2.3	4.3	2.3	2.0	1.5	1.5
Net NPAs / shareholders funds %	22.1	27.6	39.4	92.5	90.8	76.5	63.4	54.2
Profitability (%)								
Net interest margin (avg assets)	3.17	3.14	2.87	2.41	2.31	2.41	2.44	2.51
Provisions / operating profit	39.6	55.8	68.4	148.3	81.2	72.1	55.3	55.2
ROE (UBS earnings)	15.7	9.7	8.2	-10.3	4.1	6.3	10.1	10.3
RoAdjE (UBS earnings & equity)	15.7	9.7	8.2	(10.3)	4.1	6.3	10.1	10.3
RoRWA (UBS)	1.54	0.96	0.80	(0.97)	0.36	0.53	0.84	0.85
RoA (UBS earnings)	1.01	0.65	0.53	(0.63)	0.23	0.34	0.54	0.55
Productivity (%)								
Cost income ratio	43.0	46.8	45.6	45.7	49.7	50.3	50.8	50.7
Cost / average assets	1.74	1.81	1.82	1.57	1.74	1.77	1.79	1.81
Compensation expense ratio	34.4	38.0	36.9	35.1	40.2	41.1	41.5	41.3
Growth (%)								
Revenue	9.1	5.1	15.4	-5.1	10.4	8.3	8.5	9.9
Operating profit pre provisions	4.1	-1.9	18.1	-5.2	2.3	6.9	7.4	10.2
Net earnings (UBS)	-2.8	-29.6	-8.4	-	-	59.0	71.8	10.5
Net DPS	22.7	-63.0	65.1	-	-	59.0	71.8	10.5
Total assets (year end)	4.5	14.9	9.6	10.6	6.8	8.2	8.4	8.5
Customer loans	5.1	13.1	9.0	8.4	8.0	10.0	10.0	10.0
Customer deposits	3.2	15.3	11.1	10.3	10.1	9.3	9.3	9.2
Value (x)								
Market cap/revenues	1.4	1.1	1.4	1.1	1.0	0.9	0.8	0.7
Market cap/deposits	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
P/PPOP (diluted)	2.6	2.0	2.8	1.9	2.0	1.9	1.7	1.6
P/E (local GAAP, basic)	6.0	6.4	11.3	NM	15.2	9.6	5.6	5.0
P/E (UBS, diluted)	6.0	6.4	11.3	(5.8)	15.2	9.6	5.6	5.0
Net dividend yield %	3.4	1.7	1.8	0.0	1.0	1.6	2.7	3.0
P/BV x	0.9	0.6	0.9	0.6	0.6	0.6	0.5	0.5
P/BV (UBS) x	0.9	0.6	0.9	0.6	0.6	0.6	0.5	0.5

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Appendix

Methodology and limitations to our study of MCA data

For this study, we have relied on government fillings (MCA) done for creation of a charge on assets taken as collateral in case of lending. We have surveyed charge documents from the ROC website for a sample of 200 companies which are chosen based on either high leverage or weak financials or credit ratings below investment grade or high debt-to-equity ratios or low cash interest coverage ratios or are otherwise potentially stressed (in our view). Some of the corporates in our sample have strong cash flows but are chosen due to weak sector fundamentals or high promoter group leverage. We have analysed all loans appearing on index of charges and tired removing duplicates on a best-effort basis. While these approvals may not be equal to the current exact exposures of these banks, we believe they give a good approximation of existing exposure for a relative comparison among banks. We do not claim this study to be comprehensive nor accurate as we could not obtain data on many loan contracts.

Methodology and limitations of power sector study

With the help of UBS Utilities team (Gopal Ritolia and Sourabh Taparia), we did a bottom up analysis of 114 power sector projects (coal and gas based) with capacity of around 80000 MW. We considered availability of PPA as key success factor and availability funds with promoters group is also considered as criteria to select few under construction projects.

Please note that we have analysed loan approvals to corporates which owns one or more of the weak projects (as described above) in the absence of project specific exposures data.

Data for ratings analysis sourced from Capitaline

Credit ratings data used in this report is sourced from Capitaline and the following ratings websites (in cases where data was not available with Capitaline).

- <http://www.crisil.com/>
- <http://www.careratings.com/>
- <http://www.icra.in/>
- <https://www.indiaratings.co.in/>

State Bank of India Investment case

While we think SBI is best-placed among the SOE banks, its asset quality risks remain high and large exposure to stressed corporates could lead to high provisions in the next 12-18 months. SBI's profitability could remain under pressure, with ROE of <11% in FY16E/FY17E. We expect revenue growth to stay weak and provisions to remain high.

Punjab National Bank Investment case

We believe that a recovery in ROEs is unlikely to occur in the near term given the high 18% exposure to stressed sectors and likely stress on its margins. High stock of existing NPLs and low provision coverage would mean high P&L provisions capping any ROA improvements. A market share loss in low-cost retail deposits could also put pressure on its long-term profitability.

Valuation Method and Risk Statement

We use a residual income model to value banks and a sum-of-the-parts methodology to value companies that own other financial service businesses.

While we expect a gradual recovery in economic growth, a sustained economic slowdown could impact the banking and finance sector on several fronts—this may lead to a slowdown in credit, increase NPL risk, impact fee income, and exert pressure on NIM. Lower rates could put pressure on margins, and we expect stable to marginal declines for banks under our coverage. However, a sharp decline in lending rates could lead to a higher drop in margins and profitability. We expect asset quality to remain weak in the near term and improve only gradually. Nevertheless, exposure to large leveraged corporates remains a risk and a default by a large corporate could significantly impact some banks under our coverage.

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12-Month Rating	Definition	Coverage ¹	IB Services ²
Buy	FSR is > 6% above the MRA.	47%	32%
Neutral	FSR is between -6% and 6% of the MRA.	38%	25%
Sell	FSR is > 6% below the MRA.	15%	21%
Short-Term Rating	Definition	Coverage ³	IB Services ⁴
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%

Source: UBS. Rating allocations are as of 30 June 2016.

1:Percentage of companies under coverage globally within the 12-month rating category.

2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.

3:Percentage of companies under coverage globally within the Short-Term rating category.

4:Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

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UBS Securities India Private Ltd: Vishal Goyal, CFA; Ishank Kumar, CFA; Gopal Ritolia. **UBS Securities Pte. Ltd.:** William Vanderpump.

Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
HDFC Bank ^{7, 16}	HDBK.BO	Buy	N/A	Rs1,231.45	22 Jul 2016
IndusInd Bank	INBK.BO	Neutral	N/A	Rs1,136.95	22 Jul 2016
LIC Housing Finance	LICH.BO	Buy	N/A	Rs509.70	22 Jul 2016
Punjab National Bank ⁷	PNBK.BO	Sell	N/A	Rs120.25	22 Jul 2016
State Bank of India ⁷	SBI.BO	Buy	N/A	Rs223.45	22 Jul 2016
YES Bank ⁷	YESB.BO	Sell	N/A	Rs1,158.35	22 Jul 2016

Source: UBS. All prices as of local market close.

Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

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Additional Prices: Axis Bank, Rs537.55 (22 Jul 2016); ICICI Bank, Rs263.55 (22 Jul 2016); Bank of Baroda, Rs150.90 (22 Jul 2016); Federal Bank, Rs63.85 (22 Jul 2016); Kotak Mahindra Bank, Rs760.10 (22 Jul 2016); Source: UBS. All prices as of local market close.

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