

# Asian Banks Strategist

## What If US Interest Rates Normalize?

- **Return of US to 3% inflation, 5% Fed Funds rate?** – With talk of US QE tapering, we thought it timely to review the impact on Asian banks of meaningful increases in US inflation and interest rates. Our bank analysts were each asked to assess the impact of US inflation returning to 3% and Fed Funds rate to 5% (ie, pre-GFC conditions). On the back of this, they have generally assumed rises of 2-3% in local inflation and 100bps in interest rates. Note this is not Citi's base case for the US – which is for CPI inflation to move up from 1.3% in 2013 to 2.1% in 2014, short-term rates to stay at 25bps until 2015, and Fed QE to gradually taper later in 2H13 but purchases to extend into 2014.
- **Zero interest rate bound SG, JP and HK benefit most; ID and TH consumer banks lose out** – We expect bank earnings to benefit the most in Singapore (+21%), Japan (+15%) and HK (+14%). Big banks benefit most – DBS, MUFG and HSB are most leveraged within these three countries. Impact is most negative for Indonesia as loan growth slows from a high level and credit costs rise, with the worst-case scenario resulting in -15% for BBRI and BBNI. Thai consumer banks (BAY, TISCO) face NIM pressure due to their high proportion of fixed-rate lending.
- **Revenge of the NIMs** – The biggest earnings impact for most countries is from NIMs as a result of higher interest rates. Most Asian banks benefit from higher interest rates because of their relatively liquid balance sheets and strong deposit franchises (high proportion of low cost CASA deposits). We see the **biggest NIM upside in the Philippines, Singapore, HK, Taiwan, China and Japan** – in most of these, NIMs have been compressed in recent years by near-zero short-term rates. We see Korea, Malaysia and India as the least interest-rate sensitive.
- **Credit costs at 10-year lows, watch for normalization** – We foresee higher credit costs as inflation rises, monetary policy tightens and interest rates rise. Many countries have credit costs that are within a whisker of the 10-year lows (ID, PH, TW, MY, SG, JP, CN) and have had rapid credit expansion in recent years (CN, TH, ID, HK, SG). Of these, **Indonesia and Taiwan concern us most** – both have significant room for credit cost normalization vs the 10-year average; Indonesia has also had rapid credit expansion; Taiwan banks are highly leveraged due to their low profitability.
- **Modest impact on loan growth and expenses** – We see minimal/modest impact on loan growth. Upward pressure on operating costs will be moderate due to higher inflation. Trading gains in the Philippines would likely fall further due to higher interest rates (following significant gains in the past two years).
- **Country preferences** – *Overweight* India, China. *Neutral* Indonesia, Taiwan, HK, Thailand, Korea. *Underweight* Singapore, Malaysia, Philippines. *Regional Top Buys:* ICICI, Axis, BOC, CCB, Hana. *Regional Top Sells:* OCBC, CIMB, BPI, TMB, BCA.

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# Contents

<b>Asian Banks View at a Glance</b>	<b>4</b>
<b>Return to 3% inflation, 5% Fed Funds rate?</b>	<b>7</b>
<b>Biggest beneficiaries are SG, JP and HK; ID and TH consumer banks lose out</b>	<b>8</b>
<b>NIM is the biggest swing factor</b>	<b>9</b>
<b>Credit costs at 10-year lows, watch for normalization</b>	<b>13</b>
<b>China</b>	<b>28</b>
Rate Liberalization Offsets NIM Benefits	28
China Banks – Valuation Charts	33
China Banks – Valuation Charts (Cont'd)	34
<b>Hong Kong</b>	<b>37</b>
Major Beneficiary of NIM Recovery	37
Hong Kong Banks – Valuation Charts	41
Hong Kong Banks – Valuation Charts (Cont'd)	42
<b>India</b>	<b>45</b>
Impact Modest – Already in an Easing Cycle	45
India Banks – Valuation Charts	50
India Banks – Valuation Charts (Cont'd)	51
<b>Indonesia</b>	<b>54</b>
Most Adversely Impacted on Loan Growth and Credit Costs	54
Indonesia Banks – Valuation Charts	59
<b>Japan</b>	<b>62</b>
Major Beneficiary of Higher US Inflation and Rates	62
Japan Banks – Valuation Charts	65
Japan Banks – Valuation Charts (Cont'd)	66
<b>Korea</b>	<b>69</b>
Limited Benefits from Macro Turnaround	69
Korea Banks – Valuation Charts	74
Korea Banks – Valuation Charts (Cont'd)	75
<b>Malaysia</b>	<b>78</b>
Impact Relatively Neutral	78
Malaysia Banks – Valuation Charts	83
Malaysia Banks – Valuation Charts (Cont'd)	84
<b>Philippines</b>	<b>87</b>
Major NIM Beneficiary but Offset by Other Areas	87
Philippine Banks – Valuation Charts	92
<b>Singapore</b>	<b>95</b>
Major Beneficiary of NIM Expansion	95
Singapore Banks – Valuation Charts	102
<b>Taiwan</b>	<b>104</b>
NIM Beneficiary but Offset by Credit Cost Normalization	104
Taiwan Banks – Valuation Charts	110
Taiwan Banks – Valuation Charts (Cont'd)	111
<b>Thailand</b>	<b>114</b>
Most Negative for Consumer Banks	114
Thailand Banks – Valuation Charts	120
Thailand Banks – Valuation Charts (Cont'd)	121
<b>Appendix A-1</b>	<b>127</b>

**Figure 1. Pan-Asia Banks Team Contacts**

*For informational purposes only*

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Source: Citi Research

## Asian Banks View at a Glance

Figure 2. Asian Banks Strategy – Country Views

	Commentary	Stock picks
<b>Overweight</b>		
India	India banks have had a nice rebound in the past month but are still the second worst performing banking sector YTD in Asia ex. The sector is trading on mean valuations. The sweetest part of the falling interest rate trade is probably done. Looking ahead, we believe India banks are on the right side of a traditional bank stock up-cycle; lower rates, near peaking asset quality, looking for growth (gingerly), and cautious managements. Indian banks shouldn't be running away quickly, but they should head up.	Top picks: ICICI Bank, Axis Bank
China	We have structural concerns over there being too much credit in China, but we don't see this coming to roost in the near term. Instead we move to a tactical overweight – we see monetary policy remaining accommodative given flattish economic growth, inexpensive valuations (1.1x 12M-fwd P/B, 1SD below the mean) due to ongoing underperformance (flat YTD, +20% past 12M – among the worst regionally), and earnings still growing albeit modestly (8% pa). BVPS growth (14% 2013E) is one of the highest in the region, helping to limit share price downside. Dividend yields are high (5.6% 2013E); equity raising unlikely for the major banks near term. Further deposit rate liberalization is a risk – highly likely in 2013 but this is now much more expected and somewhat factored into our earnings.	Top picks: BOC, CCB, CRCB Least preferred: MSB, CMB
<b>Neutral</b>		
Indonesia	Driven by expectations of strong earnings momentum, banks re-rated to 13.4x 12M-Fwd PERs, close to historic range highs, making prices more vulnerable to negative earnings/macro surprises. 1Q results while good saw emerging NIM pressure/asset quality issues. Cloudy macro outlook with likely S&P downgrade, fuel hike. BBCE's hiking of TD rates signals that broad money could constrain loan growth and pressure NIMs.	Preferred: BBRI, BBNI Least preferred: BBCE
Taiwan	We see improved access to China and RMB will be a game changer for Taiwanese banks, which in our view has the potential to trigger a re-rating of the sector. And, we anticipate next round of ECFA expected in 2H13 to ratify additional access for brokers and banks will be a catalyst for further outperformance. While a soft patch to a recovery could be a drag in the ST, we recommend investors use that as an opportunity to narrow u/w in the space.	Top picks: Chinatrust, Mega, First, Cathay
Hong Kong	Near term focus is on RMB banking. RMB deposit base grew with currency appreciation and cross-border trades. Regulations relaxed on RMB banking and CNH HIBOR rate planned to launch in June. Fundamental trends broadly inline but lack excitement. Sector loan demand looks to have tapered off in late 1Q13 while funding costs edged up in March/April; margin remains positive hoh for 1H13. Asset quality benign but expect deterioration in China.	Top picks: BoCHK Least preferred: HSB
Thailand	2013E another resilient year for earnings (+19%yoy), near term infra plan delays, fading consumer impact on GDP. Rising policy uncertainty; no clear evidence that strong THB has hit exports so BoT may resist rate cuts.	Top picks: KBANK, SCB Least preferred: TMB
Korea	Valuation is getting close to the bottom, but it may be a little too early to jump in due to concern on asset quality. 2Q will likely be disappointing as banks will have to put in more provisioning for ailing corporates in shipping (eg. STX), shipbuilding, and construction sectors. On the other hand, the housing market has started to show some improvement in terms of sentiment. NIM is likely to decline further during 2-3Q due to BoK's unexpected rate cut in May, but at a slower pace. We are a little more positive than before, but not clear on the extent of the provisions needed in 2Q for ailing corporates.	Top pick: Hana Least preferred: IBK
<b>Underweight</b>		
Singapore	Headwinds post 1Q: [a] interest rates likely soft, mgmt guide 2013 NIMs likely to stay near record lows; [b] Ex-NIM improvement, ROEs may be capped at 11-12% despite otherwise strong revenues, [c] Basel 3 CET1 ratios are comfortable but not excessive, [d] supply side issues constrain Singapore GDP response to US recovery.	Top pick: UOB Least preferred: OCBC
Malaysia	BN's narrow election win should broadly maintain status quo, policy continuity positive for markets; The rollout of major ETP projects could be expedited and fiscal reforms (fuel hike, GST implementation) should proceed. Soft pre-elections monetary data (especially weak business credit demand) and ongoing NIM pressure point to relatively subdued 1Q13 results.	Top pick: Maybank Least preferred: CIMB
Philippines	At 19x 2013E PER v recurring EPS +7% (2.3x P/B vs 12.3% ROE) prices are as much due to portfolio flows as core earnings; but macro story looks priced in. Collapse of short term rates & yield curve inversion may flag the peaking of bond trading profits in 1Q13 and (post >150bps SDA rate cuts to 2.5%) NIM pressure in 2Q13.	Top pick: BDO Least preferred: BPI

Source: Citi Research

Figure 3. Asian Banks — Top Regional Buys and Sells

As at 24 May 2013											
Banks	Rating	Price L Ccy	Target Price	ETR %	EPS Growth %		PE (x)		PB (x)		ROE (%)
					13E	14E	13E	14E	13E	14E	
<b>Top Buys:</b>											
ICICI Bank	1	1,204	1,535	29.2	28.7	21.9	16.7	13.7	2.1	1.9	13.1
ICICI Bank is a structural re-rating play, and while it continues to be work-in-progress, the story looks intact, as is its potential upswing to an economic/market revival.											
Axis Bank	1	1,458	1,795	24.3	9.9	22.3	13.4	10.9	2.1	1.8	18.7
Axis has had a decent stock run, but we believe that it retains its leverage to economic stabilization/revival.											
Hana FG	1	37,600	53,000	42.6	-30.7	19.6	8.2	6.9	0.6	0.5	7.5
Currently trading at 0.5x P/B, we expect KEB's operation improvement to be share price driver for Hana since it now owns full 100% of KEB.											
BOC	1	3.66	4.40	26.6	5.8	6.9	5.5	5.1	0.9	0.8	16.9
Expect continued NIM outperformance; BOC least exposed to domestic deposit rate liberalization; beneficiary of shift in US interest rate expectation and Rmb internationalization.											
CCB	1	6.30	7.70	28.1	8.1	8.5	6.0	5.5	1.1	1.0	20.6
Solid deposit franchise and balance sheet – sector-high Tier 1 ratio, low LDR, ample provisions.											
<b>Top Sells:</b>											
OCBC	3	10.86	9.60	-8.5	-8.0	5.9	14.6	13.8	1.5	1.4	10.6
Expected weak revenue performance as bumper trading profits/life non-par gains from 2012 normalize. 1.55x P/B vs 10.6% ROE.											
CIMB	3	8.51	7.96	-3.5	7.7	7.9	13.5	12.5	2.0	1.8	15.8
Although political risk has dissipated, group continues to face challenges in overseas operations (namely Indonesia and Thai) and capital management.											
BPI	3	101.60	92.00	-7.7	8.8	11.0	21.0	19.0	3.3	3.0	16.7
Current valuation at 3.3x P/B vs 16.7% ROE; highest ROE of peers but funding constraints suggest further NIM pressure.											
TMB	3	2.54	2.00	-19.3	311.1	13.3	16.8	14.8	1.8	1.7	11.1
Strong operational/ROE improvement but looks well priced in at 1.8x P/B v 11% ROE.											
BBCA	3	10,950	8,400	-22.2	18.0	18.1	19.3	16.3	4.1	3.4	23.6
Our top Sell in ID based on expensive valuation. Decision to raise time deposits by 100-150bps (May 13) to squeeze NIMs. Lending yield under pressure due to competition.											

Source: Citi Research Estimates

Figure 4. Asian Banks – US Interest Rate Normalization Impact at a Glance

Country	Impact	Comments
<b>SINGAPORE</b> Net earnings impact: +21%	<b>Overall</b>	Mostly driven by NIM expansion (+40bps/earnings +26%) but somewhat offset by higher credit cost +20bps/earnings -10%) and operating costs (earnings -6%).
	<b>NIM: +40bps</b>	Assume 3M SGD SIBOR recovers from below 40bps to 3%, NIMs could recover 40bps.
	<b>Credit cost: +20bps</b>	Assume a moderate 20bps rise to reach our estimate of normalized levels of 40bps.
	<b>Others</b>	Minimal loan growth impact - Singapore unlikely to return to trend GDP growth of 5%. Non-interest income benefits from a better economy and capital markets. Higher cost/income as banks invest more in an improving environment.
	<b>Stocks</b>	DBS most leveraged to this scenario on all fronts, OCBC the least sensitive.
<b>JAPAN</b> Net earnings impact: +15%	<b>Overall</b>	NIM benefits (+18bps/earnings +25%) partly offset by higher credit cost (+10bps/earnings -11%)
	<b>NIM: +18bps</b>	NIM largely driven by short term rate which is assumed to rise only slightly. NIM expansion mainly due to widening of lending rates versus deposit rates.
	<b>Credit cost: +10bps</b>	Unlikely to be a major concern due to heavy de-leveraging and stringent credit standards.
	<b>Others</b>	Loan growth will benefit from "Abenomics". Limited room for cost reduction as Japanese banks have already gone through cost restructuring.
	<b>Stocks</b>	Mega banks are greater beneficiaries than regional banks given lower interest rate risks and greater overseas exposures (currency gains); MUFG the biggest beneficiary in the sector.
<b>HONG KONG</b> Net earnings impact: +14%	<b>Overall</b>	Mostly driven by NIM expansion (+40bps/earnings +25%) offset by higher credit cost (+20bps/earnings -6%) and operating costs (earnings -5%).
	<b>NIM: +40bps</b>	Assumes the HK banks claw back 2/3 of the NIM contraction during 2007-09, during which HIBOR and USD LIBOR collapsed to close to zero.
	<b>Credit cost: +20bps</b>	Mortgages less at risk, corporate lending greater risk. Credit costs coming off a low base.
	<b>Others</b>	Loan growth impact limited - cross-border China lending driven by onshore/offshore borrowing spread.
	<b>Stocks</b>	Big banks benefit substantially; HSB may benefit more than BOCHK due to higher CASA mix.
<b>PHILIPPINES</b> Net earnings impact: +8%	<b>Overall</b>	NIM benefits offset by a sharp fall in trading income (higher rates to impact valuation on investment securities) and moderate deterioration in credit quality and cost/income ratios.
	<b>NIM: +44bps</b>	Assume 75bps rise in benchmark rates. Top banks are very sensitive to interest rates since 50-60% of deposits are in low cost CASA.
	<b>Trading income: -20%</b>	Higher rates negative for valuations of trading securities composed mostly of Philippines government bonds, following significant gains from past 2 years on back of falling rates.
	<b>Credit cost: +11bps</b>	NPLs at a historical low; consumer loans more sensitive to rising rates. Sector is well reserved with over 100% provision coverage among the top banks.
	<b>Others</b>	Cost/income ratio to rise 90bps on the back of additional 3ppt increase in salary and occupancy costs due to rising inflation. Limited loan growth impact; infrastructure driven in the medium term.
	<b>Stocks</b>	Benefit for all of the top banks; BDO better off given its higher LDR and higher CASA mix.
<b>KOREA</b> Net earnings impact: +7%	<b>Overall</b>	Mainly driven by NIM expansion (+11bps/earnings +12%) due to assumed interest rate increases, partly offset by slight rise in credit cost (+7bps/earnings -6%).
	<b>NIM: +11bps</b>	Assumes interest rates to rise 150bps, NIMs expand 11bps. Don't expect NIMs to recover back to pre-GFC levels, duration gap is now pretty much at neutral.
	<b>Credit cost: +7bps</b>	Upward pressure on NPLs but Korean banks' credit cost is already high vs Asia; assume credit cost rises 7bps back to historical avg of 69bps.
	<b>Others</b>	Assume higher inflation rate to flow through to slightly higher loan growth. Modest improvement to cost/income ratio on better revenue outlook (on NIMs and loan growth).
	<b>Stocks</b>	IBK and Hana FG are more positively impacted by this macro scenario
<b>CHINA</b> Net earnings impact: +4%	<b>Overall</b>	NIM benefits (+20bps/earnings +12%) offset by higher credit cost (+20bps/earnings -6%) and modest pressure on cost/income ratio (+1ppt/earnings -2%).
	<b>NIM: +20bps</b>	Return of lending rates back to pre-GFC levels could be c50bps positive for NIMs. But rate liberalization could take away 30-40bps, so leaving a net impact of c20bps positive.
	<b>Credit cost: +20bps</b>	Assume NPLs rise from c1% to 2% due to tighter credit (in response to inflation). Sector is well reserved for a moderate rise in NPLs, hence assume only a 20bps rise in credit cost to c80bps.
	<b>Others</b>	Loan growth impact muted - credit tightening more likely focused on shadow banking rather than bank lending. Modest pressure on cost/income ratios which are at the lows vs history/region.
	<b>Stocks</b>	Big banks better positioned being more resilient to rate liberalization and rising NPLs.

Note: The countries mentioned in this table have been ranked based on the impact of US rate normalization on net earnings, starting from most positive at the top  
Source: Citi Research Estimates

Figure 5. Asian Banks – US Interest Rate Normalization Impact at a Glance (Continued)

Country	Impact	Comments
<b>MALAYSIA</b> Net earnings impact: +2%	<b>Overall</b>	NIM benefits (+15bps/earnings +8%) offset by higher credit cost (+10bps/earnings -4%) and modest pressure on cost/income ratio (+1ppt/earnings -2%).
	<b>NIM: +15bps</b>	Assumes overnight policy rate to increase 50bps (return to normalized level of 3.5%) leading to c15bps NIM expansion.
	<b>Credit cost: +10bps</b>	Modest NPL deterioration expected, nothing significant. Sector is well provisioned (99% provision coverage).
	<b>Others</b>	Impact on loan demand minimal. Moderate cost pressure from higher personnel, marketing and admin costs due to higher inflation.
	<b>Stocks</b>	Little differentiation between the top three banks but Maybank and Public benefit slightly more.
<b>TAIWAN</b> Net earnings impact: +2%	<b>Overall</b>	Significant NIM recovery (+30bps/earnings +30%) but also expect sizeable NPL deterioration as credit costs normalize (+40bps/earnings -28%).
	<b>NIM: +30bps</b>	Assume policy rates rise 1.875%, could lead to NIMs expanding 45-60bps. But we discount this by half due to fierce price competition given Taiwan's highly fragmented banking system.
	<b>Credit cost: +40bps</b>	Significant NPL impact coming from very low credit cost levels. Assume credit costs triple due to the increase in interest rates.
	<b>Others</b>	Expect limited impact on loan growth and cost/income ratios.
	<b>Stocks</b>	State banks most leveraged to rising NIM given their low profitability but they will also be hit most on rising credit cost. In reality, private banks and better run state banks (E Sun, Chinatrust, Mega) likely have more pricing power and better risk management.
<b>THAILAND</b> Net earnings impact: +1%	<b>Overall</b>	NIM benefits (for big banks) offset by modestly higher credit cost and operating cost pressure.
	<b>NIM: varies</b>	Assume policy rate hike of 150bps. NIM positive for big banks (+13-14bps) but negative for smaller banks (BAY - 11bps).
	<b>Credit cost: +10bps</b>	Provision coverage adequate at 128% so expect only a modest increase in credit cost.
	<b>Others</b>	Cost/income ratio 1ppt higher due to inflation.
	<b>Stocks</b>	Net net slight positive earnings impact for big banks (KBANK, KTB biggest beneficiaries) but negative for consumer driven banks (BAY, TISCO).
<b>INDIA</b> Net earnings impact: -4%	<b>Overall</b>	Small NIM benefit (+5-10bps/earnings +4%) but offset by higher credit cost (+25bps/earnings -6%) and modest loan growth and operating cost pressures.
	<b>NIM: +5-10bps</b>	Assume lending rates rise only 25bps; India is currently in a falling inflation and interest rate cycle. Impact of a rise in US inflation and interest rates should be relatively modest.
	<b>Credit cost: +25bps</b>	India is already in a NPL cycle, credit deterioration has not yet peaked. Could see 25-50bps credit cost increase for some of the more vulnerable players if inflation and interest rates rise.
	<b>Others</b>	Potential for loan growth to slip 2-3% if rates rise and economic uncertainty more pronounced.
	<b>Stocks</b>	Biggest beneficiary HDFC Bank (high CASA deposits, low duration bond portfolio); most vulnerable YES Bank (high dependence on bulk deposits).
<b>INDONESIA</b> Net earnings impact: -12%	<b>Overall</b>	Negative earnings impact driven by increase in credit costs (+50bps/earnings -9%) and slowdown in loan growth (-5ppt/earnings -4%); slight offset on higher NIMs (+5bps/earnings +1%).
	<b>NIM: +5bps</b>	Interest rates may need to be raised 150bps due to inflation. Most positive for BBKA (+22bps) and BMRI (+14bps) but negative for BBRI (-21bps) due to high proportion of fixed rate loans.
	<b>Credit cost: +50bps</b>	Deterioration likely given strong loan growth in recent years; credit costs were at much higher levels during the past inflationary periods vs current 45bps level.
	<b>Others</b>	Assume loan growth slows 5ppt from current 22-24% level.
	<b>Stocks</b>	Among the major banks, BBKA least vulnerable (earnings -9%), BBRI and BBNI most vulnerable (earnings -15%).

Note: The countries mentioned in this table have been ranked based on the impact of US rate normalization on net earnings, starting from most positive at the top  
Source: Citi Research Estimates

## Return to 3% inflation, 5% Fed Funds rate?

Assume inflation rises 2-3% points,  
interest rates up about 100bps

We assess the impact of a meaningful increase in US inflation and interest rates; we asked each analyst to come up with a “best estimate” macro scenario domestically and subsequent impact on earnings should US inflation return to 3% and Fed Funds rate to 5% (ie. back to pre-GFC conditions). Our analysts have generally assumed local inflation rising 2-3% and interest rates rising about 100bps on the back of this US scenario – note that these are relatively crude and simplistic assumptions.

Figure 6. Asia - Current Economic Indicators vs. Our US Interest Rate Normalization Scenario

		Inflation (%)	Short term interest rate (%)	Long bond yield (%)	1Y lending rate (%)	1Y deposit rate (%)
China	Current	2.8	3.2	3.6	6.0	3.0
	Assumed	5.0	5.0	6.0	7.5	5.0
	<b>Change</b>	<b>2.2</b>	<b>1.8</b>	<b>2.4</b>	<b>1.5</b>	<b>2.0</b>
Hong Kong	Current	4.3	0.4	n.a.	2.4	0.3
	Assumed	6.0	3.0	n.a.	4.0	3.0
	<b>Change</b>	<b>1.7</b>	<b>2.6</b>	<b>n.a.</b>	<b>1.6</b>	<b>2.7</b>
India	Current	6.5	7.8	8.0	9.7	8.5
	Assumed	10.0	9.0	9.0	10.5	9.5
	<b>Change</b>	<b>3.5</b>	<b>1.3</b>	<b>1.0</b>	<b>0.8</b>	<b>1.0</b>
Indonesia	Current	5.6	4.0	5.5	11.5	5.9
	Assumed	12.0	5.5	6.8	12.7	7.2
	<b>Change</b>	<b>6.4</b>	<b>1.5</b>	<b>1.3</b>	<b>1.2</b>	<b>1.3</b>
Japan	Current	-0.2	0.1	0.6	1.0	0.0
	Assumed	2.0	0.3	1.5	1.3	0.2
	<b>Change</b>	<b>2.2</b>	<b>0.2</b>	<b>0.9</b>	<b>0.3</b>	<b>0.1</b>
Korea	Current	2.5	2.5	3.2	4.9	2.9
	Assumed	3.2	4.0	5.7	n.a.	n.a.
	<b>Change</b>	<b>0.7</b>	<b>1.5</b>	<b>2.5</b>	<b>n.a.</b>	<b>n.a.</b>
Malaysia	Current	1.7	3.0	3.2	6.6	3.2
	Assumed	4.0	3.5	4.0	7.1	3.7
	<b>Change</b>	<b>2.3</b>	<b>0.5</b>	<b>0.8</b>	<b>0.5</b>	<b>0.5</b>
Philippines	Current	3.0	3.5	3.1	6.0	2.0
	Assumed	6.0	4.5	3.7	6.8	2.6
	<b>Change</b>	<b>3.0</b>	<b>1.0</b>	<b>0.6</b>	<b>0.8</b>	<b>0.6</b>
Singapore	Current	3.5	0.4	1.6	No PLR rates. Loans are largely priced off interbank rates. Avg loan yield c3.04%	
	Assumed	3.0	3.0	4.0		
	<b>Change</b>	<b>-0.5</b>	<b>2.6</b>	<b>2.4</b>		
Taiwan	Current	1.7	1.0 - 1.5%	1.4	1.6	1.4
	Assumed	3.3	2.0 - 2.5%	3.0	3.3	3.0
	<b>Change</b>	<b>1.6</b>	<b>1.0</b>	<b>1.6</b>	<b>1.7</b>	<b>1.7</b>
Thailand	Current	3.3	2.8	3.6	7.0	2.0
	Assumed	5.0	4.3	6.0	8.0	4.5
	<b>Change</b>	<b>1.7</b>	<b>1.5</b>	<b>2.4</b>	<b>1.0</b>	<b>2.5</b>

Source: Citi Research Estimates

Note this US scenario is not our base case – Citi's base case is for a moderate increase in US CPI inflation from 1.3% 2013 to 2.1% 2014 and short-term rates to remain at 25bps until 2015. We expect gradual tapering of Fed QE later in 2H13 but bond purchases are likely to extend into 2014.

Citi's base case is for US inflation rising moderately to 2.1% in 2014 and short rates staying at 25bps till 2015

Figure 7. Selected Countries – Base Case Economic Forecast Overview (Percent)

	GDP Growth		CPI Inflation		Short-Term Interest Rates		10-Year Yields	
	2013F	2014F	2013F	2014F	2013F	2014F	2013F	2014F
United States	1.9	2.9	1.3	2.1	0.25	0.25	2.20	2.90
China	7.7	7.3	2.9	3.1	3.00	3.13	3.36	3.49
Hong Kong	3.0	3.4	4.3	3.6	0.50	0.90	0.80	1.50
India	5.7	6.4	5.5	5.0	6.75	6.75	8.25	8.25
Indonesia	6.1	6.3	6.9	5.4	4.38	4.75	5.61	5.93
Japan	2.0	1.5	0.0	2.0	0.10	0.10	0.75	0.65
Korea	2.9	3.7	1.9	2.8	2.56	2.50	2.70	2.92
Malaysia	5.2	6.0	2.0	2.8	3.00	3.50	3.40	3.80
Philippines	6.2	6.6	3.3	3.7	3.50	4.50	2.25	3.50
Singapore	2.0	4.0	3.2	2.8	0.30	0.40	1.70	2.40
Taiwan	3.2	4.0	1.7	1.9	1.88	1.97	1.28	1.38
Thailand	4.7	4.8	3.2	3.6	2.50	3.00	3.25	3.65

Source: Citi Research

## Biggest beneficiaries are SG, JP and HK; ID and TH consumer banks lose out

Zero interest rate bound countries to benefit most

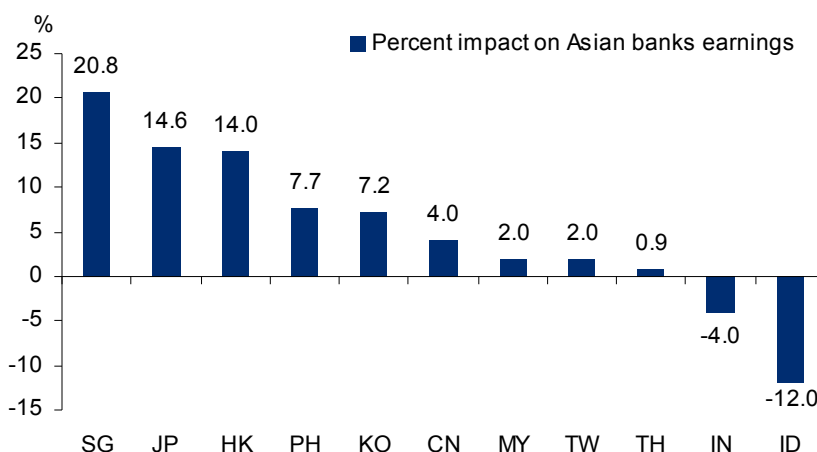
Countries where our analysts expect bank earnings to benefit the most from a scenario of US interest rate normalization are Singapore (earnings +21%), Japan (earnings +15%) and HK (earnings +14%) – all driven by NIM expansion. The big banks generally benefit the most and we believe DBS, MUFG and HSB are the most leveraged to this scenario within these three countries.

Indonesia impacted by loan growth slowdown and credit costs

The earnings impact is most negative for Indonesia as we expect loan growth to slow from a high level and credit costs to rise; BBRI and BBNi are most vulnerable (earnings -15%). Thai consumer banks face NIM and earnings pressure due to their high proportion of fixed rate lending; BAY earnings -11% and TISCO earnings -56%.

Countries where we expect a moderately positive impact (5-10% earnings benefit) are the Philippines, Korea and China. Expect relatively neutral impact in Malaysia, Taiwan and Thailand.

Figure 8. Asia – Impact of US Interest Rate Normalization on Bank Earnings (%)



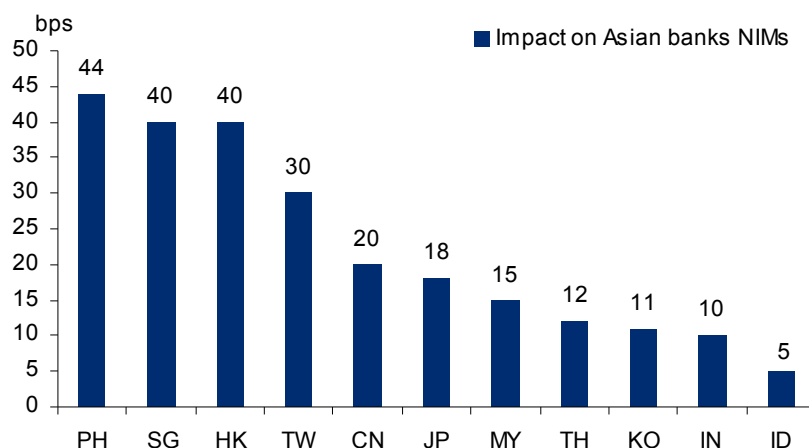
Source: Citi Research Estimates

## NIM is the biggest swing factor

Most NIM upside in PH, SG, HK, TW, CN and JP

The biggest earnings impact for most countries is from NIMs as a result of higher interest rates. Our analysts see the biggest NIM upside in Philippines, Singapore, HK, Taiwan, China and Japan as a result of this US scenario – most of these are countries where NIMs have been compressed in recent years by near-zero short term rates.

Figure 9. Asia – Impact of US Interest Rate Normalization on Bank Net Interest Margins (bps)



Source: Citi Research Estimates

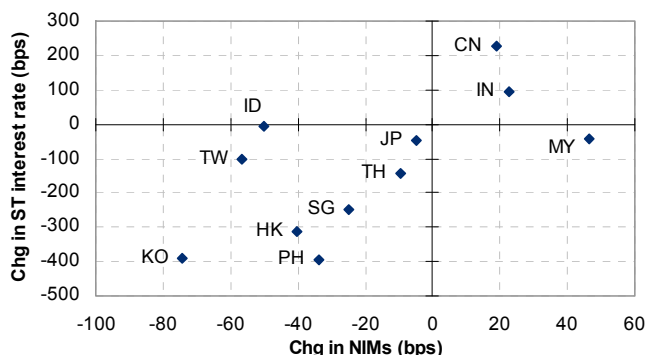
Balance sheet characteristics that lead to greater interest rate sensitivity

Most Asian banks benefit from higher interest rates because of their relatively liquid balance sheets (LDRs generally below 100%) and strong deposit franchises (high proportion of low cost CASA deposits). In general, we believe banks with the following balance sheet characteristics tend to be more sensitive to interest rates:

- **High proportion of low cost CASA deposits** – because CASA deposits (current and savings accounts) tend to either not reprice or reprice much less with the interest rate cycle. Having a high proportion of CASA deposits is very beneficial to a bank's funding cost in a rising rate environment, but painful in a falling rate environment.
- **Low proportion of fixed rate lending** – because fixed rate loans (mostly for high interest rate lending such as credit cards, personal loans and micro lending) do not reprice with the interest rate cycle, they benefit NIMs in a falling rate environment but pressure NIMs in a rising rate environment.
- **High equity Tier 1 ratio** – because equity funding is considered interest free funding from a P&L perspective (although economically there is a cost of equity from an investment/valuation perspective), so having more equity is a positive for earnings and NIM in a rising rate environment (being able to earn higher returns on this free funding), and vice versa.
- **Low LDR** – because this implies a relatively large bond investment portfolio (in order to manage the surplus liquidity), and this tends to benefit NIM in a steepening yield curve environment, as long as the bond portfolio duration is relatively short and duration can be extended to take advantage of higher long term rates.

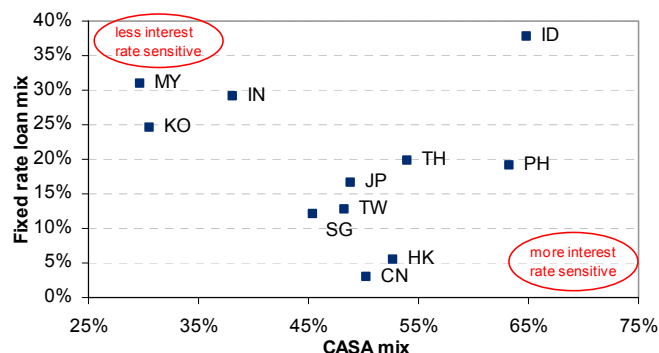
The charts below put together these factors. To combine together the first three points above, we have come up with the concept of “net free funds” which is the amount of shareholders’ funds plus CASA deposits minus fixed rate loans. In theory, the larger the net free funds, the more sensitive NIMs are to the absolute level of interest rates.

Figure 10. Asia – NIM Change vs. Short-term Rates in 2012 vs. 2007



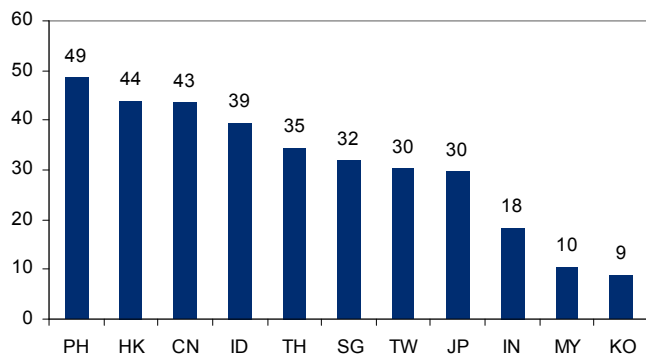
Source: Company Reports and Citi Research

Figure 11. Asia – CASA Mix vs. Fixed Rate Loan Mix



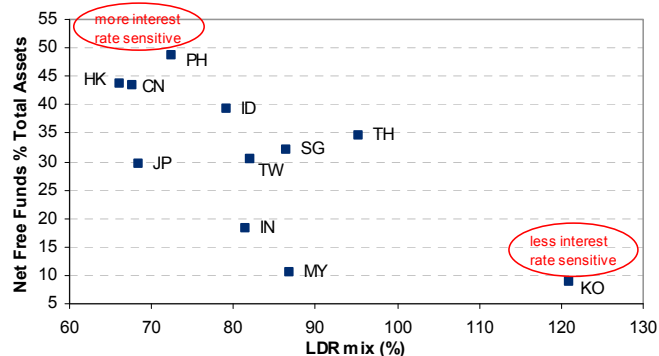
Source: Company Reports and Citi Research

Figure 12. Asia – Net Free Funds as Percent of Total Assets



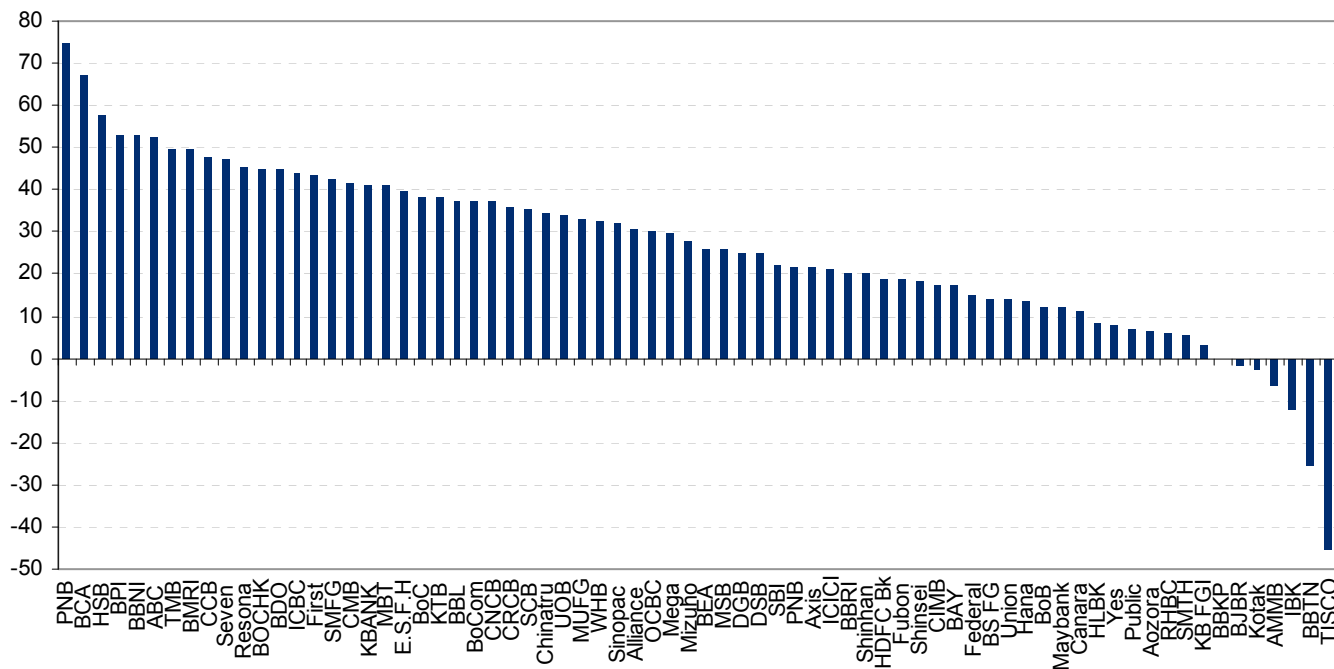
Note: Net Free Funds = CASA Deposits – Fixed Rate Loans + Shareholders’ Funds  
Source: Company Reports and Citi Research

Figure 13. Asia – LDR vs. Net Free Funds as Percent of Total Assets



Note: Net Free Funds = CASA Deposits – Fixed Rate Loans + Shareholders’ Funds  
Source: Citi Research

Figure 14. Asia Banks – Net Free Funds as a Percent of Total Assets



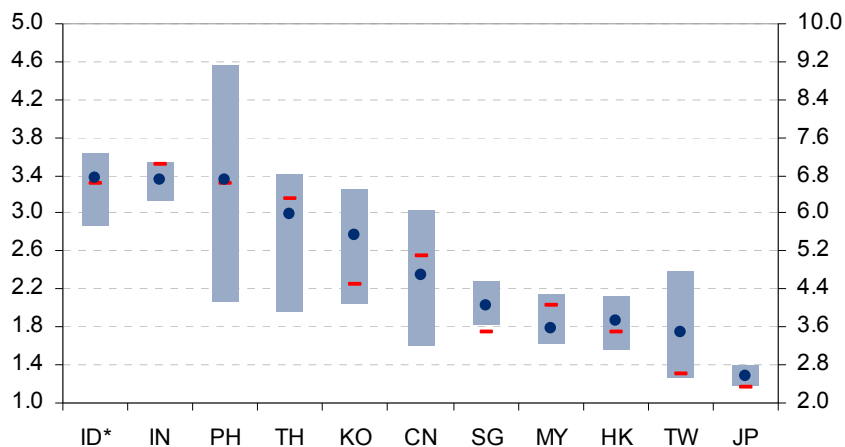
Note: Net Free Funds = CASA Deposits – Fixed Rate Loans + Shareholders' Funds  
Source: Company Reports and Citi Research

**Top down, most rate sensitive are PH, HK, CN and least sensitive are KR, MY, IN**

The conclusion from this top down exercise is that Korea, Malaysia and India are the least interest rate sensitive and the rest of the countries are reasonably sensitive to interest rates with Philippines, HK, China being the most rate sensitive. There are however a few offsetting points to consider:

- In China, ongoing interest rate liberalization will likely put pressure on NIMs and somewhat offset the benefits from higher interest rate levels.
- In Indonesia, we expect a reversal of the deposit mix migration trend in recent years (which has been shifting from expensive time deposits to low cost CASA) as interest rates rise. Tempering Indonesian banks' sensitivity to interest rates is that NIMs are already generally high and profitability of Indonesian banks also is very high.

Figure 15. Asia Banks – NIM Trend Over the Past 10 Years (%)



Notes:

[1] \* For ID values refer to the Y-axis on the right-hand side

[2] Grey columns represent the past 10 years range, blue dot the 10 year average and red lines our 2013 estimates

[3] Country averages reflect market cap weighted average of stocks under Citi's coverage

Source: Company Reports and Citi Research Estimates

**NIMs in SG, JP, TW, KR close to 10-year lows**

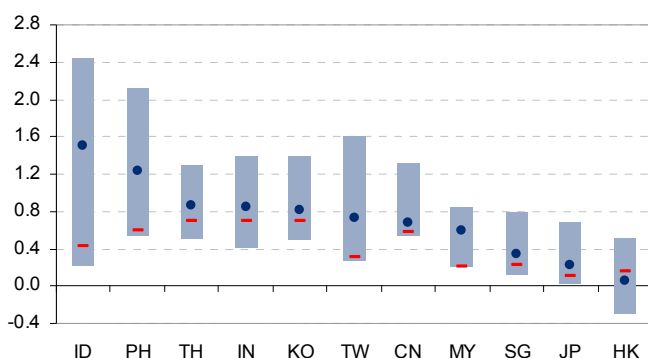
NIMs in Singapore, Japan, Taiwan and Korea are at or close to the 10-year low – mostly the North Asian countries. In contrast, NIMs in Philippines, Thailand, Indonesia, Malaysia, India and China are at or above the 10-year average – most of these are South/South East Asian countries.

## Credit costs at 10-year lows, watch for normalization

**Most countries are at or close to 10-year low credit costs**

We foresee higher credit costs as inflation rises, monetary policy tightens and interest rates rise. The credit quality environment in Asia has mostly been very benign in the past few years. Many countries have credit costs that are within a whisker of the 10-year lows – for example, Indonesia, Philippines, Taiwan, Malaysia, Singapore, Japan, and China. This means that credit costs for most of these countries are now further away from the 10-year average.

Figure 16. Asia Banks – Credit Cost Trend Over the Past 10 Years (%)



Notes:

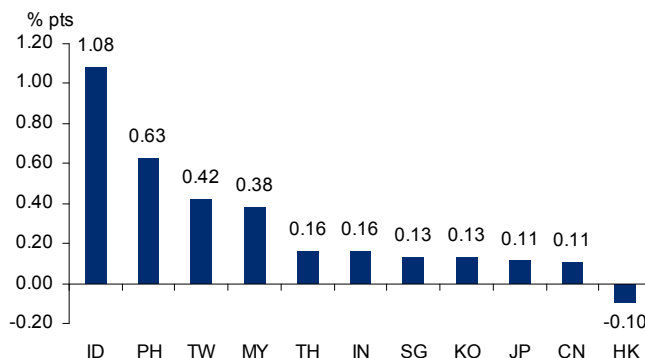
[1] Grey columns represent the past 10 years range, blue dot the 10 year average and red lines our 2013 estimates

[2] Country avg reflect market cap weighted avg of stocks under Citi's coverage

[3] We have excluded Fubon from our Taiwan averages due to exceptionals

Source: Company Reports and Citi Research Estimates

Figure 17. Asia Banks – Credit Cost Gap in 2013 vs. 10-year Average



Notes:

[1] Country avg reflect market cap weighted avg of stocks under Citi's coverage

[2] We have excluded Fubon from our Taiwan averages due to exceptionals

Source: Company Reports and Citi Research Estimates

Most of Asia has also had rapid credit expansion in recent years. We measure this through different metrics: (CN, TH, ID, HK, SG).

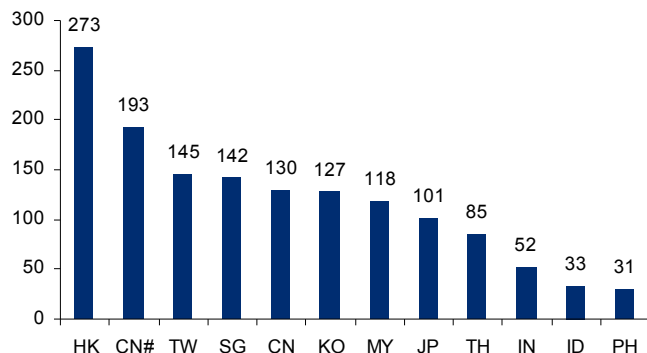
**Loans/GDP ratio rose most in HK, SG, CN and TH**

■ **Expansion in loans/GDP ratio** – Over the past three years, the loans/GDP ratio has increased the most in HK, Singapore and China (on a total system credit basis), followed by Thailand.

**Credit multiplier high for HK, SG, ID and TH**

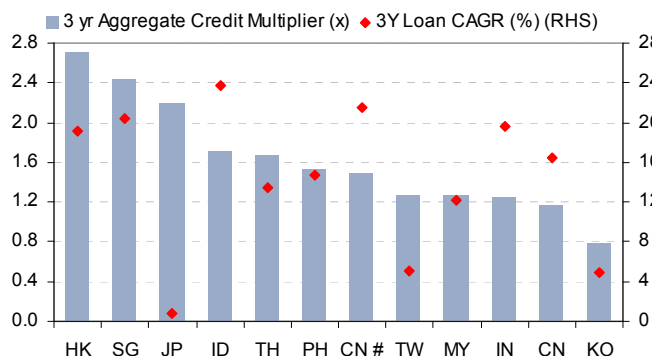
■ **Credit multiplier** – Defined as the rate of loan growth over the rate of nominal GDP growth over the past three years. Again HK and Singapore feature strongly, but Indonesia and Thailand have also had fairly rapid loan growth at 1.7x nominal GDP growth in the past three years.

Figure 18. Asia – Banking System Loan Penetration (Dec-12) (%)



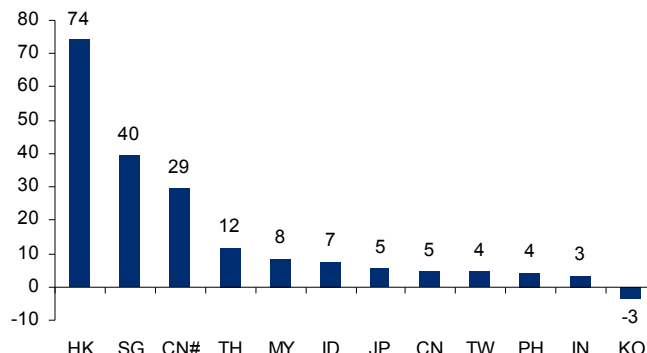
Note: 'CN#' refers to total system credit penetration in China including WMP products, trust asset loans etc. 'CN' refers to bank loan penetration in China  
Source: CEIC Data Company Limited, Citi Research

Figure 20. Asia – Credit Multiplier Over the Past 3 Years



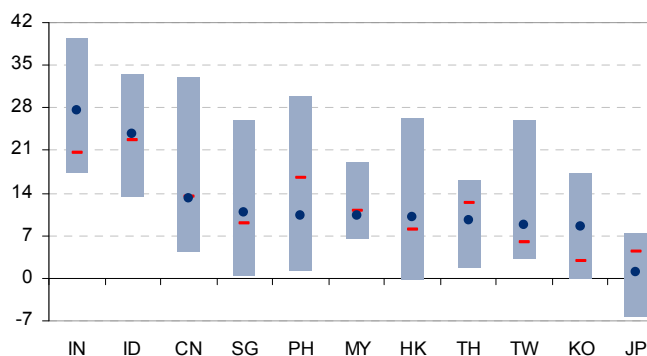
Note:  
[1] 'CN#' refers to total system credit penetration in China, while 'CN' refers to bank loan penetration in China  
Source: CEIC Data Company Limited, Citi Research

Figure 19. Asia – Chg in Loan Penetration Over the Past 3 Years (%pts)



Note: 'CN#' refers to total system credit penetration in China including WMP products, trust asset loans etc. 'CN' refers to bank loan penetration in China  
Source: CEIC Data Company Limited, Citi Research

Figure 21. Asia Banks – Loan Growth Trend Over the Past 10 Years (%)

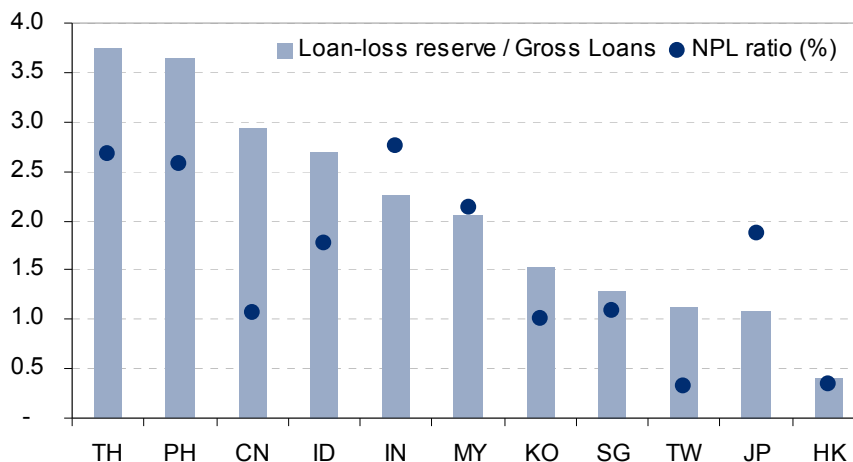


Notes:  
[1] Grey columns represent the past 10 years range, blue dot the 10 year average and red lines our 2013 estimates  
[2] Country avg reflect market cap weighted avg of stocks under Citi's coverage  
Source: Company Reports and Citi Research

**Top down, CN, TH, ID, HK and SG have had relatively rapid credit expansion**

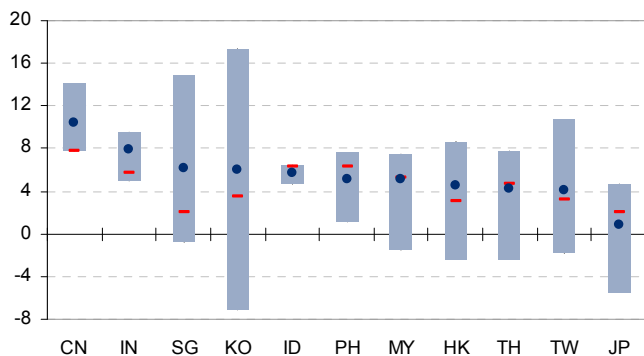
Based on our top-down assessment, we believe China, Thailand, Indonesia, HK and Singapore have had relatively rapid credit expansion and could be more vulnerable to credit quality issues should we see a slowdown in the economy and/or a rise in interest rates. But this needs to be viewed in conjunction with the amount of loan loss reserves, and as the chart below shows, China, Thailand and Indonesia have among the highest loan loss reserves/loans ratio in the region – which are also in excess of NPL levels; HK has the least reserves as a percentage of the loan book in the region.

Figure 22. Asia Banks – 2013E Asset Quality Comparison



Source: Company Reports and Citi Research Estimates

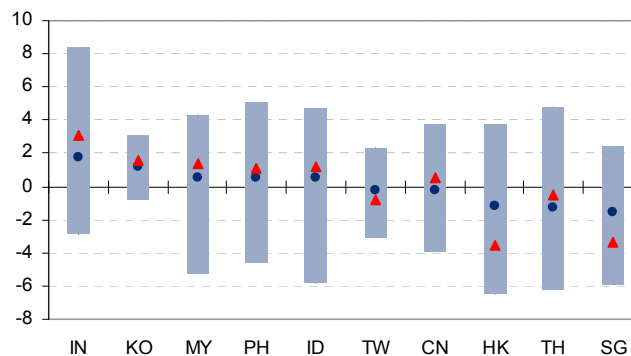
Figure 23. Asia – Real GDP Growth Trend Over the Past 10 Years (%)



Note: Grey columns represent the past 10 years range, blue dot the 10 year average and red lines our 2013 estimates

Source: CEIC Data Company Limited, Citi Research

Figure 24. Asia – Real Deposit Rate Trend Over the Past 10 Years (%)



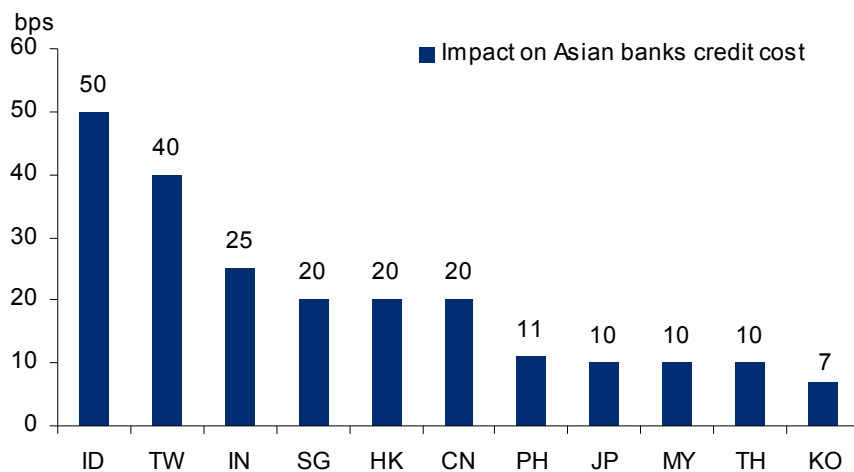
Note: Grey columns represent the past 10 years range, blue dot the 10 year average and red triangle the current values

Source: CEIC Data Company Limited, Citi Research

From a bottom-up perspective, our analysts are most concerned with credit cost normalization in Indonesia and Taiwan – both have significant room for credit cost normalization vs the 10-year average; Indonesia has also had rapid credit expansion; Taiwan banks are highly leveraged due to their low profitability.

Bottom up, our analysts are most concerned about credit cost normalization in ID and TH

Figure 25. Asia – Impact of US Interest Rate Normalization on Bank Credit Cost (bps)



Source: Citi Research Estimates

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## Stock Performance, Valuations and Forecasts

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Figure 26. Asian Stocks – Price Performance

	Currency	Current Price (LCY)	Market Cap USD (M)	Price Performance (% change in local currency)				52 Week Low		52 Week High	
				1M	3M	12M	YTD	Price	% Diff	Price	% Diff
China											
CCB	HKD	6.30	202,894	0.5%	0.2%	23.3%	1.3%	4.71	-25.2%	6.75	7.1%
CNCB	HKD	4.35	26,217	5.3%	-9.9%	5.3%	-5.4%	3.50	-19.5%	5.51	26.7%
ABC	HKD	3.65	152,711	2.5%	-8.8%	15.5%	-4.7%	2.72	-25.5%	4.44	21.6%
ICBC	HKD	5.39	242,764	2.1%	-1.8%	16.4%	-2.0%	3.97	-26.3%	6.00	11.3%
Minsheng Bank	HKD	9.63	35,188	2.8%	-4.8%	35.1%	7.5%	5.35	-44.4%	12.32	27.9%
BoCom	HKD	6.02	57,589	1.9%	0.3%	19.4%	3.1%	4.75	-21.1%	6.70	11.3%
CRC Bank	HKD	4.03	4,828	-1.2%	-4.7%	26.7%	-5.0%	2.77	-31.3%	5.09	26.3%
CMB	HKD	16.12	44,804	3.3%	-4.4%	10.1%	-5.7%	12.02	-25.4%	19.02	18.0%
BoC	HKD	3.66	131,609	4.3%	0.3%	28.9%	5.8%	2.73	-25.4%	4.00	9.3%
Bank Weighted Average			898,604	2.3%	-2.6%	20.0%	-0.2%		-26.0%		13.3%
Hong Kong											
Hang Seng Bank	HKD	126.90	31,252	-0.4%	0.9%	26.0%	6.9%	99.20	-21.8%	132.80	4.6%
BEA	HKD	30.60	8,915	-0.2%	-1.3%	15.9%	3.2%	24.95	-18.5%	32.70	6.9%
Wing Hang Bank	HKD	73.05	2,845	-8.7%	-15.1%	-0.9%	-9.7%	67.55	-7.5%	87.35	19.6%
Dah Sing Fin	HKD	37.70	1,440	-9.9%	-9.7%	53.9%	7.9%	22.20	-41.1%	43.00	14.1%
DSB	HKD	10.44	1,683	-8.3%	10.9%	48.3%	23.8%	6.56	-37.2%	11.62	11.3%
BOC HK	HKD	27.15	36,977	4.0%	5.0%	23.1%	12.7%	20.85	-23.2%	28.00	3.1%
Bank Weighted Average			83,112	1.0%	2.0%	23.7%	8.9%		-22.2%		5.0%
HSBC	HKD	86.15	206,686	5.1%	1.4%	38.6%	6.0%	59.80	-30.6%	90.70	5.3%
Standard Chartered	HKD	181.80	56,691	-5.9%	-12.3%	12.4%	-7.2%	149.00	-18.0%	215.00	18.3%
Bank Weighted Average (incl. 0005.HK & 2888.HK)			346,489	2.3%	-0.7%	30.7%	4.5%		-26.5%		7.3%
India											
AXIS Bank	INR	1,458.45	12,242	1.0%	3.2%	46.2%	7.1%	926.90	-36.4%	1,549.00	6.2%
BoB	INR	692.40	5,225	0.0%	-6.6%	1.4%	-21.6%	606.25	-12.4%	899.65	29.9%
Canara	INR	426.80	3,387	-2.3%	-3.4%	9.6%	-17.2%	306.00	-28.3%	550.00	28.9%
Federal	INR	451.55	1,384	0.2%	-8.9%	10.9%	-16.4%	392.00	-13.2%	550.75	22.0%
HDFC Bank	INR	701.60	29,890	1.8%	6.3%	40.6%	2.5%	485.10	-30.9%	724.00	3.2%
HDFC	INR	907.55	25,163	8.2%	13.5%	37.0%	8.9%	633.30	-30.2%	916.65	1.0%
ICICI	INR	1,204.00	24,888	3.6%	10.3%	46.8%	3.9%	767.95	-36.2%	1,234.00	2.5%
IDFC	INR	155.35	4,215	-0.8%	-0.4%	24.6%	-10.3%	117.25	-24.5%	185.35	19.3%
Kotak	INR	780.30	10,720	12.9%	17.4%	43.1%	20.1%	525.00	-32.7%	796.30	2.1%
PNB	INR	787.70	4,988	1.2%	-7.6%	8.8%	-11.7%	659.00	-16.3%	922.10	17.1%
SBI	INR	2,151.15	26,361	-5.9%	-2.1%	9.2%	-11.3%	1,816.20	-15.6%	2,550.00	18.5%
Union Bank	INR	227.20	2,429	-4.3%	0.0%	12.0%	-19.2%	150.10	-33.9%	288.00	26.8%
Yes Bank	INR	505.55	3,250	2.2%	3.2%	54.2%	5.9%	310.70	-38.5%	547.15	8.2%
Bank Weighted Average			154,143	2.2%	5.6%	32.4%	0.5%		-28.3%		8.5%
Indonesia											
BCA	IDR	10,950	27,349	-0.9%	3.8%	47.0%	20.3%	6,750	-38.4%	11,400	4.1%
Bank Bukopin	IDR	910	735	-4.2%	21.3%	40.0%	46.8%	580	-36.3%	1,000	9.9%
Bank Negara ID	IDR	5,100	9,635	-1.9%	16.6%	35.1%	37.8%	3,500	-31.4%	5,600	9.8%
Bank Rakyat	IDR	9,300	23,242	6.3%	8.8%	56.3%	33.8%	5,150	-44.6%	9,950	7.0%
Bank BTN	IDR	1,370	1,466	-12.2%	-13.8%	13.5%	-5.5%	1,083	-21.0%	1,740	27.0%
Bank Danamon	IDR	5,800	5,632	-6.5%	-5.7%	4.5%	2.7%	4,900	-15.5%	6,550	12.9%
Bk Jabar Banten	IDR	1,200	1,179	-2.4%	0.0%	23.7%	13.2%	800	-33.3%	1,300	8.3%
Bank Mandiri	IDR	10,050	23,756	-4.3%	5.2%	41.5%	24.1%	6,550	-34.8%	10,750	7.0%
Bank Panin	IDR	890	2,171	7.2%	21.9%	-5.3%	41.3%	590	-33.7%	980	10.1%
Bank Weighted Average			95,164	-0.5%	6.3%	42.1%	25.5%		-36.5%		7.2%

Note: Priced as on 24 May 2013  
Source: Bloomberg, Citi Research

Figure 27. Asian Stocks – Price Performance (Contd.)

	Currency	Current Price (LCY)	Market Cap USD (M)	Price Performance (% change in local currency)				52 Week Low		52 Week High	
				1M	3M	12M	YTD	Price	% Diff	Price	% Diff
Japan											
Shinsei	JPY	245	6,419	-6.8%	21.9%	178.4%	43.3%	78	-68.2%	295	20.4%
Aozora	JPY	313	3,604	3.6%	12.2%	87.4%	18.6%	152	-51.4%	341	8.9%
MUFG	JPY	622	86,924	-3.7%	21.2%	81.9%	34.9%	328	-47.3%	750	20.6%
Resona	JPY	493	11,891	-5.0%	15.7%	64.9%	25.8%	278	-43.6%	574	16.4%
SMTH	JPY	470	17,100	-1.9%	30.2%	128.2%	56.1%	188	-60.0%	649	38.1%
SMFG	JPY	4,210	56,272	-5.5%	13.9%	81.2%	35.2%	2,231	-47.0%	4,995	18.6%
Chiba Bank	JPY	662	5,620	-11.7%	12.6%	43.9%	31.3%	436	-34.1%	797	20.4%
BoY	JPY	537	6,938	-8.8%	13.5%	48.8%	34.3%	344	-35.9%	629	17.1%
Joyo Bank	JPY	535	3,965	-6.0%	17.6%	63.6%	30.8%	318	-40.6%	632	18.1%
Fukuoka Fin	JPY	432	3,664	-12.2%	5.4%	44.0%	25.6%	273	-36.8%	535	23.8%
Shizuoka Bank	JPY	1,104	6,958	-4.7%	20.4%	42.5%	31.3%	752	-31.9%	1,310	18.7%
Shiga Bank	JPY	547	1,425	-18.2%	3.0%	33.7%	2.4%	391	-28.5%	713	30.3%
Hiroshima Bank	JPY	429	2,625	-14.0%	11.7%	56.6%	18.8%	240	-44.1%	529	23.3%
Seven Bank	JPY	339	3,986	4.0%	39.5%	83.2%	49.3%	170	-49.9%	397	17.1%
Mizuho	JPY	206	49,118	-3.7%	2.0%	77.6%	31.2%	110	-46.6%	233	13.1%
Bank Weighted Average			266,512	-4.6%	15.8%	81.6%	34.7%		-47.0%		19.5%
Korea											
Jeonbuk Bank	KRW	6,220	368	2.6%	23.2%	48.6%	48.4%	4,080	-34.4%	6,250	0.5%
Ind Bk Korea	KRW	12,500	6,096	-2.7%	-2.7%	5.0%	5.5%	10,950	-12.4%	13,550	8.4%
Shinhan Fin Grp	KRW	40,200	16,896	1.6%	-5.1%	4.7%	3.5%	33,100	-17.7%	43,650	8.6%
Hana	KRW	37,600	9,661	0.0%	-5.6%	3.2%	8.4%	30,100	-19.9%	41,550	10.5%
KB FGI	KRW	37,300	12,773	4.2%	-3.5%	2.9%	-1.6%	32,500	-12.9%	41,850	12.2%
BS Fin Grp	KRW	15,700	2,691	6.1%	0.6%	30.3%	18.9%	10,550	-32.8%	16,900	7.6%
DGB Fin	KRW	17,050	2,026	10.0%	4.0%	26.8%	17.2%	12,050	-29.3%	17,200	0.9%
Bank Weighted Average			50,512	2.0%	-3.6%	6.6%	5.1%		-17.6%		9.4%
Malaysia											
Alliance Finan	MYR	4.94	2,520	11.3%	19.3%	29.0%	12.3%	3.79	-23.3%	5.10	3.2%
AMMB	MYR	7.28	7,231	10.3%	15.7%	18.0%	7.1%	5.92	-18.7%	7.37	1.2%
CIMB	MYR	8.51	21,358	10.1%	20.7%	18.4%	11.5%	6.90	-18.9%	8.70	2.2%
Hong Long Bk	MYR	14.04	8,698	-2.9%	-3.2%	15.1%	-5.0%	11.90	-15.2%	15.06	7.3%
Maybank	MYR	10.08	28,140	3.5%	11.1%	18.6%	9.6%	8.49	-15.8%	10.40	3.2%
Public	MYR	16.78	19,538	2.4%	6.6%	23.4%	3.1%	13.60	-19.0%	16.90	0.7%
RHB Capital	MYR	8.76	7,200	3.9%	14.1%	18.1%	13.9%	6.90	-21.2%	10.92	24.7%
Bank Weighted Average			94,686	4.9%	11.8%	19.4%	7.5%		-17.9%		4.3%
Philippines											
Banco De Oro	PHP	94.00	8,087	2.2%	4.0%	63.3%	29.1%	57.61	-38.7%	99.00	5.3%
Bk of Philippine	PHP	101.60	8,680	-2.3%	-10.9%	55.8%	6.9%	65.20	-35.8%	114.00	12.2%
Metrobank	PHP	133.70	6,782	8.7%	17.3%	58.2%	31.1%	83.50	-37.5%	139.50	4.3%
Phil Natl Bank	PHP	104.50	2,727	-3.2%	8.5%	53.5%	14.8%	67.80	-35.1%	117.00	12.0%
Bank Weighted Average			26,276	1.8%	3.0%	58.5%	20.8%		-37.1%		8.0%
Singapore											
OCBC	SGD	10.86	29,560	-0.4%	8.6%	27.3%	11.6%	8.14	-25.0%	11.20	3.1%
UOB	SGD	21.67	27,263	5.2%	10.3%	24.8%	9.4%	16.91	-22.0%	22.10	2.0%
Bank Weighted Average			56,824	2.3%	9.4%	26.1%	10.5%		-23.6%		2.6%

Note: Priced as on 24 May 2013  
Source: Bloomberg, Citi Research

Figure 28. Asian Stocks – Price Performance (Contd.)

		Current Price	Market Cap	Price Performance (% change in local currency)				52 Week Low		52 Week High	
	Currency	(LCY)	USD (M)	1M	3M	12M	YTD	Price	% Diff	Price	% Diff
Taiwan											
Fubon	TWD	40.35	12,852	-4.4%	1.0%	48.9%	15.0%	26.29	-34.9%	44.20	9.5%
E.S.F.H	TWD	17.60	2,948	-2.2%	-1.4%	25.3%	8.3%	12.86	-26.9%	18.30	4.0%
Mega	TWD	23.55	9,014	0.9%	-5.4%	19.8%	4.2%	18.92	-19.7%	25.90	10.0%
Sinopac	TWD	14.50	3,668	-1.7%	5.8%	56.0%	16.5%	9.14	-37.0%	15.30	5.5%
Chinatrust	TWD	18.45	8,481	3.4%	4.2%	25.6%	9.4%	13.96	-24.3%	18.90	2.4%
First	TWD	18.10	4,916	0.8%	-5.7%	16.6%	2.3%	15.38	-15.0%	19.40	7.2%
Bank Weighted Average			41,879	-0.7%	-0.3%	33.1%	9.7%		-26.8%		7.2%
Thailand											
Bank of Ayudhya	THB	35.50	7,197	5.2%	3.6%	29.1%	9.2%	26.00	-26.8%	37.00	4.2%
Bangkok Bank	THB	222.00	14,144	-2.6%	-6.7%	19.7%	6.2%	174.00	-21.6%	245.00	10.4%
Kasikornbank	THB	219.00	17,494	1.9%	1.9%	48.0%	13.2%	143.00	-34.7%	228.00	4.1%
Krung Thai	THB	22.60	10,543	-7.0%	-11.4%	57.0%	15.3%	13.83	-38.8%	27.75	22.8%
Siam Comm	THB	185.50	21,047	-1.9%	4.2%	33.9%	2.2%	132.00	-28.8%	199.50	7.5%
TISCO Fin	THB	50.25	1,343	-8.3%	-1.1%	46.6%	2.2%	32.85	-34.6%	57.43	14.3%
TMB Bank	THB	2.54	3,697	-5.2%	4.1%	68.2%	36.6%	1.40	-44.9%	2.96	16.5%
Bank Weighted Average			75,465	-1.5%	-0.7%	39.2%	9.7%		-30.9%		9.7%

Note: Priced as on 24 May 2013  
Source: Bloomberg, Citi Research

Figure 29. Asian Banks – Comparative Valuations (as of 24<sup>th</sup> May 2012)

China																									
Bank	RIC	CCY	Price	Mkt Cap US\$m	Risk / Target Rating	Price	ETR (%)	P/E (x)		P/B (x)		P/Tang BVPS (x)		P/PPOP (x)		Div. Yield (%)		ROE (%)		ROA (%)		T1 Ratio (%)		TotCap Ratio (%)	
								13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
CCB	0939.HK	HKD	6.30	202,894	1	7.70	27.0	6.19	5.70	1.19	1.04	1.19	1.04	4.02	3.69	5.66	6.14	20.62	19.52	1.40	1.35	11.27	11.56	13.21	13.43
CNCB	0998.HK	HKD	4.35	26,217	2	5.00	20.0	5.14	4.53	0.76	0.67	0.76	0.67	2.83	2.59	4.87	5.52	15.76	15.80	1.03	1.03	9.79	9.51	12.22	11.59
ABC	1288.HK	HKD	3.65	152,711	1	4.70	33.9	5.96	5.58	1.13	0.99	1.13	0.99	3.72	3.44	5.87	6.27	20.25	18.91	1.16	1.10	9.66	9.74	12.28	12.15
ICBC	1398.HK	HKD	5.39	242,764	2	6.40	23.6	6.20	5.73	1.20	1.05	1.20	1.05	4.28	3.94	5.74	6.21	20.99	19.80	1.37	1.33	10.50	10.82	13.24	13.47
Minsheng	1988.HK	HKD	9.63	35,188	3	8.50	-9.0	5.67	5.26	1.13	0.96	1.13	0.96	3.45	3.16	3.53	3.80	21.86	19.75	1.20	1.19	8.11	8.33	9.76	9.86
BoCom	3328.HK	HKD	6.02	57,589	2	6.50	10.5	6.09	5.78	0.87	0.79	0.87	0.79	3.77	3.53	4.93	5.19	15.02	14.27	1.08	1.01	11.02	10.69	13.65	13.09
CRC Bank	3618.HK	HKD	4.03	4,828	1	5.70	46.6	4.92	4.47	0.84	0.74	0.84	0.74	3.40	2.98	7.35	8.08	18.80	18.10	1.38	1.31	11.25	10.24	11.84	10.70
CMB	3968.HK	HKD	16.12	44,804	3	15.50	-1.2	7.35	6.67	1.29	1.13	1.36	1.18	4.86	4.39	4.08	4.50	20.18	18.11	1.29	1.24	9.34	9.25	12.23	11.86
BoC	3988.HK	HKD	3.66	131,609	1	4.40	25.1	5.68	5.31	0.91	0.81	0.91	0.81	3.70	3.44	6.16	6.59	16.87	16.15	1.10	1.06	10.52	10.63	13.65	13.56
Market Cap Weighted Average								6.07	5.63	1.11	0.97	1.11	0.98	3.96	3.65	5.57	6.00	19.63	18.49	1.26	1.21	10.40	10.55	12.93	12.93
Hong Kong																									
HSB	0011.HK	HKD	126.90	31,252	2	126.00	3.5	10.63	14.93	2.10	2.00	2.24	2.12	13.19	12.01	4.26	4.33	21.98	13.73	2.04	1.36	11.13	10.88	12.37	12.02
BEA	0023.HK	HKD	30.60	8,915	2	33.00	11.1	13.73	13.08	1.13	1.08	1.22	1.15	11.04	10.29	3.26	3.42	8.47	8.45	0.69	0.69	10.89	11.19	14.36	14.52
WHB	0302.HK	HKD	73.05	2,845	1	94.00	31.7	10.61	10.48	1.05	0.98	1.12	1.04	9.37	8.46	3.30	3.34	10.28	9.72	1.03	0.98	11.37	11.71	16.83	16.93
DSF	0440.HK	HKD	37.70	1,440	1	46.00	25.1	8.83	8.26	0.60	0.57	0.63	0.60	7.96	7.87	3.11	3.33	6.94	7.05	0.71	0.72	10.25	10.36	14.64	14.67
DSB	2356.HK	HKD	10.44	1,683	1	12.00	18.0	9.00	8.23	0.69	0.65	0.72	0.68	10.73	10.59	3.05	3.34	7.88	8.13	0.89	0.91	10.25	10.36	14.64	14.67
BOC HK	2388.HK	HKD	27.15	36,977	1	30.00	15.2	13.48	12.59	1.80	1.69	1.80	1.69	11.00	10.18	4.82	5.16	13.71	13.84	1.13	1.14	12.48	12.47	16.88	16.58
Market Cap Weighted Average								12.17	13.29	1.77	1.68	1.83	1.73	11.72	10.79	4.32	4.53	15.90	12.85	1.41	1.16	11.68	11.63	14.83	14.59
HSBC	0005.HK	HKD	86.15	206,686	2	94.20	13.4	10.98	10.82	1.15	1.09	1.38	1.28	6.46	6.34	4.33	4.51	10.83	10.37	0.68	1.28	13.72	14.03	16.34	16.62
Stan Chart	2888.HK	HKD	181.80	56,691	1	219.00	24.4	10.33	9.53	1.16	1.07	1.36	1.24	6.11	5.63	3.91	4.24	11.72	11.80	0.83	1.58	13.14	12.99	16.40	15.94
Market Cap Weighted Average (incl. 0005.HK & 2888.HK)								11.16	11.20	1.30	1.23	1.48	1.39	7.66	7.29	4.26	4.47	12.19	11.20	0.88	1.30	13.13	13.28	15.99	16.02
India																									
AXIS Bank	AXBK.BO	INR	1,458	12,242	1	1,795	24.4	13.36	10.92	2.06	1.77	2.06	1.77	7.45	6.07	1.23	1.37	18.72	17.86	1.67	1.70	12.21	11.24	16.97	15.66
BoB	BOB.BO	INR	692	5,225	1	910	34.0	5.98	5.34	0.91	0.80	0.91	0.80	3.01	2.53	2.60	2.67	16.21	15.88	0.99	0.97	10.57	9.87	14.62	13.44
Canara	CNBK.BO	INR	427	3,387	2	485	16.3	5.08	4.28	0.73	0.64	0.73	0.64	2.74	2.30	2.69	2.81	15.33	15.93	0.94	0.98	10.37	10.35	13.69	13.53
Federal	FED.BO	INR	452	1,384	1	590	32.8	8.64	7.51	1.20	1.07	1.20	1.07	4.36	3.76	2.10	2.21	14.75	15.06	1.36	1.33	13.37	12.58	13.83	12.97
HDFC Bank	HDBK.BO	INR	702	29,890	2	750	7.5	24.87	20.33	4.61	3.86	4.61	3.86	14.64	12.25	0.78	0.67	20.34	20.87	1.82	1.86	11.10	10.75	16.89	14.31
HDFC	HDFC.BO	INR	908	25,163	2	940	4.9	29.06	24.67	5.61	4.99	5.61	4.99	21.02	17.68	1.38	1.60	22.21	21.68	2.69	2.68	13.75	12.87	16.40	15.50
ICICI	ICBK.BO	INR	1,204	24,888	1	1,535	29.2	16.68	13.69	2.08	1.87	2.08	1.87	10.50	8.67	1.66	1.74	13.10	14.41	1.65	1.77	12.79	12.47	18.76	18.29
IDFC	IDFC.BO	INR	155	4,215	1	210	36.8	12.72	10.66	1.72	1.52	1.72	1.52	7.92	6.77	1.61	1.74	14.22	15.13	2.73	2.71	14.62	13.72	15.98	14.86
Kotak	KTKM.BO	INR	780	10,720	2	785	0.8	26.55	20.47	3.88	3.13	3.88	3.13	17.46	13.29	0.18	0.18	15.68	16.91	2.11	2.20	16.98	16.43	19.68	18.62
PNB	PNBK.BO	INR	788	4,988	1	1,095	42.4	5.67	4.84	0.85	0.75	0.85	0.75	2.49	2.15	3.43	3.81	15.89	16.43	0.99	1.03	9.25	9.03	12.37	11.92
SBI	SBI.BO	INR	2,151	26,361	1	2,860	34.6	10.74	10.02	1.53	1.36	1.53	1.36	4.45	3.89	1.63	1.77	15.05	14.35	0.94	0.89	9.47	9.24	13.57	13.05
Union Bank	UNBK.BO	INR	227	2,429	2	245	11.6	7.14	5.59	0.93	0.83	0.93	0.83	2.71	2.22	3.74	3.96	13.72	15.75	0.75	0.82	7.23	6.92	10.24	9.60
Yes Bank	YESB.BO	INR	506	3,250	2	590	17.9	14.82	11.29	3.12	2.62	3.12	2.62	9.00	7.15	1.19	1.68	24.81	25.93	1.51	1.60	9.47	9.50	18.25	18.03
Market Cap Weighted Average								18.35	15.30	3.05	2.64	3.05	2.64	11.26	9.35	1.44	1.54	17.50	17.73	1.72	1.74	11.95	11.47	16.32	15.22

Note: Coverage on HSBC and Standard Chartered provided by our European Banks Team;  
Source: Company Reports and Citi Research Estimates

Figure 30. Asian Banks – Comparative Valuations (as of 24<sup>th</sup> May 2012) (Contd.)

Indonesia																									
Bank	RIC	CCY	Price	Mkt Cap US\$m	Risk / Rating	Target Price	ETR (%)	P/E (x)		P/B (x)		P/Tang BVPS (x)		P/POP (x)		Div. Yield (%)		ROE (%)		ROA (%)		T1 Ratio (%)		TotCap Ratio (%)	
								13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
BCA	BBCA.JK	IDR	10,950	27,349	3	8,400	-22.4	19.27	16.31	4.06	3.36	4.06	3.36	15.24	12.76	1.04	1.23	23.60	22.56	2.88	2.90	13.89	14.12	14.70	14.82
Bank Bukopin	BBKP.JK	IDR	910	735	3	725	-17.3	8.54	7.85	1.30	1.14	1.30	1.14	5.86	5.32	2.34	2.55	16.06	15.46	1.12	1.05	11.33	10.86	14.08	12.58
Bank Negara ID	BBNI.JK	IDR	5,100	9,635	2	5,450	9.4	11.80	10.83	1.92	1.71	1.92	1.71	8.57	7.44	2.54	2.77	17.35	16.69	2.21	2.06	14.73	14.19	15.93	15.14
Bank Rakyat	BBRI.JK	IDR	9,300	23,242	2	9,400	3.7	11.43	10.65	2.83	2.38	2.83	2.38	8.88	8.00	2.62	1.88	27.18	24.28	3.24	2.95	15.25	15.42	16.22	16.34
Bank BTN	BBTN.JK	IDR	1,370	1,466	3	1,350	0.9	9.49	8.47	1.25	1.12	1.25	1.12	6.38	5.53	2.11	2.36	13.96	14.02	1.24	1.18	15.41	14.14	16.29	14.86
Bk Jabar Banten	BJBR.JK	IDR	1,200	1,179	3	1,125	-2.1	9.66	9.18	1.78	1.59	1.78	1.59	5.73	5.15	4.14	3.27	19.28	18.33	1.58	1.42	17.99	16.97	17.82	16.83
Bank Mandiri	BMRI.JK	IDR	10,050	23,756	2	10,350	5.3	13.14	11.76	2.67	2.29	2.67	2.29	9.28	8.02	2.28	2.55	21.99	20.98	2.56	2.39	13.68	13.32	15.64	15.05
Market Cap Weighted Average								14.31	12.66	3.02	2.55	3.02	2.55	10.84	9.33	2.04	1.99	23.14	21.68	2.76	2.62	14.35	14.27	15.56	15.33
Japan																									
Shinsei	8303.T	JPY	245	6,419	1	330	35.1	12.74	12.40	1.05	0.95	1.05	0.95	25.08	26.16	0.41	0.41	4.14	3.24	0.28	0.25	10.41	11.41	12.24	12.94
Aozora	8304.T	JPY	313	3,604	2	320	6.1	12.06	16.12	1.03	0.81	1.03	0.81	11.15	14.19	4.38	3.83	7.57	4.20	0.80	0.50	16.28	14.80	15.67	14.24
MUFG	8306.T	JPY	622	86,924	1	770	26.0	10.32	11.98	0.77	0.80	0.77	0.80	7.56	7.87	1.93	2.25	6.05	5.30	0.31	0.26	12.75	13.93	16.68	18.03
Resona	8308.T	JPY	493	11,891	1	590	22.7	6.67	11.79	0.83	0.86	0.83	0.86	7.46	7.35	2.43	3.04	12.21	7.10	0.58	0.33	10.75	10.82	14.67	14.57
SMTH	8309.T	JPY	470	17,100	1	610	31.9	12.95	11.52	1.00	1.00	1.00	1.00	8.24	8.34	1.81	2.13	6.09	7.58	0.29	0.35	9.96	10.61	14.10	14.57
SMFG	8316.T	JPY	4,210	56,272	1	6,350	53.4	7.18	9.87	0.90	0.92	0.90	0.92	7.02	7.03	2.85	2.61	9.73	7.75	0.42	0.32	10.94	10.55	14.71	13.97
Chiba Bank	8331.T	JPY	662	5,620	1	850	30.2	13.23	12.75	0.83	0.80	0.83	0.81	7.83	8.05	1.81	1.81	6.12	6.06	0.37	0.37	12.99	12.33	14.35	13.56
BoY	8332.T	JPY	537	6,938	1	700	32.4	12.44	12.67	0.93	0.89	0.93	0.89	6.75	7.28	2.05	2.05	7.40	6.89	0.42	0.40	11.32	11.37	13.50	13.45
Joyo Bank	8333.T	JPY	535	3,965	1	700	32.4	17.49	16.83	0.88	0.86	0.89	0.86	8.98	8.93	1.59	1.59	4.83	4.81	0.27	0.27	11.93	11.76	12.86	12.38
Fukuoka Fin	8354.T	JPY	432	3,664	2	550	29.6	12.22	12.56	0.63	0.59	0.85	0.77	4.18	4.57	2.31	2.08	7.30	6.53	0.33	0.31	7.23	7.55	11.29	11.61
Shizuoka Bank	8355.T	JPY	1,104	6,958	2	1,200	10.1	12.19	18.25	0.93	0.87	0.93	0.87	10.10	11.21	1.36	1.36	5.85	4.83	0.45	0.38	14.78	14.95	16.09	16.21
Shiga Bank	8366.T	JPY	547	1,425	1	750	38.2	21.78	20.35	0.74	0.72	0.74	0.72	7.89	8.04	1.10	1.10	3.18	3.34	0.13	0.14	9.47	9.61	14.00	14.08
Hiroshima Bank	8379.T	JPY	429	2,625	1	600	41.5	14.17	14.62	0.85	0.82	0.85	0.82	5.76	6.84	1.63	1.63	6.00	5.55	0.27	0.26	8.06	7.95	11.84	11.69
Seven Bank	8410.T	JPY	339	3,986	3	300	-9.4	20.68	19.19	2.79	2.43	2.79	2.43	12.62	12.09	1.99	2.06	14.44	13.54	2.73	2.51	60.22	75.23	60.22	75.23
Mizuho	8411.T	JPY	206	49,118	1	300	48.5	9.31	10.08	0.90	0.94	0.90	0.94	6.16	6.76	2.91	2.91	8.62	8.25	0.30	0.27	11.03	11.38	14.19	14.46
Market Cap Weighted Average								10.11	11.67	0.89	0.90	0.89	0.90	7.78	8.12	2.30	2.39	7.69	6.69	0.39	0.33	12.35	12.98	15.74	16.30
Korea																									
Ind Bk Korea	024110.KS	KRW	12,500	6,096	2H	15,000	23.2	7.87	7.25	0.59	0.55	0.59	0.55	3.11	3.01	3.20	3.20	7.59	7.85	0.50	0.52	8.97	9.31	12.12	12.58
Shinhan Fin Grp	055550.KS	KRW	40,200	16,896	1	49,000	23.9	9.25	8.67	0.69	0.65	0.69	0.65	4.62	4.44	1.99	2.11	7.97	8.02	0.66	0.67	12.61	12.83	15.74	16.02
Hana	086790.KS	KRW	37,600	9,661	1	53,000	42.6	8.22	6.87	0.55	0.51	0.55	0.51	3.74	3.35	1.60	1.73	7.53	7.74	0.45	0.52	10.35	10.67	14.30	14.48
KB FGI	105560.KS	KRW	37,300	12,773	1	45,000	22.4	9.54	7.78	0.56	0.53	0.56	0.53	3.86	3.61	1.74	1.88	6.01	6.97	0.54	0.65	11.52	12.03	15.06	15.51
BS Fin Grp	138930.KS	KRW	15,700	2,691	2	17,000	10.5	8.44	7.62	0.86	0.78	0.86	0.78	4.37	3.96	2.23	2.55	10.58	10.74	0.81	0.84	10.70	10.91	15.16	15.45
DGB Fin	139130.KS	KRW	17,050	2,026	2H	18,700	11.7	8.22	7.53	0.84	0.77	0.84	0.77	4.27	3.94	2.05	2.35	10.59	10.63	0.78	0.78	10.73	10.86	13.97	14.14
Market Cap Weighted Average								8.87	7.82	0.63	0.59	0.63	0.59	4.05	3.80	2.01	2.14	7.58	7.93	0.58	0.63	11.28	11.60	14.75	15.07

Source: Company Reports and Citi Research Estimates

Figure 31. Asian Banks – Comparative Valuations (as of 24<sup>th</sup> May 2012) (Contd.)

				Mkt Cap	Risk / Target	ETR	P/E (x)		P/B (x)		P/Tang BVPS (x)		P/PPOP (x)		Div. Yield (%)		ROE (%)		ROA (%)		T1 Ratio (%)		TotCap Ratio (%)		
Bank	RIC	CCY	Price	US\$m	Rating	Price	(%)	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
Malaysia																									
Alliance Finan	ALFG.KL	MYR	4.94	2,520	3	4.51	-5.1	14.01	13.31	1.90	1.77	2.08	1.93	10.87	9.42	3.36	3.71	13.80	13.56	1.29	1.24	12.66	12.50	15.37	15.06
AMMB	AMMB.KL	MYR	7.28	7,231	3	6.91	-1.8	13.37	12.10	1.82	1.68	2.50	2.24	9.46	8.03	3.02	3.30	14.13	14.40	1.36	1.37	10.57	10.84	14.34	14.41
CIMB	CIMB.KL	MYR	8.51	21,358	3	7.96	-3.5	13.52	12.54	2.03	1.85	2.97	2.59	9.60	8.77	2.94	3.17	15.75	15.47	1.34	1.33	10.07	10.29	13.75	13.73
Hong Long Bk	HLBB.KL	MYR	14.04	8,698	2	15.40	12.9	13.60	12.77	1.98	1.79	2.39	2.12	12.07	10.60	3.06	3.21	15.37	14.74	1.20	1.21	12.76	13.05	16.36	16.45
Maybank	MBBM.KL	MYR	10.08	28,140	1	11.26	16.1	13.67	12.66	1.91	1.80	2.24	2.09	9.15	8.40	4.37	4.66	14.34	14.63	1.20	1.19	11.96	11.85	14.53	14.24
Public	PUBM.KL	MYR	16.78	19,538	2	16.00	-1.4	14.02	12.74	2.92	2.59	3.23	2.83	9.98	9.04	3.22	3.46	22.12	21.57	1.46	1.46	11.21	11.23	14.57	14.33
RHB Capital	RHBC.KL	MYR	8.76	7,200	2	7.75	-7.9	11.15	10.11	1.31	1.19	1.87	1.65	7.38	6.69	3.60	4.07	12.24	12.34	1.02	1.03	12.46	12.45	15.47	15.23
Market Cap Weighted Average								13.50	12.44	2.10	1.92	2.61	2.33	9.63	8.69	3.50	3.77	16.17	16.04	1.29	1.28	11.40	11.47	14.61	14.46
Philippines																									
Banco De Oro	BDO.PS	PHP	94.00	8,087	1	88.00	-5.4	21.09	17.31	2.05	1.89	2.07	1.90	13.96	11.34	1.19	1.42	10.07	11.34	1.21	1.27	14.64	13.82	20.07	18.48
Bk of Philippine	BPI.PS	PHP	101.60	8,680	3	92.00	-7.7	21.04	18.95	3.35	3.00	3.35	3.00	14.74	12.80	1.77	1.77	16.74	16.68	1.76	1.75	13.82	14.02	15.24	15.29
Metrobank	MBT.PS	PHP	133.70	6,782	2	115.00	-13.2	20.63	16.37	2.05	1.86	2.15	1.94	10.49	9.92	1.05	1.20	10.50	11.92	1.32	1.49	16.17	15.91	18.03	17.51
Phil Natl Bank	PNB.PS	PHP	104.50	2,727	2	105.00	0.5	13.88	10.87	1.58	1.40	1.58	1.40	9.73	7.85	0.00	0.00	11.89	13.66	1.44	1.73	14.60	N/A	22.37	N/A
Market Cap Weighted Average								20.20	16.94	2.43	2.20	2.46	2.22	12.88	11.10	1.22	1.33	12.58	13.50	1.44	1.53	14.76	14.50	18.19	17.03
Singapore																									
OCBC	OCBC.SI	SGD	10.86	29,560	3	9.60	-8.5	14.64	13.83	1.54	1.45	1.82	1.69	10.44	9.77	3.08	3.13	10.56	10.56	0.82	0.81	16.40	15.76	18.20	17.37
UOB	UOBH.SI	SGD	21.67	27,263	1	20.30	-3.0	12.94	12.25	1.41	1.32	1.70	1.58	9.41	8.76	3.37	3.60	11.14	11.11	1.00	0.99	14.49	14.23	18.56	17.94
Market Cap Weighted Average								13.83	13.07	1.47	1.39	1.76	1.64	9.95	9.28	3.22	3.36	10.84	10.83	0.91	0.89	15.49	15.02	18.38	17.65
Taiwan																									
Fubon	2881.TW	TWD	40.35	12,852	3	38.00	-3.5	13.18	11.67	1.36	1.25	1.36	1.25	1.92	1.86	2.28	2.57	10.82	11.17	0.72	0.76	10.06	10.30	14.14	14.37
E.S.F.H	2884.TW	TWD	17.60	2,948	1	21.00	21.3	12.23	10.99	1.11	1.03	1.11	1.03	8.11	6.98	2.04	2.27	9.37	9.69	0.61	0.64	9.15	9.26	12.32	12.39
Mega	2886.TW	TWD	23.55	9,014	1	27.50	21.1	11.81	11.37	1.20	1.15	1.20	1.15	8.84	8.12	4.66	4.84	10.41	10.32	0.82	0.81	9.76	9.80	12.01	12.05
Sinopac	2890.TW	TWD	14.50	3,668	3	10.25	-28.0	16.94	16.54	1.08	1.03	1.10	1.05	11.22	10.23	1.18	1.21	6.50	6.35	0.50	0.49	9.07	9.17	13.39	13.49
Chinatrust	2891.TW	TWD	18.45	8,481	1	21.00	16.1	10.94	10.67	1.33	1.26	1.41	1.32	8.62	8.09	2.25	2.30	12.74	12.12	1.07	1.07	11.51	11.66	12.83	12.97
First	2892.TW	TWD	18.10	4,916	1	22.50	26.0	13.06	12.70	1.02	0.96	1.02	0.96	8.99	8.51	1.91	1.97	8.65	8.34	0.53	0.52	8.24	8.30	10.44	10.47
Market Cap Weighted Average								12.68	11.90	1.24	1.16	1.26	1.17	6.84	6.34	2.63	2.79	10.39	10.32	0.76	0.77	9.92	10.06	12.79	12.91
Thailand																									
BAY	BAY.BK	THB	35.50	7,197	1	39.00	13.2	11.83	10.17	1.74	1.57	1.74	1.57	6.33	5.56	3.38	3.93	15.34	16.22	1.63	1.73	11.06	11.21	16.83	16.75
Bangkok Bank	BBLf.BK	THB	222.00	14,144	2	220.00	2.6	11.47	10.49	1.51	1.39	1.51	1.39	8.02	7.34	3.49	3.81	13.32	13.78	1.47	1.49	11.31	11.35	15.18	14.95
Kasikornbank	KBANf.BK	THB	219.00	17,494	1	232.00	8.0	12.47	10.72	2.42	2.09	2.49	2.14	7.84	6.85	2.05	2.80	20.95	20.96	1.96	2.09	11.31	12.14	16.52	17.00
Krung Thai	KTb.BK	THB	22.60	10,543	1	25.50	17.0	9.61	7.90	1.58	1.41	1.58	1.41	6.03	5.48	4.16	5.07	17.30	18.87	1.38	1.52	9.96	10.04	15.41	14.93
Siam Comm	SCB.BK	THB	185.50	21,047	1	203.00	12.2	12.66	11.21	2.56	2.23	2.68	2.32	8.73	7.76	2.77	3.13	21.66	21.28	2.06	2.07	11.22	11.72	16.40	16.55
TISCO Fin	TISCO.BK	THB	50.25	1,343	3	46.79	-2.1	8.41	7.09	1.85	1.60	1.85	1.60	4.27	3.95	4.75	5.64	23.50	24.17	1.44	1.51	8.16	8.68	11.86	12.16
TMB Bank	TMB.BK	THB	2.54	3,697	3	2.00	-19.3	16.76	14.79	1.79	1.66	1.79	1.66	8.93	8.15	1.97	2.23	11.09	11.64	0.90	0.95	11.16	11.09	17.88	17.71
Market Cap Weighted Average								12.01	10.50	2.07	1.82	2.11	1.86	7.71	6.90	2.98	3.53	18.24	18.56	1.72	1.79	11.01	11.38	16.09	16.13

Source: Company Reports and Citi Research Estimates

Figure 32. Asian – Bank Earnings Forecasts and Key Assumptions (Local Currency)

	China (9 Banks) (Bn)				Hong Kong (5 Banks) (Bn)				India (13 Banks) (Bn)				Indonesia (7 Banks) (Bn)			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	13.3	13.4	12.5	12.4	10.2	8.1	7.5	7.6	19.1	17.0	18.7	19.0	23.7	22.4	21.7	21.7
Net Interest Margin (bps)	263	254	246	241	170	174	178	184	354	360	360	360	667	679	666	649
<b>Net Interest Income (LC b)</b>	<b>1,744.1</b>	<b>1,902.1</b>	<b>2,065.1</b>	<b>2,265.2</b>	<b>49.3</b>	<b>55.1</b>	<b>59.7</b>	<b>65.2</b>	<b>1,197.7</b>	<b>1,367.4</b>	<b>1,612.0</b>	<b>1,899.9</b>	<b>123,946</b>	<b>146,396</b>	<b>169,367</b>	<b>179,971</b>
NII Growth (%)	14.5	9.1	8.6	9.7	10.3	11.7	8.5	9.1	22.2	14.2	17.9	17.9	15.6	18.1	15.7	18.1
<b>Non Interest Income (LC b)</b>	<b>506.6</b>	<b>572.5</b>	<b>652.2</b>	<b>744.2</b>	<b>21.0</b>	<b>21.9</b>	<b>23.5</b>	<b>25.1</b>	<b>484.7</b>	<b>542.5</b>	<b>621.9</b>	<b>707.1</b>	<b>35,587</b>	<b>41,811</b>	<b>49,153</b>	<b>49,052</b>
Non-II Growth (%)	12.7	13.0	13.9	14.1	17.8	4.4	7.0	7.1	6.8	11.9	14.6	13.7	15.3	17.5	17.6	-0.2
-Fee Income (LC b)	417.1	480.1	552.8	637.1	14.6	16.4	17.8	19.3	346.4	362.9	417.0	480.7	28,716	34,279	40,657	39,452
-Fee Growth (%)	9.5	15.1	15.1	15.2	3.4	11.9	8.8	8.5	10.0	4.8	14.9	15.3	17.6	19.4	18.6	18.3
-Other Income (LC b)	89.4	92.4	99.4	107.1	6.4	5.6	5.7	5.8	138.3	179.6	204.9	226.4	6,871	7,532	8,496	9,600
-Other Income Growth (%)	30.1	3.3	7.6	7.8	73.1	(13.0)	1.7	2.5	(0.5)	29.9	14.1	10.5	6.5	9.6	12.8	13.0
<b>Total Income (LC b)</b>	<b>2,250.7</b>	<b>2,474.7</b>	<b>2,717.3</b>	<b>3,009.4</b>	<b>70.3</b>	<b>77.0</b>	<b>83.2</b>	<b>90.3</b>	<b>1,682.4</b>	<b>1,909.9</b>	<b>2,233.9</b>	<b>2,607.0</b>	<b>159,533</b>	<b>188,207</b>	<b>218,519</b>	<b>229,024</b>
Total Income Growth (%)	14.1	10.0	9.8	10.8	12.5	9.5	8.0	8.6	17.3	13.5	17.0	16.7	15.5	18.0	16.1	18.0
Non-II % of Total Income	22.5	23.1	24.0	24.7	29.9	28.5	28.2	27.8	28.8	28.4	27.8	27.1	22.3	22.2	22.5	21.4
<b>Operating Costs (LC b)</b>	<b>894.1</b>	<b>995.5</b>	<b>1,112.9</b>	<b>1,244.2</b>	<b>25.4</b>	<b>27.5</b>	<b>29.5</b>	<b>31.7</b>	<b>709.5</b>	<b>815.5</b>	<b>933.1</b>	<b>1,074.6</b>	<b>79,008</b>	<b>92,892</b>	<b>108,678</b>	<b>113,036</b>
Costs Growth (%)	15.7	11.3	11.8	11.8	8.8	8.5	7.2	7.3	14.2	14.9	14.4	15.2	16.0	17.6	17.0	16.5
Costs % of Total Income	39.7	40.2	41.0	41.3	36.1	35.8	35.5	35.1	42.2	42.7	41.8	41.2	49.5	49.4	49.7	49.4
<b>Pre-Provision Profit (LC b)</b>	<b>1,356.5</b>	<b>1,479.1</b>	<b>1,604.4</b>	<b>1,765.2</b>	<b>44.9</b>	<b>49.5</b>	<b>53.7</b>	<b>58.6</b>	<b>972.9</b>	<b>1,094.4</b>	<b>1,300.8</b>	<b>1,532.3</b>	<b>80,525</b>	<b>95,315</b>	<b>109,842</b>	<b>115,987</b>
PPP Growth (%)	13.1	9.0	8.5	10.0	14.6	10.1	8.5	9.2	19.7	12.5	18.9	17.8	15.1	18.4	15.2	19.4
PPOP/Avg Loans (Bps)	382	368	353	346	294	297	299	303	401	382	385	381	536	519	539	489
<b>Provision Charges (LC b)</b>	<b>190.3</b>	<b>233.1</b>	<b>261.1</b>	<b>291.4</b>	<b>1.8</b>	<b>2.7</b>	<b>3.2</b>	<b>3.8</b>	<b>244.1</b>	<b>293.7</b>	<b>330.3</b>	<b>368.4</b>	<b>5,819</b>	<b>10,343</b>	<b>14,692</b>	<b>15,265</b>
- NPL Ratio (%)	1.0	1.1	1.1	1.2	0.3	0.3	0.4	0.4	2.1	2.4	2.3	2.3	1.6	1.8	1.8	1.8
- Provision Coverage (%)	272.0	271.2	270.3	270.5	132.5	119.6	112.9	113.0	76.7	65.8	71.7	76.2	155.9	130.4	125.6	127.5
- Provisions bps of Loans	54	58	57	57	11	15	17	19	65	71	68	65	37	55	65	64
Others (LC b)	3.3	3.8	4.1	4.5	10.1	11.4	3.1	3.3	(29.0)	7.0	(4.4)	(3.6)	3,183	1,669	1,849	2,847
<b>Pre-tax Profit (LC b)</b>	<b>1,169.5</b>	<b>1,249.7</b>	<b>1,347.4</b>	<b>1,478.4</b>	<b>53.2</b>	<b>58.1</b>	<b>53.6</b>	<b>58.1</b>	<b>699.8</b>	<b>807.7</b>	<b>966.1</b>	<b>1,160.3</b>	<b>77,888</b>	<b>86,642</b>	<b>96,998</b>	<b>103,570</b>
Tax (LC b)	267.8	282.7	303.8	332.8	7.3	8.2	8.4	9.1	214.4	242.2	299.8	361.5	16,940	18,307	20,526	21,459
Minorities (LC b)	7.9	8.0	8.9	9.8	1.0	1.0	1.1	1.1	0.2	0.2	0.2	0.2	681	789	916	848
<b>Net Profit (LC b)</b>	<b>893.8</b>	<b>959.0</b>	<b>1,034.8</b>	<b>1,135.8</b>	<b>44.9</b>	<b>48.9</b>	<b>44.1</b>	<b>47.9</b>	<b>485.2</b>	<b>565.4</b>	<b>666.1</b>	<b>798.6</b>	<b>60,267</b>	<b>67,546</b>	<b>75,557</b>	<b>81,262</b>
FD EPS (LC)	0.7	0.8	0.8	0.9	5.6	6.4	5.0	5.6	70.4	79.4	91.0	107.5	575	645	723	849
FD EPS Growth (%)	15.8	3.1	8.1	9.9	12.0	14.3	(21.3)	10.3	26.4	12.8	14.7	18.1	20.2	12.2	12.2	15.9
BVPS (LC)	3.7	4.2	4.8	5.4	31.4	37.2	39.2	41.7	471.2	541.5	613.9	701.0	2,569	3,080	3,625	4,294
BVPS Growth (%)	16.8	14.1	13.7	13.3	15.9	18.4	5.5	6.3	17.9	14.9	13.4	14.2	21.5	19.9	17.7	18.6
RoRWA (%)	2.17	2.15	2.02	1.97	3.25	3.38	2.81	2.84	1.73	1.84	1.84	1.88	4.40	3.75	3.80	3.54
<b>Tier 1 ratio (%)</b>	<b>10.4</b>	<b>10.4</b>	<b>10.6</b>	<b>10.8</b>	<b>12.1</b>	<b>11.8</b>	<b>11.7</b>	<b>11.7</b>	<b>11.7</b>	<b>12.0</b>	<b>11.5</b>	<b>11.0</b>	<b>14.5</b>	<b>14.4</b>	<b>14.3</b>	<b>14.2</b>
Core Tier 1 ratio (%)	10.4	10.3	10.4	10.6	11.9	11.7	11.7	11.7	10.1	10.3	10.2	9.9	14.5	14.4	14.3	14.2
CAR (%)	13.3	12.9	12.9	13.0	15.5	14.9	14.6	14.5	16.0	16.4	15.3	14.5	15.7	15.6	15.3	15.2
<b>Loan to Deposit ratio (%)</b>	<b>67.6</b>	<b>68.2</b>	<b>68.5</b>	<b>68.8</b>	<b>65.8</b>	<b>66.7</b>	<b>67.7</b>	<b>68.7</b>	<b>90.3</b>	<b>90.8</b>	<b>91.8</b>	<b>92.8</b>	<b>80.1</b>	<b>83.1</b>	<b>85.1</b>	<b>84.6</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY13E FY14E FY15E</b>				<b>FY13E FY14E FY15E</b>				<b>FY13E FY14E FY15E</b>				<b>FY13E FY14E FY15E</b>			
<b>EPS Base Case (LC)</b>	0.8 0.8 0.9				6.4 5.0 5.6				79.4 91.0 107.5				644.8 723.3 848.8			
% Impact from																
<b>Loan Growth: +1% Chg</b>	1.2 1.2 1.2				0.7 0.8 0.8				2.2 2.2 2.2				1.2 1.3 1.4			
<b>NIM: +10bps Chg</b>	9.6 9.9 10.2				7.4 8.8 8.6				8.7 8.8 8.7				2.5 2.7 2.8			
<b>Cost Income %: +1% Chg</b>	3.2 3.2 3.2				1.8 2.2 2.2				4.4 4.4 4.3				2.2 2.3 2.2			
<b>Provisions/Loans: +10bps Chg</b>	5.1 5.4 5.5				3.9 4.7 4.7				6.6 6.6 6.6				2.1 2.1 2.3			
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	2.55	2.47	2.39	2.34	1.48	1.55	1.59	1.64	3.17	3.13	3.18	3.21	5.59	5.63	5.52	5.32
Total operating income	3.29	3.21	3.15	3.11	2.12	2.17	2.21	2.27	4.46	4.37	4.41	4.41	7.20	7.24	7.12	6.77
Operating expenses	-1.31	-1.29	-1.29	-1.29	-0.76	-0.78	-0.78	-0.80	-1.88	-1.87	-1.84	-1.82	-3.57	-3.57	-3.54	-3.34
Op profit before provisions	1.98	1.92	1.86	1.82	1.35	1.39	1.43	1.47	2.58	2.50	2.57	2.59	3.63	3.67	3.58	3.43
Provisions	-0.28	-0.30	-0.30	-0.30	-0.05	-0.08	-0.08	-0.10	-0.65	-0.67	-0.65	-0.62	-0.26	-0.40	-0.48	-0.45
Non-recurring items	0.00	0.00	0.00	0.00	0.30	0.32	0.08	0.08	-0.08	0.02	-0.01	-0.01	0.00	0.00	0.00	0.00
Tax	-0.39	-0.37	-0.35	-0.34	-0.22	-0.23	-0.22	-0.23	-0.57	-0.55	-0.59	-0.61	-0.76	-0.70	-0.67	-0.63
<b>Net profit (ROA)</b>	<b>1.31</b>	<b>1.24</b>	<b>1.20</b>	<b>1.17</b>	<b>1.35</b>	<b>1.38</b>	<b>1.17</b>	<b>1.20</b>	<b>1.29</b>	<b>1.29</b>	<b>1.31</b>	<b>1.35</b>	<b>2.72</b>	<b>2.60</b>	<b>2.46</b>	<b>2.40</b>
Leverage (x)	16.1	15.6	15.3	15.1	12.0	11.2	11.0	10.9	12.8	12.5	12.6	12.8	9.2	9.0	9.1	9.4
<b>ROE</b>	<b>21.01</b>	<b>19.35</b>	<b>18.27</b>	<b>17.71</b>	<b>16.19</b>	<b>15.47</b>	<b>12.84</b>	<b>13.14</b>	<b>16.46</b>	<b>16.19</b>	<b>16.50</b>	<b>17.26</b>	<b>23.31</b>	<b>21.74</b>	<b>20.68</b>	<b>20.83</b>

Source: Company Reports and Citi Research Estimates

Figure 33. Asian – Bank Earnings Forecasts and Key Assumptions (Local Currency)

	Japan (15 Banks) (Bn)				Korea (6 Banks) (Bn)				Malaysia (7 Banks) (Bn)				Philippines (4 Banks) (Bn)			
	FY13A	FY14E	FY15E	FY16E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY11A	FY12E	FY13E	FY14E
<b>Loan Growth (%)</b>	5.7	3.9	4.1	0.6	11.9	2.7	3.3	3.6	11.1	11.2	10.4	9.9	20.7	13.9	16.7	17.7
Net Interest Margin (bps)	118	115	118	120	250	225	227	230	210	204	200	197	328	325	332	346
<b>Net Interest Income (LC b)</b>	<b>4,789.0</b>	<b>4,973.9</b>	<b>5,274.6</b>	<b>5,444.5</b>	<b>25,223</b>	<b>24,161</b>	<b>25,272</b>	<b>26,628</b>	<b>27.3</b>	<b>29.2</b>	<b>31.3</b>	<b>29.5</b>	<b>96.3</b>	<b>101.8</b>	<b>114.8</b>	<b>136.2</b>
NII Growth (%)	(2.3)	3.9	6.0	3.2	4.9	(4.2)	4.6	5.4	12.1	6.8	7.2	6.7	4.7	5.8	12.8	18.5
<b>Non Interest Income (LC b)</b>	<b>3,093.0</b>	<b>2,719.3</b>	<b>2,806.0</b>	<b>2,882.5</b>	<b>5,584</b>	<b>5,257</b>	<b>5,505</b>	<b>5,733</b>	<b>20.3</b>	<b>23.4</b>	<b>25.5</b>	<b>24.7</b>	<b>67.3</b>	<b>81.7</b>	<b>82.4</b>	<b>82.9</b>
Non-II Growth (%)	6.2	(12.1)	3.2	2.7	(1.1)	(5.9)	4.7	4.2	12.9	15.5	9.2	-3.3	5.5	21.5	0.8	0.6
-Fee Income (LC b)	1,587.0	1,632.0	1,698.7	1,760.1	5,277	4,956	5,116	5,292	8.5	10.2	11.1	10.5	25.0	27.1	30.2	34.4
-Fee Growth (%)	8.1	2.8	4.1	3.6	2.3	(6.1)	3.2	3.5	16.3	20.3	9.3	8.1	13.2	8.5	11.4	13.9
-Other Income (LC b)	1,506.0	1,087.3	1,107.3	1,122.3	307.5	300.8	388.9	440.9	11.8	13.2	14.4	14.2	42.3	54.6	52.2	48.5
-Other Income Growth (%)	4.2	(27.8)	1.8	1.4	(37)	(2)	29	13	10.6	12.0	9.1	-1.6	1.5	29.1	-4.4	-7.1
<b>Total Income (LC b)</b>	<b>7,882.0</b>	<b>7,693.2</b>	<b>8,080.6</b>	<b>8,327.0</b>	<b>30,807</b>	<b>29,418</b>	<b>30,776</b>	<b>32,361</b>	<b>47.6</b>	<b>52.6</b>	<b>56.9</b>	<b>54.2</b>	<b>163.6</b>	<b>183.6</b>	<b>197.3</b>	<b>219.0</b>
Total Income Growth (%)	0.9	(2.4)	5.0	3.0	3.7	(4.5)	4.6	5.1	12.4	10.5	8.1	7.2	5.0	12.2	7.5	11.0
Non-II % of Total Income	39.2	35.3	34.7	34.6	18.1	17.9	17.9	17.7	42.6	44.5	44.9	45.6	41.1	44.5	41.8	37.8
<b>Operating Costs (LC b)</b>	<b>4,055.5</b>	<b>4,028.8</b>	<b>4,046.1</b>	<b>4,006.0</b>	<b>14,705</b>	<b>14,819</b>	<b>15,199</b>	<b>15,797</b>	<b>22.8</b>	<b>25.0</b>	<b>26.5</b>	<b>24.8</b>	<b>100.7</b>	<b>106.9</b>	<b>114.6</b>	<b>123.8</b>
Costs Growth (%)	(0.1)	(0.7)	0.4	(1.0)	14.9	0.8	2.6	3.9	14.0	9.8	5.9	6.0	7.7	6.2	7.2	8.1
Costs % of Total Income	51.5	52.4	50.1	48.1	47.7	50.4	49.4	48.8	47.8	47.5	46.6	45.7	61.6	58.3	58.1	56.5
<b>Pre-Provision Profit (LC b)</b>	<b>3,826.5</b>	<b>3,664.5</b>	<b>4,034.5</b>	<b>4,321.0</b>	<b>16,102</b>	<b>14,599</b>	<b>15,578</b>	<b>16,564</b>	<b>24.8</b>	<b>27.6</b>	<b>30.4</b>	<b>29.4</b>	<b>62.8</b>	<b>76.6</b>	<b>82.6</b>	<b>95.2</b>
PPP Growth (%)	2.0	(4.2)	10.1	7.1	(4.7)	(9.3)	6.7	6.3	11.0	11.1	10.1	8.3	1.0	22.0	7.8	15.2
PPOP/Avg Loans (Bps)	121	110	117	123	209	177	183	188	261	261	273	256	363	389	387	381
<b>Provision Charges (LC b)</b>	<b>226.6</b>	<b>359.4</b>	<b>449.2</b>	<b>485.8</b>	<b>6,104</b>	<b>5,786</b>	<b>5,554</b>	<b>5,780</b>	<b>1.6</b>	<b>2.1</b>	<b>2.6</b>	<b>2.5</b>	<b>13.0</b>	<b>13.2</b>	<b>12.9</b>	<b>16.8</b>
- NPL Ratio (%)	2.0	1.9	1.7	1.6	1.0	1.0	1.0	1.0	2.2	2.1	2.1	2.0	3.1	2.7	2.6	2.6
- Provision Coverage (%)	54.9	59.5	64.5	68.1	155.0	154.0	155.7	145.2	90.5	92.0	93.6	100.0	127.7	139.0	137.5	131.1
- Provisions bps of Loans	7	11	13	14	77	69	64	65	17	21	23	23	78.7	72.4	60.0	66.9
Others (LC b)	(456.7)	(173.7)	(180.7)	(171.4)	(177)	129	86	65	0.5	0.6	0.6	0.7	0.0	0.0	0.0	0.0
<b>Pre-tax Profit (LC b)</b>	<b>3,143.2</b>	<b>3,131.4</b>	<b>3,404.6</b>	<b>3,663.8</b>	<b>9,822</b>	<b>8,942</b>	<b>10,110</b>	<b>10,849</b>	<b>23.8</b>	<b>26.1</b>	<b>28.4</b>	<b>27.6</b>	<b>49.9</b>	<b>63.5</b>	<b>69.8</b>	<b>78.4</b>
Tax (LC b)	632.8	1,012.6	1,110.2	1,191.0	2,108	2,161	2,447	2,625	5.7	6.3	6.9	6.8	9.1	10.6	11.7	12.9
Minorities (LC b)	0.0	0.0	0.0	0.0	285.4	219.7	209.1	222.5	0.3	0.3	0.3	0.4	1.6	2.4	2.4	2.5
<b>Net Profit (LC b)</b>	<b>2,510.4</b>	<b>2,118.9</b>	<b>2,294.4</b>	<b>2,472.8</b>	<b>7,428</b>	<b>6,562</b>	<b>7,454</b>	<b>8,001</b>	<b>17.9</b>	<b>19.5</b>	<b>21.2</b>	<b>20.5</b>	<b>39.1</b>	<b>50.4</b>	<b>55.7</b>	<b>62.9</b>
FD EPS (LC)	160.2	121.4	133.7	145.8	4,421	3,718	4,248	4,578	0.8	0.8	0.9	1.0	4.3	5.0	5.4	6.5
FD EPS Growth (%)	35.7	(24.2)	10.1	9.0	(14.2)	(15.9)	14.2	7.8	10.8	4.9	8.6	7.9	21.2	17.9	7.8	20.8
BVPS (LC)	1,452.3	1,427.0	1,526.7	1,653.1	51,366	54,176	57,740	61,570	4.9	5.3	5.8	6.2	36.9	43.5	47.8	52.8
BVPS Growth (%)	19.6	(1.7)	7.0	8.3	8.5	5.5	6.6	6.6	14.1	8.5	9.5	9.3	9.4	17.8	10.1	10.5
RoRWA (%)	0.87	0.73	0.76	0.81	1.36	1.19	1.30	1.35	2.12	1.98	2.06	1.95	1.9	2.1	2.2	2.2
<b>Tier 1 ratio (%)</b>	<b>12.4</b>	<b>13.0</b>	<b>12.0</b>	<b>12.6</b>	<b>11.0</b>	<b>11.3</b>	<b>11.6</b>	<b>11.9</b>	<b>12.1</b>	<b>11.5</b>	<b>11.5</b>	<b>11.4</b>	<b>12.5</b>	<b>14.5</b>	<b>14.8</b>	<b>14.5</b>
Core Tier 1 ratio (%)	12.4	13.0	12.0	12.6	10.3	10.6	11.0	11.3	10.6	10.1	10.3	10.2	12.7	15.0	15.2	14.9
CAR (%)	15.7	16.3	15.1	15.8	14.6	14.7	15.1	15.4	15.9	14.6	14.5	14.2	16.6	18.3	18.2	17.0
<b>Loan to Deposit ratio (%)</b>	<b>68.5</b>	<b>77.7</b>	<b>80.2</b>	<b>80.7</b>	<b>121.0</b>	<b>120.5</b>	<b>121.1</b>	<b>121.5</b>	<b>86.3</b>	<b>86.7</b>	<b>86.6</b>	<b>86.9</b>	<b>69.7</b>	<b>73.7</b>	<b>76.1</b>	<b>77.3</b>
<b>EPS SENSITIVITY STUDY</b>		<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>
<b>EPS Base Case (LC)</b>		121.4	133.7	145.8		3,718	4,248	4,578		0.8	0.9	1.0		5.0	5.4	6.5
% Impact from																
<b>Loan Growth: +1% Chg</b>		2.3	2.3	2.3		3.5	3.2	3.1		0.8	0.8	0.8		0.9	1.0	1.1
<b>NIM: +10bps Chg</b>		27.0	25.7	24.3		20.3	18.5	18.0		5.6	5.6	5.6		5.2	5.2	5.2
<b>Cost Income %: +1% Chg</b>		4.8	4.7	4.5		5.6	5.1	5.0		2.0	2.0	2.0		3.0	2.9	2.9
<b>Provisions/Loans: +10bps Chg</b>		20.8	20.0	18.8		15.6	14.2	13.7		4.1	4.0	4.2		3.3	3.2	3.3
<b>ROA/ROE DECOMP (%)</b>	<b>FY13A</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>
Net interest income	0.68	0.69	0.74	0.76	2.35	2.06	2.07	2.10	1.94	1.88	1.86	1.83	3.07	3.04	3.12	3.28
Total operating income	1.12	1.07	1.13	1.17	2.87	2.51	2.52	2.55	3.37	3.39	3.37	3.37	5.21	5.48	5.36	5.28
Operating expenses	-0.58	-0.56	-0.57	-0.56	-1.37	-1.27	-1.25	-1.24	-1.61	-1.61	-1.57	-1.54	-3.21	-3.19	-3.12	-2.99
Op profit before provisions	0.54	0.51	0.56	0.61	1.50	1.25	1.28	1.30	1.76	1.78	1.80	1.83	2.00	2.29	2.25	2.29
Provisions	-0.03	-0.05	-0.06	-0.07	-0.57	-0.49	-0.46	-0.45	-0.11	-0.14	-0.15	-0.15	-0.41	-0.39	-0.35	-0.41
Non-recurring items	-0.06	-0.02	-0.03	-0.02	-0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.09	-0.14	-0.16	-0.17	-0.20	-0.18	-0.20	-0.21	-0.40	-0.40	-0.41	-0.42	-0.29	-0.32	-0.32	-0.31
<b>Net profit (ROA)</b>	<b>0.36</b>	<b>0.30</b>	<b>0.32</b>	<b>0.35</b>	<b>0.69</b>	<b>0.56</b>	<b>0.61</b>	<b>0.63</b>	<b>1.27</b>	<b>1.26</b>	<b>1.26</b>	<b>1.28</b>	<b>1.25</b>	<b>1.51</b>	<b>1.52</b>	<b>1.52</b>
Leverage (x)	21.5	22.1	20.9	19.9	13.5	13.3	12.8	12.5	13.6	13.0	13.0	13.0	10.5	9.4	8.9	9.3
<b>ROE</b>	<b>7.66</b>	<b>6.55</b>	<b>6.71</b>	<b>6.91</b>	<b>9.34</b>	<b>7.44</b>	<b>7.82</b>	<b>7.87</b>	<b>16.42</b>	<b>15.69</b>	<b>15.62</b>	<b>15.96</b>	<b>12.82</b>	<b>13.65</b>	<b>12.86</b>	<b>13.19</b>

Source: Company Reports and Citi Research Estimates

Figure 34. Asian – Bank Earnings Forecasts and Key Assumptions (Local Currency)

	Singapore (2 Banks) (Bn)				Taiwan (5 Banks) (Bn)				Thailand (7 Banks) (Bn)			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	8.2	9.5	9.4	10.3	5.1	6.2	6.7	6.7	11.9	12.2	11.2	9.9
Net Interest Margin (bps)	179	174	176	179	129	132	132	133	318	317	317	319
<b>Net Interest Income (LC b)</b>	<b>12.9</b>	<b>13.5</b>	<b>14.5</b>	<b>9.3</b>	<b>112.4</b>	<b>121.3</b>	<b>129.5</b>	<b>138.3</b>	<b>296.2</b>	<b>334.2</b>	<b>368.6</b>	<b>408.4</b>
NII Growth (%)	8.7	4.0	7.9	9.0	8.9	7.9	6.8	6.8	13.2	12.8	10.3	10.8
<b>Non Interest Income (LC b)</b>	<b>8.5</b>	<b>8.5</b>	<b>9.0</b>	<b>6.0</b>	<b>337.6</b>	<b>317.8</b>	<b>331.3</b>	<b>356.5</b>	<b>164.3</b>	<b>180.7</b>	<b>196.9</b>	<b>215.4</b>
Non-II Growth (%)	20.4	0.1	6.2	(33.9)	18.9	(5.9)	4.2	7.6	11.3	10.0	9.0	9.4
-Fee Income (LC b)	4.4	4.9	5.3	3.6	52.7	59.7	66.2	73.9	94.7	108.0	120.3	133.9
-Fee Growth (%)	10.2	10.5	9.2	9.6	1.6	13.3	10.9	11.7	12.1	14.1	11.3	11.3
-Other Income (LC b)	4.1	3.6	3.7	2.3	284.9	258.1	265.1	282.6	69.6	72.7	76.7	81.6
-Other Income Growth (%)	27.5	(8.4)	2.0	(46.0)	23	(9)	3	7	10.2	4.5	5.4	6.4
<b>Total Income (LC b)</b>	<b>21.4</b>	<b>21.9</b>	<b>23.5</b>	<b>15.3</b>	<b>450.0</b>	<b>439.1</b>	<b>460.8</b>	<b>494.8</b>	<b>460.5</b>	<b>514.9</b>	<b>565.5</b>	<b>623.9</b>
Total Income Growth (%)	13.0	2.4	7.3	7.9	16.3	(2.4)	4.9	7.4	12.5	11.8	9.8	10.3
Non-II % of Total Income	39.6	38.7	38.3	39.0	75.0	72.4	71.9	72.1	35.7	35.1	34.8	34.5
<b>Operating Costs (LC b)</b>	<b>9.0</b>	<b>9.7</b>	<b>10.4</b>	<b>6.9</b>	<b>146.8</b>	<b>151.3</b>	<b>157.8</b>	<b>166.4</b>	<b>207.6</b>	<b>224.0</b>	<b>240.0</b>	<b>257.1</b>
Costs Growth (%)	10.1	8.1	7.1	7.5	7.5	3.1	4.3	5.4	9.1	7.9	7.2	7.1
Costs % of Total Income	42.1	44.4	44.3	45.3	32.6	34.5	34.3	33.6	45.1	43.5	42.4	41.2
<b>Pre-Provision Profit (LC b)</b>	<b>12.4</b>	<b>12.2</b>	<b>13.1</b>	<b>8.4</b>	<b>303.2</b>	<b>287.8</b>	<b>303.0</b>	<b>328.4</b>	<b>252.9</b>	<b>290.9</b>	<b>325.5</b>	<b>366.8</b>
PPP Growth (%)	15.2	(1.7)	7.4	8.2	21.0	(5.1)	5.3	8.4	15.4	15.0	11.9	12.7
PPOP/Avg Loans (Bps)	240	216	222	165	520	467	462	470	347	356	377	385
<b>Provision Charges (LC b)</b>	<b>1.6</b>	<b>1.6</b>	<b>1.9</b>	<b>1.0</b>	<b>210.1</b>	<b>187.6</b>	<b>192.9</b>	<b>207.9</b>	<b>60.3</b>	<b>53.8</b>	<b>52.7</b>	<b>55.4</b>
- NPL Ratio (%)	1.2	1.2	1.2	1.0	0.3	0.3	0.3	0.4	2.8	2.7	2.7	2.4
- Provision Coverage (%)	125.2	119.1	117.2	104.4	365.1	336.8	319.4	305.8	137.4	135.0	134.8	147.7
- Provisions bps of Loans	32	29	31	25	566	477	462	471	83	69	62	59
Others (LC b)	0.2	0.2	0.2	0.1	10.9	9.6	8.0	6.9	0.0	0.0	0.0	0.0
<b>Pre-tax Profit (LC b)</b>	<b>10.9</b>	<b>10.7</b>	<b>11.4</b>	<b>7.5</b>	<b>104.0</b>	<b>109.8</b>	<b>118.1</b>	<b>127.4</b>	<b>192.6</b>	<b>237.0</b>	<b>272.7</b>	<b>311.5</b>
Tax (LC b)	1.7	1.7	1.8	1.2	15.1	16.2	17.0	18.3	41.3	46.9	54.3	62.0
Minorities (LC b)	0.4	0.4	0.4	0.2	0.0	0.0	0.0	0.0	3.0	3.6	4.2	4.7
<b>Net Profit (LC b)</b>	<b>8.8</b>	<b>8.7</b>	<b>9.2</b>	<b>6.1</b>	<b>88.9</b>	<b>93.6</b>	<b>101.0</b>	<b>109.1</b>	<b>148.3</b>	<b>186.5</b>	<b>214.3</b>	<b>244.7</b>
FD EPS (LC)	1.26	1.26	1.34	1.37	2.12	2.16	2.34	2.53	10.6	12.6	14.3	16.3
FD EPS Growth (%)	13.3	0.0	6.4	8.6	7.4	2.1	8.2	7.8	24.9	18.8	13.3	14.1
BVPS (LC)	11.29	11.97	12.75	12.53	19.60	21.17	22.72	24.47	67.2	74.1	83.4	94.0
BVPS Growth (%)	8.6	6.0	6.5	6.6	7.5	8.0	7.4	7.7	15.0	10.3	12.6	12.7
RoRWA (%)	1.80	1.60	1.62	1.29	1.58	1.61	1.64	1.67	2.1	2.3	2.5	2.6
<b>Tier 1 ratio (%)</b>	<b>14.5</b>	<b>14.2</b>	<b>13.8</b>	<b>14.5</b>	<b>9.9</b>	<b>10.0</b>	<b>10.1</b>	<b>10.3</b>	<b>10.9</b>	<b>11.1</b>	<b>11.4</b>	<b>12.6</b>
Core Tier 1 ratio (%)	11.9	11.8	11.6	12.4	9.6	9.7	9.8	9.9	10.7	10.8	11.1	12.2
CAR (%)	17.5	17.0	16.3	16.9	12.7	12.7	12.9	13.0	16.4	16.2	16.2	16.8
<b>Loan to Deposit ratio (%)</b>	<b>87.0</b>	<b>87.3</b>	<b>87.4</b>	<b>87.2</b>	<b>83.2</b>	<b>85.2</b>	<b>87.1</b>	<b>88.6</b>	<b>95.7</b>	<b>95.8</b>	<b>95.8</b>	<b>96.2</b>
<b>EPS SENSITIVITY STUDY</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (LC)</b>		1.3	1.3	1.4		2.2	2.3	2.5		12.6	14.3	16.3
% Impact from												
<b>Loan Growth: +1% Chg</b>		0.9	0.9	1.5		1.0	1.0	0.9		1.0	1.0	0.9
<b>NIM: +10bps Chg</b>		7.5	7.6	7.2		11.3	11.1	10.9		4.6	4.4	4.3
<b>Cost Income %: +1% Chg</b>		2.1	2.2	2.1		5.4	5.2	5.2		2.2	2.1	2.0
<b>Provisions / Loans: +10bps Chg</b>		5.5	5.4	7.0		7.6	7.4	7.3		3.5	3.2	3.1
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	1.46	1.43	1.44	1.41	0.97	0.98	0.99	0.99	2.94	2.95	2.97	3.00
Total operating income	2.42	2.33	2.33	2.31	3.87	3.56	3.51	3.55	4.58	4.55	4.56	4.59
Operating expenses	-1.02	-1.03	-1.03	-1.04	-1.26	-1.23	-1.20	-1.19	-2.06	-1.98	-1.93	-1.89
Op profit before provisions	1.40	1.29	1.30	1.26	2.61	2.33	2.31	2.35	2.51	2.57	2.62	2.70
Provisions	-0.19	-0.17	-0.19	-0.14	-1.81	-1.52	-1.47	-1.49	-0.60	-0.48	-0.42	-0.41
Non-recurring items	0.00	0.00	0.00	0.00	0.09	0.08	0.06	0.05	0.00	0.00	0.00	0.00
Tax	-0.19	-0.18	-0.18	-0.18	-0.13	-0.13	-0.13	-0.13	-0.41	-0.41	-0.44	-0.46
<b>Net profit (ROA)</b>	<b>0.99</b>	<b>0.92</b>	<b>0.91</b>	<b>0.92</b>	<b>0.76</b>	<b>0.76</b>	<b>0.77</b>	<b>0.78</b>	<b>1.47</b>	<b>1.65</b>	<b>1.73</b>	<b>1.80</b>
Leverage (x)	12.5	12.5	12.7	13.0	14.5	14.1	13.8	13.7	11.4	11.0	10.9	10.5
<b>ROE</b>	<b>12.07</b>	<b>11.10</b>	<b>11.11</b>	<b>11.41</b>	<b>11.10</b>	<b>10.65</b>	<b>10.61</b>	<b>10.69</b>	<b>15.67</b>	<b>17.33</b>	<b>17.89</b>	<b>18.20</b>

Source: Company Reports and Citi Research Estimates

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## Country Section

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# China

## Rate Liberalization Offsets NIM Benefits

### Key Scenario Assumptions

- **CPI inflation rises to 5%** – up from our 2013E forecast of 2.8%. So not quite a doubling of inflation but back to the levels just before the GFC (2007 4.8%, 2008 5.9%).
- **One-year deposit rate rises to around 5%** – China may have to raise deposit rates to match at least the Fed Funds rate to avoid large capital outflows. One-year deposit rate (currently 3%) could rise to around 5%, higher than the peak pre-GFC of 4.14%. With a one-year deposit rate of c5%, real deposit rate would be close to neutral. And further deposit rate liberalization (relaxation of the deposit rate cap) would likely be used to achieve the 5% deposit rate.
- **One-year lending rate reaches 7-8%** – Currently 6%, may reach 7-8%, versus the peak pre-GFC of 7.47% (in 2008). This implicitly assumes that the rate hike cycle will be asymmetric to a degree, ie. deposit rates rising faster than lending rates.
- **Short- and long-term market interest rates** – could also rise 2-3ppts from current levels in this scenario.

### Implications for China Banks

- **Rising rates a positive for NIMs** – A return of lending rates back to pre-GFC levels could imply that NIMs, which are likely to average c2.70% in 1H13, also recover to the pre-GFC peak of 3.20%, ie. a 50bps improvement. Rising rates are positive for NIMs because the Chinese banks have a lot of low cost deposits – about 50% of deposits in the system are low cost demand deposits. But we need to discount this because the spread between lending and deposit rates (take the 1-year lending and deposit rates as benchmarks) is (a) now narrower than previously partly due to the rate liberalization last year, and (b) will likely further narrow due to further deposit rate liberalization. The spread between the 1-year lending rate and 1-year deposit rate was 3.33% pre-GFC, it is now 3.03% and factoring in the deposit rate scenario above, it could narrow towards 2.5% (ie. c80bps narrower than before). We believe this could take away 30-40bps from the NIM benefit. Roughly speaking, we could be looking at a net impact of 20bps benefit. Every 10bps increase in NIM adds around 6% to earnings, so in aggregate a 20bps uplift will raise earnings by 12%.
- **Limited impact on loan growth, tightening most likely on shadow banking** – With inflation rising, credit will be tightened. Bulk of credit tightening most likely would come from shadow banking (eg. WMPs) rather than from bank loans, which have been growing at a more measured pace. WMP growth will also naturally be under pressure as deposit rates rise.
- **Rise in NPLs likely to be cushioned by high provision coverage** – With tightening credit in the economy, NPLs will rise especially given the rapid expansion of credit in recent years. However, a strong US economy will likely help. So we don't expect a massive surge in NPLs, but a rise in the NPL ratio from currently 1% to say 2% would not be unreasonable. On the other hand, Chinese banks have high provision coverage and so the rise in NPLs may not flow through to the P&L as much. Assume NPL rises from c1% to 2%, credit cost +20bps from 60bps currently assumed to 80bps. Every 10bps rise in credit cost lowers earnings by 3%, and so a 20bps rise would lower earnings by 6%.

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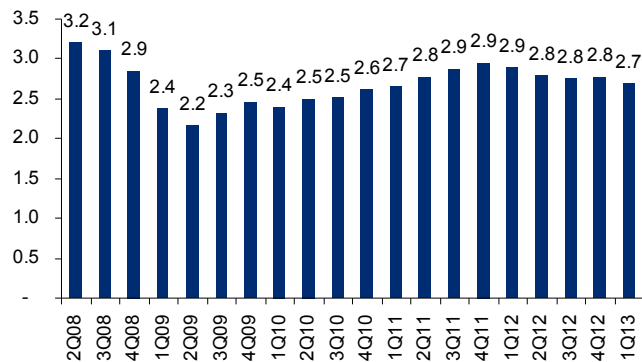
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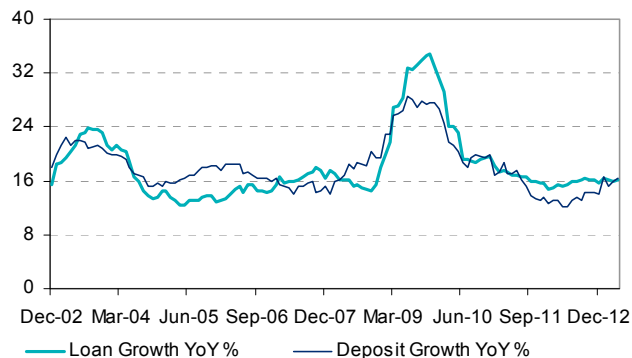
- **Minimal pressure on cost/income ratio** – Cost/income ratios are at the trough after many years of strong revenue growth, and look low vs the region after adjusting for the business tax (which is booked in operating expenses). Since NIMs will rise in a rising rate environment, helping to support revenue growth, we believe the pressure on the cost/income ratio will not be that significant even with some cost inflation. Every 1% point rise in the cost/income ratio will lower earnings by 2%.

Figure 35. China Banks – Average NIM Trend (%)



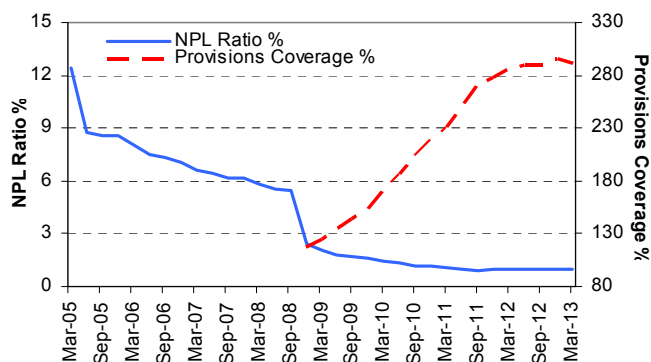
Source: Citi Research

Figure 36. China Banks – Loan Growth and Deposit Growth (YoY %)



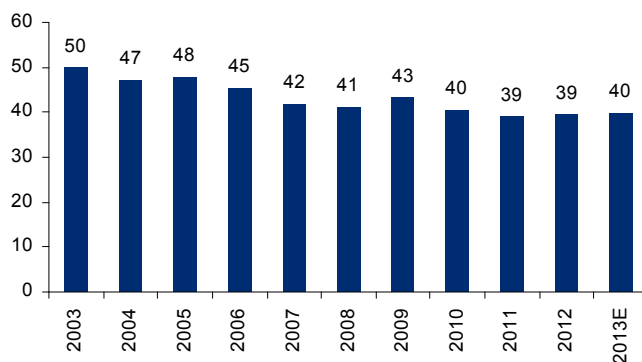
Source: Citi Research

Figure 37. China Banks – System NPL Ratio & Provision Coverage (%)



Source: Citi Research

Figure 38. China Banks – Average Cost-to-income Ratio (%)



Source: Citi Research

ROEs for big banks (i.e. ICBC and CCB) could rise to 21%

## Overall Impact

With ROEs forecasted to be around 20% in 2013E for the big banks, their reported ROEs could rise to 21% under the above scenario for a 4% earnings uplift.

Figure 39. China Banks – Overall impact

		Earnings impact	ROE impact
NIM	+20bps	12%	2.4%
Loan growth	Minimal	0%	0.0%
Non-interest income	Minimal	0%	0.0%
Cost/income	+100bps	-2%	-0.4%
Credit cost	+20bps	-6%	-1.2%
<b>Net impact</b>		<b>4%</b>	<b>0.8%</b>

Source: Citi Research Estimates

MSB and CNCB relatively less sensitive to changes in lending and deposit rates

Smaller banks that have weak deposit franchises, especially MSB and CNCB, may come under more NIM pressure as deposit rates further liberalize. They rely on more time deposits as funding (vs low cost demand deposits) and are more likely to pay up to the maximum rate for deposits generally. Our analysis suggests that MSB and CNCB are relatively less sensitive to changes in lending and deposit rates (based on the loans/time deposits ratio - see table below).

Figure 40. China Banks – Loan books are c30% larger than time deposit base

FY12 %	Loans/ Deposits [1]	Time / Total Deposits [2]	Loans / Time Deposits [1/2]
CMB	72.9	47.8	152.7
BoCom	80.6	54.4	148.0
ABC	58.3	41.4	140.8
CCB	65.5	47.8	137.0
BOC	74.2	54.3	136.6
ICBC	64.4	49.5	130.1
CNCB	71.5	57.7	123.9
MSB	68.4	61.9	110.5
CRCB	54.5	56.1	97.0
<b>Average</b>	<b>67.8</b>	<b>52.3</b>	<b>130.7</b>

Source: Company Reports and Citi Research

Figure 41. China – Economic Indicators

	2006	2007	2008	2009	2010	2011	2012	2013F	2014F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	2,787.2	3,494.5	4,544.0	5,070.5	5,932.5	7,319.0	8,244.5	9,228.9	10,298.1
Nominal GDP, local currency bn	22,224	26,583	31,490	34,632	40,151	47,310	51,932	56,964	62,406
GDP per capita, US\$	2,120	2,645	3,422	3,800	4,424	5,432	6,089	6,789	7,545
Population, mn	1,314.5	1,321.3	1,328.0	1,334.5	1,340.9	1,347.4	1,354.0	1,359.5	1,364.9
Unemployment, % of labour force	4.1	4.0	4.2	4.3	4.1	4.1	4.1	4.1	4.2
<b>Economic Activity</b>									
Real GDP, % yoy	12.7	14.2	9.6	9.2	10.4	9.3	7.8	7.7	7.3
Real investment growth % yoy	13.6	14.7	11.0	19.2	11.9	9.7	8.4	7.6	7.1
Real consumption growth % yoy	9.8	11.0	8.5	9.4	9.2	10.7	8.2	7.3	7.8
private consumption growth % yoy	11.3	11.1	9.2	10.3	8.5	17.1	8.4	7.5	8.0
<b>Prices, Money &amp; Credit</b>									
CPI, % yoy	2.8	6.5	1.2	1.9	4.6	4.1	2.5	3.5	3.5
CPI, % avg	1.5	4.8	5.9	-0.7	3.3	5.4	2.6	2.9	3.1
Nominal wages, % yoy	14.6	18.5	16.9	11.6	13.3	17.8	9.8	9.7	9.6
Credit extension to private sector, % yoy	14.3	19.3	14.0	33.2	20.3	15.1	14.8	14.6	13.9
Policy interest rate, % eop	2.52	4.14	2.25	2.25	2.75	3.50	3.00	3.00	3.25
1 month inter-bank rate, % eop	2.58	3.61	1.23	1.79	6.17	6.00	4.90	3.40	3.65
Long term yield, % eop	2.62	4.19	1.80	3.06	3.61	3.27	3.33	3.36	3.61
lc/US\$, eop	7.81	7.30	6.82	6.83	6.59	6.29	6.23	6.08	6.02
lc/US\$, avg	7.97	7.61	6.95	6.83	6.77	6.46	6.31	6.12	6.05
<b>Balance of Payments, US\$ bn</b>									
Current account	231.8	353.2	420.6	243.3	237.8	136.1	193.1	203.0	206.0
% of GDP	8.3	10.1	9.3	4.8	4.0	1.9	2.3	2.2	2.0
Trade balance	177.5	264.3	298.1	195.7	181.5	154.9	231.1	254.1	242.8
Exports	969.0	1,220.5	1,430.7	1,201.6	1,577.8	1,898.4	2,048.9	2,247.0	2,379.8
Imports	791.5	956.1	1,132.6	1,005.9	1,396.2	1,743.5	1,817.8	1,992.9	2,137.0
Service balance	-8.8	-7.9	-11.8	-29.4	-31.2	-61.6	-89.7	-98.7	-108.5
Income balance	-5.1	8.0	28.6	-8.5	-25.9	-70.3	-42.1	-0.6	-13.6
FDI, net	100.1	139.1	114.8	87.2	185.7	231.7	191.1	147.0	99.9
International reserves	1,066.3	1,528.2	1,946.0	2,399.2	2,847.3	3,181.1	3,311.6	3,677.9	3,860.6
Total Amortisations	17.9	20.3	23.3	34.2	27.2	33.2	38.8	41.8	46.0
<b>Public Finances, % of GDP</b>									
Consolidated government balance	-1.0	0.6	-0.4	-2.2	-2.2	-1.3	-2.0	-2.0	-2.0
Consolidated gov primary balance	-0.5	1.0	0.1	-1.8	-1.7	-0.9	-1.6	-1.6	-1.6
Public debt	18.6	39.0	37.4	47.8	49.2	44.3	45.0	45.2	45.2
of which Domestic	17.4	38.0	36.6	47.0	48.6	43.7	44.5	44.7	44.8
<b>Foreign Assets &amp; Liabilities, US\$ bn</b>									
External debt	338.6	389.2	390.2	428.6	548.9	695.0	764.5	840.9	925.0
Private	304.2	354.3	356.9	391.8	510.1	657.6	723.4	795.7	875.3
Public	34.4	34.9	33.3	36.9	38.8	37.4	41.1	45.2	49.7
External debt / GDP	12.1	11.1	8.6	8.5	9.3	9.5	9.3	9.1	9.0
External debt / XGS	31.9	29.0	24.7	32.2	31.5	33.4	34.0	34.1	35.4
Short-term debt	199.2	235.7	226.3	259.3	375.7	475.7	523.2	575.5	633.1
Short-term debt/International Reserves (%)	18.7	15.4	11.6	10.8	13.2	15.0	15.8	15.6	16.4
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1F	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	8.9	8.1	7.6	7.4	7.9	7.7	7.8	7.9	7.5
CPI, % yoy	4.1	3.6	2.2	1.9	2.5	2.1	3.0	3.0	3.5
Policy interest rate, % eop	3.50	3.50	3.25	3.00	3.00	3.00	3.00	3.00	3.00
1 month inter-bank rate, % eop	5.99	4.22	4.48	3.99	4.90	3.40	3.40	3.40	3.40
Long term yield, % eop	3.27	3.17	2.92	3.24	3.33	3.36	3.36	3.36	3.36
lc vs USD, eop	6.29	6.30	6.35	6.28	6.23	6.21	6.10	6.09	6.08

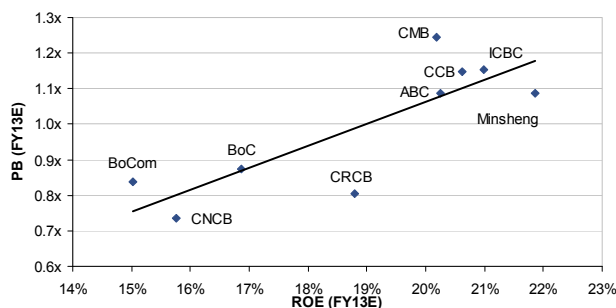
Source: CEIC Data Company Ltd, Fitch, IFS, Moody's and Citi Research Estimates

Figure 42. China — Banks Valuation Snapshot

Stock, Rating, Ric	Price		TP	ETR	Mkt Cap	Net Profit		EPS		EPS Chg		P/E		NBV/S		P/NBV		Net DPS		Yield		ROAE	
	HKD	HKD				(%)	(HKD b)	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
ICBC, 2, 1398.HK	5.38	6.40	24.9	1,881.1	253.4	274.2	0.71	0.77	6.2	8.2	6.0	5.5	3.70	4.23	1.15	1.01	0.25	0.27	6.0	6.4	21.0	19.8	
CCB, 1, 0939.HK	6.30	7.70	28.1	1,575.1	208.8	226.5	0.84	0.91	8.1	8.5	6.0	5.5	4.33	4.95	1.15	1.01	0.29	0.32	5.9	6.4	20.6	19.5	
BoC, 1, 3988.HK	3.66	4.40	26.6	1,021.7	147.5	157.7	0.53	0.56	5.8	6.9	5.5	5.1	3.31	3.69	0.87	0.78	0.18	0.20	6.4	6.8	16.9	16.2	
ABC, 1, 1288.HK	3.67	4.70	34.2	1,192.0	163.2	174.1	0.50	0.54	12.5	6.7	5.7	5.4	2.65	3.01	1.09	0.96	0.18	0.19	6.1	6.5	20.2	18.9	
BoCom, 2, 3328.HK	6.03	6.50	12.9	447.8	60.2	63.4	0.81	0.85	-8.3	5.2	5.9	5.6	5.68	6.28	0.84	0.76	0.24	0.26	5.1	5.4	15.0	14.3	
CMB, 3, 3968.HK	16.02	15.50	1.0	345.7	47.4	52.2	1.80	1.98	-14.2	10.2	7.1	6.4	10.23	11.67	1.25	1.09	0.54	0.59	4.2	4.7	20.2	18.1	
CNCB, 2, 0998.HK	4.35	5.00	20.0	203.5	32.5	36.8	0.69	0.79	4.7	13.3	4.9	4.4	4.68	5.29	0.73	0.65	0.17	0.20	5.1	5.7	15.8	15.8	
Minsheng, 3, 1988.HK	9.72	8.50	-8.9	275.7	39.5	42.6	1.39	1.50	3.6	7.8	5.5	5.1	6.99	8.21	1.09	0.93	0.28	0.30	3.7	3.9	21.9	19.8	
CRCB, 1, 3618.HK	3.98	5.70	50.8	37.0	6.5	7.1	0.67	0.74	16.6	9.9	4.7	4.3	3.95	4.47	0.81	0.71	0.24	0.27	7.6	8.4	18.8	18.1	

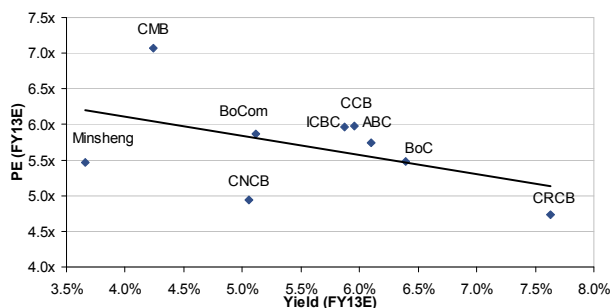
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 43. Price-Book vs. ROAE 2013E



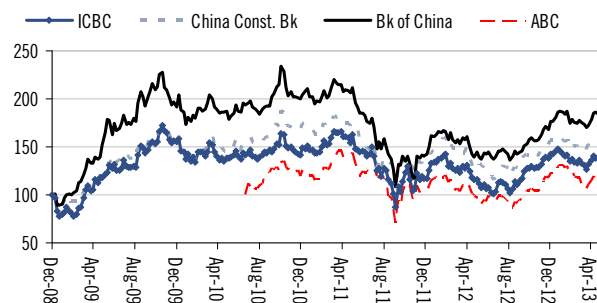
Source: Citi Research Estimates

Figure 44. P/E vs. Dividend Yield 2013E



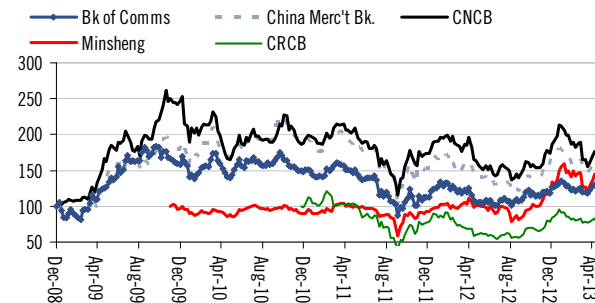
Source: Citi Research Estimates

Figure 45. Big-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 46. Mid-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

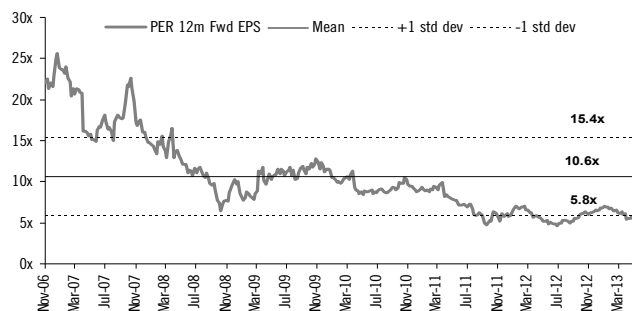
Figure 47. Chinese Banks – Current vs. Target Valuation and Historical P/B & P/E Ranges

	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (HKD)	CY13E P/B (x)	CY13E P/E (x)	Target Price (HKD)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
ICBC	5.38	1.2	6.0	6.40	1.4	7.1	1.3	1.9	2.6	5.8	10.6	15.4
CCB	6.30	1.1	6.0	7.70	1.4	7.3	1.3	1.9	2.6	6.4	10.3	14.2
BOC	3.66	0.9	5.5	4.40	1.1	6.6	0.9	1.4	1.9	5.1	9.2	13.4
ABC	3.67	1.1	5.8	4.70	1.4	7.4	1.0	1.3	1.6	5.1	6.7	8.4
BoCom	6.03	0.8	5.9	6.50	0.9	6.4	1.0	1.8	2.6	5.9	11.3	16.7
CMB	16.02	1.2	7.1	15.50	1.2	6.8	1.2	2.5	3.7	6.1	12.7	19.4
CNCB	4.35	0.7	5.0	5.00	0.8	5.7	0.8	1.3	1.8	4.3	9.3	14.4
Minsheng	9.72	1.1	5.5	8.50	1.0	4.8	0.9	1.2	1.4	4.9	7.0	9.1

Note: Priced as on 23 May 2013; Source: Citi Research Estimates

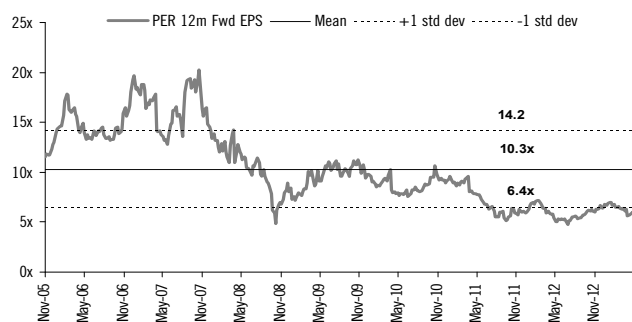
## China Banks – Valuation Charts

Figure 48. ICBC – 12M Forward Consensus P/E Chart



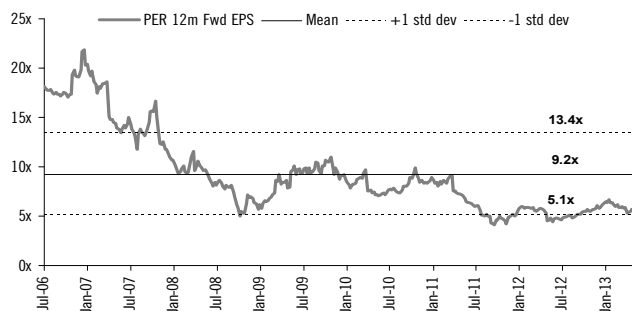
Source: DataStream, Citi Research

Figure 50. CCB – 12M Forward Consensus P/E Chart



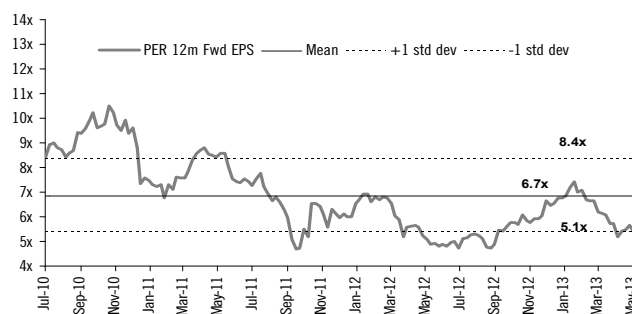
Source: DataStream, Citi Research

Figure 52. BOC – 12M Forward Consensus P/E Chart



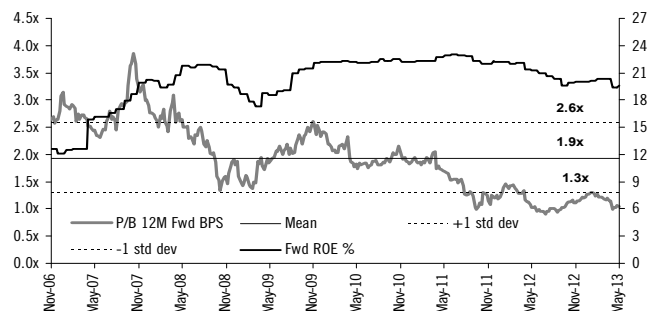
Source: DataStream, Citi Research

Figure 54. ABC – 12M Forward Consensus P/E Chart



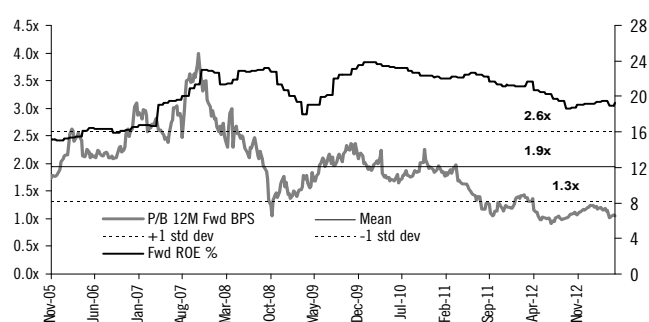
Source: DataStream, Citi Research

Figure 49. ICBC – 12M Forward Consensus P/B Chart



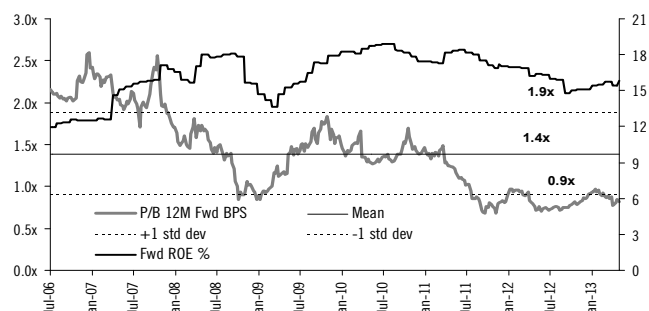
Source: DataStream, Citi Research

Figure 51. CCB – 12M Forward Consensus P/B Chart



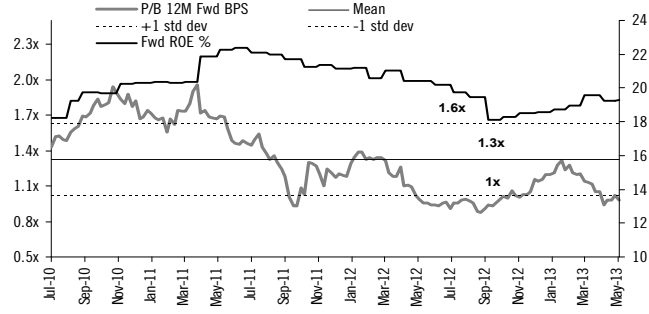
Source: DataStream, Citi Research

Figure 53. BOC – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

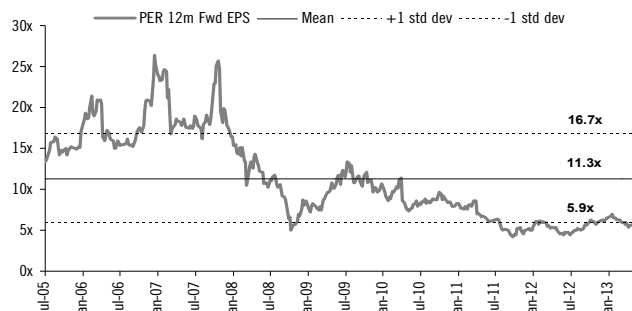
Figure 55. ABC – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

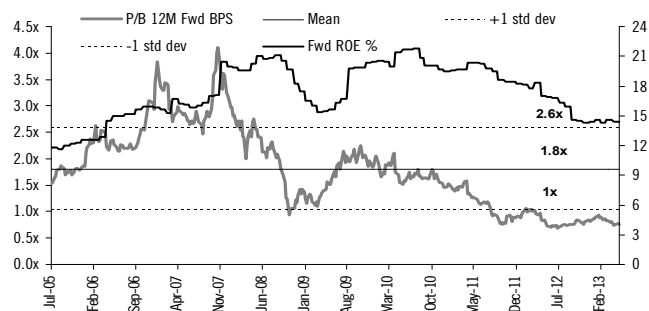
## China Banks – Valuation Charts (Cont'd)

Figure 56. BoCom – 12M Forward Consensus P/E Chart



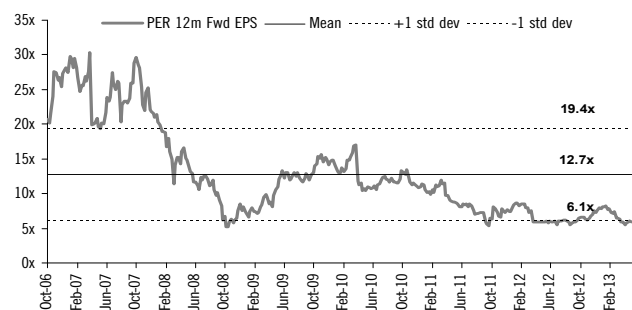
Source: DataStream, Citi Research

Figure 57. BoCom – 12M Forward Consensus P/B Chart



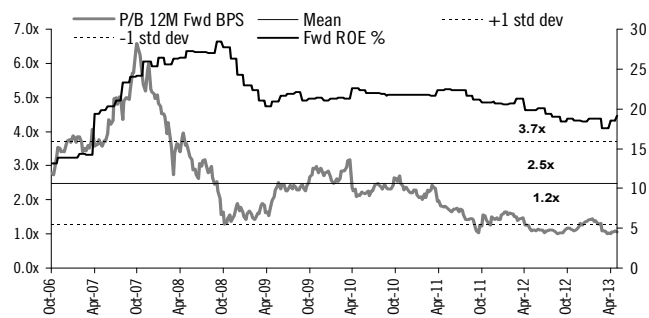
Source: DataStream, Citi Research

Figure 58. CMB – 12M Forward Consensus P/E Chart



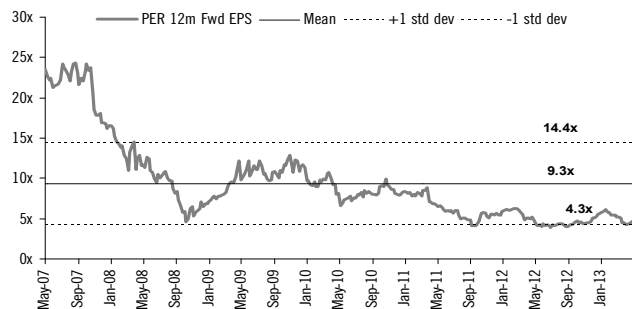
Source: DataStream, Citi Research

Figure 59. CMB – 12M Forward Consensus P/B Chart



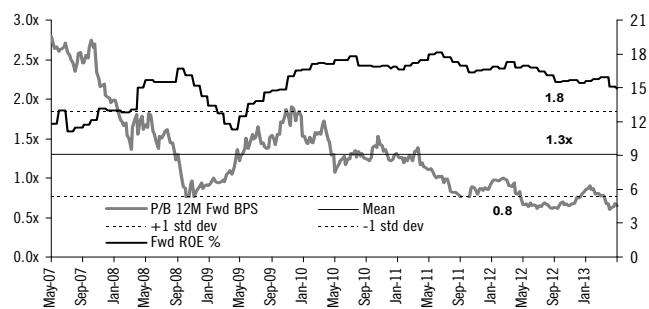
Source: DataStream, Citi Research

Figure 60. CNCB – 12M Forward Consensus P/E Chart



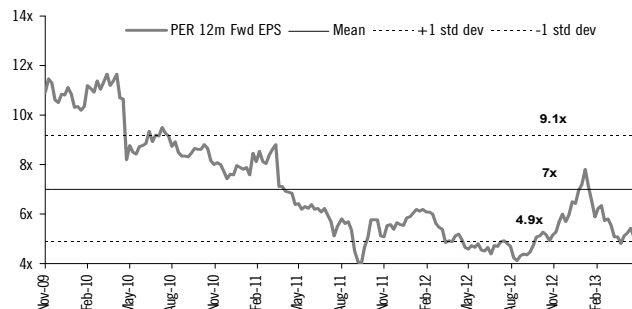
Source: DataStream, Citi Research

Figure 61. CNCB – 12M Forward Consensus P/B Chart



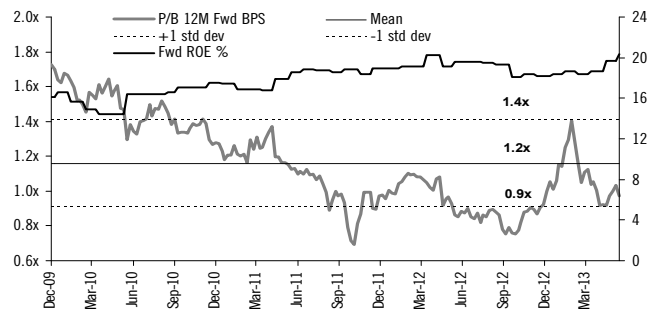
Source: DataStream, Citi Research

Figure 62. Minsheng – 12M Forward Consensus P/E Chart



Source: DataStream, Citi Research

Figure 63. Minsheng – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 64. China – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	ICBC			CCB			BoC			ABC			BoCom		
	FY12A	FY13E	FY14E	FY12A	FY13E	FY14E	FY12A	FY13E	FY14E	FY12A	FY13E	FY14E	FY12A	FY13E	FY14E
<b>Loan Growth (%)</b>	13.0	12.7	12.1	15.6	14.4	12.7	8.2	12.5	11.3	14.1	13.2	13.3	15.1	13.6	13.0
Net Interest Margin (bps)	258	248	240	275	264	255	217.3	220.0	210.5	277	268	259	259	246	235
<b>Net Interest Income (RMB b)</b>	<b>417.8</b>	<b>449.8</b>	<b>486.1</b>	<b>353.2</b>	<b>389.5</b>	<b>425.9</b>	<b>257.0</b>	<b>278.6</b>	<b>296.5</b>	<b>341.9</b>	<b>373.0</b>	<b>405.8</b>	<b>120.1</b>	<b>129.2</b>	<b>138.6</b>
NII Growth (%)	15.2	7.6	8.1	16.0	10.3	9.3	12.7	8.4	6.4	11.3	9.1	8.8	16.1	7.6	7.2
<b>Non Interest Income (RMB b)</b>	<b>111.9</b>	<b>126.2</b>	<b>143.4</b>	<b>109.3</b>	<b>121.8</b>	<b>138.3</b>	<b>109.2</b>	<b>124.0</b>	<b>140.5</b>	<b>83.1</b>	<b>94.7</b>	<b>108.7</b>	<b>27.4</b>	<b>31.2</b>	<b>35.3</b>
Non-II Growth (%)	3.8	12.8	13.6	15.3	11.4	13.6	9.0	13.5	13.3	14.5	14.0	14.7	15.2	13.7	13.2
-Fee Income (RMB b)	106.1	120.5	136.9	93.5	106.4	122.2	69.9	80.7	93.4	74.8	86.2	99.5	20.9	24.0	27.6
-Fee Growth (%)	4.4	13.6	13.7	7.5	13.7	14.8	8.1	15.5	15.7	8.9	15.2	15.4	11.9	15.0	15.0
-Other Income (RMB b)	5.8	5.8	6.5	15.8	15.5	16.2	39.3	43.3	47.1	8.2	8.5	9.2	6.5	7.2	7.7
-Other Income Growth (%)	(7.3)	(0.7)	12.6	101.9	(2.3)	4.6	10.4	10.1	8.9	116.5	3.6	7.7	27.1	9.8	7.0
<b>Total Income (RMB b)</b>	<b>529.7</b>	<b>576.0</b>	<b>629.5</b>	<b>462.5</b>	<b>511.4</b>	<b>564.2</b>	<b>366.2</b>	<b>402.6</b>	<b>437.0</b>	<b>425.0</b>	<b>467.8</b>	<b>514.4</b>	<b>147.6</b>	<b>160.5</b>	<b>173.9</b>
Total Income Growth (%)	12.6	8.7	9.3	15.8	10.6	10.3	11.5	9.9	8.6	11.9	10.1	10.0	15.9	8.7	8.4
Non-II % of Total Income	21.1	21.9	22.8	23.6	23.8	24.5	29.8	30.8	32.2	19.6	20.3	21.1	18.6	19.4	20.3
<b>Operating Costs (RMB b)</b>	<b>189.9</b>	<b>208.6</b>	<b>230.6</b>	<b>171.1</b>	<b>189.9</b>	<b>214.0</b>	<b>160.0</b>	<b>176.0</b>	<b>193.4</b>	<b>182.8</b>	<b>206.1</b>	<b>232.0</b>	<b>57.8</b>	<b>63.2</b>	<b>70.1</b>
Costs Growth (%)	12.0	9.8	10.6	18.4	11.0	12.7	13.6	10.0	9.9	16.2	12.8	12.6	17.1	9.4	11.0
Costs % of Total Income	35.9	36.2	36.6	37.0	37.1	37.9	43.7	43.7	44.2	43.0	44.1	45.1	39.2	39.4	40.3
<b>Pre-Provision Profit (RMB b)</b>	<b>339.8</b>	<b>367.4</b>	<b>398.9</b>	<b>291.5</b>	<b>321.5</b>	<b>350.2</b>	<b>206.2</b>	<b>226.6</b>	<b>243.7</b>	<b>242.2</b>	<b>261.6</b>	<b>282.4</b>	<b>89.8</b>	<b>97.2</b>	<b>103.8</b>
PPP Growth (%)	12.9	8.1	8.6	14.4	10.3	8.9	10.0	9.9	7.5	8.9	8.0	7.9	15.2	8.3	6.7
PPOP/Avg Loans (Bps)	409.6	392.5	379.3	416.1	399.2	383.0	312.2	310.7	298.8	401.2	381.5	363.5	325.8	309.0	291.1
<b>Provision Charges (RMB b)</b>	<b>33.7</b>	<b>42.8</b>	<b>48.0</b>	<b>40.0</b>	<b>51.8</b>	<b>58.4</b>	<b>19.4</b>	<b>30.2</b>	<b>33.6</b>	<b>54.2</b>	<b>51.4</b>	<b>58.3</b>	<b>14.5</b>	<b>18.9</b>	<b>21.4</b>
- NPL Ratio (%)	0.8	0.9	0.9	1.0	1.1	1.2	1.0	1.0	1.1	1.6	1.7	1.7	0.9	1.0	1.1
- Provision Coverage (%)	296.0	286.4	284.3	271.3	268.8	261.8	236.3	245.8	243.8	265.8	264.0	264.9	254.5	253.2	256.8
- Provisions bps of Loans	40.7	45.7	45.7	57.2	64.3	63.8	29.4	41.4	41.2	89.8	75.0	75.0	52.8	60.0	60.0
Others (RMB b)	2.7	2.9	3.2	0.0	0.0	0.0	0.6	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
<b>Pre-tax Profit (RMB b)</b>	<b>308.7</b>	<b>327.5</b>	<b>354.1</b>	<b>251.4</b>	<b>269.7</b>	<b>291.9</b>	<b>187.4</b>	<b>197.1</b>	<b>210.8</b>	<b>187.9</b>	<b>210.2</b>	<b>224.1</b>	<b>75.2</b>	<b>78.4</b>	<b>82.4</b>
Tax (RMB b)	70.0	73.9	79.6	57.8	60.8	65.2	41.9	43.3	46.2	42.8	47.0	50.0	16.7	18.0	18.8
Minorities (RMB b)	0.2	0.2	0.2	0.4	0.1	0.1	6.1	6.3	6.9	0.0	0.0	0.0	0.1	0.1	0.1
<b>Net Profit (RMB b)</b>	<b>238.5</b>	<b>253.4</b>	<b>274.2</b>	<b>193.2</b>	<b>208.8</b>	<b>226.5</b>	<b>139.4</b>	<b>147.5</b>	<b>157.7</b>	<b>145.1</b>	<b>163.2</b>	<b>174.1</b>	<b>58.4</b>	<b>60.2</b>	<b>63.4</b>
FD EPS (RMB)	0.67	0.71	0.77	0.77	0.84	0.91	0.5	0.5	0.6	0.45	0.50	0.54	0.88	0.81	0.85
FD EPS Growth (%)	14.5	6.2	8.2	14.1	8.1	8.5	12.2	5.8	6.9	19.0	12.5	6.7	7.9	(8.3)	5.2
BVPS (RMB)	3.21	3.70	4.23	3.77	4.33	4.95	3.0	3.3	3.7	2.31	2.65	3.01	5.12	5.68	6.28
BVPS Growth (%)	17.5	15.1	14.4	16.1	15.1	14.2	13.9	12.0	11.5	15.4	15.0	13.6	16.5	11.1	10.5
RoRWA (%)	2.66	2.44	2.30	2.68	2.52	2.39	2.0	1.9	1.8	2.13	2.09	1.94	1.94	1.73	1.58
<b>Tier 1 ratio (%)</b>	<b>10.6</b>	<b>10.5</b>	<b>10.8</b>	<b>11.3</b>	<b>11.3</b>	<b>11.6</b>	<b>10.5</b>	<b>10.5</b>	<b>10.6</b>	<b>9.7</b>	<b>9.7</b>	<b>9.7</b>	<b>11.5</b>	<b>11.0</b>	<b>10.7</b>
Core Tier 1 ratio (%)	10.6	10.5	10.8	11.3	11.3	11.6	10.4	10.5	10.6	9.7	9.7	9.7	11.5	11.0	10.7
CAR (%)	13.7	13.2	13.5	14.3	13.2	13.4	12.6	13.7	13.6	12.6	12.3	12.2	14.4	13.6	13.1
<b>Loan to Deposit ratio (%)</b>	<b>64.5</b>	<b>65.4</b>	<b>66.0</b>	<b>66.2</b>	<b>66.8</b>	<b>66.9</b>	<b>74.8</b>	<b>75.4</b>	<b>75.7</b>	<b>59.2</b>	<b>59.8</b>	<b>60.3</b>	<b>79.0</b>	<b>79.4</b>	<b>79.5</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY13E FY14E</b>			<b>FY13E FY14E</b>			<b>FY13E FY14E</b>			<b>FY13E FY14E</b>			<b>FY13E FY14E</b>		
<b>EPS Base Case (RMB)</b>	0.71 0.77			0.84 0.91			0.53 0.56			0.50 0.54			0.81 0.85		
% Impact from															
<b>Loan Growth: +1% Chg</b>	1.1 1.1			1.2 1.2			1.2 1.3			1.3 1.3			1.5 1.5		
<b>NIM: +10bps Chg</b>	8.8 9.0			8.7 9.0			10.5 10.9			10.4 11.0			10.7 11.5		
<b>Cost Income %: +1% Chg</b>	2.8 2.8			3.0 3.0			3.3 3.4			3.5 3.6			3.3 3.4		
<b>Provisions / Loans: +10bps Chg</b>	4.5 4.7			4.7 4.9			6.0 6.3			5.1 5.5			6.4 6.9		
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>
Net interest income	2.53	2.43	2.35	2.69	2.61	2.53	2.10	2.08	2.00	2.74	2.65	2.57	2.43	2.31	2.20
Total operating income	3.21	3.11	3.05	3.52	3.43	3.35	2.99	3.01	2.94	3.41	3.33	3.25	2.99	2.86	2.76
Operating expenses	-1.15	-1.12	-1.12	-1.30	-1.27	-1.27	-1.31	-1.31	-1.30	-1.47	-1.47	-1.47	-1.17	-1.13	-1.11
Op profit before provisions	2.06	1.98	1.93	2.22	2.16	2.08	1.68	1.69	1.64	1.94	1.86	1.79	1.82	1.74	1.65
Provisions	-0.20	-0.23	-0.23	-0.31	-0.35	-0.35	-0.16	-0.23	-0.23	-0.44	-0.37	-0.37	-0.29	-0.34	-0.34
Non-recurring items	0.02	0.02	0.02	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.42	-0.40	-0.39	-0.44	-0.41	-0.39	-0.34	-0.32	-0.31	-0.34	-0.33	-0.32	-0.34	-0.32	-0.30
<b>Net profit (ROA)</b>	<b>1.44</b>	<b>1.37</b>	<b>1.33</b>	<b>1.47</b>	<b>1.40</b>	<b>1.35</b>	<b>1.14</b>	<b>1.10</b>	<b>1.06</b>	<b>1.16</b>	<b>1.16</b>	<b>1.10</b>	<b>1.18</b>	<b>1.08</b>	<b>1.01</b>
Leverage (x)	15.9	15.4	14.9	15.0	14.7	14.5	15.83	15.33	15.22	17.8	17.5	17.2	15.2	14.0	14.2
<b>ROE</b>	<b>22.98</b>	<b>20.99</b>	<b>19.80</b>	<b>22.04</b>	<b>20.62</b>	<b>19.52</b>	<b>18.01</b>	<b>16.87</b>	<b>16.15</b>	<b>20.74</b>	<b>20.25</b>	<b>18.91</b>	<b>17.91</b>	<b>15.02</b>	<b>14.27</b>

Source: Company Reports and Citi Research Estimates

Figure 65. China – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	CMB			CNCB			Minsheng			CRCB			Sector (9 Banks)		
	FY12A	FY13E	FY14E	FY12A	FY13E	FY14E	FY12A	FY13E	FY14E	FY12A	FY13E	FY14E	FY12A	FY13E	FY14E
<b>Loan Growth (%)</b>	16.0	14.4	13.2	16.0	14.1	12.9	14.9	13.7	13.5	20.2	17.9	18.5	13.3	13.4	12.5
Net Interest Margin (bps)	303	288	280	265	260	255	288	265	266	341	338	328	263	254	246
<b>Net Interest Income (RMB b)</b>	<b>88.4</b>	<b>98.7</b>	<b>110.1</b>	<b>75.5</b>	<b>81.6</b>	<b>90.6</b>	<b>77.2</b>	<b>86.0</b>	<b>94.0</b>	<b>13.092</b>	<b>15.624</b>	<b>17.632</b>	<b>1,744.1</b>	<b>1,902.1</b>	<b>2,065.1</b>
NII Growth (%)	15.8	11.7	11.5	15.9	8.1	11.0	19.0	11.5	9.2	24.6	19.3	12.9	14.5	9.1	8.6
<b>Non Interest Income (RMB b)</b>	<b>25.4</b>	<b>28.5</b>	<b>32.3</b>	<b>14.2</b>	<b>17.1</b>	<b>19.2</b>	<b>25.4</b>	<b>28.3</b>	<b>33.5</b>	<b>0.561</b>	<b>0.719</b>	<b>0.914</b>	<b>506.6</b>	<b>572.5</b>	<b>652.2</b>
Non-II Growth (%)	25.0	12.1	13.6	18.7	19.9	12.7	46.4	11.3	18.2	(8.5)	28.1	27.1	12.7	13.0	13.9
-Fee Income (RMB b)	19.7	23.1	26.6	11.2	13.9	16.0	20.5	24.7	29.8	0.4	0.6	0.8	417.1	480.1	552.8
-Fee Growth (%)	26.3	17.2	15.1	26.9	24.3	15.0	35.9	20.6	20.6	(31.4)	27.8	35.0	9.5	15.1	15.1
-Other Income (RMB b)	5.6	5.3	5.7	3.0	3.1	3.2	4.9	3.6	3.6	0.1	0.2	0.2	89.4	92.4	99.4
-Other Income Growth (%)	20.8	(5.5)	7.0	(4.3)	3.3	2.1	116.2	(27.6)	1.6	(667.4)	29.5	(0.0)	30.1	3.3	7.6
<b>Total Income (RMB b)</b>	<b>113.8</b>	<b>127.1</b>	<b>142.4</b>	<b>89.7</b>	<b>98.7</b>	<b>109.8</b>	<b>102.6</b>	<b>114.3</b>	<b>127.4</b>	<b>13.653</b>	<b>16.343</b>	<b>18.546</b>	<b>2,250.7</b>	<b>2,474.7</b>	<b>2,717.3</b>
Total Income Growth (%)	17.8	11.8	12.0	16.4	10.0	11.3	24.8	11.4	11.4	22.8	19.7	13.5	14.1	10.0	9.8
Non-II % of Total Income	22.3	22.4	22.7	15.9	17.3	17.5	24.8	24.8	26.3	4.1	4.4	4.9	22.5	23.1	24.0
<b>Operating Costs (RMB b)</b>	<b>48.7</b>	<b>55.5</b>	<b>63.1</b>	<b>35.0</b>	<b>39.8</b>	<b>45.3</b>	<b>42.7</b>	<b>49.5</b>	<b>56.5</b>	<b>6.075</b>	<b>7.019</b>	<b>7.912</b>	<b>894.1</b>	<b>995.5</b>	<b>1,112.9</b>
Costs Growth (%)	18.2	14.0	13.7	23.2	13.7	13.8	16.6	15.7	14.2	27.2	15.5	12.7	15.7	11.3	11.8
Costs % of Total Income	42.8	43.6	44.3	39.0	40.3	41.2	41.7	43.3	44.3	44.5	42.9	42.7	39.7	40.2	41.0
<b>Pre-Provision Profit (RMB b)</b>	<b>65.1</b>	<b>71.7</b>	<b>79.3</b>	<b>54.7</b>	<b>58.9</b>	<b>64.5</b>	<b>59.8</b>	<b>64.9</b>	<b>70.9</b>	<b>7.579</b>	<b>9.324</b>	<b>10.634</b>	<b>1,356.5</b>	<b>1,479.1</b>	<b>1,604.4</b>
PPP Growth (%)	17.5	10.1	10.7	12.4	7.6	9.6	31.4	8.4	9.3	19.5	23.0	14.0	13.1	9.0	8.5
PPOP/Avg Loans (Bps)	367.1	351.0	341.6	353.5	330.8	319.4	462.2	438.5	422.0	476.8	493.1	475.7	382.4	367.9	353.4
<b>Provision Charges (RMB b)</b>	<b>5.6</b>	<b>10.2</b>	<b>11.6</b>	<b>13.1</b>	<b>15.3</b>	<b>15.2</b>	<b>9.2</b>	<b>11.5</b>	<b>13.2</b>	<b>0.511</b>	<b>0.997</b>	<b>1.470</b>	<b>190.3</b>	<b>233.1</b>	<b>261.1</b>
- NPL Ratio (%)	0.6	0.6	0.7	0.7	0.8	0.9	0.8	0.8	0.9	1.0	1.0	1.1	1.0	1.1	1.1
- Provision Coverage (%)	355.1	360.6	368.9	288.2	303.4	309.0	315.1	309.2	316.8	350.6	322.5	316.3	272.0	271.2	270.3
- Provisions bps of Loans	31.5	50.0	50.0	84.6	86.0	75.0	71.0	77.6	78.7	32.2	52.7	65.8	53.8	57.9	57.5
Others (RMB b)	0.1	0.1	0.1	(0.0)	(0.0)	(0.0)	0.0	0.0	0.0	0.001	0.100	0.100	3.3	3.8	4.1
<b>Pre-tax Profit (RMB b)</b>	<b>59.6</b>	<b>61.5</b>	<b>67.8</b>	<b>41.6</b>	<b>43.6</b>	<b>49.4</b>	<b>50.7</b>	<b>53.4</b>	<b>57.7</b>	<b>7.068</b>	<b>8.428</b>	<b>9.264</b>	<b>1,169.5</b>	<b>1,249.7</b>	<b>1,347.4</b>
Tax (RMB b)	14.3	14.2	15.6	10.2	10.7	12.1	12.3	13.0	14.1	1.690	1.954	2.148	267.8	282.7	303.8
Minorities (RMB b)	0.0	0.0	0.0	0.4	0.4	0.4	0.7	0.9	1.0	0.016	0.019	0.021	7.9	8.0	8.9
<b>Net Profit (RMB b)</b>	<b>45.3</b>	<b>47.4</b>	<b>52.2</b>	<b>31.0</b>	<b>32.5</b>	<b>36.8</b>	<b>37.6</b>	<b>39.5</b>	<b>42.6</b>	<b>5.361</b>	<b>6.455</b>	<b>7.095</b>	<b>893.8</b>	<b>959.0</b>	<b>1,034.8</b>
FD EPS (RMB)	2.10	1.80	1.98	0.66	0.69	0.79	1.34	1.39	1.50	0.6	0.7	0.7	0.74	0.76	0.83
FD EPS Growth (%)	25.3	(14.2)	10.2	(6.7)	4.7	13.3	28.6	3.6	7.8	26.2	16.6	9.9	15.8	3.1	8.1
BVPS (RMB)	9.29	10.23	11.67	4.14	4.68	5.29	5.75	6.99	8.21	3.4	4.0	4.5	3.70	4.22	4.80
BVPS Growth (%)	21.5	10.1	14.1	13.8	13.0	13.0	18.5	21.6	17.5	14.5	15.3	13.1	16.8	14.1	13.7
RoRWA (%)	2.36	2.01	1.84	1.70	1.55	1.52	2.07	1.76	1.62	2.42	2.28	2.01	2.17	2.15	2.02
<b>Tier 1 ratio (%)</b>	<b>8.5</b>	<b>9.3</b>	<b>9.2</b>	<b>9.9</b>	<b>9.8</b>	<b>9.5</b>	<b>8.1</b>	<b>8.1</b>	<b>8.3</b>	<b>12.0</b>	<b>11.3</b>	<b>10.2</b>	<b>10.4</b>	<b>10.4</b>	<b>10.6</b>
Core Tier 1 ratio (%)	8.5	9.3	9.2	10.0	9.8	9.5	8.1	8.1	8.3	12.0	11.3	10.2	10.4	10.3	10.4
CAR (%)	12.1	12.2	11.9	13.4	12.2	11.6	10.8	9.8	9.9	12.9	11.8	10.7	13.3	12.9	12.9
<b>Loan to Deposit ratio (%)</b>	<b>75.2</b>	<b>75.5</b>	<b>75.6</b>	<b>73.7</b>	<b>74.5</b>	<b>74.4</b>	<b>71.9</b>	<b>72.3</b>	<b>72.6</b>	<b>58.9</b>	<b>59.8</b>	<b>60.5</b>	<b>67.6</b>	<b>68.2</b>	<b>68.5</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY13E FY14E</b>			<b>FY13E FY14E</b>			<b>FY13E FY14E</b>			<b>FY13E FY14E</b>			<b>FY13E FY14E</b>		
<b>EPS Base Case (RMB)</b>	1.80 1.98			0.69 0.79			1.39 1.50			0.67 0.74			0.76 0.83		
% Impact from															
<b>Loan Growth: +1% Chg</b>	1.4 1.4			1.7 1.6			1.2 1.2			1.1 1.2			1.2 1.2		
<b>NIM: +10bps Chg</b>	8.9 9.3			12.0 12.0			10.2 10.3			8.8 9.3			9.6 9.9		
<b>Cost Income %: +1% Chg</b>	3.3 3.4			3.8 3.7			3.6 3.7			3.1 3.2			3.2 3.2		
<b>Provisions / Loans: +10bps Chg</b>	5.3 5.5			6.8 6.8			4.7 4.9			3.6 3.9			5.1 5.4		
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>
Net interest income	2.85	2.68	2.60	2.64	2.59	2.54	2.84	2.61	2.62	3.36	3.34	3.25	2.55	2.47	2.39
Total operating income	3.67	3.46	3.37	3.13	3.13	3.08	3.77	3.47	3.56	3.51	3.49	3.42	3.29	3.21	3.15
Operating expenses	-1.57	-1.51	-1.49	-1.22	-1.26	-1.27	-1.57	-1.50	-1.58	-1.56	-1.50	-1.46	-1.31	-1.29	-1.29
Op profit before provisions	2.10	1.95	1.88	1.91	1.87	1.81	2.20	1.97	1.98	1.95	1.99	1.96	1.98	1.92	1.86
Provisions	-0.18	-0.28	-0.27	-0.46	-0.49	-0.43	-0.34	-0.35	-0.37	-0.13	-0.21	-0.27	-0.28	-0.30	-0.30
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00
Tax	-0.46	-0.38	-0.37	-0.36	-0.34	-0.34	-0.45	-0.40	-0.39	-0.43	-0.42	-0.40	-0.39	-0.37	-0.35
<b>Net profit (ROA)</b>	<b>1.46</b>	<b>1.29</b>	<b>1.24</b>	<b>1.08</b>	<b>1.03</b>	<b>1.03</b>	<b>1.38</b>	<b>1.20</b>	<b>1.19</b>	<b>1.38</b>	<b>1.38</b>	<b>1.31</b>	<b>1.31</b>	<b>1.24</b>	<b>1.20</b>
Leverage (x)	17.0	15.7	14.7	15.7	15.3	15.3	18.6	18.2	16.6	13.0	13.6	13.8	16.1	15.6	15.3
<b>ROE</b>	<b>24.78</b>	<b>20.18</b>	<b>18.11</b>	<b>17.06</b>	<b>15.76</b>	<b>15.80</b>	<b>25.67</b>	<b>21.86</b>	<b>19.75</b>	<b>17.94</b>	<b>18.80</b>	<b>18.10</b>	<b>21.01</b>	<b>19.35</b>	<b>18.27</b>

Source: Company Reports and Citi Research Estimates

# Hong Kong

## Major Beneficiary of NIM Recovery

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### Key Scenario Assumptions

- **CPI inflation jumps to c.6%** – doubling CPI inflation from current 4% to 8% could be worrisome; but is unlikely because government may intervene. We think a more reasonable guess would be c.6%. Wage inflation can be more substantial because market is close to full employment.
- **Interest rate increases c.2-3%** – HK rates largely follow US rates due to USD-peg. But serious inflation may trigger talk for a de-peg / re-peg. Real short term rate is currently negative c3.5% in HK. Similar to Singapore, a meaningful and realistic change would be to assume c.2-3% increase in rates. Indeed, the 2-3% potential rate increases were used by HKMA as stress test requirements for banks to originate new mortgage loans to retail customers.

### Implications for Hong Kong Banks

- **Direct positive impact on NIM** – upward re-pricing in loans will be offset by upward re-pricing in time deposits; but CASA and free fund contribution will increase; this can substantially enhance asset-liability spread. However, if time deposits are increased, deposit migration may also occur (recall that during 2007-08 rate cut cycle, c15ppt of deposits migrated from time to CASA in 12-18mth). Steepening of yield curve can benefit treasury-related interest income but exact extent hard to gauge and dependant on each bank's hedging strategy. Net net, with reference to historical cycles, we assume NIM to expand by c.40 for HSB/BoCHK (equivalent to about 2/3 of the drop during 2007-09), operating profit will then increase by c25%, and ROE enhances by 3.4/3.6ppt for HSB/BoCHK to 17.6%/17.4% by 2014E.
- **Limited impact on loan growth** – HK loan demand looks to be driven by the economic outlook, property market outlook, and offshore China-related demand more than local interest rates. As far as lending rate in HK remains lower than that in Mainland China, economic incentive persists to support growth in cross-border financing. Expect moderate negative impact on loan demand, in low single digit percentage point. Current base case estimate for 2014-15E loan growth remains close to nominal GDP at c7%.
- **Moderate impact on provision and credit costs** – every 10bp increase in credit costs hurts HSB earnings by c2% or BoCHK earnings by c3%. We see less risks in mortgage book (given low LTV of c30-40%, tightened offering requirements at inception) but relatively higher in corporate book. HK banks have strong credit costs history, HSB long term average since 2005 was 20bp, BoCHK average since 2005 was 11bp. As a base case, we assume increased interest rate to cause 10-20bp increase in credit costs in absence of a macro shock.
- **Operating costs** – staff costs account for c45-53% of total operating expenses. And since HK is in full employment, overall inflation may pass through quickly into rising wages. As a small offsetting factor, if increase in rates puts pressure on property prices then premise expense could show negative growth. Overall, large HK banks' cost-income ratios remained relatively low c.35% in 2012; every 10% of operating costs growth will only impact operating profit by 5%.

Figure 66. Hong Kong Banks: Long term sector relationship between rates and NIM

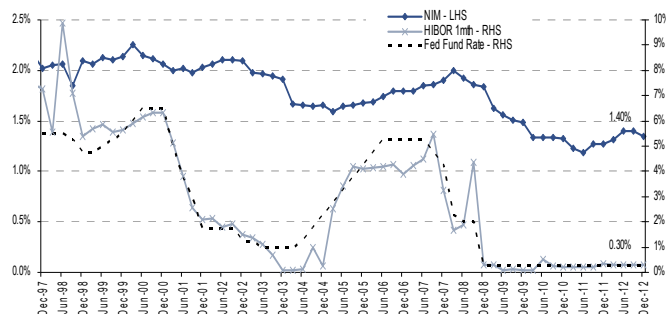
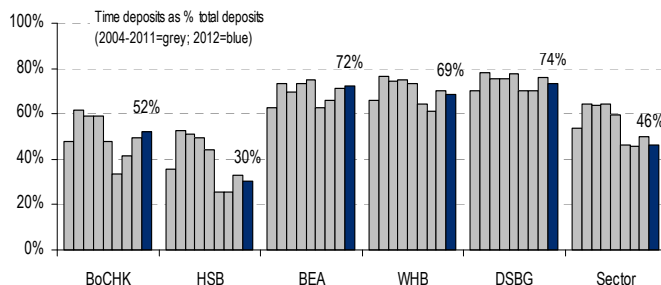


Figure 68. Hong Kong Banks: Both HSB and BoCHK have lower than peers' time deposit mix



Source: Citi Research

Figure 67. Hong Kong Banks: Long term NIM between HSB, BoCHK versus sector average

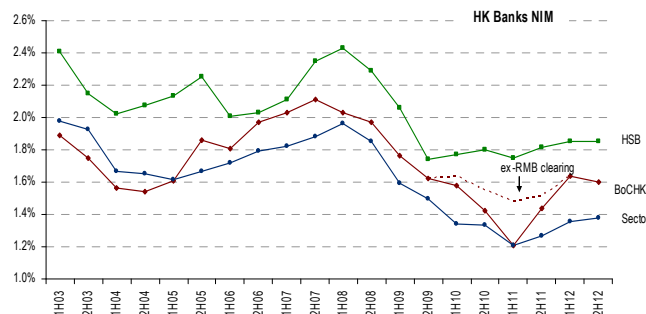
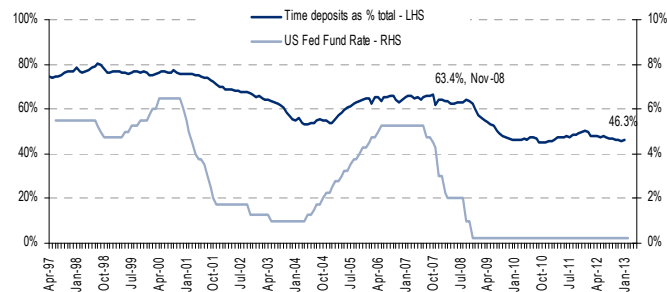


Figure 69. Hong Kong Banks: Deposit migration took 12-18mth during 2007-08 cycle from time to CASA



Source: Citi Research

## Overall Impact

ROEs likely to increase +2.0%pt to 17.9% in 2013E

With ROEs forecasted to be 16.0% in 2013E for covered companies, their reported ROEs could rise 2.0%pt to 17.9% in the above scenario for a 14% earnings uplift.

Figure 70. Hong Kong Banks – Overall impact

		Earnings impact	ROE impact
NIM	+40bp	25%	3.5%
Loan growth	Minimal	0%	0.0%
Non-interest income	Minimal	0%	0.0%
Cost/income	+10%	-5%	-0.7%
Credit cost	+20bp	-6%	-0.8%
<b>Net impact</b>		<b>14%</b>	<b>2.0%</b>

Source: Citi Research Estimates

Meaningful increase in earnings as NIM increase stronger than cost rise

Hong Kong banks will likely experience meaningful increase in earnings upon increase in inflation and interest rates. The positive effects on NIM will be stronger than the negatives from costs; unless rate increase is too unexpected and causes asset quality deterioration

HSB and BoCHK likely to benefit substantially

HSB may benefit more on NIM due to higher CASA deposit mix; but BoCHK has a higher proportional income from net interest income vs non-interest income.

Figure 71. Hong Kong – Economic Indicators

	2006	2007	2008	2009	2010	2011	2012F	2013F	2014F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	193.5	211.6	219.3	214.0	228.7	248.7	263.3	282.4	302.6
Nominal GDP, local currency bn	1,503	1,651	1,707	1,659	1,777	1,936	2,042	2,192	2,347
GDP per capita, US\$	28,031	30,497	31,488	30,594	32,429	34,971	36,697	39,059	41,515
Population, mn	6.9	6.9	7.0	7.0	7.1	7.1	7.2	7.2	7.3
Unemployment, % of labour force	4.8	4.1	3.4	5.2	4.4	3.5	3.3	3.3	3.2
<b>Economic Activity</b>									
Real GDP, % yoy	7.0	6.5	2.1	-2.5	6.8	4.9	1.5	3.0	3.4
Real investment growth % yoy	8.4	7.9	-0.3	1.0	11.1	2.2	5.2	3.4	1.6
Real consumption growth % yoy	5.4	7.9	1.9	1.0	5.9	8.2	3.2	3.4	2.0
private consumption growth % yoy	6.1	8.6	1.9	0.8	6.3	9.0	3.2	3.7	2.1
Real export growth, % yoy	9.4	8.3	2.5	-10.2	16.8	3.7	1.8	3.5	4.3
Real import growth, % yoy	9.1	9.1	2.2	-9.0	17.4	4.6	2.8	3.7	3.7
<b>Prices, Money &amp; Credit</b>									
CPI, % yoy	2.3	3.8	2.1	1.5	2.9	5.7	3.8	4.1	3.7
CPI, % avg	2.1	2.0	4.3	0.6	2.3	5.3	4.1	4.3	3.6
Nominal wages, % yoy	2.1	2.4	4.0	-1.9	2.4	9.9	4.7	3.5	4.5
Credit extension to private sector, % yoy	2.3	15.2	11.0	-2.1	20.9	12.5	7.0	8.0	8.0
1 month inter-bank rate, % eop	3.84	3.31	0.89	0.13	0.33	0.33	0.50	0.50	0.90
Long term yield, % eop	3.69	3.10	1.19	1.93	1.76	0.96	0.32	0.80	1.50
lc/US\$, eop	7.78	7.80	7.75	7.75	7.77	7.77	7.75	7.76	7.75
lc/US\$, avg	7.77	7.80	7.79	7.75	7.77	7.78	7.76	7.76	7.76
<b>Balance of Payments, US\$ bn</b>									
Current account	24.6	27.6	32.9	20.3	15.0	11.9	2.9	15.9	18.7
% of GDP	12.7	13.0	15.0	9.5	6.6	4.8	1.1	5.6	6.2
Trade balance	-17.9	-23.5	-25.9	-28.9	-43.1	-54.8	-61.6	-58.2	-58.3
Exports	316.8	344.7	363.0	318.7	390.4	429.2	443.1	463.2	497.2
Imports	334.7	368.2	388.9	347.6	433.5	484.0	504.7	521.4	555.5
Service balance	-9.3	-4.3	-2.7	3.4	10.1	16.3	22.8	23.0	23.4
Income balance	4.6	6.8	12.9	6.4	4.8	6.8	5.6	5.7	5.8
FDI, net	-15.5	-19.0	-8.9	-6.4	-10.5	-8.7	-9.0	-10.0	-11.0
International reserves	133.2	152.6	182.5	255.7	268.6	285.3	317.2	340.0	365.0
<b>Public Finances, % of GDP</b>									
Consolidated government balance	3.8	7.3	0.1	1.5	4.1	3.8	3.3	1.8	1.0
Consolidated gov primary balance	3.9	7.4	0.1	1.6	4.2	3.8	3.3	1.8	1.1
Public debt	1.4	1.2	1.0	0.7	0.6	0.6	0.5	1.0	1.3
of which Domestic	0.6	0.4	0.2	0.1	0.0	0.0	0.1	0.2	0.3
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1F	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	3.0	0.7	0.9	1.5	2.8	2.8	2.9	3.1	3.2
CPI, % yoy	6.2	4.9	3.7	3.8	3.8	3.6	4.3	4.2	4.0
1 month inter-bank rate, % eop	0.23	0.45	0.33	0.33	0.35	0.21	0.27	0.35	0.42
Long term yield, % eop	0.96	0.55	0.38	0.32	0.33	0.51	0.50	0.65	0.80
lc vs USD, eop	7.77	7.77	7.76	7.75	7.75	7.76	7.76	7.76	7.76

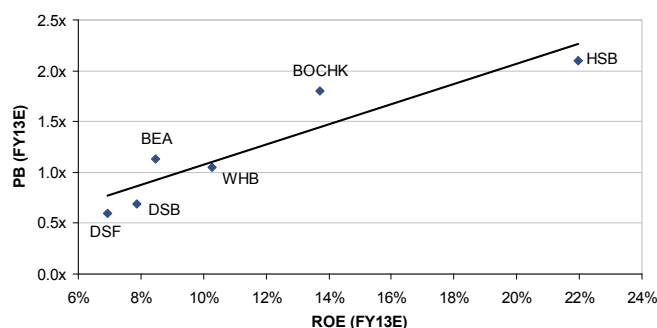
Source: CEIC Data Company Ltd, Fitch, IFS, Moody's and Citi Research Estimates

Figure 72. Hong Kong — Banks Valuation Snapshot

	Price	TP	ETR	Mkt Cap	Net Profit (HKD Bn)		EPS (HKD)		EPS Chg YoY%		P/E (x)		NBV/S (HKD)		P/NBV (x)		Net DPS (HKD)		Yield (%)		ROAE (%)	
Stock, Rating, Ric	HKD	HKD	(%)	(HKD b)	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
BOCHK, 1, 2388.HK	27.2	30.0	15.1	287.6	21.3	22.8	2.01	2.16	1.7	7.1	13.5	12.6	15.1	16.1	1.8	1.7	1.31	1.40	4.8	5.2	13.7	13.8
HSB, 2, 0011.HK	127.0	126.0	3.5	242.8	22.8	16.2	11.94	8.50	17.5	-28.8	10.6	14.9	60.4	63.4	2.10	2.00	5.40	5.50	4.3	4.3	22.0	13.7
BEA, 2, 0023.HK	30.7	33.0	10.9	69.3	5.0	5.3	2.23	2.34	-16.6	5.0	13.7	13.1	27.0	28.4	1.13	1.08	1.00	1.05	3.3	3.4	8.5	8.5
WHB, 1, 0302.HK	73.0	94.0	32.1	22.1	2.1	2.1	6.88	6.97	14.6	1.3	10.6	10.5	69.4	74.2	1.05	0.98	2.41	2.44	3.3	3.3	10.3	9.7
DSB, 1, 2356.HK	10.5	12.0	16.9	13.2	1.5	1.6	1.16	1.27	-7.1	9.3	9.0	8.2	15.1	16.1	0.69	0.65	0.32	0.35	3.1	3.3	7.9	8.1
DSF, 1, 0440.HK	37.3	46.0	26.6	11.0	1.3	1.4	4.27	4.57	1.7	6.9	8.8	8.3	63.1	66.4	0.60	0.57	1.17	1.26	3.1	3.3	6.9	7.1

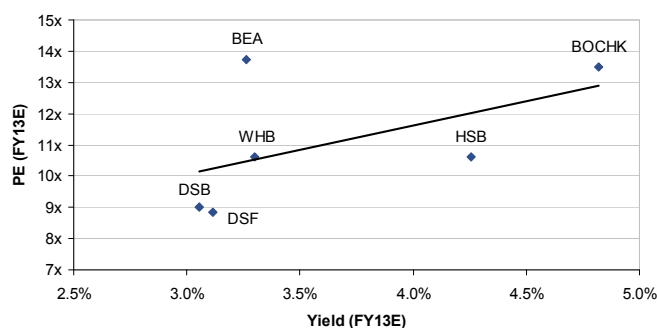
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 73. Price-Book vs. ROAE 2013E



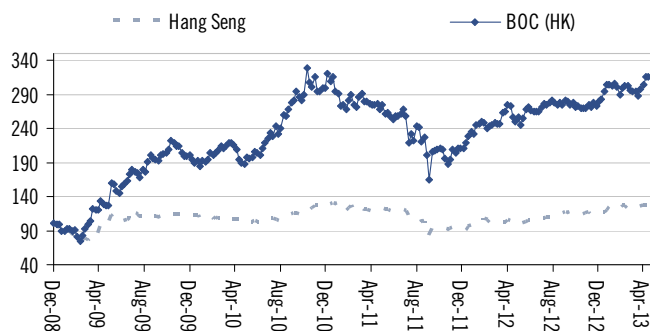
Source: Citi Research Estimates

Figure 74. P/E vs. Dividend Yield 2013E



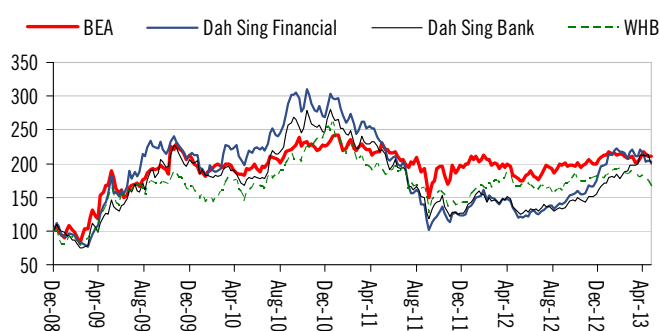
Source: Citi Research Estimates

Figure 75. Big-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 76. Mid-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

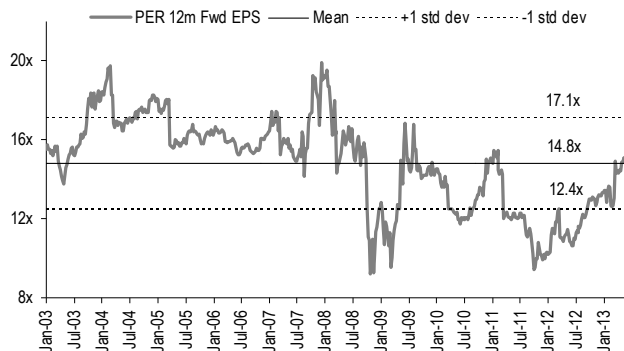
Figure 77. Hong Kong Banks – Current vs. Target Valuation and Historical P/B & P/E Ranges

	Current Valuation			Target Price (HKD)	Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (HKD)	CY13E P/B (x)	CY13E P/E (x)		CY13E P/B (x)	CY13E P/E (x)		-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
BOC Hong Kong (Hldgs)	27.2	1.8	13.5	30.0	2.0	14.9	1.5	1.9	2.3	10.5	12.9	15.3	
Hang Seng Bank	127.0	2.1	10.6	126.0	2.1	10.6	2.8	3.7	4.7	12.4	14.8	17.1	
Bank of East Asia	30.7	1.1	13.8	33.0	1.2	14.8	1.1	1.5	1.9	11.6	14.2	16.7	
Wing Hang Bank	73.0	1.1	10.6	94.0	1.4	13.7	1.2	1.7	2.3	10.4	12.5	14.7	
Dah Sing Banking Grp	10.5	0.7	9.1	12.0	0.8	10.3	0.7	1.2	1.6	7.7	9.3	10.9	
Dah Sing Financial Hldgs	37.3	0.6	8.7	46.0	0.7	10.8	0.7	1.1	1.6	7.6	10.2	12.8	

Note: Priced as on 23 May 2013; Source: Citi Research Estimates

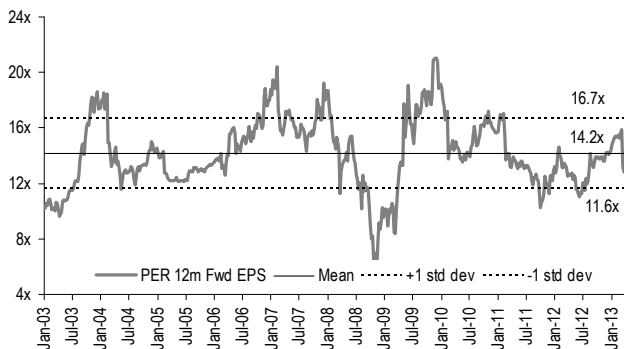
## Hong Kong Banks – Valuation Charts

Figure 78. HSB – 12M Forward Consensus P/E Chart



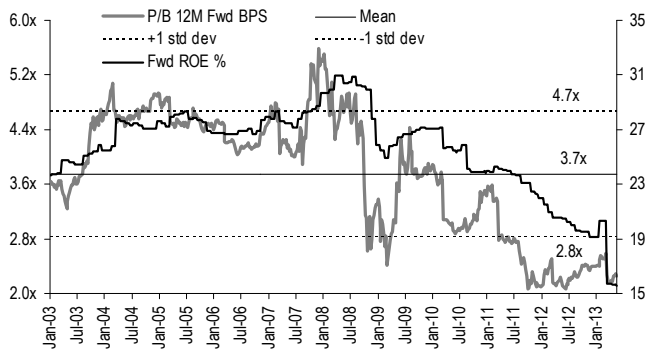
Source: DataStream, Citi Research

Figure 80. BEA – 12M Forward Consensus P/E Chart



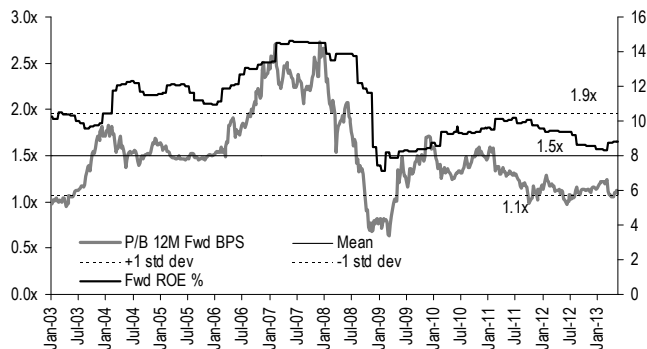
Source: DataStream, Citi Research

Figure 79. HSB – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

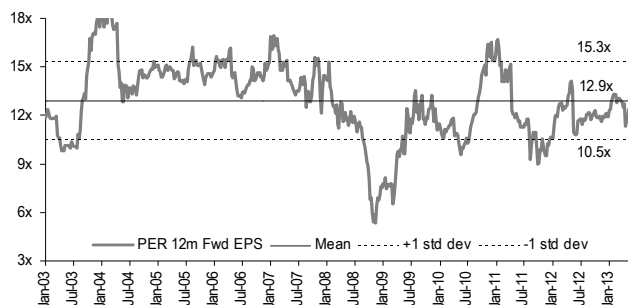
Figure 81. BEA – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

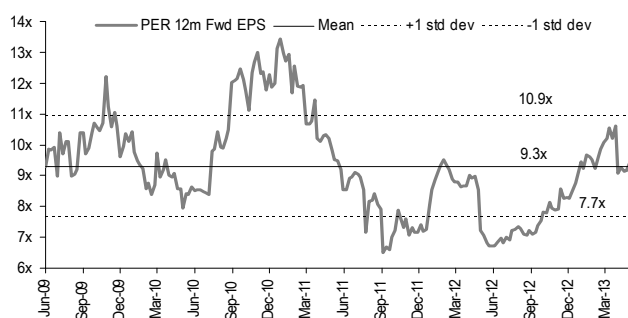
## Hong Kong Banks – Valuation Charts (Cont'd)

Figure 82. BoCHK – 12M Forward Consensus P/E Chart



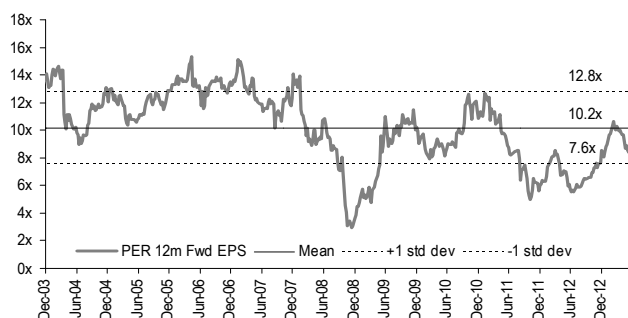
Source: DataStream, Citi Research

Figure 84. DSB – 12M Forward Consensus P/E Chart



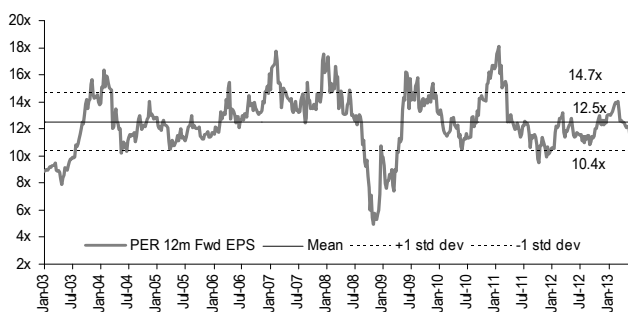
Source: DataStream, Citi Research

Figure 86. DSF – 12M Forward Consensus P/E Chart



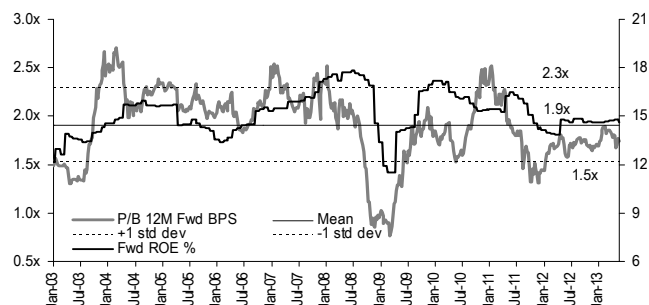
Source: DataStream, Citi Research

Figure 88. WHB – 12M Forward Consensus P/E Chart



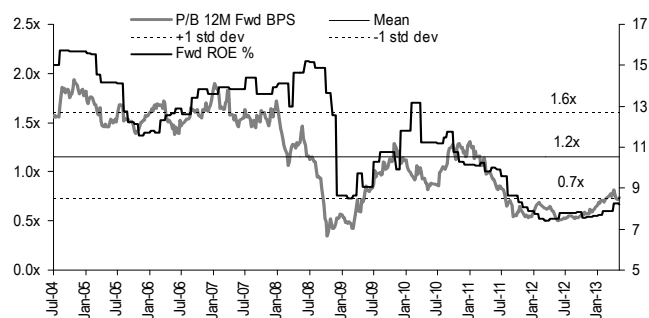
Source: DataStream, Citi Research

Figure 83. BoCHK – 12M Forward Consensus P/B Chart



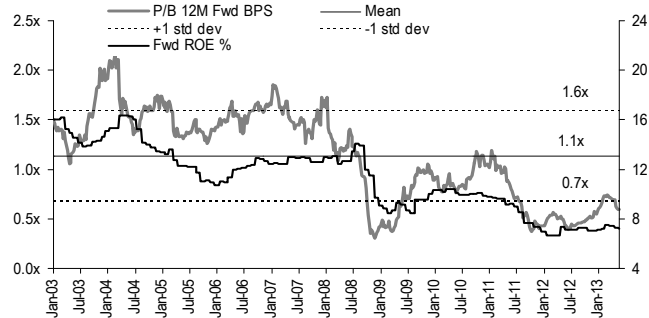
Source: DataStream, Citi Research

Figure 85. DSB – 12M Forward Consensus P/B Chart



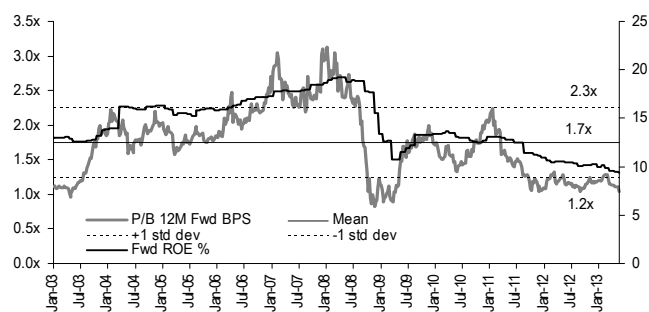
Source: DataStream, Citi Research

Figure 87. DSF – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 89. WHB – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 90. Hong Kong – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	BOCHK				HSB				BEA				WHB			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	11.3	7.9	7.8	7.9	11.5	8.0	7.8	7.9	11.2	7.6	8.1	na	3.1	10.1	6.1	6.0
Net Interest Margin (bps)	160	164	166	169	185	188	193	204	167	170	171	na	162	169	174	175
<b>Net Interest Income (HKD b)</b>	<b>24.7</b>	<b>27.6</b>	<b>29.6</b>	<b>32.0</b>	<b>16.9</b>	<b>18.9</b>	<b>20.9</b>	<b>23.4</b>	<b>9.7</b>	<b>10.7</b>	<b>11.5</b>	<b>na</b>	<b>3.0</b>	<b>3.3</b>	<b>3.6</b>	<b>3.8</b>
NII Growth (%)	12.4	11.8	7.3	7.9	7.7	11.4	10.5	12.4	5.0	10.5	7.3	na	2.9	10.2	9.1	7.1
<b>Non Interest Income (HKD b)</b>	<b>11.1</b>	<b>10.7</b>	<b>11.7</b>	<b>12.7</b>	<b>7.4</b>	<b>8.5</b>	<b>9.0</b>	<b>9.5</b>	<b>5.4</b>	<b>4.8</b>	<b>5.2</b>	<b>na</b>	<b>0.9</b>	<b>1.1</b>	<b>1.1</b>	<b>1.2</b>
Non-II Growth (%)	24.6	(2.9)	8.8	8.4	8.4	14.4	5.4	5.5	56.0	(10.0)	7.0	na	2.5	13.4	7.3	7.0
-Fee Income (HKD b)	7.9	9.0	9.8	10.7	5.1	5.6	6.0	6.4	3.4	3.7	4.0	na	0.6	0.7	0.8	0.8
-Fee Growth (%)	0.9	13.4	9.7	9.1	5.2	9.8	7.4	7.4	10.8	9.6	8.0	na	(7.6)	11.8	8.1	8.1
-Other Income (HKD b)	3.1	1.8	1.8	1.9	2.3	2.9	3.0	3.0	2.0	1.1	1.2	na	0.3	0.4	0.4	0.4
-Other Income Growth (%)	204.3	(44.1)	4.5	4.8	16.0	24.4	1.7	1.7	399.0	(43.0)	3.8	na	32.2	16.8	5.8	4.7
<b>Total Income (HKD b)</b>	<b>35.8</b>	<b>38.4</b>	<b>41.3</b>	<b>44.6</b>	<b>24.4</b>	<b>27.4</b>	<b>29.8</b>	<b>32.9</b>	<b>15.1</b>	<b>15.6</b>	<b>16.7</b>	<b>na</b>	<b>3.9</b>	<b>4.3</b>	<b>4.7</b>	<b>5.0</b>
Total Income Growth (%)	15.9	7.2	7.7	8.0	7.9	12.3	8.9	10.3	18.8	3.2	7.2	na	2.8	11.0	8.7	7.0
Non-II % of Total Income	30.9	28.0	28.2	28.3	30.5	31.1	30.1	28.8	35.6	31.1	31.0	na	24.1	24.6	24.3	24.3
<b>Operating Costs (HKD b)</b>	<b>11.4</b>	<b>12.3</b>	<b>13.1</b>	<b>14.1</b>	<b>8.4</b>	<b>9.0</b>	<b>9.6</b>	<b>10.3</b>	<b>8.7</b>	<b>9.4</b>	<b>10.0</b>	<b>na</b>	<b>1.9</b>	<b>2.0</b>	<b>2.1</b>	<b>2.2</b>
Costs Growth (%)	7.0	7.6	7.1	7.1	6.2	7.1	7.2	7.2	9.2	7.6	6.6	na	6.8	5.8	5.9	5.9
Costs % of Total Income	31.9	32.0	31.8	31.5	34.4	32.8	32.3	31.4	57.7	60.2	59.8	na	47.6	45.4	44.2	43.7
<b>Pre-Provision Profit (HKD b)</b>	<b>24.4</b>	<b>26.1</b>	<b>28.2</b>	<b>30.6</b>	<b>16.0</b>	<b>18.4</b>	<b>20.2</b>	<b>22.6</b>	<b>6.4</b>	<b>6.2</b>	<b>6.7</b>	<b>na</b>	<b>2.0</b>	<b>2.4</b>	<b>2.6</b>	<b>2.8</b>
PPP Growth (%)	20.7	7.1	8.1	8.5	8.8	15.0	9.8	11.8	35.2	(2.8)	8.2	na	(0.6)	15.7	11.0	7.9
PPOP/Avg Loans (Bps)	329.7	322.5	323.2	325.0	313.6	328.9	334.7	346.8	191.7	170.4	170.9	na	181.5	196.9	202.3	205.9
<b>Provision Charges (HKD b)</b>	<b>0.9</b>	<b>0.8</b>	<b>1.1</b>	<b>1.7</b>	<b>0.4</b>	<b>1.1</b>	<b>1.3</b>	<b>1.3</b>	<b>0.3</b>	<b>0.5</b>	<b>0.6</b>	<b>na</b>	<b>0.2</b>	<b>0.3</b>	<b>0.2</b>	<b>0.2</b>
- NPL Ratio (%)	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.5	na	0.4	0.6	0.6	0.6
- Provision Coverage (%)	180.4	154.8	137.4	137.2	104.8	102.6	101.0	96.0	80.8	73.8	69.9	na	66.2	70.9	73.3	78.2
- Provisions bps of Loans	11.6	10.5	13.0	17.8	7.6	19.2	20.9	20.6	8.0	14.2	15.9	na	21.0	21.0	17.8	13.7
Others (HKD b)	2.0	0.9	0.9	0.9	6.5	8.8	0.5	0.5	1.4	1.2	1.3	na	0.3	0.4	0.1	0.1
<b>Pre-tax Profit (HKD b)</b>	<b>25.5</b>	<b>26.1</b>	<b>28.0</b>	<b>29.8</b>	<b>22.1</b>	<b>26.1</b>	<b>19.5</b>	<b>21.7</b>	<b>7.6</b>	<b>6.9</b>	<b>7.3</b>	<b>na</b>	<b>2.1</b>	<b>2.5</b>	<b>2.5</b>	<b>2.8</b>
Tax (HKD b)	4.0	4.2	4.5	4.8	2.7	3.3	3.2	3.6	1.4	1.5	1.6	na	0.3	0.4	0.4	0.4
Minorities (HKD b)	0.6	0.6	0.7	0.7	0.0	0.0	0.0	0.0	0.1	0.1	0.1	na	0.0	0.0	0.0	0.0
<b>Net Profit (HKD b)</b>	<b>20.9</b>	<b>21.3</b>	<b>22.8</b>	<b>24.3</b>	<b>19.4</b>	<b>22.8</b>	<b>16.2</b>	<b>18.1</b>	<b>6.1</b>	<b>5.3</b>	<b>5.6</b>	<b>na</b>	<b>1.8</b>	<b>2.1</b>	<b>2.1</b>	<b>2.3</b>
FD EPS (HKD)	1.98	2.01	2.16	2.30	10.16	11.94	8.50	9.48	2.67	2.23	2.34	na	6.00	6.88	6.97	7.68
FD EPS Growth (%)	2.4	1.7	7.1	6.7	16.5	17.5	(28.8)	11.6	37.6	(16.6)	5.0	na	(17.0)	14.6	1.3	10.1
BVPS (HKD)	14.28	15.10	16.06	17.07	48.29	60.39	63.44	67.43	25.66	26.98	28.36	na	64.65	69.40	74.21	79.49
BVPS Growth (%)	16.3	5.8	6.3	6.3	15.9	25.1	5.0	6.3	11.0	5.1	5.1	na	14.3	7.3	6.9	7.1
RoRWA (%)	2.99	2.85	2.86	2.83	6.07	6.22	3.92	4.04	1.58	1.31	1.30	na	1.59	1.69	1.60	1.66
<b>Tier 1 ratio (%)</b>	<b>12.3</b>	<b>12.5</b>	<b>12.5</b>	<b>12.5</b>	<b>12.2</b>	<b>11.1</b>	<b>10.9</b>	<b>10.9</b>	<b>10.7</b>	<b>10.9</b>	<b>11.2</b>	<b>na</b>	<b>11.1</b>	<b>11.4</b>	<b>11.7</b>	<b>12.1</b>
Core Tier 1 ratio (%)	12.3	12.5	12.5	12.5	12.2	11.1	10.9	10.9	9.7	10.0	10.3	na	11.1	11.4	11.7	12.1
CAR (%)	16.8	16.9	16.6	16.4	14.0	12.4	12.0	12.0	14.3	14.4	14.5	na	15.7	16.8	16.9	17.1
<b>Loan to Deposit ratio (%)</b>	<b>63.3</b>	<b>64.1</b>	<b>65.2</b>	<b>66.4</b>	<b>66.6</b>	<b>67.5</b>	<b>68.7</b>	<b>69.9</b>	<b>70.3</b>	<b>69.6</b>	<b>70.4</b>	<b>na</b>	<b>68.7</b>	<b>71.4</b>	<b>71.5</b>	<b>71.5</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY13E FY14E FY15E</b>				<b>FY13E FY14E FY15E</b>				<b>FY13E FY14E FY15E</b>				<b>FY13E FY14E FY15E</b>			
<b>EPS Base Case (HKD)</b>	2.0 2.2 2.3				11.9 8.5 9.5				2.2 2.3 na				6.9 7.0 7.7			
% Impact from																
<b>Loan Growth: +1% Chg</b>	0.7 0.7 0.7				0.5 0.8 0.8				1.4 1.4 na				1.1 1.2 1.2			
<b>NIM: +10bps Chg</b>	9.2 9.1 9.0				5.0 7.7 7.4				14.4 14.7 na				10.7 11.2 10.8			
<b>Cost Income %: +1% Chg</b>	2.1 2.1 2.1				1.4 2.1 2.1				3.6 3.6 na				2.4 2.6 2.5			
<b>Provisions / Loans: +10bps Chg</b>	4.4 4.4 4.5				2.8 4.3 4.2				8.3 8.5 na				6.7 7.1 6.8			
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A FY13E FY14E FY15E</b>				<b>FY12A FY13E FY14E FY15E</b>				<b>FY12A FY13E FY14E FY15E</b>				<b>FY12A FY13E FY14E FY15E</b>			
Net interest income	1.38	1.47	1.49	1.52	1.65	1.69	1.75	1.86	1.49	1.50	1.50	na	1.54	1.60	1.65	1.67
Total operating income	2.00	2.03	2.07	2.12	2.38	2.45	2.50	2.61	2.32	2.17	2.18	na	2.02	2.13	2.18	2.20
Operating expenses	-0.64	-0.65	-0.66	-0.67	-0.82	-0.80	-0.81	-0.82	-1.34	-1.31	-1.30	na	-0.96	-0.96	-0.96	-0.96
Op profit before provisions	1.36	1.38	1.41	1.45	1.56	1.64	1.69	1.79	0.98	0.86	0.88	na	1.06	1.16	1.22	1.24
Provisions	-0.05	-0.05	-0.06	-0.08	-0.04	-0.10	-0.11	-0.11	-0.04	-0.07	-0.08	na	-0.12	-0.12	-0.11	-0.08
Non-recurring items	0.11	0.05	0.04	0.04	0.63	0.79	0.04	0.04	0.22	0.17	0.16	na	0.16	0.18	0.06	0.06
Tax	-0.22	-0.22	-0.22	-0.23	-0.26	-0.29	-0.27	-0.28	-0.22	-0.21	-0.21	na	-0.17	-0.20	-0.19	-0.20
<b>Net profit (ROA)</b>	<b>1.17</b>	<b>1.13</b>	<b>1.14</b>	<b>1.15</b>	<b>1.89</b>	<b>2.04</b>	<b>1.36</b>	<b>1.44</b>	<b>0.93</b>	<b>0.74</b>	<b>0.73</b>	<b>na</b>	<b>0.94</b>	<b>1.03</b>	<b>0.98</b>	<b>1.02</b>
Leverage (x)	12.7	12.1	12.1	12.0	11.9	10.8	10.1	10.1	12.4	12.2	12.3	na	10.6	10.0	9.9	9.8
<b>ROE</b>	<b>14.91</b>	<b>13.71</b>	<b>13.84</b>	<b>13.89</b>	<b>22.59</b>	<b>21.98</b>	<b>13.73</b>	<b>14.49</b>	<b>11.56</b>	<b>9.03</b>	<b>8.98</b>	<b>na</b>	<b>9.89</b>	<b>10.28</b>	<b>9.72</b>	<b>10.00</b>

Source: Company Reports and Citi Research Estimates

Figure 91. Hong Kong – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	DSF				DSB				Sector (5 Banks)				
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	
Loan Growth (%)	6.6	8.0	6.4	6.5	6.6	8.0	6.4	6.5	10.2	8.1	7.5	7.6	
Net Interest Margin (bps)	161	169	170	171	154	164	165	163	170	174	178	184	
Net Interest Income (HKD b)	2.5	2.8	3.0	3.2	2.2	2.5	2.7	2.8	49.3	55.1	59.7	65.2	
NII Growth (%)	14.1	13.2	6.9	5.9	14.9	13.0	6.5	4.4	10.3	11.7	8.5	9.1	
Non Interest Income (HKD b)	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.9	21.0	21.9	23.5	25.1	
Non-II Growth (%)	36.2	3.1	1.6	4.1	29.0	2.2	3.9	7.6	17.8	4.4	7.0	7.1	
-Fee Income (HKD b)	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.7	14.6	16.4	17.8	19.3	
-Fee Growth (%)	23.4	11.7	9.4	9.6	27.3	10.4	8.5	8.7	3.4	11.9	8.8	8.5	
-Other Income (HKD b)	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	6.4	5.6	5.7	5.8	
-Other Income Growth (%)	56.9	(7.8)	(10.4)	(6.3)	33.1	(17.1)	(10.7)	3.3	73.1	(13.0)	1.7	2.5	
Total Income (HKD b)	3.3	3.7	3.9	4.1	3.0	3.3	3.5	3.6	70.3	77.0	83.2	90.3	
Total Income Growth (%)	19.0	10.7	5.7	5.5	18.2	10.3	5.9	5.1	12.5	9.5	8.0	8.6	
Non-II % of Total Income	25.3	23.5	22.6	22.3	25.5	23.7	23.2	23.8	29.9	28.5	28.2	27.8	
Operating Costs (HKD b)	2.1	2.3	2.5	2.7	1.7	2.0	2.2	2.4	25.4	27.5	29.5	31.7	
Costs Growth (%)	20.1	11.4	8.4	8.8	26.8	20.4	8.6	9.0	8.8	8.5	7.2	7.3	
Costs % of Total Income	61.6	62.0	63.6	65.6	57.4	62.7	64.3	66.7	36.1	35.8	35.5	35.1	
Pre-Provision Profit (HKD b)	1.3	1.4	1.4	1.4	1.3	1.2	1.2	1.2	44.9	49.5	53.7	58.6	
PPP Growth (%)	17.2	9.5	1.2	(0.2)	8.2	(3.4)	1.3	(1.9)	14.6	10.1	8.5	9.2	
PPOP/Avg Loans (Bps)	153.5	156.7	147.9	138.7	151.0	135.9	128.4	118.4	294.0	296.7	298.6	303.1	
Provision Charges (HKD b)	0.1	0.3	0.3	0.3	0.1	0.3	0.3	0.3	1.8	2.7	3.2	3.8	
- NPL Ratio (%)	0.3	0.5	0.5	0.6	0.3	0.5	0.5	0.6	0.3	0.3	0.4	0.4	
- Provision Coverage (%)	87.2	83.9	87.0	90.3	87.2	83.9	87.0	90.3	132.5	119.6	112.9	113.0	
- Provisions bps of Loans	17.2	31.2	29.1	28.6	17.2	31.2	29.1	28.6	10.5	15.4	17.2	19.3	
Others (HKD b)	0.6	0.7	0.8	0.9	0.6	0.6	0.8	0.9	10.1	11.4	3.1	3.3	
Pre-tax Profit (HKD b)	1.8	1.8	2.0	2.1	1.7	1.6	1.7	1.8	53.2	58.1	53.6	58.1	
Tax (HKD b)	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	7.3	8.2	8.4	9.1	
Minorities (HKD b)	0.4	0.4	0.4	0.4	(0.0)	(0.0)	(0.0)	(0.0)	1.0	1.0	1.1	1.1	
Net Profit (HKD b)	1.2	1.3	1.4	1.4	1.5	1.5	1.6	1.7	44.9	48.9	44.1	47.9	
FD EPS (HKD)	4.20	4.27	4.57	4.85	1.25	1.16	1.27	1.32	5.61	6.41	5.04	5.56	
FD EPS Growth (%)	20.4	1.7	6.9	6.3	19.3	(7.1)	9.3	4.2	12.0	14.3	(21.3)	10.3	
BVPS (HKD)	60.00	63.10	66.41	69.92	14.30	15.14	16.06	17.02	31.42	37.19	39.22	41.70	
BVPS Growth (%)	15.1	5.2	5.2	5.3	17.1	5.9	6.1	6.0	15.9	18.4	5.5	6.3	
RoRWA (%)	1.29	1.19	1.19	1.20	1.62	1.37	1.40	1.38	3.25	3.38	2.81	2.84	
Tier 1 ratio (%)	10.3	10.2	10.4	10.4	10.3	10.2	10.4	10.4	12.1	11.8	11.7	11.7	
Core Tier 1 ratio (%)	10.3	10.2	10.4	10.4	10.3	10.2	10.4	10.4	11.9	11.7	11.7	11.7	
CAR (%)	14.9	14.6	14.7	14.6	14.9	14.6	14.7	14.6	15.5	14.9	14.6	14.5	
Loan to Deposit ratio (%)	74.0	74.1	74.4	74.8	73.1	74.1	74.4	74.8	65.8	66.7	67.7	68.7	
EPS SENSITIVITY STUDY		FY13E	FY14E	FY15E	FY13E	FY14E	FY15E	FY13E	FY14E	FY15E			
EPS Base Case (HKD)		4.3	4.6	4.9		1.2	1.3	1.3		6.4	5.0	5.6	
% Impact from													
Loan Growth: +1% Chg		1.3	1.3	1.3		1.0	1.0	1.0		0.7	0.8	0.8	
NIM: +10bps Chg		14.6	14.4	14.3		11.2	10.8	10.9		7.4	8.8	8.6	
Cost Income %: +1% Chg		3.2	3.2	3.1		2.4	2.3	2.3		1.8	2.2	2.2	
Provisions / Loans: +10bps Chg		7.8	7.8	7.8		6.6	6.5	6.6		3.9	4.7	4.7	
ROA/ROE DECOMP (%)		FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
Net interest income		1.51	1.58	1.60	1.59	1.44	1.52	1.52	1.50	1.48	1.55	1.59	1.64
Total operating income		2.02	2.07	2.06	2.05	1.94	1.99	1.98	1.97	2.12	2.17	2.21	2.27
Operating expenses		-1.24	-1.28	-1.31	-1.35	-1.11	-1.25	-1.27	-1.31	-0.76	-0.78	-0.78	-0.80
Op profit before provisions		0.78	0.79	0.75	0.71	0.83	0.74	0.71	0.66	1.35	1.39	1.43	1.47
Provisions		-0.09	-0.16	-0.15	-0.15	-0.09	-0.17	-0.16	-0.16	-0.05	-0.08	-0.08	-0.10
Non-recurring items		0.38	0.40	0.43	0.47	0.38	0.39	0.43	0.46	0.30	0.32	0.08	0.08
Tax		-0.11	-0.11	-0.10	-0.10	-0.10	-0.07	-0.07	-0.06	-0.22	-0.23	-0.22	-0.23
Net profit (ROA)		0.75	0.71	0.72	0.72	1.01	0.89	0.91	0.90	1.35	1.38	1.17	1.20
Leverage (x)		10.0	9.8	9.8	9.9	9.3	8.9	8.9	8.9	12.0	11.2	11.0	10.9
ROE		7.48	6.94	7.05	7.12	9.41	7.88	8.13	7.99	16.19	15.47	12.84	13.14

Note: Sector averages do not include BEA due to lack of comparable data for all the time periods

Source: Company Reports and Citi Research Estimates

# India

## Impact Modest – Already in an Easing Cycle

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### Key Scenario Assumptions

**India is currently in a falling inflation and interest rate cycle** – a mix of domestic demand pressures easing off, and global commodity prices falling. While India will remain exposed to a rise in US inflation and yields, its impact on India macro should be relatively modest. At most, it would arrest pace of India's likely easing. We believe a material risk to India will lie if there is a material outflow in equity capital flows – which could create pressures above what we are factoring in below

- **WPI inflation climbs to 6%** – We assume WPI inflation of 6%, up from the current estimate of 5.5-6% for FY14E. This higher inflation assumption is in line with India's last cycle of sticky and high inflation (Mar'10-Nov'11).
- **One-year deposit rates rise to c9- 9.5%** – India's deposit rates have remained relatively high for some time now – hovering between 8.5%-9.5% for over 2 years. Despite a moderation in system credit off-take (down from 20's to mid-teens now) the deposit rates are falling only modestly, driven by sluggish deposit growth (11-14%, consistently lagging loan growth). One year deposit rate (currently 8.5%) could rise to c9 – 9.5%, in line with recent peaks (though no further, as loan growth is not supportive). Coupled with a high inflation, real deposit rates would be positive.
- **One-year lending rates increase c25bps** – Currently banks' base lending rates vary from 9.7-10.5%, and may rise by c0-25bps. However, given the prevailing high rate environment and slow macro, we believe asset re-pricing (up) would be slower/smaller than liabilities – which could put NIMs at some risk.
- **Short and long term market interest rates increase 100-150bps to c8.5-9%** – Short term interest rate could climb 150bps to c8.5-9%, as was seen in the past year, when liquidity was short. Currently is c7.5%.

### Implications for India Banks

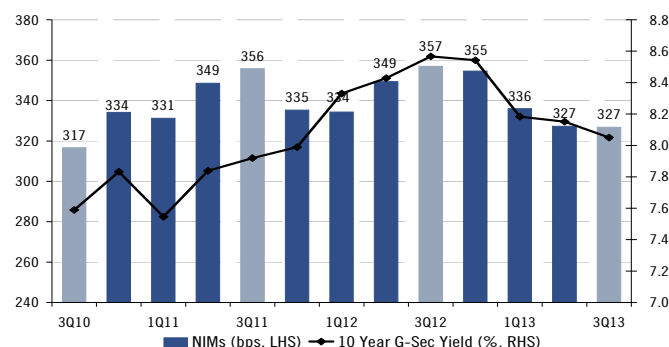
- **NIM swing likely to be smaller** – Higher lending rates are typically NIM positive for India Banks near-term, and this played out in the last fiscal. However, with some liquidity crunch – a liquidity squeeze could hurt NIMs a bit albeit in a marginal manner. A more gradual rise would lead to some level of margin expansion, consistent with historical margin trends in India, when rates rise. **Every 10bps increase in NIM adds around 3-4% to earnings for Private Banks and 6-9% for Government Banks** (lower non-interest income share).
- **Credit growth tightens 2-3% from current levels** – Higher inflation/ interest rates will effectively tighten credit. While system loan growth in India is already sluggish (15%), there is potential for it to slip further if rates climb from here. We see potential downside of another 2-3% from current levels – if US rates rise, and there is more pronounced economic uncertainty, which plays through to India too.
- **Credit costs likely to increase 25-50bps for vulnerable players** – India has been witness to a tightening credit cycle over the last fiscal, and coupled with higher rates, this has played out in higher NPLs as well as higher credit costs, which are only just stabilizing. A further rate/inflation tightening would yield incremental pressure on asset quality and credit costs, exacerbated by the slower macro. While we are already seeing higher levels of stress in the Indian banking system (on account of recent high inflation rates, slow macro); and asset

deterioration has not yet peaked, the pressures could rise further, particularly for asset heavy portfolios, though mortgage players should be relatively safer.

**Credit costs could increase by 25-50bps** for some of the more vulnerable players. Every 10bps rise in credit cost lowers earnings by 2.5%, and so a 25bps rise would **lower earnings by 6%**.

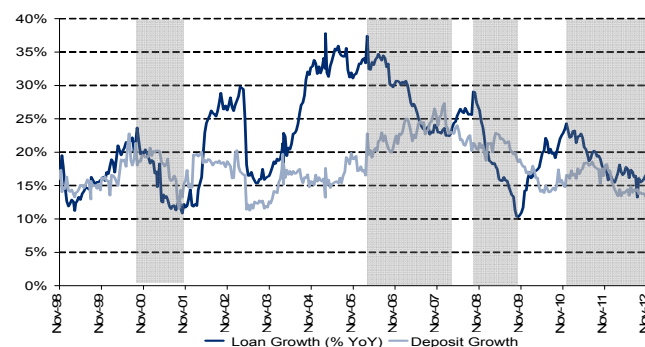
- **Nominal upwards pressure on costs** – Cost/income ratios for most Indian banks have been coming down, partly on a mature distribution network and on technological efficiencies. We see higher rates/ inflation exert a nominal upward pressure on costs, but given a positive bias for NIMs from higher rates, we see some cushion. Every 1%pt rise in cost/income ratio will lower earnings by c1%.

Figure 92. India Banks – NIM (bps) and 10-Year G-Sec Yield (% YoY)



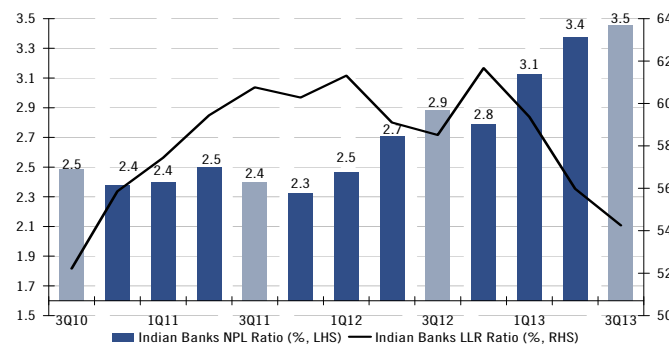
Source: Company Reports and Citi Research

Figure 93. India Banks: Loan and Deposit Growth (% YoY)



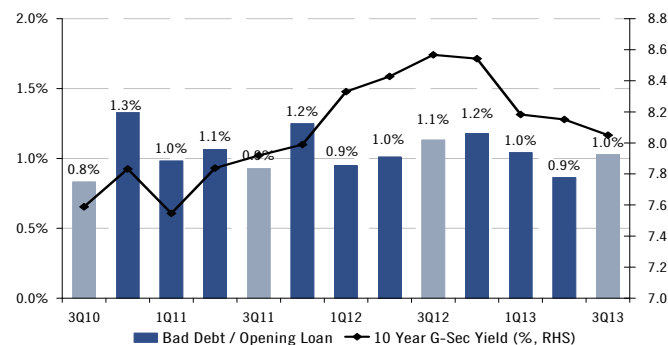
Source: Citi Research, RBI

Figure 94. India Banks – Gross NPLs and Loan Loss Ratio (% YoY)



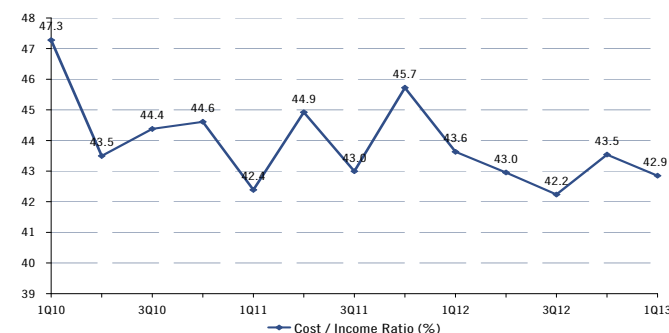
Source: Company Reports and Citi Research

Figure 95. India Banks – Credit costs (% annualized), 10 Yr G-Sec Yields



Source: Company Reports and Citi Research

Figure 96. India Banks – Cost Income Ratio (%)



Source: Company Reports and Citi Research

## Overall Impact

With ROEs forecasted to be 18.0% in FY14E for the companies in our coverage, we expect reported ROEs to decline by 1.4%pt to 16.6% under the above scenario for a 4% decline in earnings.

Figure 97. India Banks – Overall impact

		Earnings impact	ROE impact
NIM	+5/10bps	4%	1.2%
Loan growth	-2/3%	-1%	-0.4%
Non-interest income	Marginal	0%	0.0%
Cost/income	Nominal	-1%	-0.4%
Credit cost	+ 25 bps	-6%	-1.8%
<b>Net impact</b>		<b>-4.0%</b>	<b>-1.4%</b>

Source: Citi Research Estimates

**HDFC Bank relatively immune to duration value erosion**

**HDFC Bank most positively leveraged** – Due to its high CASA share (slightly offset by moderately high fixed asset loans) and low duration bond portfolio. As a result, the stock is somewhat insensitive to duration value erosion

**YES Bank most negatively impacted** – Due to its high dependence on bulky deposits (more rate sensitive) and lower CASA ratio.

Figure 98. India – Economic Indicators

	FY07	FY08	FY09	FY10	FY11	FY12	FY13F	FY14F	FY15F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	950.2	1,240.6	1,223.9	1,366.6	1,710.2	1,865.9	1,857.1	2,054.9	2,342.5
Nominal GDP, local currency bn	42,947	49,871	56,301	64,778	77,953	89,749	100,281	113,017	128,839
GDP per capita, US\$	847	1,090	1,061	1,168	1,442	1,552	1,522	1,659	1,864
Population, mn	1,122.0	1,138.0	1,154.0	1,170.0	1,186.0	1,202.0	1,220.0	1,238.3	1,256.9
<b>Economic Activity</b>									
Real GDP, % yoy	9.6	9.3	6.7	8.6	9.3	6.2	5.0	5.7	6.4
Real investment growth % yoy	13.4	18.1	-5.2	16.7	16.2	1.5	3.9	4.2	4.5
Real consumption growth % yoy	7.9	9.3	7.6	8.2	8.1	8.1	4.1	5.7	6.6
private consumption growth % yoy	8.7	9.2	7.1	7.1	8.6	8.0	4.1	5.5	6.7
Real export growth, % yoy	19.9	5.9	15.2	-4.7	19.7	15.3	5.1	10.0	11.0
Real import growth, % yoy	21.3	10.2	23.0	-2.1	15.8	21.5	5.7	12.0	9.5
<b>Prices, Money &amp; Credit</b>									
WPI, % yoy	6.8	7.7	1.5	10.6	9.7	7.7	6.0	5.5	5.0
WPI, % avg	6.5	4.8	8.1	3.8	9.6	8.9	7.3	5.5	5.0
Credit extension to private sector, % yoy	28.5	23.0	19.0	16.0	17.0	17.5	17.5	17.5	17.5
Policy interest rate, % eop	7.50	7.75	5.00	5.00	6.75	8.50	7.75	6.75	6.75
1 month inter-bank rate, % eop	9.43	8.00	5.68	4.49	9.54	10.90	8.50	8.50	8.50
Long term yield, % eop	7.98	7.96	7.01	7.83	7.99	8.25	8.25	8.25	8.25
lc/US\$, eop	44.1	39.4	48.6	46.4	44.7	53.0	55.0	56.1	55.8
lc/US\$, avg	45.2	41.2	43.4	48.3	45.7	46.6	53.4	55.1	56.1
<b>Balance of Payments, US\$ bn</b>									
Current account	-9.6	-15.7	-27.9	-38.2	-48.1	-78.2	-95.2	-84.9	-76.5
% of GDP	-1.0	-1.3	-2.3	-2.8	-2.8	-4.2	-5.1	-4.1	-3.3
Trade balance	-61.8	-91.5	-119.5	-118.2	-127.3	-189.8	-203.4	-193.4	-194.1
Exports	128.9	166.2	189.0	182.4	256.2	309.8	303.6	333.9	380.7
Imports	190.7	257.6	308.5	300.6	383.5	499.5	507.0	527.3	574.8
Service balance	29.5	38.9	53.9	35.8	44.1	64.1	62.8	66.1	73.2
Income balance	-7.3	-5.1	-7.1	-8.0	-18.0	-16.0	-20.0	-24.0	-24.0
FDI, net	7.7	15.9	19.8	18.0	11.8	22.1	23.0	28.0	30.0
International reserves	191.9	299.1	241.6	252.8	273.7	260.9	254.9	246.5	234.1
Total Amortisations	11.4	14.9	15.6	19.1	18.7	22.8	23.0	18.7	19.9
<b>Public Finances, % of GDP</b>									
Consolidated government balance	-5.4	-4.0	-8.3	-9.4	-8.0	-8.1	-7.3	-7.0	-6.7
Consolidated gov primary balance	0.0	-1.1	3.4	4.6	2.7	2.2	--	--	--
Public debt	79.9	76.1	76.8	75.8	70.7	69.9	67.6	66.8	66.2
of which Domestic	74.7	71.4	72.2	70.8	66.0	65.9	63.2	63.0	62.8
<b>Foreign Assets &amp; Liabilities, US\$ bn</b>									
External debt	172.4	224.4	224.5	260.9	305.9	345.5	376.3	391.3	406.3
Private	123.0	166.3	168.6	193.9	227.8	263.6	294.6	307.6	320.6
Public	49.4	58.1	55.9	67.1	78.1	81.9	81.7	83.7	85.7
External debt / GDP	18.1	18.1	18.3	19.1	17.9	18.5	20.3	19.0	17.3
External debt / XGS	86.1	88.5	77.7	95.2	81.5	77.5	83.4	75.5	67.0
Short-term debt	28.1	45.7	43.3	52.3	65.0	78.2	91.9	96.9	101.9
Short-term debt/International Reserves (%)	14.7	15.3	17.9	20.7	23.7	30.0	36.0	39.3	43.5
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1F	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	6.0	5.3	5.5	5.3	4.5	5.0	5.3	5.7	5.9
WPI, % yoy	7.7	7.7	7.6	8.1	7.3	6.0	5.4	5.5	5.5
Policy interest rate, % eop	8.50	8.50	8.00	8.00	8.00	7.50	7.25	7.00	6.75
1 month inter-bank rate, % eop	9.53	10.90	9.08	8.46	8.52	8.00	8.00	8.00	8.00
Long term yield, % eop	8.57	8.25	8.25	8.25	8.25	8.00	7.50	7.50	7.50
lc vs USD, eop	53.0	50.9	55.5	52.9	55.0	54.3	54.6	55.4	56.1

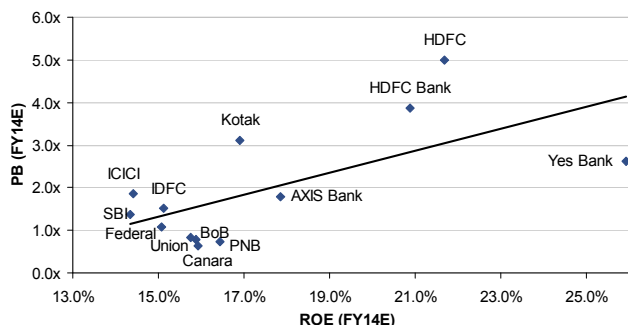
Source: CEIC Data Company Ltd, Fitch, IFS, Moody's and Citi Research Estimates

Figure 99. India — Banks Valuation Snapshot

Stock, Rating, Ric	Price (Rs.)	TP (Rs.)	ETR (%)	Mkt Cap (Rs b)	Net Profit (Rs. b)		EPS (Rs.)		EPS Chg YoY%		P/E (x)		NBV/S (Rs.)		P/NBV (x)		Net DPS (Rs.)		Yield (%)		ROAE (%)	
					14E	15E	14E	15E	14E	15E	14E	15E	14E	15E	14E	15E	14E	15E	14E	15E	14E	15E
SBI, 1, SBI.BO	2,176	2,860	33.2	1,488.6	144.0	163.1	215	243	7.2	13.2	10.1	8.9	1581	1777	1.36	1.21	38.0	40.0	1.8	1.9	14.3	14.5
ICICI, 1, ICBK.BO	1,173	1,535	32.6	1,354.0	101.5	122.8	88	106	21.9	21.0	13.6	11.3	643	724	1.87	1.66	21.0	22.0	1.8	1.8	14.4	15.6
HDFC Bank, 2, HDBK.BO	699	750	8.0	1,661.5	82.9	104.7	35	44	22.3	26.4	20.3	16.1	182	220	3.86	3.19	4.7	5.0	0.7	0.7	20.9	21.9
HDFC, 2, HDFC.BO	903	940	5.7	1,397.0	57.6	67.7	37	43	17.8	17.6	24.6	20.9	182	206	4.98	4.40	14.5	16.5	1.6	1.8	21.7	22.6
AXIS Bank, 1, AXBK.BO	1,456	1,795	24.7	682.0	64.0	77.4	134	161	22.3	20.9	11.0	9.1	824	970	1.78	1.51	20.0	20.0	1.4	1.4	17.9	18.4
PNB, 1, PNBK.BO	772	1,095	45.7	272.8	57.6	69.6	163	197	17.1	21.0	4.8	4.0	1055	1214	0.74	0.65	30.0	33.0	3.8	4.2	16.4	17.4
Kotak, 2, KTKM.BO	767	785	2.5	588.5	28.9	36.6	38	48	29.7	25.0	20.3	16.2	250	297	3.10	2.61	1.4	1.4	0.2	0.2	16.9	17.5
BoB, 1, BOB.BO	689	910	34.7	290.4	53.5	64.4	130	156	12.0	20.4	5.3	4.4	871	1006	0.80	0.69	18.5	18.5	2.7	2.7	15.9	16.6
IDFC, 1, IDFC.BO	154	210	37.8	233.7	22.0	25.6	15	17	19.3	15.9	10.6	9.1	102	115	1.51	1.34	2.7	3.0	1.7	1.9	15.1	15.5
Canara, 2, CNBK.BO	427	485	16.3	189.3	44.1	55.0	100	124	18.7	24.6	4.2	3.4	669	779	0.63	0.54	12.0	12.0	2.8	2.8	15.9	17.2
Union Bank, 2, UNBK.BO	226	245	12.3	135.0	26.9	33.4	41	50	27.7	24.1	5.6	4.5	273	313	0.83	0.72	9.0	9.0	4.0	4.0	15.7	17.2
Yes Bank, 2, YESB.BO	497	590	20.4	178.4	17.1	21.2	45	55	31.3	23.9	11.3	9.1	193	237	2.62	2.13	8.5	10.0	1.7	2.0	25.9	25.8
Federal, 1, FED.BO	449	590	33.5	76.9	10.3	12.2	60	71	15.0	18.8	7.6	6.4	423	483	1.07	0.94	10.0	10.5	2.2	2.3	15.1	15.8

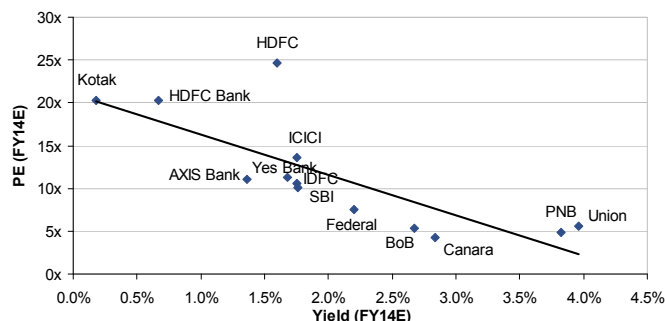
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 100. Price-Book vs. ROAE 2014E



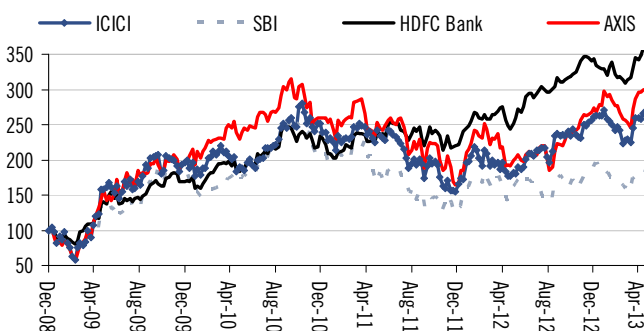
Source: Citi Research Estimates

Figure 101. P/E vs. Dividend Yield 2014E



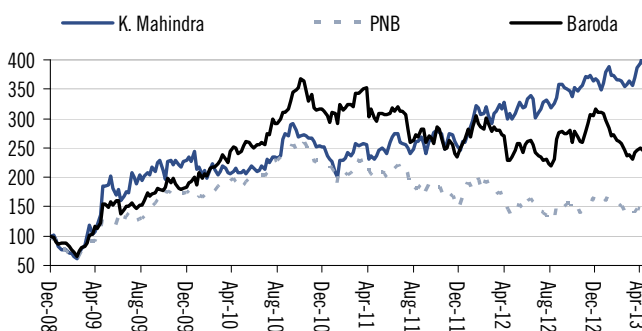
Source: Citi Research Estimates

Figure 102. Big-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 103. Mid-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

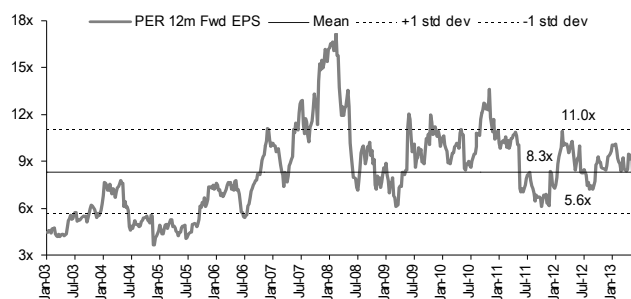
Figure 104. India Banks – Current vs. Target Valuation and Historical P/B & P/E Ranges

	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (Rs)	CY13E P/B (x)	CY13E P/E (x)	Target Price (Rs)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
State Bank Of India	2,176	1.4	10.3	2,860	1.9	13.5	1.0	1.3	1.7	5.6	8.3	11.0
ICICI Bank Ltd	1,173	1.9	14.0	1,535	2.4	18.3	1.3	1.8	2.3	9.5	14.1	18.8
HDFC Bank Ltd	699	4.0	21.2	750	4.3	22.7	2.7	3.3	3.9	14.7	18.3	21.8
AXIS Bank Ltd	1,456	1.8	11.4	1,795	2.3	14.1	1.7	2.3	2.9	7.4	12.2	16.9
Punjab National Bank	772	0.8	4.9	1,095	1.1	7.0	0.9	1.2	1.4	4.8	6.2	7.6
Kotak Mahindra Bank Ltd	767	3.2	21.3	785	3.3	21.8	1.8	2.8	3.7	13.6	18.8	24.0
Bank of Baroda	689	0.8	5.5	910	1.1	7.2	0.7	1.0	1.3	4.6	6.1	7.5

Note: Priced as on 23 May 2013; Source: Citi Research Estimates

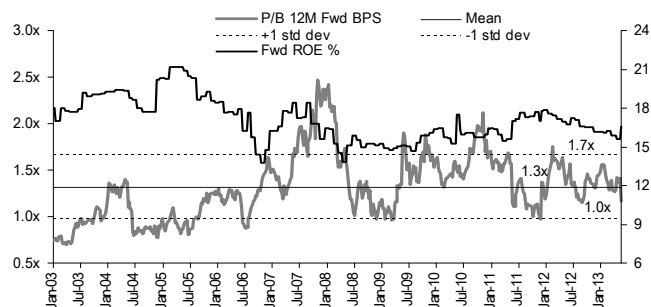
## India Banks – Valuation Charts

Figure 105. SBI – 12M Forward Consensus P/E Chart



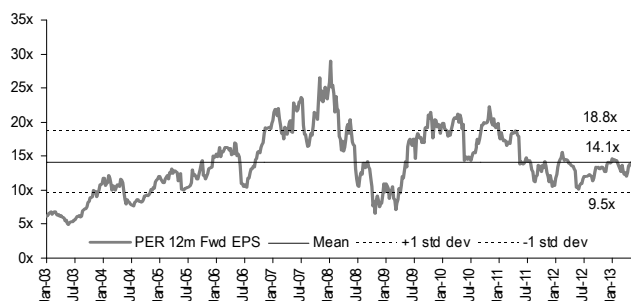
Source: DataStream, Citi Research

Figure 106. SBI – 12M Forward Consensus P/B Chart



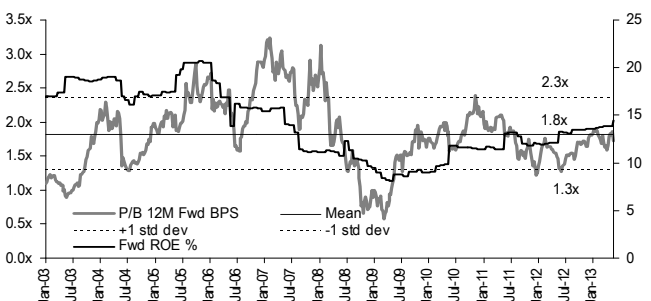
Source: DataStream, Citi Research

Figure 107. ICICI – 12M Forward Consensus P/E Chart



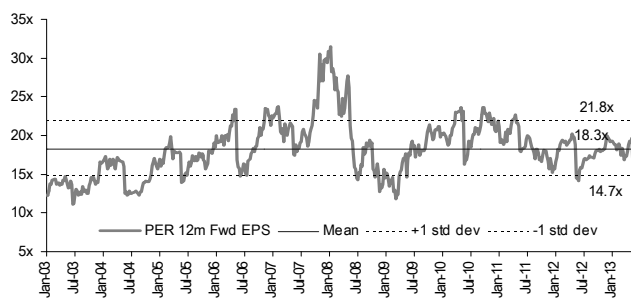
Source: DataStream, Citi Research

Figure 108. ICICI – 12M Forward Consensus P/B Chart



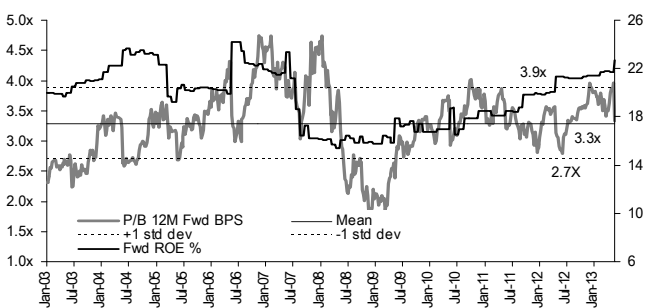
Source: DataStream, Citi Research

Figure 109. HDFC Bank – 12M Forward Consensus P/E Chart



Source: DataStream, Citi Research

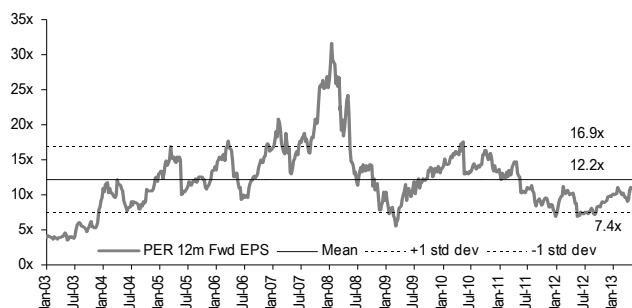
Figure 110. HDFC Bank – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

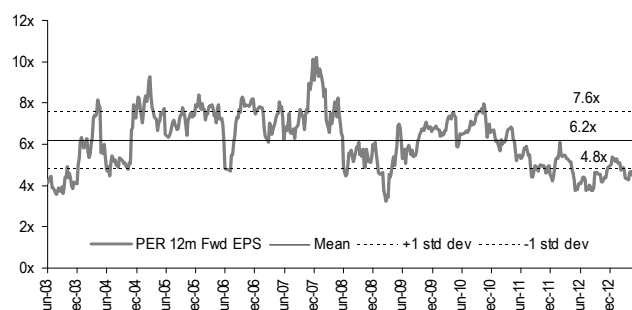
## India Banks – Valuation Charts (Cont'd)

Figure 111. Axis Bank – 12M Forward Consensus P/E Chart



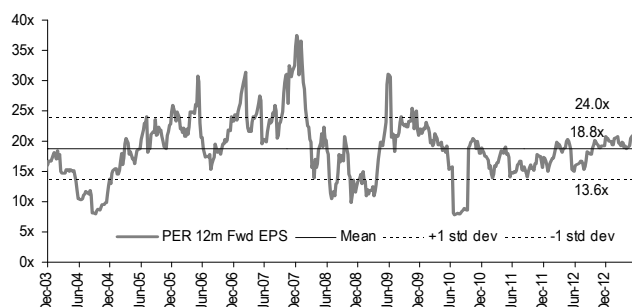
Source: DataStream, Citi Research

Figure 113. PNB – 12M Forward Consensus P/E Chart



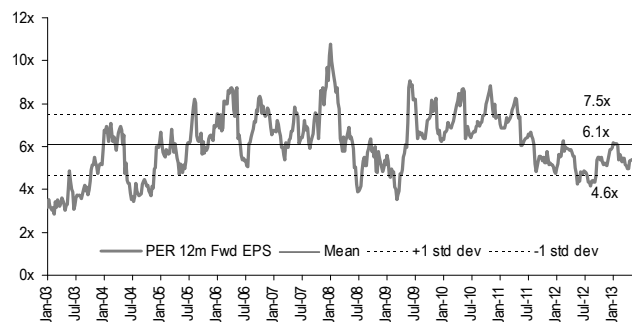
Source: DataStream, Citi Research

Figure 115. Kotak – 12M Forward Consensus P/E Chart



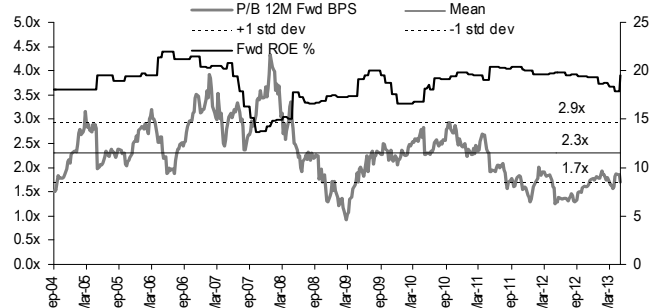
Source: DataStream, Citi Research

Figure 117. BoB – 12M Forward Consensus P/E Chart



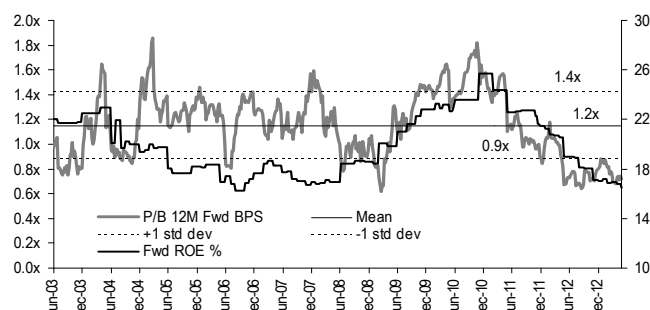
Source: DataStream, Citi Research

Figure 112. Axis Bank – 12M Forward Consensus P/B Chart



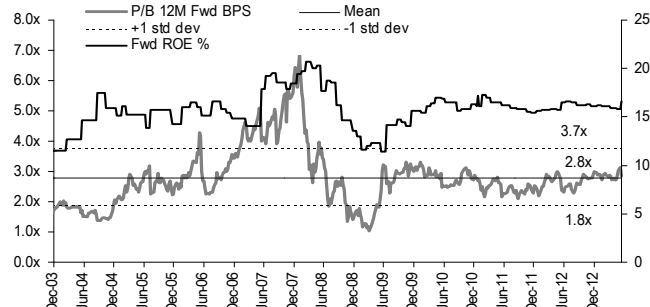
Source: DataStream, Citi Research

Figure 114. PNB – 12M Forward Consensus P/B Chart



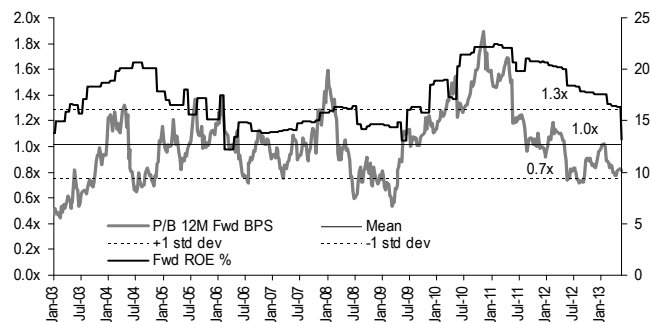
Source: DataStream, Citi Research

Figure 116. Kotak – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 118. BoB – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 119. India – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	SBI				ICICI Bank				HDFC Bank				Axis Bank			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	15.8	17.0	16.9	16.7	17.0	13.5	15.0	16.4	22.3	22.6	24.4	25.3	19.1	16.2	19.0	22.0
Net Interest Margin (bps)	348	322	322	321	256	289	306	315	426	454	444	444	315	319	327	326
<b>Net Interest Income (INR b)</b>	<b>432.9</b>	<b>449.6</b>	<b>516.4</b>	<b>591.2</b>	<b>107.3</b>	<b>138.7</b>	<b>165.9</b>	<b>196.3</b>	<b>123.0</b>	<b>158.1</b>	<b>188.1</b>	<b>231.5</b>	<b>80.2</b>	<b>96.9</b>	<b>118.7</b>	<b>142.6</b>
NII Growth (%)	33.1	3.9	14.8	14.5	19.0	29.2	19.7	18.3	16.6	28.6	19.0	23.1	22.2	20.8	22.5	20.2
<b>Non Interest Income (INR b)</b>	<b>143.5</b>	<b>160.9</b>	<b>173.8</b>	<b>189.9</b>	<b>79.1</b>	<b>83.7</b>	<b>96.1</b>	<b>110.0</b>	<b>53.3</b>	<b>68.5</b>	<b>81.8</b>	<b>97.9</b>	<b>54.2</b>	<b>68.3</b>	<b>81.8</b>	<b>96.6</b>
Non-II Growth (%)	(9.3)	12.1	8.1	9.3	11.2	5.9	14.8	14.5	23.9	28.5	19.4	19.7	17.0	26.1	19.7	18.1
-Fee Income (INR b)	135.2	128.9	141.8	156.1	54.4	57.1	63.9	74.1	42.8	51.3	61.6	73.9	43.4	48.2	58.8	71.7
-Fee Growth (%)	3.8	(4.7)	10.0	10.1	(1.4)	5.0	12.0	16.0	18.9	20.0	20.0	20.0	29.3	11.0	22.0	22.0
-Other Income (INR b)	8.3	32.0	32.0	33.8	24.7	26.6	32.2	35.8	10.6	17.2	20.3	24.1	10.8	20.1	23.0	24.9
-Other Income Growth (%)	(70.4)	285.8	0.3	5.5	55.1	7.7	20.8	11.4	49.6	62.8	17.7	18.7	(15.4)	86.7	14.3	8.2
<b>Total Income (INR b)</b>	<b>576.4</b>	<b>610.5</b>	<b>690.2</b>	<b>781.1</b>	<b>186.4</b>	<b>222.4</b>	<b>262.0</b>	<b>306.3</b>	<b>176.3</b>	<b>226.6</b>	<b>269.9</b>	<b>329.4</b>	<b>134.4</b>	<b>165.2</b>	<b>200.5</b>	<b>239.2</b>
Total Income Growth (%)	19.2	5.9	13.1	13.2	15.6	19.3	17.8	16.9	18.7	28.6	19.1	22.0	20.0	22.9	21.4	19.3
Non-II % of Total Income	24.9	26.3	25.2	24.3	42.4	37.6	36.7	35.9	30.3	30.2	30.3	29.7	40.3	41.4	40.8	40.4
<b>Operating Costs (INR b)</b>	<b>260.7</b>	<b>286.0</b>	<b>319.3</b>	<b>359.6</b>	<b>78.5</b>	<b>90.1</b>	<b>101.9</b>	<b>115.6</b>	<b>85.9</b>	<b>112.4</b>	<b>132.5</b>	<b>156.1</b>	<b>60.1</b>	<b>71.4</b>	<b>85.4</b>	<b>102.1</b>
Costs Growth (%)	13.3	9.7	11.6	12.6	18.6	14.8	13.1	13.5	20.1	30.8	17.9	17.8	25.7	18.9	19.6	19.6
Costs % of Total Income	45.2	46.9	46.3	46.0	42.1	40.5	38.9	37.8	48.7	49.6	49.1	47.4	44.7	43.2	42.6	42.7
<b>Pre-Provision Profit (INR b)</b>	<b>315.7</b>	<b>324.5</b>	<b>370.9</b>	<b>421.5</b>	<b>107.9</b>	<b>132.2</b>	<b>160.1</b>	<b>190.7</b>	<b>90.4</b>	<b>114.3</b>	<b>137.5</b>	<b>173.3</b>	<b>74.3</b>	<b>93.8</b>	<b>115.1</b>	<b>137.1</b>
PPP Growth (%)	24.6	2.8	14.3	13.6	13.5	22.5	21.1	19.1	17.5	26.4	20.3	26.1	15.8	26.2	22.7	19.1
PPOP/Avg Loans (Bps)	378.5	334.0	326.6	317.8	411.9	438.5	464.4	477.8	500.0	516.1	502.3	507.2	472.3	507.1	528.5	521.8
Provision Charges (INR b)	125.2	132.8	152.7	174.4	15.8	18.0	20.6	21.9	8.0	14.2	16.4	20.9	11.0	17.6	18.1	19.8
- NPL Ratio (%)	4.4	5.7	5.6	5.4	3.4	3.0	3.0	2.9	1.0	1.0	1.0	0.9	1.1	1.2	1.5	1.5
- Provision Coverage (%)	70.0	65.3	76.5	87.5	97.7	104.2	102.5	102.7	127.9	127.6	117.8	118.3	73.8	79.4	80.5	82.9
- Provisions bps of Loans	150.1	136.8	134.5	131.5	60.4	59.8	59.7	54.9	44.4	64.3	59.8	61.2	69.9	94.9	83.2	75.4
Others (INR b)	(5.7)	12.0	0.0	0.0	(4.1)	(0.3)	(0.5)	(0.6)	(7.2)	(2.5)	(1.0)	(0.6)	(0.4)	0.0	0.0	0.0
<b>Pre-tax Profit (INR b)</b>	<b>184.8</b>	<b>203.6</b>	<b>218.2</b>	<b>247.1</b>	<b>88.0</b>	<b>114.0</b>	<b>139.0</b>	<b>168.2</b>	<b>75.1</b>	<b>97.5</b>	<b>120.1</b>	<b>151.8</b>	<b>62.9</b>	<b>76.2</b>	<b>97.0</b>	<b>117.3</b>
Tax (INR b)	67.8	69.2	74.2	84.0	23.4	30.7	37.5	45.4	23.5	30.2	37.2	47.1	20.5	23.9	33.0	39.9
Minorities (INR b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Profit (INR b)</b>	<b>117.1</b>	<b>134.4</b>	<b>144.0</b>	<b>163.1</b>	<b>64.7</b>	<b>83.3</b>	<b>101.5</b>	<b>122.8</b>	<b>51.7</b>	<b>67.3</b>	<b>82.9</b>	<b>104.7</b>	<b>42.4</b>	<b>52.3</b>	<b>64.0</b>	<b>77.4</b>
FD EPS (INR)	179.28	200.28	214.62	243.05	56.08	72.16	87.94	106.41	21.94	28.21	34.52	43.63	99.34	109.18	133.53	161.44
FD EPS Growth (%)	37.7	11.7	7.2	13.2	25.4	28.7	21.9	21.0	29.8	28.6	22.3	26.4	24.4	9.9	22.3	20.9
BVPS (INR)	1,251.0	1,410.55	1,580.91	1,777.36	524.00	578.22	642.54	724.20	127.52	152.20	181.55	219.74	551.99	707.51	824.29	969.68
BVPS Growth (%)	22.2	12.7	12.1	12.4	9.6	10.3	11.1	12.7	16.9	19.4	19.3	21.0	19.3	28.2	16.5	17.6
RoRWA (%)	1.23	1.32	1.23	1.21	1.75	1.79	1.78	1.86	2.37	2.46	2.34	2.33	1.98	2.14	2.24	2.22
<b>Tier 1 ratio (%)</b>	<b>9.7</b>	<b>9.5</b>	<b>9.2</b>	<b>9.0</b>	<b>12.7</b>	<b>12.8</b>	<b>12.5</b>	<b>12.1</b>	<b>11.6</b>	<b>11.1</b>	<b>10.8</b>	<b>10.5</b>	<b>9.4</b>	<b>12.2</b>	<b>11.2</b>	<b>10.8</b>
Core Tier 1 ratio (%)	8.9	8.8	8.6	8.5	12.7	12.8	12.5	12.1	11.5	11.1	10.8	10.5	8.8	12.0	11.1	10.6
CAR (%)	14.1	13.6	13.1	12.5	18.5	18.8	18.3	17.8	16.5	16.9	14.3	13.6	13.7	17.0	15.7	14.8
<b>Loan to Deposit ratio (%)</b>	<b>85.8</b>	<b>87.6</b>	<b>89.2</b>	<b>90.7</b>	<b>110.6</b>	<b>109.6</b>	<b>108.6</b>	<b>107.1</b>	<b>80.6</b>	<b>82.3</b>	<b>83.1</b>	<b>84.1</b>	<b>77.7</b>	<b>78.7</b>	<b>73.9</b>	<b>74.1</b>
<b>EPS SENSITIVITY STUDY</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (INR)</b>		200.3	214.6	243.1		72.2	87.9	106.4		28.2	34.5	43.6		109.2	133.5	161.4
% Impact from																
<b>Loan Growth: +1% Chg</b>		2.9	3.1	3.2		1.2	1.2	1.2		1.8	1.7	1.7		1.4	1.4	1.3
<b>NIM: +10bps Chg</b>		13.9	14.9	15.1		7.3	6.8	6.5		6.8	6.7	6.5		7.6	7.6	7.6
<b>Cost Income %: +1% Chg</b>		6.1	6.4	6.4		3.4	3.3	3.2		4.4	4.3	4.1		4.1	4.2	4.1
<b>Provisions / Loans: +10bps Chg</b>		9.7	10.6	10.9		4.6	4.3	4.1		4.3	4.3	4.3		4.6	4.6	4.5
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	3.38	3.15	3.18	3.19	2.44	2.74	2.89	2.98	4.00	4.28	4.23	4.25	3.04	3.09	3.16	3.15
Total operating income	4.50	4.28	4.25	4.22	4.24	4.40	4.56	4.66	5.73	6.14	6.08	6.05	5.09	5.28	5.33	5.29
Operating expenses	-2.04	-2.00	-1.96	-1.94	-1.78	-1.78	-1.77	-1.76	-2.79	-3.04	-2.98	-2.87	-2.27	-2.28	-2.27	-2.26
Op profit before provisions	2.47	2.27	2.28	2.27	2.45	2.62	2.79	2.90	2.94	3.10	3.09	3.18	2.81	3.00	3.06	3.03
Provisions	-0.98	-0.93	-0.94	-0.94	-0.36	-0.36	-0.36	-0.33	-0.26	-0.39	-0.37	-0.38	-0.42	-0.56	-0.48	-0.44
Non-recurring items	-0.04	0.08	0.00	0.00	-0.09	-0.01	-0.01	-0.01	-0.24	-0.07	-0.02	-0.01	-0.02	0.00	0.00	0.00
Tax	-0.53	-0.48	-0.46	-0.45	-0.53	-0.61	-0.65	-0.69	-0.76	-0.82	-0.84	-0.86	-0.77	-0.76	-0.88	-0.88
<b>Net profit (ROA)</b>	<b>0.91</b>	<b>0.94</b>	<b>0.89</b>	<b>0.88</b>	<b>1.47</b>	<b>1.65</b>	<b>1.77</b>	<b>1.87</b>	<b>1.68</b>	<b>1.82</b>	<b>1.86</b>	<b>1.92</b>	<b>1.61</b>	<b>1.67</b>	<b>1.70</b>	<b>1.71</b>
Leverage (x)	17.18	15.99	16.20	16.45	7.62	7.95	8.16	8.34	11.13	11.16	11.19	11.41	12.64	11.20	10.49	10.78
<b>ROE</b>	<b>15.72</b>	<b>15.05</b>	<b>14.35</b>	<b>14.48</b>	<b>11.20</b>	<b>13.10</b>	<b>14.41</b>	<b>15.57</b>	<b>18.69</b>	<b>20.34</b>	<b>20.87</b>	<b>21.94</b>	<b>20.29</b>	<b>18.72</b>	<b>17.86</b>	<b>18.44</b>

Source: Company Reports and Citi Research Estimates

Figure 120. India – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	PNB				Kotak Mahindra Bank				Bank of Baroda				Sector (13 Banks)			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	22.0	12.8	17.6	17.5	28.4	23.3	35.6	28.4	25.7	16.4	17.9	17.9	19.1	17.0	18.7	19.0
Net Interest Margin (bps)	327	309	317	317	495	482	456	454	261	247	254	257	354	360	360	360
<b>Net Interest Income (INR b)</b>	<b>134.1</b>	<b>148.3</b>	<b>174.4</b>	<b>202.4</b>	<b>39.3</b>	<b>48.1</b>	<b>58.4</b>	<b>74.4</b>	<b>103.2</b>	<b>116.5</b>	<b>137.5</b>	<b>159.5</b>	<b>1,197.7</b>	<b>1,367.4</b>	<b>1,612.0</b>	<b>1,899.9</b>
NII Growth (%)	13.6	10.6	17.6	16.0	12.0	22.5	21.4	27.3	17.2	12.9	18.0	16.0	22.2	14.2	17.9	17.9
<b>Non Interest Income (INR b)</b>	<b>42.0</b>	<b>41.7</b>	<b>46.9</b>	<b>51.2</b>	<b>22.3</b>	<b>22.3</b>	<b>30.9</b>	<b>37.0</b>	<b>34.2</b>	<b>35.1</b>	<b>39.3</b>	<b>44.0</b>	<b>484.7</b>	<b>542.5</b>	<b>621.9</b>	<b>707.1</b>
Non-II Growth (%)	16.3	(0.7)	12.3	9.2	7.3	(0.1)	38.5	19.9	21.8	2.5	12.0	12.1	6.8	11.9	14.6	13.7
-Fee Income (INR b)	23.7	24.2	26.6	29.3	13.4	16.4	20.8	24.4	12.3	12.9	14.7	16.7	346.4	362.9	417.0	480.7
-Fee Growth (%)	16.1	2.0	10.0	10.0	60.3	22.3	26.9	17.2	20.1	5.0	14.0	14.0	10.0	4.8	14.9	15.3
-Other Income (INR b)	18.3	17.5	20.2	21.8	8.9	5.9	10.0	12.6	22.0	22.2	24.6	27.3	138.3	179.6	204.9	226.4
-Other Income Growth (%)	16.6	(4.1)	15.4	8.1	(28.5)	(34.0)	71.1	25.6	22.8	1.1	10.9	10.9	(0.5)	29.9	14.1	10.5
<b>Total Income (INR b)</b>	<b>176.2</b>	<b>190.1</b>	<b>221.3</b>	<b>253.5</b>	<b>61.6</b>	<b>70.4</b>	<b>89.3</b>	<b>111.4</b>	<b>137.4</b>	<b>151.6</b>	<b>176.8</b>	<b>203.6</b>	<b>1,682.4</b>	<b>1,909.9</b>	<b>2,233.9</b>	<b>2,607.0</b>
Total Income Growth (%)	14.2	7.9	16.4	14.5	10.3	14.3	26.8	24.7	18.3	10.3	16.6	15.2	17.3	13.5	17.0	16.7
Non-II % of Total Income	23.9	22.0	21.2	20.2	36.2	31.6	34.6	33.2	24.9	23.1	22.2	21.6	28.8	28.4	27.8	27.1
<b>Operating Costs (INR b)</b>	<b>70.0</b>	<b>80.4</b>	<b>91.6</b>	<b>104.4</b>	<b>34.0</b>	<b>37.1</b>	<b>44.8</b>	<b>54.7</b>	<b>51.6</b>	<b>56.8</b>	<b>64.1</b>	<b>72.4</b>	<b>709.5</b>	<b>815.5</b>	<b>933.1</b>	<b>1,074.6</b>
Costs Growth (%)	10.0	14.8	13.9	14.0	6.7	9.1	20.7	22.1	11.4	10.2	12.8	12.8	14.2	14.9	14.4	15.2
Costs % of Total Income	39.7	42.3	41.4	41.2	55.3	52.7	50.2	49.1	37.5	37.5	36.3	35.5	42.2	42.7	41.8	41.2
Pre-Provision Profit (INR b)	106.1	109.7	129.7	149.1	27.6	33.3	44.5	56.7	85.8	94.8	112.7	131.2	972.9	1,094.4	1,300.8	1,532.3
PPP Growth (%)	17.2	3.3	18.3	15.0	15.0	20.8	33.7	27.4	22.9	10.5	18.9	16.5	19.7	12.5	18.9	17.8
PPOP/Avg Loans (Bps)	389.6	344.2	352.9	345.1	576.3	554.3	569.6	552.1	327.7	300.3	304.7	301.0	400.6	381.9	384.9	381.5
<b>Provision Charges (INR b)</b>	<b>33.2</b>	<b>39.7</b>	<b>43.2</b>	<b>44.5</b>	<b>1.0</b>	<b>1.8</b>	<b>2.1</b>	<b>3.0</b>	<b>20.2</b>	<b>33.9</b>	<b>37.4</b>	<b>38.7</b>	<b>244.1</b>	<b>293.7</b>	<b>330.3</b>	<b>368.4</b>
- NPL Ratio (%)	2.9	4.6	4.6	4.5	1.3	1.3	1.2	1.3	1.5	2.3	1.9	1.6	2.1	2.4	2.3	2.3
- Provision Coverage (%)	65.7	28.5	22.4	14.7	86.9	85.6	80.6	75.8	96.0	78.8	91.7	107.6	76.7	65.8	71.7	76.2
- Provisions bps of Loans	121.7	124.7	117.4	103.0	20.6	30.5	26.5	28.7	77.0	107.5	101.3	88.7	65.0	71.5	67.5	64.9
Others (INR b)	(2.6)	(0.7)	(0.7)	(0.7)	(0.0)	0.0	0.0	0.0	(5.4)	(0.4)	(1.0)	(0.6)	(29.0)	7.0	(4.4)	(3.6)
<b>Pre-tax Profit (INR b)</b>	<b>70.4</b>	<b>69.3</b>	<b>85.9</b>	<b>104.0</b>	<b>26.6</b>	<b>31.4</b>	<b>42.4</b>	<b>53.7</b>	<b>60.3</b>	<b>60.4</b>	<b>74.2</b>	<b>92.0</b>	<b>699.8</b>	<b>807.7</b>	<b>966.1</b>	<b>1,160.3</b>
Tax (INR b)	21.5	21.1	28.4	34.3	8.1	9.4	13.4	17.0	10.2	12.7	20.8	27.6	214.4	242.2	299.8	361.5
Minorities (INR b)	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2
<b>Net Profit (INR b)</b>	<b>48.8</b>	<b>48.1</b>	<b>57.6</b>	<b>69.6</b>	<b>18.3</b>	<b>21.9</b>	<b>28.9</b>	<b>36.6</b>	<b>50.1</b>	<b>47.7</b>	<b>53.5</b>	<b>64.4</b>	<b>485.2</b>	<b>565.4</b>	<b>666.1</b>	<b>798.6</b>
FD EPS (INR)	148.91	139.03	162.85	197.04	24.77	29.39	38.11	47.64	124.37	115.71	129.63	156.10	70.36	79.38	91.05	107.50
FD EPS Growth (%)	6.2	(6.6)	17.1	21.0	13.4	18.7	29.7	25.0	11.2	(7.0)	12.0	20.4	26.4	12.8	14.7	18.1
BVPS (INR)	820.13	927.03	1,054.93	1,213.53	174.18	200.99	249.62	296.62	666.29	761.76	870.58	1,005.87	471.23	541.47	613.91	700.97
BVPS Growth (%)	20.8	13.0	13.8	15.0	17.1	15.4	24.2	18.8	24.7	14.3	14.3	15.5	17.9	14.9	13.4	14.2
RoRWA (%)	1.80	1.54	1.60	1.65	4.69	4.36	4.29	4.03	2.16	1.77	1.68	1.64	1.73	1.84	1.84	1.88
<b>Tier 1 ratio (%)</b>	<b>9.3</b>	<b>9.3</b>	<b>9.0</b>	<b>8.9</b>	<b>17.8</b>	<b>17.0</b>	<b>16.4</b>	<b>15.4</b>	<b>10.8</b>	<b>10.6</b>	<b>9.9</b>	<b>9.3</b>	<b>11.7</b>	<b>12.0</b>	<b>11.5</b>	<b>11.0</b>
Core Tier 1 ratio (%)	8.6	8.6	8.5	8.5	8.1	8.9	9.0	9.7	10.8	10.6	9.9	9.3	10.1	10.3	10.2	9.9
CAR (%)	12.6	12.4	11.9	11.6	20.6	19.7	18.6	17.4	14.7	14.6	13.4	12.6	16.0	16.4	15.3	14.5
<b>Loan to Deposit ratio (%)</b>	<b>78.9</b>	<b>77.7</b>	<b>77.6</b>	<b>77.5</b>	<b>147.4</b>	<b>129.9</b>	<b>122.0</b>	<b>118.9</b>	<b>75.8</b>	<b>76.4</b>	<b>77.9</b>	<b>80.1</b>	<b>90.3</b>	<b>90.8</b>	<b>91.8</b>	<b>92.8</b>
<b>EPS SENSITIVITY STUDY</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (INR)</b>		139.0	162.9	197.0		29.4	38.1	47.6		115.7	129.6	156.1		79.4	91.0	107.5
% Impact from																
<b>Loan Growth: +1% Chg</b>		2.5	2.5	2.4		1.5	1.4	1.5		1.8	2.1	2.1		2.2	2.2	2.2
<b>NIM: +10bps Chg</b>		13.0	12.7	12.2		5.9	5.8	5.9		12.0	13.0	12.5		8.7	8.8	8.7
<b>Cost Income %: +1% Chg</b>		5.2	5.1	4.8		4.2	4.1	4.0		3.8	4.2	4.1		4.4	4.4	4.3
<b>Provisions / Loans: +10bps Chg</b>		8.6	8.5	8.3		3.6	3.6	3.7		8.0	8.9	8.8		6.6	6.6	6.6
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	3.21	3.04	3.11	3.11	4.73	4.64	4.45	4.48	2.56	2.43	2.50	2.53	3.17	3.13	3.18	3.21
Total operating income	4.21	3.89	3.95	3.90	7.42	6.79	6.80	6.71	3.41	3.16	3.21	3.23	4.46	4.37	4.41	4.41
Operating expenses	-1.67	-1.65	-1.63	-1.60	-4.10	-3.58	-3.41	-3.30	-1.28	-1.18	-1.17	-1.15	-1.88	-1.87	-1.84	-1.82
Op profit before provisions	2.54	2.24	2.31	2.29	3.32	3.21	3.39	3.41	2.13	1.97	2.05	2.08	2.58	2.50	2.57	2.59
Provisions	-0.79	-0.81	-0.77	-0.68	-0.12	-0.18	-0.16	-0.18	-0.50	-0.71	-0.68	-0.61	-0.65	-0.67	-0.65	-0.62
Non-recurring items	-0.06	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	-0.13	-0.01	-0.02	-0.01	-0.08	0.02	-0.01	-0.01
Tax	-0.51	-0.43	-0.51	-0.53	-0.97	-0.91	-1.02	-1.02	-0.25	-0.26	-0.38	-0.44	-0.57	-0.55	-0.59	-0.61
<b>Net profit (ROA)</b>	<b>1.17</b>	<b>0.99</b>	<b>1.03</b>	<b>1.07</b>	<b>2.21</b>	<b>2.11</b>	<b>2.20</b>	<b>2.20</b>	<b>1.24</b>	<b>0.99</b>	<b>0.97</b>	<b>1.02</b>	<b>1.29</b>	<b>1.29</b>	<b>1.31</b>	<b>1.35</b>
Leverage (x)	16.96	16.13	16.00	16.22	6.96	7.43	7.69	7.93	16.62	16.30	16.35	16.27	12.81	12.51	12.56	12.78
<b>ROE</b>	<b>19.80</b>	<b>15.89</b>	<b>16.43</b>	<b>17.37</b>	<b>15.36</b>	<b>15.68</b>	<b>16.91</b>	<b>17.46</b>	<b>20.66</b>	<b>16.21</b>	<b>15.88</b>	<b>16.64</b>	<b>16.46</b>	<b>16.19</b>	<b>16.50</b>	<b>17.26</b>

Source: Company Reports and Citi Research Estimates

# Indonesia

## Most Adversely Impacted on Loan Growth and Credit Costs

### Key Scenario Assumptions

- **CPI inflation rises to 12% from 5.57% (Apr. '13)** – Current Citi baseline case is for inflation to rise to 8.2% due to probable 33% increase in subsidized fuel prices. Based on USD currency strengthening sharply and triggering portfolio sell-off, can rise further to 12%. This 12% peak is based on 2008, when fuel prices were hiked by similar 33% and was followed by the global financial crisis.
- **Policy interest rates (FasBI -overnight borrowing rate)** – Our base case is of 75bps hike (to 4.75%). Taking the above inflation scenario, Bank Indonesia may be forced to raise rates cumulatively by 150bps, as happened in 2008
  - **Time deposit rates** – These have strong link to policy rates through Deposit Insurance Corporation (LPS). LPS sets the ceiling rate for deposits to be insured and this is used by banks to set their TD rates. Historically, the LPS rate has been c150bps over FasBI rate. A 150bps hike in FasBI rate may necessitate 125bps hike in TD rate. We have incorporated 75bps hike in TD rate in 2013F and add another 50bps for this worse case scenario.
  - **CASA deposit rates** – CASA deposits are mostly for transactional purposes and have weak relationship with policy rate. We expect the impact to be ½ of what it will be on TD rates, ie 62.5bps increase.
  - **Average lending rate** – Our base case assumes 20bps pa decline in lending rates, based on strong competition. Higher policy rate may temporarily reverse the trend. We assume partial 125bps rise in rate from our base case and apply to loans that can be repriced within next 12 months.
  - **Money market instruments** – We assume full impact of 125bps on placements and marketable securities. For variable rate bonds, we assume only a 63bps increase.
- **Loan growth slows by 500bps** – Banking sector Rp loan growth has been steady at 22-24% over the last 3-years while FX lending (15% of total loans) has been volatile. Considering current loan growth is in line with historic mean levels, our worse case scenario is based on growth falling to 1std below mean (to 18%).
- **Credit cost can go up potentially by 50bps** – Credit costs were at a much more elevated levels during the past inflationary periods than the current 0.45%. With strong loan growth of previous years, risk of credit cost rising by 50bps is high.

### Implications for Indonesia Banks

- **Earnings decline by 12% and ROE by 270bps in the worse case scenario** – BBKA is the least vulnerable amongst large caps with potential EPS decline of 8.5% and ROE decline of 200bps. BBRI and BBNI are most vulnerable on earnings (15% decline) with BBRI ROE declining by 400bps.
- **Positive impact on NIMs for 3 out of 4 banks** – Rising rates are positive for earnings of BBKA (+5%), BMRI (+4%) and BBNI (+2%) and negative for BBRI (-4%). The first three banks have c80% loans that can be repriced (floating or smaller tenor). For BBRI, only c40% of loans can be repriced, due to higher portion of Micro/Salary based loans. BBKA deposits comprise 80% CASA, reducing impact of higher time deposit rate.

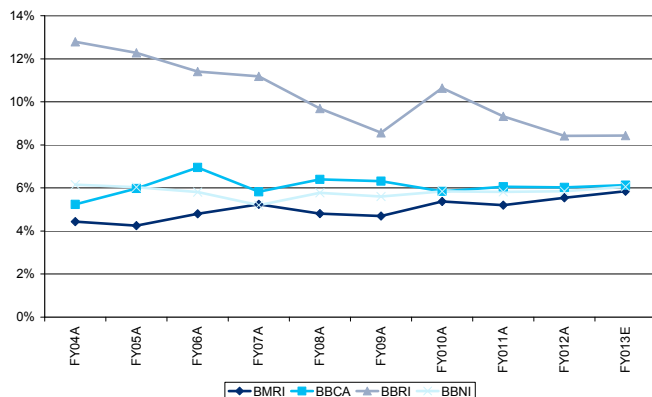
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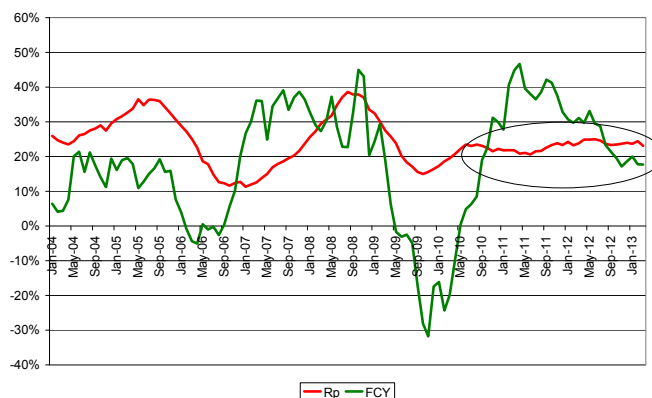
- **Slower loan growth impacts earning by 4%—** BBNI is the most vulnerable to lower loan growth with earnings decline of 6%, if loan growth slows by 500bps. BBRI is least vulnerable at 2% impact.
- **Credit cost rising by 50bps will reduce EPS by 9% –** The impact will range from 10.5% (BBNI) to 8% (BBRI). BBCA and BMRI will have almost similar 9% earnings decline.
- **Limited impact on non interest income and operating expenses –** Indonesian banks are relatively less reliant on trading gains, contributing 2% of earnings. Foreign exchange related earnings are slightly higher than 2.6%. In a currency volatility period, income on foreign currency will more than compensate for a decline in trading income. BBNI is the most reliant on securities trading (4% of profit) while BMRI has high contribution from foreign currency related activities (6%). Opex is mostly domestic related with employee bonuses adjusted in periods of earnings slowdowns.

Figure 121. Indonesia Banks – NIM Trend (%)



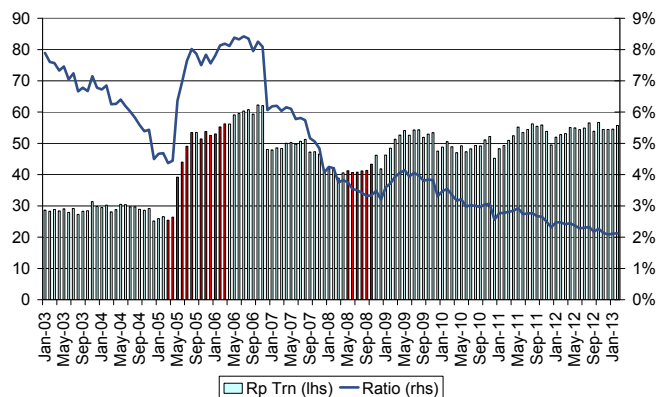
Source: Company data, Citi Research

Figure 123. Indonesia Banks – Loan Growth



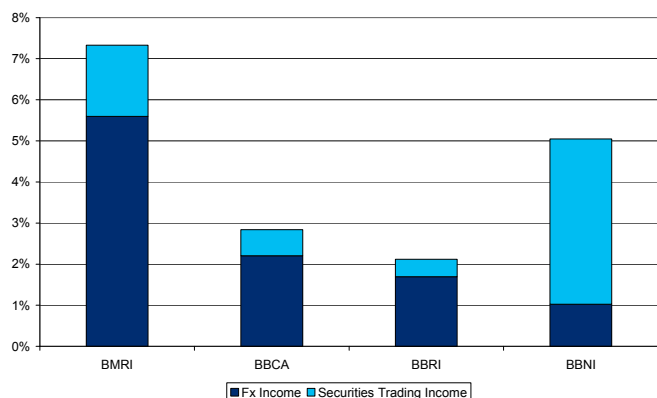
Source: Company data, Citi Research

Figure 122. Indonesia Asset Quality Trend (%)



Source: Company data, Citi Research

Figure 124. Indonesia Banks – Trading and Forex Income to Total Income



Source: Company data, Citi Research

## Overall Impact

Sector ROEs can potentially decline from 23% to 20.3%, if we incorporate the impact of all three factors, ie, higher rates, slower loan growth and higher credit costs. The net profit impact will be 12%.

Figure 125. Indonesia Banks – Overall impact on Earnings

		Earnings impact	ROE impact
NIM	+5bps	1%	0.26%
Loan growth	-5pps	-4%	-0.90%
Non-interest income	na	na	na
Cost/income	na	na	na
Credit cost	+50 bps	-9%	-2.06%
<b>Net impact</b>		<b>-12%</b>	<b>-2.7%</b>

Source: Citi Research Estimates

Figure 126. EPS Impact For Individual Banks

	BMRI	BBCA	BBRI	BBNI
NIMs - Change (bps)	14	22	(21)	6
<b>Impact on Earnings</b>				
NIMs	3.6%	5.2%	-4.3%	1.8%
Loan Growth (-500bps)	-4.2%	-4.8%	-2.2%	-5.8%
Credit Cost (+50 bps)	-9.2%	-8.8%	-8.2%	-10.5%
Net Impact	-9.9%	-8.4%	-14.7%	-14.5%
<b>ROE Impact</b>				
NIMs	79	122	-118	32
Loan Growth (-500bps)	-93	-114	-60	-101
Credit Cost (+50 bps)	-203	-207	-222	-182
Net Impact	-217	-199	-400	-251

Source: Citi Research Estimates

Figure 127. Indonesia – Economic Indicators

	2006	2007	2008	2009	2010	2011	2012	2013F	2014F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	364.4	432.2	510.7	538.6	709.5	845.8	878.3	955.3	1,082.4
Nominal GDP, local currency bn	3,339,217	3,950,893	4,948,688	5,606,203	6,446,852	7,422,781	8,241,864	9,365,180	10,621,769
GDP per capita, US\$	1,636	1,915	2,235	2,328	2,986	3,486	3,596	3,876	4,340
Population, mn	222.8	225.6	228.5	231.4	237.6	242.6	244.2	246.5	249.4
Unemployment, % of labour force	10.3	9.1	8.4	7.9	7.1	6.6	6.1	5.9	5.8
<b>Economic Activity</b>									
Real GDP, % yoy	5.5	6.3	6.0	4.6	6.2	6.5	6.2	6.1	6.3
Real investment growth % yoy	1.3	1.9	12.4	2.4	8.8	10.5	16.9	6.5	8.8
Real consumption growth % yoy	3.9	4.9	5.9	6.2	4.1	4.5	4.8	5.3	5.3
private consumption growth % yoy	3.2	5.0	5.3	4.9	4.7	4.7	5.3	5.1	4.9
Real export growth, % yoy	9.4	8.5	9.5	-9.7	15.3	13.6	2.0	2.3	8.1
Real import growth, % yoy	8.6	9.1	10.0	-15.0	17.3	13.3	6.6	-0.2	8.7
<b>Prices, Money &amp; Credit</b>									
CPI, % yoy	6.6	5.8	11.1	2.8	7.0	3.8	4.3	8.2	4.3
CPI, % avg	13.1	6.3	9.9	4.8	5.1	5.4	4.3	6.9	5.4
Nominal wages, % yoy	6.3	4.2	7.6	5.3	12.2	6.8	8.1	28.0	15.0
Credit extension to private sector, % yoy	12.1	22.9	29.7	18.3	20.8	25.9	22.0	18.0	20.0
Policy interest rate, % eop	4.75	3.00	8.75	6.00	5.50	4.50	4.00	4.75	4.75
1 month inter-bank rate, % eop	5.75	3.35	9.44	6.39	5.66	4.57	4.24	4.90	4.90
Long term yield, % eop	10.18	10.02	11.92	10.07	7.83	6.05	5.39	5.60	6.00
lc/US\$, eop	8994	9393	10900	9425	9010	9068	9638	9880	9732
lc/US\$, avg	9171	9140	9673	10376	9078	8763	9361	9816	9805
<b>Balance of Payments, US\$ bn</b>									
Current account	10.9	10.5	0.1	10.6	5.1	1.7	-24.1	-22.3	-19.1
% of GDP	3.0	2.4	0.0	2.0	0.7	0.2	-2.7	-2.3	-1.8
Trade balance	29.7	32.8	22.9	30.9	30.6	34.8	8.6	11.0	15.6
Exports	103.5	118.0	139.6	119.6	158.1	200.8	188.5	188.6	218.9
Imports	73.9	85.3	116.7	88.7	127.4	166.0	179.9	177.6	203.3
Service balance	-9.9	-11.8	-13.0	-9.7	-9.3	-10.6	-10.8	-10.6	-10.8
Income balance	-13.8	-15.5	-15.2	-15.1	-20.8	-26.7	-25.9	-26.2	-28.0
FDI, net	2.2	2.3	3.4	2.6	11.1	11.5	14.3	14.4	15.5
International reserves	42.6	56.9	51.6	66.1	96.2	110.1	112.8	106.0	108.0
Total Amortisations	16.4	18.8	16.7	20.4	24.0	25.1	40.3	41.0	42.0
<b>Public Finances, % of GDP</b>									
Consolidated government balance	-0.9	-1.3	-0.1	-1.6	-0.7	-1.1	-1.8	-2.1	-1.4
Consolidated gov primary balance	1.5	0.8	1.7	0.1	0.6	0.1	-0.8	-1.1	-0.2
Public debt	39.6	34.1	29.3	31.4	26.3	23.5	23.6	22.7	22.5
of which Domestic	22.6	19.7	16.2	19.3	16.7	15.5	16.1	15.6	15.6
<b>Foreign Assets &amp; Liabilities, US\$ bn</b>									
External debt	132.6	141.2	155.1	172.9	202.4	225.4	251.2	285.0	310.0
Private	56.8	60.6	68.5	73.6	83.8	106.7	125.1	146.5	168.0
Public	75.8	80.6	86.6	99.3	118.6	118.6	126.1	138.5	142.0
External debt / GDP	36.4	32.7	30.4	32.1	28.5	26.6	28.6	29.8	28.6
External debt / XGS	115.3	108.2	100.1	130.2	115.8	101.8	118.7	134.1	127.1
Short-term debt	12.2	18.7	20.5	24.0	31.6	36.6	43.9	42.0	45.0
Short-term debt/International Reserves (%)	28.7	32.8	39.7	36.4	32.8	33.2	38.9	39.6	41.7
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1F	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	6.5	6.3	6.4	6.2	6.1	6.0	6.1	6.1	6.2
CPI, % yoy	3.8	4.0	4.5	4.3	4.3	5.9	5.5	8.2	8.2
Policy interest rate, % eop	4.50	3.75	3.75	4.00	4.00	4.00	4.00	4.75	4.75
1 month inter-bank rate, % eop	4.57	3.78	3.98	4.11	4.24	4.18	4.20	4.90	4.90
Long term yield, % eop	6.05	6.02	6.28	5.98	5.39	5.74	5.60	5.50	5.60
lc vs USD, eop	9068	9144	9393	9570	9638	9718	9805	9843	9880

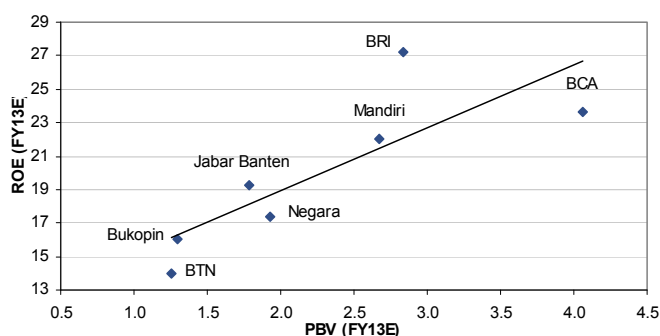
Source: CEIC Data Company Ltd, Fitch, IFS, Moody's and Citi Research Estimates

Figure 128. Indonesia — Banks Valuation Snapshot

Stock, Rating, Ric	Price (Rp)	TP (Rp)	ETR (%)	Mkt Cap (Rp tn)	Profit (Rp Bn)		EPS (Rp)		EPS Chg YoY (%)		P/E (x)		NBV/S (Rp)		P/B (x)		DPS (Rp)		Yield (%)		ROAE (%)	
					13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
BCA, 3, BBCA.JK	10,900	8,400	-21.9	266.1	13,897	16,419	568	671	18.0	18.1	19.3	16.3	2,697	3,255	4.06	3.36	114	134	1.0	1.2	23.6	22.6
Mandiri, 2, BMRI.JK	10,150	10,350	4.3	234.5	17,850	19,947	765	855	15.1	11.7	13.1	11.8	3,762	4,387	2.67	2.29	229	256	2.3	2.6	22.0	21.0
Rakyat, 2, BBRI.JK	9,300	9,400	3.7	227.1	19,505	20,946	813	873	4.4	7.4	11.4	10.6	3,282	3,911	2.83	2.38	244	175	2.6	1.9	27.2	24.3
Negara, 2, BBNI.JK	5,250	5,450	6.4	96.9	8,058	8,779	432	471	14.4	8.9	11.8	10.8	2,650	2,991	1.92	1.71	130	141	2.5	2.8	17.3	16.7
Bukopin, 3, BBKP.JK	910	725	-18.0	7.2	849	924	107	116	2.1	8.8	8.5	7.8	702	798	1.30	1.14	21	23	2.3	2.5	16.1	15.5
BJBR, 3, BJBR.JK	1,200	1,125	-2.1	11.5	1,204	1,268	124	131	0.9	5.3	9.7	9.2	673	754	1.78	1.59	50	39	4.1	3.3	19.3	18.3
BTN, 3, BBTN.JK	1,390	1,350	-0.8	14.5	1,513	1,695	144	162	-3.8	12.0	9.5	8.5	1,092	1,226	1.25	1.12	29	32	2.1	2.4	14.0	14.0

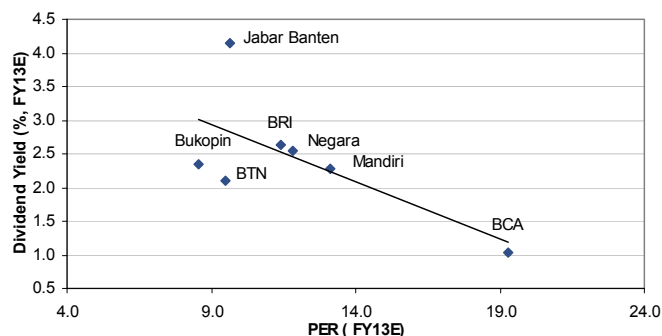
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 129. Price-Book vs. ROAE 2013E



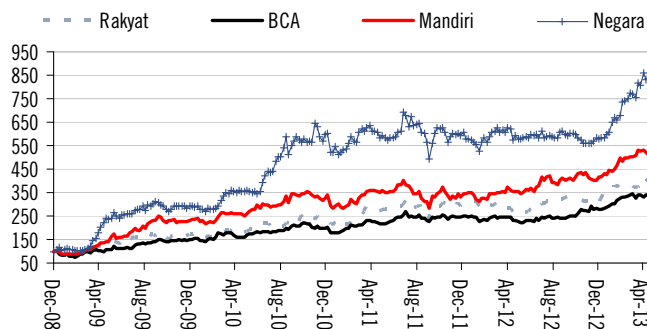
Source: Citi Research Estimates

Figure 130. P/E vs. Dividend Yield 2013E



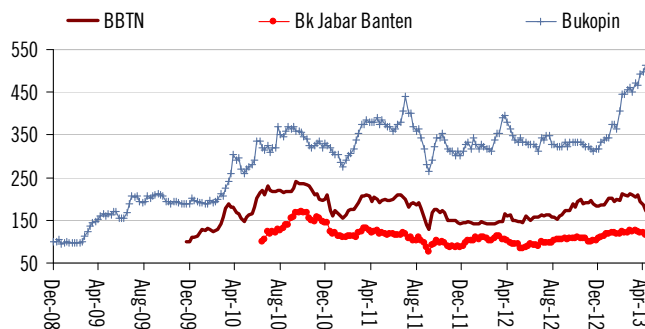
Source: Citi Research Estimates

Figure 131. Big-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 132. Mid-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

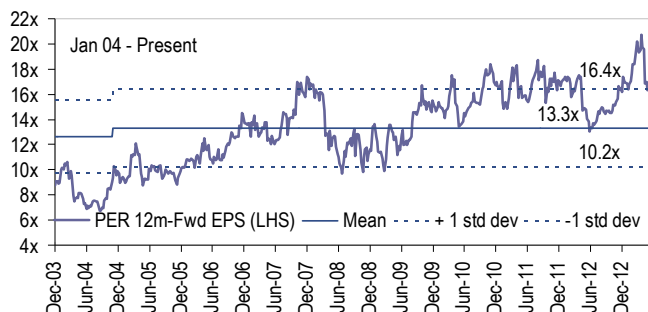
Figure 133. Indonesia Banks — Current vs. Target Valuation and Historical P/B & P/E Ranges

	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (IDR)	CY13E P/B (x)	CY13E P/E (x)	Target Price (IDR)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
BBCA	10,900	4.0	19.2	8,400	3.1	14.8	2.2	3.0	3.9	10.2	13.3	16.4
Rakyat	9,300	2.8	11.4	9,400	2.9	11.6	2.1	2.7	3.2	8.0	10.0	11.9
Mandiri	10,150	2.7	13.3	10,350	2.8	13.5	1.3	1.8	2.4	7.8	10.4	13.0
Negara	5,250	2.0	12.1	5,450	2.1	12.6	1.0	1.5	1.9	7.1	9.9	12.8

Note: Priced as on 23 May 2013; Source: Citi Research Estimates

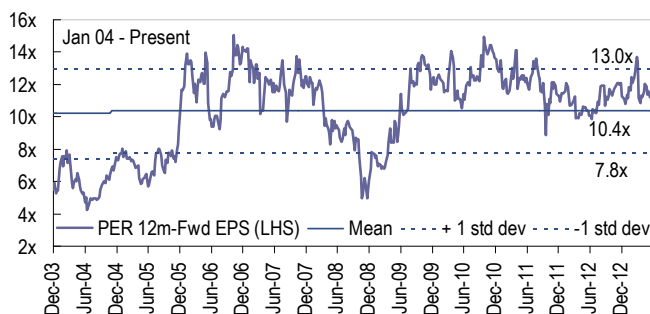
## Indonesia Banks – Valuation Charts

Figure 134. BCA – 12M Forward Consensus P/E Chart



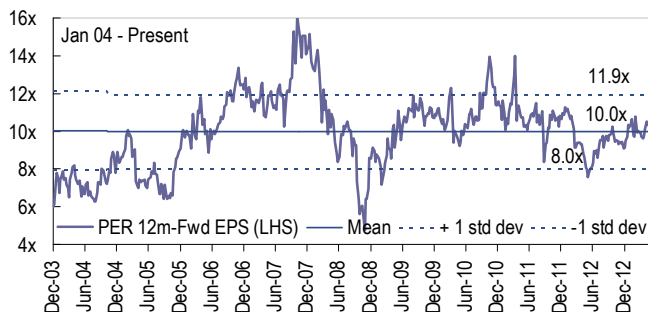
Source: DataStream, Citi Research

Figure 136. Mandiri – 12M Forward Consensus P/E Chart



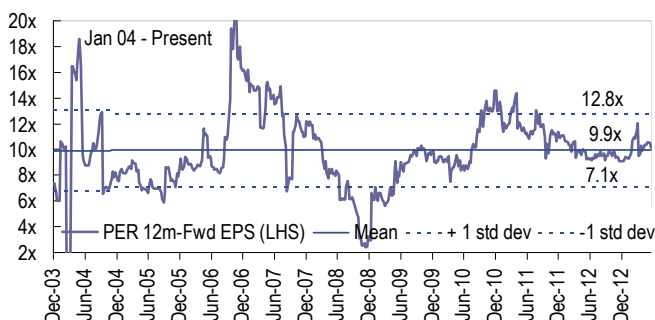
Source: DataStream, Citi Research

Figure 138. Rakyat – 12M Forward Consensus P/E Chart



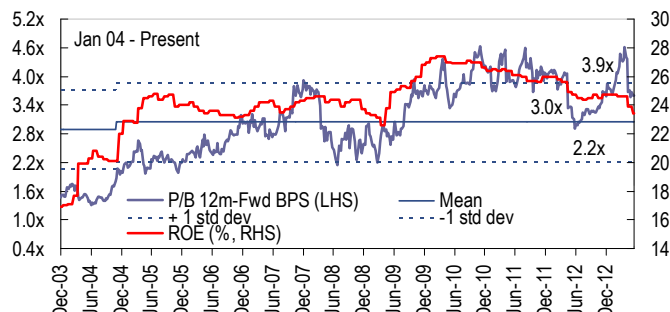
Source: DataStream, Citi Research

Figure 140. Negara – 12M Forward Consensus P/E Chart



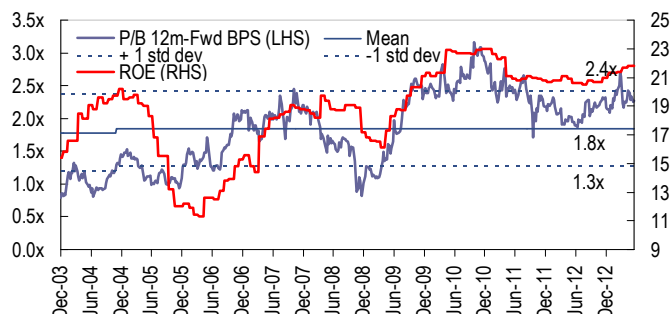
Source: DataStream, Citi Research

Figure 135. BCA – 12M Forward Consensus P/B Chart



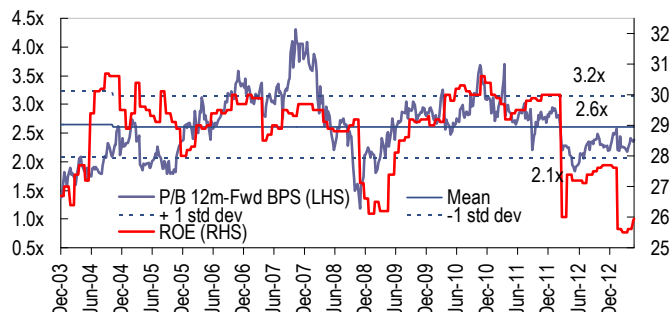
Source: DataStream, Citi Research

Figure 137. Mandiri – 12M Forward Consensus P/B Chart



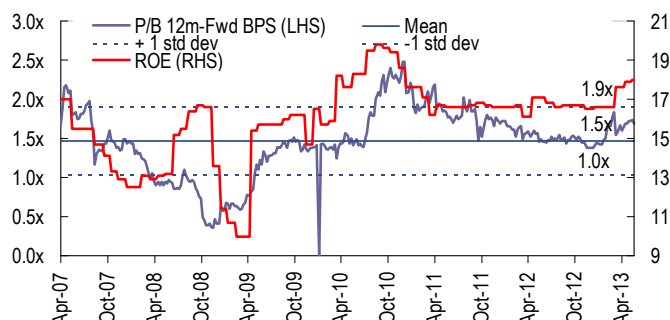
Source: DataStream, Citi Research

Figure 139. Rakyat – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 141. Negara – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 142. Indonesia – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	BBCA				BBRI				Mandiri			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	27.1	23.8	23.3	23.0	22.9	21.8	20.2	20.2	23.6	22.9	22.7	22.0
Net Interest Margin (bps)	603	613	611	612	842	843	817	812	555	585	571	568
<b>Net Interest Income (IDR b)</b>	<b>21,246</b>	<b>24,736</b>	<b>29,000</b>	<b>34,182</b>	<b>36,483</b>	<b>42,288</b>	<b>48,223</b>	<b>56,289</b>	<b>27,530</b>	<b>34,015</b>	<b>39,690</b>	<b>47,394</b>
NII Growth (%)	17.6	16.4	17.2	17.9	6.0	15.9	14.0	16.7	26.4	23.6	16.7	19.4
<b>Non Interest Income (IDR b)</b>	<b>6,368</b>	<b>7,693</b>	<b>9,139</b>	<b>10,783</b>	<b>5,146</b>	<b>5,949</b>	<b>6,912</b>	<b>8,064</b>	<b>11,850</b>	<b>14,112</b>	<b>16,825</b>	<b>19,882</b>
Non-II Growth (%)	6.4	20.8	18.8	18.0	29.3	15.6	16.2	16.7	16.4	19.1	19.2	18.2
-Fee Income (IDR b)	5,453	6,655	7,896	9,357	3,929	4,607	5,399	6,350	9,563	11,392	13,589	16,027
-Fee Growth (%)	19.7	22.0	18.7	18.5	16.6	17.3	17.2	17.6	14.4	19.1	19.3	17.9
-Other Income (IDR b)	915	1,038	1,242	1,426	1,217	1,342	1,513	1,713	2,287	2,719	3,236	3,855
-Other Income Growth (%)	-35.9	13.5	19.7	14.8	99.5	10.3	12.8	13.2	25.5	18.9	19.0	19.1
<b>Total Income (IDR b)</b>	<b>27,614</b>	<b>32,429</b>	<b>38,139</b>	<b>44,965</b>	<b>41,629</b>	<b>48,237</b>	<b>55,136</b>	<b>64,353</b>	<b>39,380</b>	<b>48,127</b>	<b>56,516</b>	<b>67,275</b>
Total Income Growth (%)	14.8	17.4	17.6	17.9	8.4	15.9	14.3	16.7	23.2	22.2	17.4	19.0
Non-II % of Total Income	23.1	23.7	24.0	24.0	12.4	12.3	12.5	12.5	30.1	29.3	29.8	29.6
<b>Operating Costs (IDR b)</b>	<b>12,860</b>	<b>14,852</b>	<b>17,148</b>	<b>19,809</b>	<b>19,491</b>	<b>23,128</b>	<b>27,263</b>	<b>31,718</b>	<b>18,913</b>	<b>22,866</b>	<b>27,263</b>	<b>32,280</b>
Costs Growth (%)	17.8	15.5	15.5	15.5	14.1	18.7	17.9	16.3	16.0	20.9	19.2	18.4
Costs % of Total Income	46.6	45.8	45.0	44.1	46.8	47.9	49.4	49.3	48.0	47.5	48.2	48.0
<b>Pre-Provision Profit (IDR b)</b>	<b>14,754</b>	<b>17,577</b>	<b>20,991</b>	<b>25,156</b>	<b>22,138</b>	<b>25,109</b>	<b>27,873</b>	<b>32,635</b>	<b>20,467</b>	<b>25,260</b>	<b>29,253</b>	<b>34,995</b>
PPP Growth (%)	12.3	19.1	19.4	19.8	3.8	13.4	11.0	17.1	30.8	23.4	15.8	19.6
PPOP/Avg Loans (Bps)	562.1	541.2	578.7	563.1	611.5	569.3	574.0	559.3	526.8	528.9	550.0	538.0
<b>Provision Charges (IDR b)</b>	<b>499</b>	<b>641</b>	<b>904</b>	<b>1,265</b>	<b>441</b>	<b>2,015</b>	<b>3,106</b>	<b>4,718</b>	<b>843</b>	<b>1,956</b>	<b>3,200</b>	<b>4,594</b>
- NPL Ratio (%)	0.4	0.4	0.4	0.4	1.8	2.3	2.3	2.3	1.9	2.2	2.2	2.2
- Provision Coverage (%)	413.7	351.1	314.8	297.6	224.7	148.2	132.8	129.1	194.1	156.1	149.5	144.9
- Provisions bps of Loans	21	22	25	28	13	50	64	81	24	46	62	72
Others (IDR b)	431	431	431	431	2,162	1,295	1,424	1,567	879	300	350	393
<b>Pre-tax Profit (IDR b)</b>	<b>14,686</b>	<b>17,367</b>	<b>20,518</b>	<b>24,322</b>	<b>23,859</b>	<b>24,389</b>	<b>26,191</b>	<b>29,484</b>	<b>20,503</b>	<b>23,604</b>	<b>26,403</b>	<b>30,794</b>
Tax (IDR b)	2,967	3,473	4,104	4,864	5,172	4,878	5,238	5,897	4,460	5,135	5,743	6,699
Minorities (IDR b)	-3	-4	-4	-5	6	6	7	8	539	620	713	831
<b>Net Profit (IDR b)</b>	<b>11,722</b>	<b>13,897</b>	<b>16,419</b>	<b>19,463</b>	<b>18,681</b>	<b>19,505</b>	<b>20,946</b>	<b>23,579</b>	<b>15,504</b>	<b>17,850</b>	<b>19,947</b>	<b>23,264</b>
FD EPS (IDR)	481.62	568.24	671.35	795.83	778.93	813.30	873.39	983.18	664.47	765.00	854.87	997.05
FD EPS Growth (%)	8.3	18.0	18.1	18.5	26.3	4.4	7.4	12.6	26.6	15.1	11.7	16.6
BVPS (IDR)	2129.41	2697.32	3255.02	3916.58	2702.18	3281.80	3911.20	4719.71	3196.33	3761.99	4387.36	5127.95
BVPS Growth (%)	23.4	26.7	20.7	20.3	30.2	21.5	19.2	20.7	20.7	17.7	16.6	16.9
RoRWA (%)	4.02	3.75	3.99	3.88	6.18	4.68	4.60	4.36	4.52	4.04	4.06	3.87
<b>Tier 1 ratio (%)</b>	<b>13.3</b>	<b>13.9</b>	<b>14.1</b>	<b>14.2</b>	<b>15.9</b>	<b>15.2</b>	<b>15.4</b>	<b>15.7</b>	<b>13.6</b>	<b>13.7</b>	<b>13.3</b>	<b>13.0</b>
Core Tier 1 ratio (%)	13.3	13.9	14.1	14.2	15.9	15.2	15.4	15.7	13.6	13.7	13.3	13.0
CAR (%)	14.2	14.7	14.8	14.8	16.9	16.2	16.3	16.6	15.5	15.6	15.1	14.5
<b>Loan to Deposit ratio (%)</b>	<b>70.8</b>	<b>75.0</b>	<b>78.8</b>	<b>82.6</b>	<b>80.4</b>	<b>83.4</b>	<b>84.7</b>	<b>86.0</b>	<b>80.4</b>	<b>82.0</b>	<b>82.9</b>	<b>83.4</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (IDR)</b>	481.62	568.24	671.35	795.83	778.93	813.30	873.39	983.18	664.47	765.00	854.87	997.05
% Impact from												
<b>Loan Growth: +1% Chg</b>		0.9	1.0	1.0		1.3	1.4	1.5		1.0	1.1	1.1
<b>NIM: +10bps Chg</b>		2.3	2.3	2.3		2.1	2.3	2.4		2.6	2.7	2.8
<b>Cost Income %: +1% Chg</b>		1.9	1.9	1.8		2.0	2.1	2.2		2.1	2.2	2.3
<b>Provisions / Loans: +10bps Chg</b>		1.9	1.8	1.8		1.8	1.9	2.0		2.1	2.1	2.2
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	5.15	5.13	5.12	5.13	7.14	7.03	6.79	6.74	4.64	4.88	4.76	4.73
Total operating income	6.70	6.73	6.73	6.75	8.15	8.02	7.77	7.70	6.63	6.90	6.77	6.72
Operating expenses	-3.12	-3.08	-3.02	-2.97	-3.82	-3.84	-3.84	-3.80	-3.19	-3.28	-3.27	-3.22
Op profit before provisions	3.58	3.65	3.70	3.78	4.34	4.17	3.93	3.91	3.45	3.62	3.51	3.49
Provisions	-0.12	-0.13	-0.16	-0.19	-0.09	-0.33	-0.44	-0.56	-0.14	-0.28	-0.38	-0.46
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.72	-0.72	-0.72	-0.73	-1.01	-0.81	-0.74	-0.71	-0.75	-0.74	-0.69	-0.67
<b>Net profit (ROA)</b>	<b>2.84</b>	<b>2.88</b>	<b>2.90</b>	<b>2.92</b>	<b>3.66</b>	<b>3.24</b>	<b>2.95</b>	<b>2.82</b>	<b>2.61</b>	<b>2.56</b>	<b>2.39</b>	<b>2.32</b>
Leverage (x)	9.4	8.9	8.4	8.2	9.6	9.1	8.9	8.7	9.3	9.3	9.6	9.8
<b>ROE</b>	<b>25.0</b>	<b>23.6</b>	<b>22.6</b>	<b>22.2</b>	<b>32.6</b>	<b>27.2</b>	<b>24.3</b>	<b>22.8</b>	<b>22.7</b>	<b>22.0</b>	<b>21.0</b>	<b>21.0</b>

Source: Company Reports and Citi Research Estimates

Figure 143. Indonesia – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	BBNI				Sector (7 banks)			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	<b>22.8</b>	<b>21.6</b>	<b>21.5</b>	<b>21.5</b>	<b>23.7</b>	<b>22.4</b>	<b>21.7</b>	<b>21.7</b>
Net Interest Margin (bps)	585	605	591	594	667	679	666	649
<b>Net Interest Income (IDR b)</b>	<b>15,459</b>	<b>18,339</b>	<b>21,005</b>	<b>24,628</b>	<b>123,946</b>	<b>146,396</b>	<b>169,367</b>	<b>179,971</b>
NII Growth (%)	17.1	18.6	14.5	17.2	15.6	18.1	15.7	18.1
<b>Non Interest Income (IDR b)</b>	<b>5,474</b>	<b>6,149</b>	<b>7,035</b>	<b>8,261</b>	<b>35,587</b>	<b>41,811</b>	<b>49,153</b>	<b>49,052</b>
Non-II Growth (%)	9.9	12.3	14.4	17.4	15.3	17.5	17.6	-0.2
-Fee Income (IDR b)	3,412	4,174	5,075	6,133	28,716	34,279	40,657	39,452
-Fee Growth (%)	22.5	22.3	21.6	20.9	17.6	19.4	18.6	18.3
-Insurance Income (IDR b)	0	0	0	0	0	0	0	0
-Insurance Growth (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-Other Income (IDR b)	2,062	1,975	1,960	2,128	6,871	7,532	8,496	9,600
-Other Income Growth (%)	-6.1	-4.2	-0.8	8.6	6.5	9.6	12.8	13.0
<b>Total Income (IDR b)</b>	<b>20,933</b>	<b>24,488</b>	<b>28,040</b>	<b>32,889</b>	<b>159,533</b>	<b>188,207</b>	<b>218,519</b>	<b>229,024</b>
Total Income Growth (%)	15.2	17.0	14.5	17.3	15.5	18.0	16.1	18.0
Non-II % of Total Income	26.2	25.1	25.1	25.1	22.3	22.2	22.5	21.4
<b>Operating Costs (IDR b)</b>	<b>11,806</b>	<b>13,395</b>	<b>15,261</b>	<b>17,387</b>	<b>79,008</b>	<b>92,892</b>	<b>108,678</b>	<b>113,036</b>
Costs Growth (%)	15.5	13.5	13.9	13.9	16.0	17.6	17.0	16.5
Costs % of Total Income	56.4	54.7	54.4	52.9	49.5	49.4	49.7	49.4
<b>Pre-Provision Profit (IDR b)</b>	<b>9,127</b>	<b>11,092</b>	<b>12,778</b>	<b>15,502</b>	<b>80,525</b>	<b>95,315</b>	<b>109,842</b>	<b>115,987</b>
PPP Growth (%)	14.8	21.5	15.2	21.3	15.1	18.4	15.2	19.4
PPOP/Avg Loans (Bps)	454.7	454.3	472.6	472.1	536.5	518.7	539.1	488.9
<b>Provision Charges (IDR b)</b>	<b>486</b>	<b>1,314</b>	<b>2,153</b>	<b>3,162</b>	<b>5,819</b>	<b>10,343</b>	<b>14,692</b>	<b>15,265</b>
- NPL Ratio (%)	2.8	2.9	2.9	3.0	1.6	1.8	1.8	1.8
- Provision Coverage (%)	122.5	113.1	111.3	114.7	155.9	130.4	125.6	127.5
- Provisions bps of Loans	28	61	82	99	37	55	65	64
Others (IDR b)	258	304	358	423	3,183	1,669	1,849	2,847
<b>Pre-tax Profit (IDR b)</b>	<b>8,899</b>	<b>10,082</b>	<b>10,984</b>	<b>12,763</b>	<b>77,888</b>	<b>86,642</b>	<b>96,998</b>	<b>103,570</b>
Tax (IDR b)	1,851	2,016	2,197	2,553	16,940	18,307	20,526	21,459
Minorities (IDR b)	2	7	8	10	681	789	916	848
<b>Net Profit (IDR b)</b>	<b>7,046</b>	<b>8,058</b>	<b>8,779</b>	<b>10,200</b>	<b>60,267</b>	<b>67,546</b>	<b>75,557</b>	<b>81,262</b>
FD EPS (IDR)	377.84	432.13	470.75	546.99	574.76	644.78	723.27	848.82
FD EPS Growth (%)	21.3	14.4	8.9	16.2	20.2	12.2	12.2	15.9
BVPS (IDR)	2331.21	2649.98	2991.08	3396.83	2569.34	3080.49	3625.43	4293.67
BVPS Growth (%)	15.2	13.7	12.9	13.6	21.5	19.9	17.7	18.6
RoRWA (%)	3.35	2.84	2.80	2.70	4.40	3.75	3.80	3.54
<b>Tier 1 ratio (%)</b>	<b>15.2</b>	<b>14.7</b>	<b>14.2</b>	<b>13.7</b>	<b>14.5</b>	<b>14.4</b>	<b>14.3</b>	<b>14.2</b>
Core Tier 1 ratio (%)	15.2	14.7	14.2	13.7	14.5	14.4	14.3	14.2
CAR (%)	16.7	15.9	15.1	14.4	15.7	15.6	15.3	15.2
<b>Loan to Deposit ratio (%)</b>	<b>78.0</b>	<b>80.6</b>	<b>83.0</b>	<b>85.4</b>	<b>80.1</b>	<b>83.1</b>	<b>85.1</b>	<b>84.6</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (IDR)</b>	<b>377.84</b>	<b>432.13</b>	<b>470.75</b>	<b>546.99</b>	<b>574.76</b>	<b>644.78</b>	<b>723.27</b>	<b>848.82</b>
% Impact from								
<b>Loan Growth: +1% Chg</b>		1.2	1.3	1.4		1.2	1.3	1.4
<b>NIM: +10bps Chg</b>		3.0	3.2	3.3		2.5	2.7	2.8
<b>Cost Income %: +1% Chg</b>		2.4	2.6	2.6		2.2	2.3	2.2
<b>Provisions / Loans: +10bps Chg</b>		2.4	2.5	2.6		2.1	2.1	2.3
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	4.89	5.04	4.92	4.95	5.59	5.63	5.52	5.32
Total operating income	6.62	6.73	6.57	6.61	7.20	7.24	7.12	6.77
Operating expenses	-3.73	-3.68	-3.58	-3.50	-3.57	-3.57	-3.54	-3.34
Op profit before provisions	2.89	3.05	2.99	3.12	3.63	3.67	3.58	3.43
Provisions	-0.15	-0.36	-0.50	-0.64	-0.26	-0.40	-0.48	-0.45
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.59	-0.55	-0.51	-0.51	-0.76	-0.70	-0.67	-0.63
<b>Net profit (ROA)</b>	<b>2.23</b>	<b>2.21</b>	<b>2.06</b>	<b>2.05</b>	<b>2.72</b>	<b>2.60</b>	<b>2.46</b>	<b>2.40</b>
Leverage (x)	8.2	8.5	8.7	9.0	9.2	9.0	9.1	9.4
<b>ROE</b>	<b>17.4</b>	<b>17.3</b>	<b>16.7</b>	<b>17.1</b>	<b>23.3</b>	<b>21.7</b>	<b>20.7</b>	<b>20.8</b>

Source: Company Reports and Citi Research Estimates

# Japan

## Major Beneficiary of Higher US Inflation and Rates

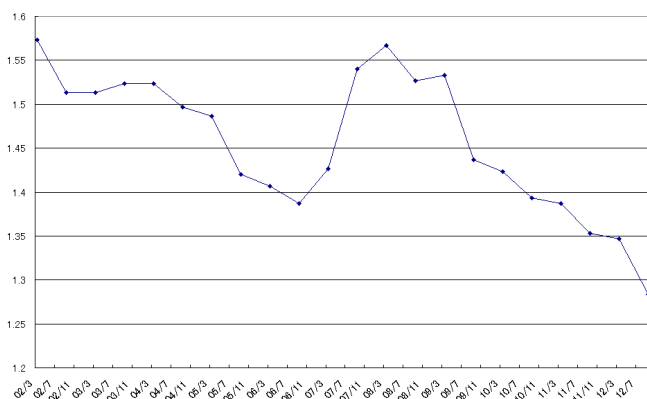
### Key Scenario Assumptions

- **CPI inflation rises to 2%** – We assume inflation rises to 2%, up from -0.2% in 2012, in line with current government/BOJ target.
- **One-year deposit rates** – Deposit rate sensitivity has been consistently 40% of the marginal change in market rate.
- **One-year lending rates** – No change in the market rate spread is assumed. Therefore, the change in the market rate hit the yield simply by the same rate change.
- **Short and long term market interest rates** – Steepening of the yield curve is assumed given the government's willingness to spend more and enhance the inflation expectation.

### Implications for Japan Banks

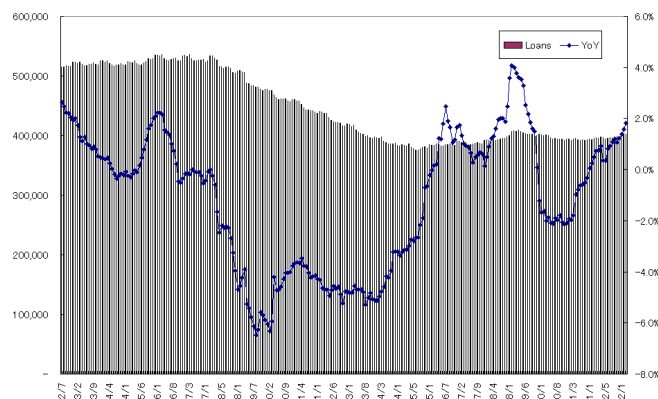
- **NIMs expand 18bps** – NIM is largely affected by the short term rate. The small rise in short term rate in this assumption will improve the margin somewhat. Expect 18bps NIM benefit based on the sensitivity difference of the lending rate and deposit rate.
- **Loan demand likely to increase** – “Abenomics” will help increase the loan demand from corporate, household and public sectors.
- **Asset quality not a major concern** – Thanks to the heavy deleveraging and stringent credit assessment of assets, Japanese banks' NPL issue will not become a major concern.
- **Further cost reduction unlikely** – Japanese banks have already gone through restructuring and there is limited room for the cost reduction.

Figure 144. Japan Banks – Average NIM Trend (%)



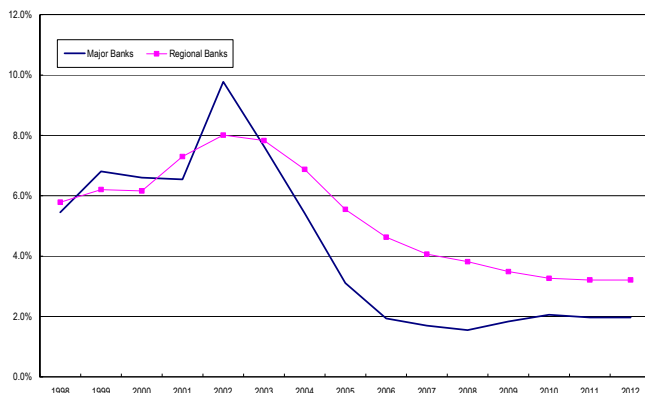
Source: Company Reports and Citi Research

Figure 145. Japan Banks – Loans (JPY bn)



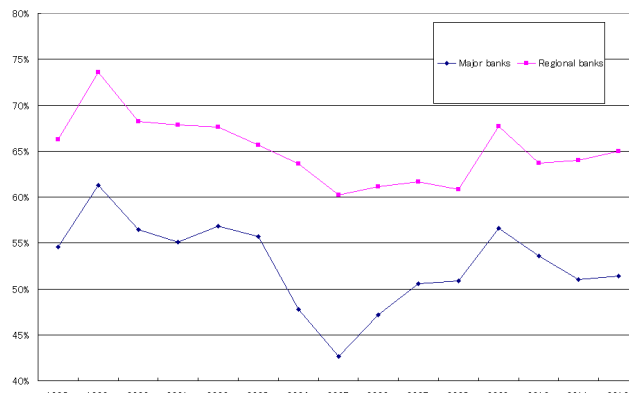
Source: BOJ, Citi Research

Figure 146. Japan Banks – System NPL Ratio (%)



Source: Citi Research

Figure 147. Japan Banks – Average Cost-to-income Ratio (%)



Source: Citi Research

## Overall Impact

ROEs expected to increase 1.2%pts to 9.2%

With ROEs forecasted to be 8.0% in 2013E for the companies in our coverage, their reported ROEs could rise by 1.2%pt to 9.2% under the above scenario for a 15% earnings uplift.

Figure 148. Japan Banks – Overall impact

		Earnings impact	ROE impact
NIM	+18bps	25.1%	2.0%
Loan growth	Minimal	0.0%	0.0%
Non-interest income	Minimal	0.0%	0.0%
Cost/income	Minimal	0.0%	0.0%
Credit cost	+10bps	-10.5%	-0.8%
<b>Net impact</b>		<b>14.6%</b>	<b>1.2%</b>

Source: Citi Research Estimates

Mega banks set to benefit the most; prefer MUFG

Mega banks in general benefit more from the given scenario than other banks as they have much shorter duration, and enjoy currency devaluation due to overseas revenues.

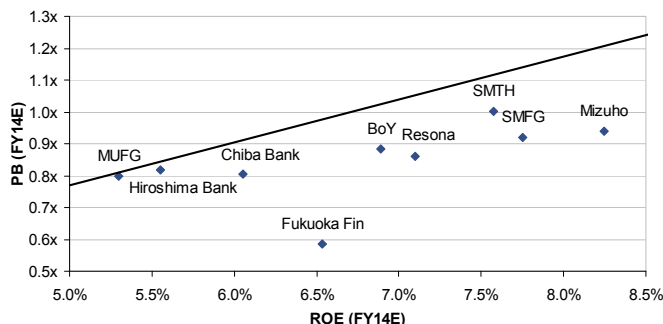
We prefer MUFG among the mega banks due to [1] Best capitalized bank and likelihood of dividend hike in the near term is high [2] Yen depreciation will leverage the earnings contribution from overseas. [3] Least exposure to interest rate risk [4] Net profit growth likely to improve in FY2013 unlike for the other two mega banks.

Figure 149. Japan — Banks Valuation Snapshot

Stock, Rating, Ric	Price (JPY)	TP (JPY)	ETR (%)	Mkt Cap (JPY b)	Net Profit (JPY Bn)		EPS (JPY)		EPS Chg YoY%		P/E (x)		NBV/S (JPY)		P/NBV (x)		Net DPS (JPY)		Yield (%)		ROAE (%)	
					14E	15E	14E	15E	14E	15E	14E	15E	14E	15E	14E	15E	14E	15E	14E	15E	14E	15E
MUFG, 1, 8306.T	346	770	124.7	8,974	330.4	362.2	28	32	-13.8	11.7	12.0	10.7	426	448	0.80	0.76	7.7	8.2	2.3	2.4	5.3	5.5
SMFG, 1, 8316.T	2,348	6,350	173.0	5,822	263.1	288.1	233	257	-27.3	10.3	9.9	9.0	2504	2701	0.92	0.85	60.1	60.1	2.6	2.6	7.8	7.9
Mizuho, 1, 8411.T	113	300	168.3	4,999	256.0	277.7	11	12	-7.7	8.5	10.1	9.3	120	129	0.94	0.87	3.3	3.3	2.9	2.9	8.2	8.4
SMTH, 1, 8309.T	253	610	142.9	1,710	71.8	78.1	22	25	12.4	10.9	11.5	10.4	256	258	1.00	0.99	5.5	6.6	2.1	2.6	7.6	8.2
Resona, 1, 8308.T	266	590	124.9	1,190	78.1	81.6	23	24	-43.4	4.8	11.8	11.2	313	339	0.86	0.79	8.2	8.2	3.0	3.0	7.1	7.0
BoY, 1, 8332.T	292	700	141.6	700	29.3	29.9	23	24	-1.8	2.7	12.7	12.3	331	349	0.89	0.84	6.0	6.0	2.0	2.0	6.9	6.7
Shizuoka Bank, 2, 8355.T	597	1,200	102.2	698	20.6	21.5	33	34	-33.2	4.0	18.2	17.5	693	721	0.87	0.84	8.2	8.2	1.4	1.4	4.8	4.8
Shinsei, 1, 8303.T	126	330	163.1	610	11.6	14.0	11	13	2.7	21.6	12.4	10.2	141	154	0.95	0.87	0.5	0.5	0.4	0.4	3.2	3.6
Chiba Bank, 1, 8331.T	361	850	137.3	568	23.0	23.6	28	29	3.8	2.4	12.7	12.5	450	472	0.80	0.77	6.6	6.6	1.8	1.8	6.1	6.0
Seven Bank, 3, 8410.T	182	300	67.0	397	11.5	12.3	10	10	7.8	7.4	19.2	17.9	76	86	2.43	2.14	3.8	3.9	2.1	2.1	13.5	12.7
Joyo Bank, 1, 8333.T	286	700	146.7	393	12.5	11.9	17	17	3.9	-4.4	16.8	17.6	342	352	0.86	0.83	4.6	4.6	1.6	1.6	4.8	4.5
Fukuoka Fin, 2, 8354.T	237	550	134.1	373	22.4	23.8	19	20	-2.7	9.1	12.6	11.5	403	418	0.59	0.56	4.9	4.9	2.1	2.1	6.5	6.7
Aozora, 2, 8304.T	169	320	92.9	362	14.5	13.9	11	13	-25.2	25.3	16.1	12.9	212	219	0.81	0.78	6.6	6.6	3.8	3.8	4.2	3.9
Hiroshima Bank, 1, 8379.T	228	600	165.1	258	9.7	10.2	16	17	-3.1	5.1	14.6	13.9	287	300	0.82	0.78	3.8	3.8	1.6	1.6	5.6	5.6
Shiga Bank, 1, 8366.T	292	750	157.8	141	3.6	3.9	15	16	7.0	7.2	20.4	19.0	415	427	0.72	0.70	3.3	3.3	1.1	1.1	3.3	3.5

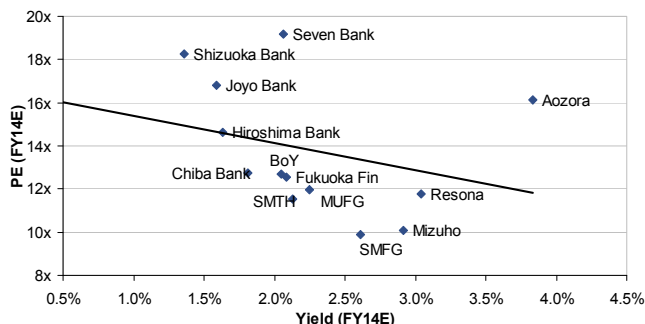
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 150. Price-Book vs. ROAE 2014E



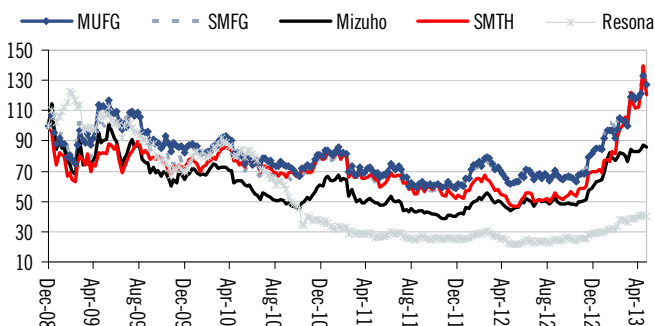
Source: Citi Research Estimates

Figure 151. P/E vs. Dividend Yield 2014E



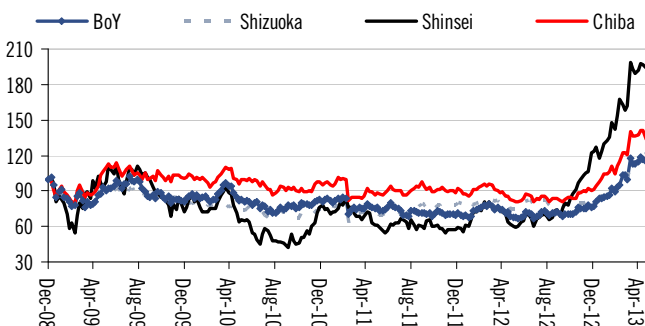
Source: Citi Research Estimates

Figure 152. Big-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 153. Mid-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

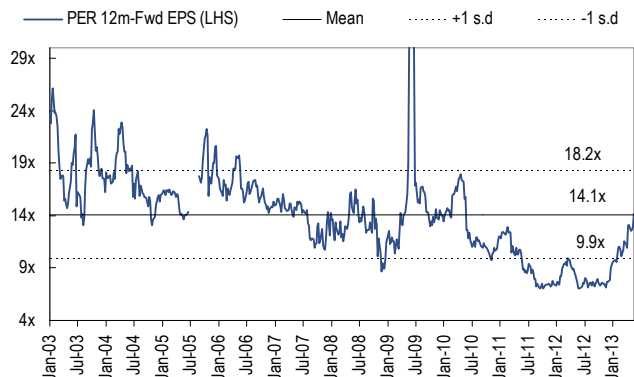
Figure 154. Japan Banks – Current vs. Target Valuation and Historical P/B & P/E Ranges

	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (JPY)	CY13E P/B (x)	CY13E P/E (x)	Target Price (JPY)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
Mitsubishi UFJ Financial Grp	634	0.8	11.7	770	1.0	14.3	0.6	1.1	1.6	9.9	14.1	18.2
Sumitomo Mitsui Financial Grp	4,210	0.9	9.0	6,350	1.4	13.6	0.6	1.2	1.8	8.0	11.6	15.3
Mizuho Financial Grp	207	0.9	9.9	300	1.4	14.4	0.5	1.3	2.0	7.5	11.7	15.9
Sumitomo Mitsui Trust Hldgs	464	1.0	11.7	610	1.3	15.4	0.7	1.0	1.3	7.0	9.1	11.2
Resona Hldgs	487	0.8	9.8	590	1.0	11.9	0.7	1.4	2.0	7.6	11.9	16.3

Note: Priced as on 23 May 2013; Source: Citi Research Estimates

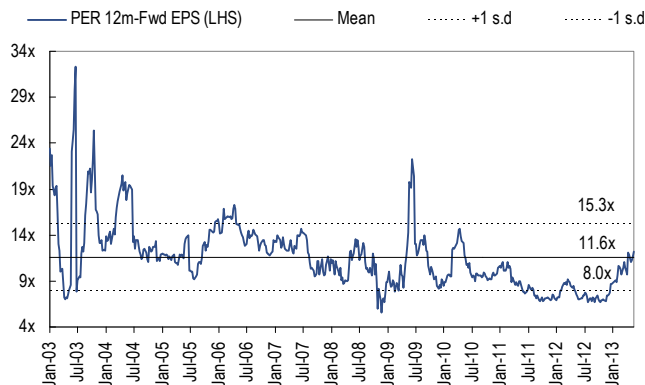
## Japan Banks – Valuation Charts

Figure 155. MUFG – 12M Forward Consensus P/E Chart



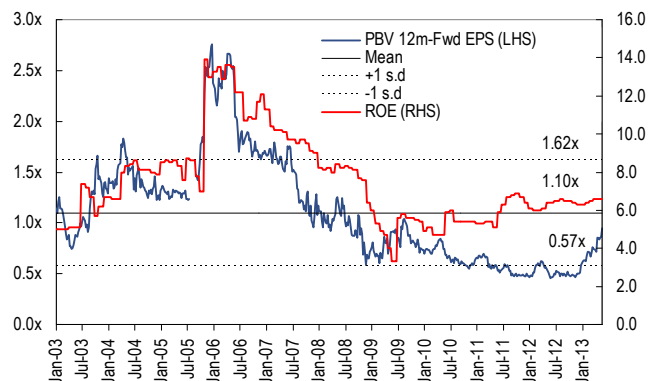
Source: DataStream, Citi Research

Figure 157. SMFG – 12M Forward Consensus P/E Chart



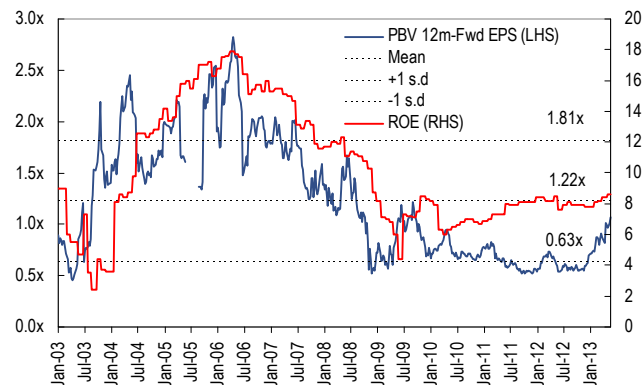
Source: DataStream, Citi Research

Figure 156. MUFG – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

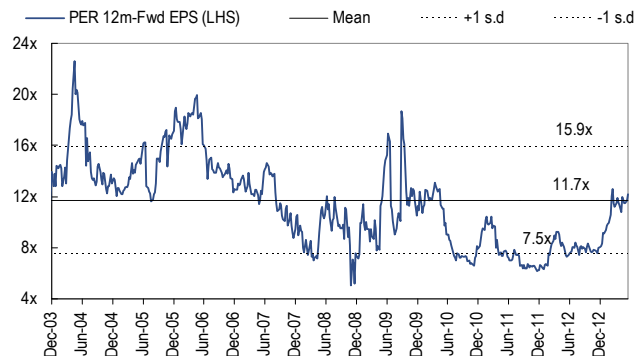
Figure 158. SMFG – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

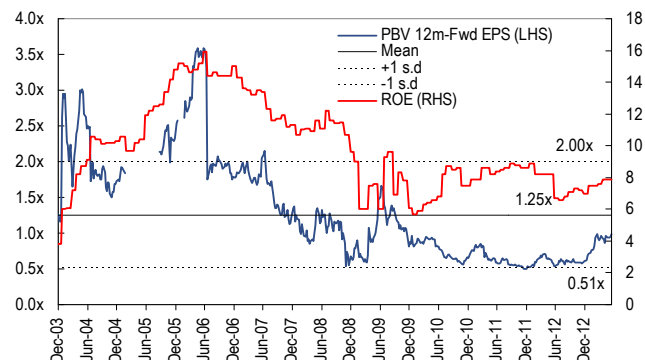
## Japan Banks – Valuation Charts (Cont'd)

Figure 159. Mizuho – 12M Forward Consensus P/E Chart



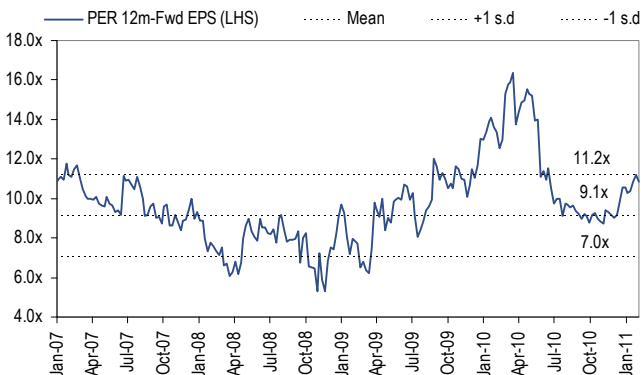
Source: DataStream, Citi Research

Figure 160. Mizuho – 12M Forward Consensus P/B Chart



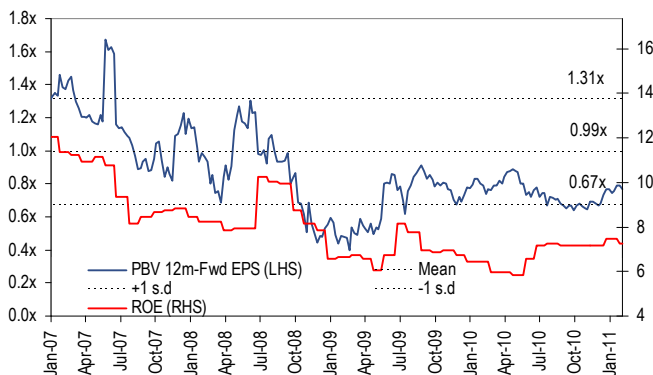
Source: DataStream, Citi Research

Figure 161. SMTH – 12M Forward Consensus P/E Chart



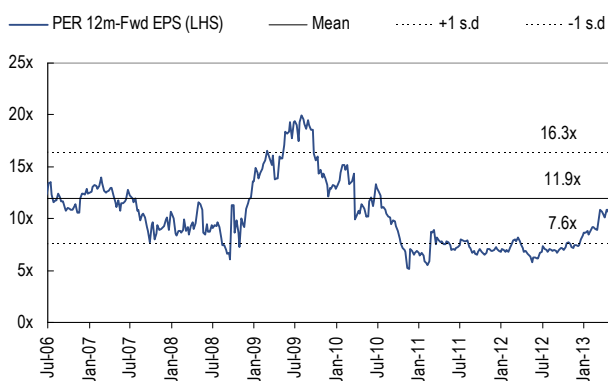
Source: DataStream, Citi Research

Figure 162. SMTH – 12M Forward Consensus P/B Chart



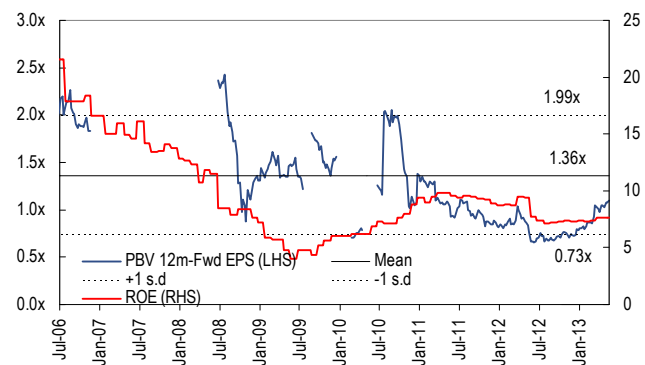
Source: DataStream, Citi Research

Figure 163. Resona – 12M Forward Consensus P/E Chart



Source: DataStream, Citi Research

Figure 164. Resona – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 165. Japan – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	MUFG				SMFG				Mizuho				SMTH			
	FY13A	FY14E	FY15E	FY16E	FY13A	FY14E	FY15E	FY16E	FY13A	FY14E	FY15E	FY16E	FY13A	FY14E	FY15E	FY16E
<b>Loan Growth (%)</b>	8.1	(2.4)	4.1	0.4	4.6	11.2	6.3	0.6	5.9	6.4	3.4	0.4	8.5	4.4	4.7	0.2
Net Interest Margin (bps)	149	152	160	162	110	108	107	112	88	88	90	93	65	63	64	69
<b>Net Interest Income (JPY b)</b>	<b>1,325.4</b>	<b>1,388.2</b>	<b>1,475.8</b>	<b>1,523.4</b>	<b>971.2</b>	<b>1,027.7</b>	<b>1,103.1</b>	<b>1,191.3</b>	<b>956.6</b>	<b>1,009.3</b>	<b>1,085.4</b>	<b>1,147.6</b>	<b>199.6</b>	<b>205.2</b>	<b>218.1</b>	<b>240.1</b>
NII Growth (%)	(2.5)	4.7	6.3	3.2	1.5	5.8	7.3	8.0	(2.7)	5.5	7.5	5.7	(8.5)	2.8	6.3	10.1
<b>Non Interest Income (JPY b)</b>	<b>1,072.3</b>	<b>937.1</b>	<b>980.8</b>	<b>1,017.7</b>	<b>568.9</b>	<b>515.5</b>	<b>537.2</b>	<b>563.6</b>	<b>729.5</b>	<b>597.7</b>	<b>601.9</b>	<b>614.8</b>	<b>250.1</b>	<b>239.0</b>	<b>244.3</b>	<b>252.7</b>
Non-II Growth (%)	7.0	(12.6)	4.7	3.8	(1.2)	(9.4)	4.2	4.9	16.8	(18.1)	0.7	2.1	(7.3)	(4.4)	2.2	3.4
-Fee Income (JPY b)	511.7	514.7	547.5	586.4	343.8	344.9	363.5	384.7	346.0	350.6	350.1	350.1	85.3	107.5	112.4	118.2
-Fee Growth (%)	8.8	0.6	6.4	7.1	7.8	0.3	5.4	5.9	13.5	1.3	(0.1)	(0.0)	2.6	26.0	4.5	5.2
-Other Income (JPY b)	560.6	422.5	433.3	431.3	225.1	170.7	173.8	178.9	383.5	247.1	251.8	264.7	164.8	131.5	131.9	134.4
-Other Income Growth (%)	5.4	(24.6)	2.6	(0.4)	(12.3)	(24.2)	1.8	3.0	20.0	(35.6)	1.9	5.1	(11.6)	(20.2)	0.3	1.9
<b>Total Income (JPY b)</b>	<b>2,397.7</b>	<b>2,325.3</b>	<b>2,456.6</b>	<b>2,541.2</b>	<b>1,540.1</b>	<b>1,543.2</b>	<b>1,640.4</b>	<b>1,755.0</b>	<b>1,686.1</b>	<b>1,607.0</b>	<b>1,687.3</b>	<b>1,762.4</b>	<b>449.7</b>	<b>444.2</b>	<b>462.4</b>	<b>492.8</b>
Total Income Growth (%)	1.5	(3.0)	5.6	3.4	0.5	0.2	6.3	7.0	4.9	(4.7)	5.0	4.5	(7.8)	(1.2)	4.1	6.6
Non-II % of Total Income	44.7	40.3	39.9	40.0	36.9	33.4	32.8	32.1	43.3	37.2	35.7	34.9	55.6	53.8	52.8	51.3
<b>Operating Costs (JPY b)</b>	<b>1,233.9</b>	<b>1,207.7</b>	<b>1,211.5</b>	<b>1,215.3</b>	<b>727.7</b>	<b>732.7</b>	<b>752.0</b>	<b>771.8</b>	<b>839.7</b>	<b>835.6</b>	<b>832.9</b>	<b>835.6</b>	<b>239.4</b>	<b>236.6</b>	<b>231.5</b>	<b>231.5</b>
Costs Growth (%)	3.6	(2.1)	0.3	0.3	1.1	0.7	2.6	2.6	(4.5)	(0.5)	(0.3)	0.3	(3.7)	(1.2)	(2.2)	0.0
Costs % of Total Income	51.5	51.9	49.3	47.8	47.3	47.5	45.8	44.0	49.8	52.0	49.4	47.4	53.2	53.3	50.1	47.0
<b>Pre-Provision Profit (JPY b)</b>	<b>1,163.8</b>	<b>1,117.6</b>	<b>1,245.1</b>	<b>1,325.8</b>	<b>812.4</b>	<b>810.6</b>	<b>888.4</b>	<b>983.1</b>	<b>846.4</b>	<b>771.4</b>	<b>854.5</b>	<b>926.8</b>	<b>210.3</b>	<b>207.6</b>	<b>231.0</b>	<b>261.3</b>
PPP Growth (%)	(0.6)	(4.0)	11.4	6.5	(0.1)	(0.2)	9.6	10.7	16.2	(8.9)	10.8	8.5	(12.0)	(1.3)	11.3	13.1
PPOP/Avg Loans (Bps)	132.4	123.9	136.9	142.6	126.6	117.0	118.0	126.4	128.9	110.7	116.9	124.5	97.7	90.7	96.5	106.6
Provision Charges (JPY b)	65.3	124.3	130.0	136.9	19.5	65.4	86.5	112.1	114.2	67.4	105.2	110.2	(5.3)	11.4	18.2	25.2
- NPL Ratio (%)	1.9	1.8	1.7	1.6	1.7	1.4	1.3	1.2	1.9	1.7	1.6	1.5	1.4	1.2	1.1	1.1
- Provision Coverage (%)	50.4	55.6	61.1	64.6	78.4	86.7	97.5	103.3	51.0	56.1	61.2	64.7	40.6	42.7	45.0	47.4
- Provisions bps of Loans	7.4	13.8	14.3	14.7	3.0	9.4	11.5	14.4	17.4	9.7	14.4	14.8	(2.5)	5.0	7.6	10.3
Others (JPY b)	(47.5)	(33.9)	(62.4)	(60.3)	(127.4)	(32.1)	(20.2)	(17.7)	(177.5)	(79.6)	(71.2)	(67.0)	(56.6)	(8.6)	(8.4)	(8.2)
<b>Pre-tax Profit (JPY b)</b>	<b>1,051.0</b>	<b>959.4</b>	<b>1,052.8</b>	<b>1,128.6</b>	<b>665.4</b>	<b>713.1</b>	<b>781.7</b>	<b>853.4</b>	<b>554.7</b>	<b>624.3</b>	<b>678.1</b>	<b>749.6</b>	<b>159.0</b>	<b>187.6</b>	<b>204.4</b>	<b>227.9</b>
Tax (JPY b)	340.7	355.0	389.5	417.6	47.6	231.8	254.0	277.3	43.5	156.1	169.5	187.4	53.9	56.3	61.3	68.4
Minorities (JPY b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Profit (JPY b)</b>	<b>710.3</b>	<b>604.4</b>	<b>663.3</b>	<b>711.0</b>	<b>617.8</b>	<b>481.4</b>	<b>527.6</b>	<b>576.0</b>	<b>511.3</b>	<b>468.3</b>	<b>508.6</b>	<b>562.2</b>	<b>105.2</b>	<b>131.3</b>	<b>143.1</b>	<b>159.5</b>
FD EPS (JPY)	60.28	51.94	58.02	61.39	586.50	426.46	470.34	508.43	22.14	20.44	22.17	24.49	36.30	40.81	45.24	50.21
FD EPS Growth (%)	(13.1)	(13.8)	11.7	5.8	52.8	(27.3)	10.3	8.1	15.7	(7.7)	8.5	10.4	(8.5)	12.4	10.9	11.0
BVPS (JPY)	803	779	820	862	4,688	4,585	4,946	5,344	230	219	236	255	471	469	473	510
BVPS Growth (%)	18.2	(2.9)	5.2	5.2	21.5	(2.2)	7.9	8.1	22.6	(4.6)	7.7	7.7	13.9	(0.5)	0.8	7.9
RoRWA (%)	0.82	0.70	0.77	0.81	1.09	0.73	0.74	0.78	0.94	0.79	0.84	0.92	0.56	0.66	0.69	0.75
<b>Tier 1 ratio (%)</b>	<b>12.7</b>	<b>13.9</b>	<b>14.1</b>	<b>14.7</b>	<b>10.9</b>	<b>10.5</b>	<b>10.6</b>	<b>11.2</b>	<b>11.0</b>	<b>11.4</b>	<b>11.8</b>	<b>12.5</b>	<b>10.0</b>	<b>10.6</b>	<b>10.2</b>	<b>10.8</b>
Core Tier 1 ratio (%)	12.7	13.9	14.1	14.7	10.9	10.5	10.6	11.2	11.0	11.4	11.8	12.5	10.0	10.6	10.2	10.8
CAR (%)	16.7	18.0	18.0	18.7	14.7	14.0	13.8	14.4	14.2	14.5	14.9	15.5	14.1	14.6	14.0	14.6
<b>Loan to Deposit ratio (%)</b>	<b>62.3</b>	<b>62.1</b>	<b>64.2</b>	<b>64.5</b>	<b>65.1</b>	<b>79.9</b>	<b>84.3</b>	<b>84.7</b>	<b>67.8</b>	<b>84.8</b>	<b>87.0</b>	<b>87.2</b>	<b>82.5</b>	<b>153.9</b>	<b>159.6</b>	<b>159.8</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY14E FY15E FY16E</b>				<b>FY14E FY15E FY16E</b>				<b>FY14E FY15E FY16E</b>				<b>FY14E FY15E FY16E</b>			
<b>EPS Base Case (JPY)</b>	51.9 58.0 61.4				426.5 470.3 508.4				20.4 22.2 24.5				40.8 45.2 50.2			
% Impact from																
<b>Loan Growth: +1% Chg</b>	3.1 2.9 2.9				2.0 2.0 2.0				1.6 1.6 1.5				1.4 1.4 1.4			
<b>NIM: +10bps Chg</b>	20.7 19.0 18.1				26.2 25.9 24.5				30.7 29.6 27.3				32.3 31.0 28.5			
<b>Cost Income %: +1% Chg</b>	5.3 5.1 4.9				4.2 4.1 4.0				4.3 4.1 3.9				4.4 4.2 4.0			
<b>Provisions / Loans: +10bps Chg</b>	20.4 18.8 17.9				19.1 18.9 17.9				18.6 18.0 16.6				22.7 21.8 20.0			
<b>ROA/ROE DECOMP (%)</b>	<b>FY13A</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>	<b>FY13A</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>	<b>FY13A</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>	<b>FY13A</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>
Net interest income	0.58	0.60	0.66	0.68	0.67	0.68	0.72	0.76	0.56	0.58	0.63	0.66	0.55	0.55	0.59	0.65
Total operating income	1.06	1.01	1.09	1.13	1.06	1.03	1.06	1.12	0.98	0.92	0.98	1.02	1.25	1.19	1.24	1.32
Operating expenses	-0.54	-0.53	-0.54	-0.54	-0.50	-0.49	-0.49	-0.49	-0.49	-0.48	-0.49	-0.48	-0.66	-0.63	-0.62	-0.62
Op profit before provisions	0.51	0.49	0.55	0.59	0.56	0.54	0.58	0.63	0.49	0.44	0.50	0.54	0.58	0.56	0.62	0.70
Provisions	-0.03	-0.05	-0.06	-0.06	-0.01	-0.04	-0.06	-0.07	-0.07	-0.04	-0.06	-0.06	0.01	-0.03	-0.05	-0.07
Non-recurring items	-0.02	-0.01	-0.03	-0.03	-0.09	-0.02	-0.01	-0.01	-0.10	-0.05	-0.04	-0.04	-0.16	-0.02	-0.02	-0.02
Tax	-0.15	-0.15	-0.17	-0.19	-0.03	-0.15	-0.16	-0.18	-0.03	-0.09	-0.10	-0.11	-0.15	-0.15	-0.17	-0.18
<b>Net profit (ROA)</b>	<b>0.31</b>	<b>0.26</b>	<b>0.29</b>	<b>0.32</b>	<b>0.42</b>	<b>0.32</b>	<b>0.34</b>	<b>0.37</b>	<b>0.30</b>	<b>0.27</b>	<b>0.30</b>	<b>0.33</b>	<b>0.29</b>	<b>0.35</b>	<b>0.39</b>	<b>0.43</b>
Leverage (x)	19.30	20.11	18.78	17.92	22.98	24.22	23.03	21.65	28.90	30.63	28.21	26.52	20.86	21.51	21.40	20.55
<b>ROE</b>	<b>6.05</b>	<b>5.30</b>	<b>5.53</b>	<b>5.65</b>	<b>9.73</b>	<b>7.75</b>	<b>7.88</b>	<b>7.96</b>	<b>8.62</b>	<b>8.25</b>	<b>8.36</b>	<b>8.62</b>	<b>6.09</b>	<b>7.58</b>	<b>8.24</b>	<b>8.81</b>

Source: Company Reports and Citi Research Estimates

Figure 166. Japan – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	Resona				BoY				Shizuoka Bank				Sector (15 Banks)			
	FY13A	FY14E	FY15E	FY16E	FY13A	FY14E	FY15E	FY16E	FY13A	FY14E	FY15E	FY16E	FY13A	FY14E	FY15E	FY16E
<b>Loan Growth (%)</b>	2.7	4.1	3.2	0.1	4.4	3.5	3.0	2.0	2.5	2.3	1.0	1.0	5.7	3.9	4.1	0.6
Net Interest Margin (bps)	134	132	135	140	152	146	143	142	126	124	125	125	118	115	118	120
<b>Net Interest Income (JPY b)</b>	<b>433.0</b>	<b>440.9</b>	<b>469.2</b>	<b>494.5</b>	<b>162.1</b>	<b>161.9</b>	<b>164.0</b>	<b>167.2</b>	<b>122.1</b>	<b>123.5</b>	<b>125.2</b>	<b>126.5</b>	<b>4,789.0</b>	<b>4,973.9</b>	<b>5,274.6</b>	<b>5,444.5</b>
NII Growth (%)	(4.7)	1.8	6.4	5.4	(1.7)	(0.1)	1.3	2.0	(4.1)	1.1	1.4	1.0	(2.3)	3.9	6.0	3.2
<b>Non Interest Income (JPY b)</b>	<b>148.6</b>	<b>137.0</b>	<b>142.9</b>	<b>148.6</b>	<b>39.3</b>	<b>36.2</b>	<b>37.2</b>	<b>37.1</b>	<b>28.8</b>	<b>22.1</b>	<b>23.0</b>	<b>23.0</b>	<b>3,093.0</b>	<b>2,719.3</b>	<b>2,806.0</b>	<b>2,882.5</b>
Non-II Growth (%)	2.8	(7.8)	4.3	4.0	1.1	(7.8)	2.8	(0.3)	36.9	(23.3)	3.9	0.0	6.2	(12.1)	3.2	2.7
-Fee Income (JPY b)	84.2	83.2	87.2	92.4	29.3	31.2	32.2	32.1	14.8	15.1	16.0	16.0	1,587.0	1,632.0	1,698.7	1,760.1
-Fee Growth (%)	14.7	(1.2)	4.8	5.9	(7.3)	6.6	3.3	(0.4)	0.5	1.9	5.6	0.0	8.1	2.8	4.1	3.6
-Other Income (JPY b)	64.4	53.8	55.7	56.3	10.0	5.0	5.0	5.0	14.0	7.0	7.0	7.0	1,506.0	1,087.3	1,107.3	1,122.3
-Other Income Growth (%)	(9.4)	(16.5)	3.6	1.0	37.2	(50.0)	(0.0)	0.0	122.2	(50.0)	0.0	(0.0)	4.2	(27.8)	1.8	1.4
<b>Total Income (JPY b)</b>	<b>581.6</b>	<b>577.9</b>	<b>612.1</b>	<b>643.1</b>	<b>201.4</b>	<b>198.1</b>	<b>201.2</b>	<b>204.3</b>	<b>150.9</b>	<b>145.6</b>	<b>148.2</b>	<b>149.5</b>	<b>7,882.0</b>	<b>7,693.2</b>	<b>8,080.6</b>	<b>8,327.0</b>
Total Income Growth (%)	(2.9)	(0.6)	5.9	5.1	(1.1)	(1.6)	1.6	1.6	1.7	(3.5)	1.8	0.9	0.9	(2.4)	5.0	3.0
Non-II % of Total Income	25.5	23.7	23.3	23.1	19.5	18.3	18.5	18.1	19.1	15.2	15.5	15.4	39.2	35.3	34.7	34.6
<b>Operating Costs (JPY b)</b>	<b>335.6</b>	<b>328.4</b>	<b>328.4</b>	<b>328.4</b>	<b>96.7</b>	<b>101.0</b>	<b>102.0</b>	<b>104.0</b>	<b>80.0</b>	<b>80.0</b>	<b>79.9</b>	<b>79.9</b>	<b>4,055.5</b>	<b>4,028.8</b>	<b>4,046.1</b>	<b>4,006.0</b>
Costs Growth (%)	(1.0)	(2.1)	0.0	0.0	(1.7)	4.5	1.0	2.0	(1.4)	0.0	(0.1)	0.0	(0.1)	(0.7)	0.4	(1.0)
Costs % of Total Income	57.7	56.8	53.7	51.1	48.0	51.0	50.7	50.9	53.0	55.0	53.9	53.5	51.5	52.4	50.1	48.1
<b>Pre-Provision Profit (JPY b)</b>	<b>246.0</b>	<b>249.5</b>	<b>283.6</b>	<b>314.7</b>	<b>104.7</b>	<b>97.1</b>	<b>99.2</b>	<b>100.3</b>	<b>70.9</b>	<b>65.6</b>	<b>68.3</b>	<b>69.5</b>	<b>3,826.5</b>	<b>3,664.5</b>	<b>4,034.5</b>	<b>4,321.0</b>
PPP Growth (%)	(5.3)	1.4	13.7	10.9	(0.6)	(7.3)	2.2	1.1	5.5	(7.5)	4.1	1.9	2.0	(4.2)	10.1	7.1
PPOP/Avg Loans (Bps)	94.1	92.3	101.2	110.5	114.2	101.8	100.7	99.3	105.0	94.8	97.1	97.9	120.6	110.2	116.7	123.1
<b>Provision Charges (JPY b)</b>	<b>(21.4)</b>	<b>20.4</b>	<b>36.2</b>	<b>37.0</b>	<b>13.8</b>	<b>11.6</b>	<b>12.0</b>	<b>12.3</b>	<b>1.0</b>	<b>6.9</b>	<b>7.0</b>	<b>7.1</b>	<b>226.6</b>	<b>359.4</b>	<b>449.2</b>	<b>485.8</b>
- NPL Ratio (%)	2.1	1.9	1.8	1.7	2.2	2.2	2.1	2.1	3.4	3.3	3.2	3.2	2.0	1.9	1.7	1.6
- Provision Coverage (%)	73.8	80.4	87.4	92.1	31.3	31.8	32.2	32.7	31.6	31.6	31.6	31.6	54.9	59.5	64.5	68.1
- Provisions bps of Loans	(8.2)	7.5	12.9	13.0	15.0	12.2	12.2	12.2	1.5	10.0	10.0	10.0	7.2	11.0	13.0	13.9
Others (JPY b)	(13.7)	(17.5)	(17.5)	(17.1)	(3.1)	0.0	0.5	0.5	(0.5)	1.0	1.0	1.0	(456.7)	(173.7)	(180.7)	(171.4)
<b>Pre-tax Profit (JPY b)</b>	<b>253.8</b>	<b>211.6</b>	<b>229.9</b>	<b>260.5</b>	<b>87.8</b>	<b>85.5</b>	<b>87.7</b>	<b>88.5</b>	<b>69.4</b>	<b>59.6</b>	<b>62.2</b>	<b>63.4</b>	<b>3,143.2</b>	<b>3,131.4</b>	<b>3,404.6</b>	<b>3,663.8</b>
Tax (JPY b)	1.8	68.8	80.5	91.2	33.0	31.9	32.9	33.9	25.7	21.9	22.8	22.9	632.8	1,012.6	1,110.2	1,191.0
Minorities (JPY b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Profit (JPY b)</b>	<b>252.0</b>	<b>142.8</b>	<b>149.5</b>	<b>169.3</b>	<b>54.8</b>	<b>53.6</b>	<b>54.8</b>	<b>54.6</b>	<b>43.7</b>	<b>37.8</b>	<b>39.4</b>	<b>40.5</b>	<b>2,510.4</b>	<b>2,118.9</b>	<b>2,294.4</b>	<b>2,472.8</b>
FD EPS (JPY)	73.93	41.83	43.85	49.33	43.16	42.38	43.53	43.36	90.57	60.50	62.92	64.88	160.18	121.39	133.69	145.78
FD EPS Growth (%)	8.7	(43.4)	4.8	12.5	13.6	(1.8)	2.7	(0.4)	59.8	(33.2)	4.0	3.1	35.7	(24.2)	10.1	9.0
BVPS (JPY)	595	574	621	676	575	607	639	672	1,182	1,268	1,320	1,374	1,452	1,427	1,527	1,653
BVPS Growth (%)	29.8	(3.6)	8.2	8.9	7.1	5.5	5.4	5.1	6.5	7.3	4.1	4.1	19.6	(1.7)	7.0	8.3
RoRWA (%)	1.45	0.80	0.80	0.88	0.81	0.75	0.73	0.71	1.02	0.83	0.84	0.86	0.87	0.73	0.76	0.81
<b>Tier 1 ratio (%)</b>	<b>10.7</b>	<b>10.8</b>	<b>10.9</b>	<b>11.6</b>	<b>11.3</b>	<b>11.4</b>	<b>11.5</b>	<b>11.7</b>	<b>14.8</b>	<b>14.9</b>	<b>15.4</b>	<b>15.9</b>	<b>12.4</b>	<b>13.0</b>	<b>12.0</b>	<b>12.6</b>
Core Tier 1 ratio (%)	10.7	10.8	10.9	11.6	11.3	11.4	11.5	11.7	14.8	14.9	15.4	15.9	12.4	13.0	12.0	12.6
CAR (%)	14.7	14.6	14.5	15.2	13.5	13.4	13.5	13.7	16.1	16.2	16.7	17.1	15.7	16.3	15.1	15.8
<b>Loan to Deposit ratio (%)</b>	<b>72.2</b>	<b>75.2</b>	<b>76.8</b>	<b>76.8</b>	<b>85.1</b>	<b>87.2</b>	<b>89.0</b>	<b>89.9</b>	<b>87.8</b>	<b>89.4</b>	<b>89.8</b>	<b>90.3</b>	<b>68.5</b>	<b>77.7</b>	<b>80.2</b>	<b>80.7</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY14E FY15E FY16E</b>				<b>FY14E FY15E FY16E</b>				<b>FY14E FY15E FY16E</b>				<b>FY14E FY15E FY16E</b>			
<b>EPS Base Case (JPY)</b>	41.8 43.9 49.3				42.4 43.5 43.4				60.5 62.9 64.9				121.4 133.7 145.8			
% Impact from																
<b>Loan Growth: +1% Chg</b>	3.2 3.4 3.2				3.5 3.5 3.6				3.1 3.0 3.0				2.3 2.3 2.3			
<b>NIM: +10bps Chg</b>	31.1 31.4 28.1				28.4 28.8 29.8				35.9 34.8 34.0				27.0 25.7 24.3			
<b>Cost Income %: +1% Chg</b>	5.4 5.5 5.1				5.1 5.0 5.2				5.3 5.1 5.0				4.8 4.7 4.5			
<b>Provisions / Loans: +10bps Chg</b>	25.1 25.3 22.7				24.4 24.7 25.6				25.0 24.4 23.8				20.8 20.0 18.8			
<b>ROA/ROE DECOMP (%)</b>	<b>FY13A</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>	<b>FY13A</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>	<b>FY13A</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>	<b>FY13A</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY16E</b>
Net interest income	1.00	1.02	1.08	1.14	1.25	1.22	1.21	1.21	1.25	1.25	1.25	1.26	0.68	0.69	0.74	0.76
Total operating income	1.35	1.34	1.41	1.48	1.56	1.49	1.48	1.48	1.55	1.47	1.48	1.49	1.12	1.07	1.13	1.17
Operating expenses	-0.78	-0.76	-0.76	-0.76	-0.75	-0.76	-0.75	-0.75	-0.82	-0.81	-0.80	-0.80	-0.58	-0.56	-0.57	-0.56
Op profit before provisions	0.57	0.58	0.66	0.72	0.81	0.73	0.73	0.73	0.73	0.66	0.68	0.69	0.54	0.51	0.56	0.61
Provisions	0.05	-0.05	-0.08	-0.09	-0.11	-0.09	-0.09	-0.09	-0.01	-0.07	-0.07	-0.07	-0.03	-0.05	-0.06	-0.07
Non-recurring items	-0.03	-0.04	-0.04	-0.04	-0.02	0.00	0.00	0.00	-0.01	0.01	0.01	0.01	-0.06	-0.02	-0.03	-0.02
Tax	0.00	-0.16	-0.19	-0.21	-0.26	-0.24	-0.24	-0.25	-0.26	-0.22	-0.23	-0.23	-0.09	-0.14	-0.16	-0.17
<b>Net profit (ROA)</b>	<b>0.58</b>	<b>0.33</b>	<b>0.35</b>	<b>0.39</b>	<b>0.42</b>	<b>0.40</b>	<b>0.40</b>	<b>0.39</b>	<b>0.45</b>	<b>0.38</b>	<b>0.39</b>	<b>0.40</b>	<b>0.36</b>	<b>0.30</b>	<b>0.32</b>	<b>0.35</b>
Leverage (x)	20.92	21.43	20.36	19.23	17.49	17.05	16.56	16.03	13.04	12.63	12.28	11.88	21.47	22.13	20.90	19.90
<b>ROE</b>	<b>12.21</b>	<b>7.10</b>	<b>7.03</b>	<b>7.49</b>	<b>7.40</b>	<b>6.89</b>	<b>6.68</b>	<b>6.33</b>	<b>5.85</b>	<b>4.83</b>	<b>4.84</b>	<b>4.79</b>	<b>7.66</b>	<b>6.55</b>	<b>6.71</b>	<b>6.91</b>

Source: Company Reports and Citi Research Estimates

# Korea

## Limited Benefits from Macro Turnaround

### Key Scenario Assumptions

- **CPI inflation returns to 3.2%** – Fed rate hikes would reflect normalization of the US economy. Korea's economy will also grow to its potential level, increasing inflationary pressure from the demand side. From the recent 2.5%, we expect inflation would also return the average level of last decade, at 3.2%.
- **BoK's policy rate to hike to 4%** – Bank of Korea will likely start the rate hike cycle earlier than the Fed on the back of high level of inflation expectation as well as expected inflationary pressures from public service tariff hikes, etc. We expect the first rate hike at the end of 2013 and 3 more hikes in 2014 to contain inflation at around 3%, which is the mid-point of the BoK's new inflation target band (2.5-3.5%YoY), and the rate to be raised to 4.0% along with economic growth at the low 4% level.
- **Long-term market interest rate** – Bank of Korea's rate hikes and better economic growth will steepen the curves, and the spread between the policy rate and long rate (10yr KTB) will widen from current 12bps to 170bps, suggesting yield on 10yr KBT to rise to 5.7%.

### Implications for Korea Banks

- **NIMs likely to rise, but not to pre-GFC level of 2.4%** – Our interest rate sensitivity analysis suggests 1.5% increase in interest rate would lift NIM by 11bps (from 2.0% in 4Q12 to 2.11%). Though improving, we don't expect NIM to recover back to pre-GFC level of 2.4%, as Korean banks are rather in a neutral position relative to interest rates after narrowing duration gap. Every 1bp increase in NIM adds around 1.1% to earnings of Korea FHCs (or banks) in our coverage. Thus in aggregate a 11 bps uplift would raise earnings by c.12%.
- **Real term loan growth to remain unchanged** – Rising inflation rate (from current 2.5%) to 3.2%, a normalized level, would increase loan demand accordingly. Given (a) higher than peers' household debt and (b) an aging population with less housing demand, we believe real term loan growth will remain unchanged. That said, an 0.7%pt inflation rate translates into only 0.7%pt loan growth, upgrading earnings by 1.0%.
- **Mild credit cost hiccup to average level of 69bps (+7bps)** – With a lending rate increase, credit cost and NPL should increase accordingly. But given Korean banks' credit costs stand at 63bps, higher than for Asia regional peers and close to the Korean average of 69bps, we assume a mild credit cost hiccup to the 69bps average (+7bps). Every 1bp rise in credit cost lowers earnings by c.0.9%, so a 7bps rise would lower earnings by 6.1%.
- **Cost-income ratio likely to improve 1.9%pt to 48.5%** – Reflecting NIM expansion and loan growth, we believe the cost-to-income ratio would automatically improve to 48.5% from the 50.4% we estimate for 2013, assuming no change in operating expense. Aside from an earnings driven cost-to-income ratio improvement, we don't believe a macro improvement will lower costs.

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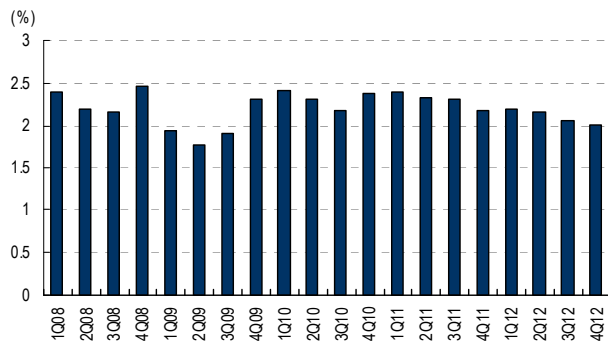
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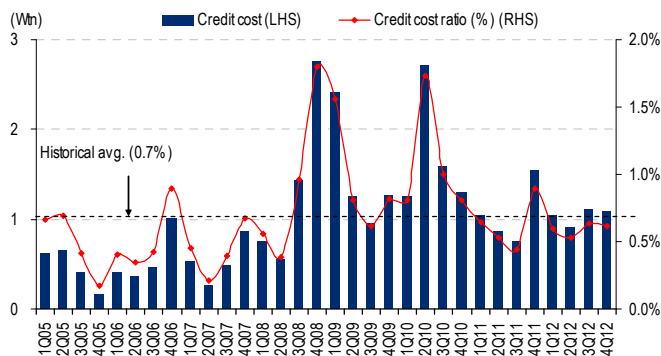
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Figure 167. Korea Banks – Average NIM Trend (%)



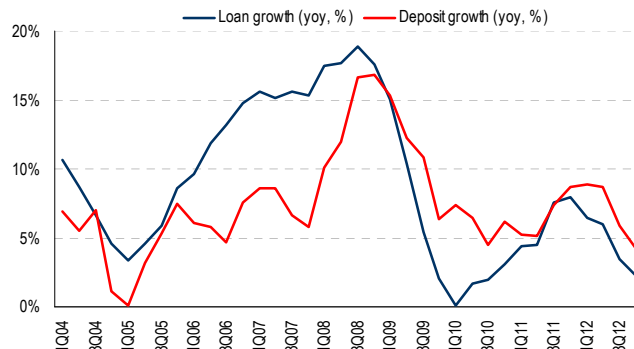
Source: FSS, Citi Research

Figure 169. Korea Banks – Provisioning Trend (%)



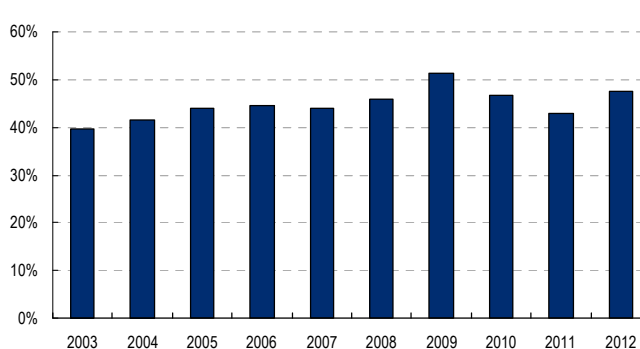
Source: FSS, Citi Research

Figure 168. Korea Banks – Loan Growth and Deposit Growth (YoY %)



Source: FSS, Citi Research

Figure 170. Korea Banks – Average Cost-to-income Ratio (%)



Source: Company Reports and Citi Research

## Overall Impact

With ROEs forecasted to be 7.3% in 2013E for the companies in our coverage, their reported ROEs could rise by 0.5%pt to 7.9% under the above scenario for a 7.2% earnings uplift.

Figure 171. Korea Banks – Overall impact

	Earnings impact		ROE impact
NIM	+11bps	12%	0.9%pt
Loan growth	+0.7%pt	1%	0.1%pt
Non-interest income	na	na	na
Cost/income	minimal	minimal	minimal
Credit cost	+7bps	-6%	-0.4%pt
<b>Net impact</b>		<b>7%</b>	<b>0.5%pt</b>

Source: Citi Research Estimates

**Our pecking order: IBK benefits most, given higher NIM sensitivity, outweighing higher credit cost pick up**

Our pecking order for net profit impact from a macro-turnaround is IBK>HFG>KBFG>DGBFG>BSFG>SFG. By company, IBK is set to benefit the most from a macro turnaround, given higher NIM sensitivity (higher LDR and negative duration gap), which outweighs higher than peers' credit cost pick-up. Among large banks, HFG will benefit the most, according to our analysis.

Figure 172. IBK to Benefit Most From Macro Tailwinds Assumption

(Wbn, %)	KBFG	SFG	HFG**	IBK	BSFG	DGBFG	Total
FY13E NP (Group)	1,510	2,062	1,325	1,027	360	278	6,562
<b>Earning Impact As % of FY13E NP</b>							
Bank NIM expansion of 11bps	13.0%	8.8%	14.6%	15.2%	9.6%	10.1%	12.0%
Net loan gth rate inc. of 0.7%	1.4%	0.8%	1.6%	1.5%	1.3%	1.3%	1.3%
Bank credit cost rise of 7bps	-7.1%	-4.2%	-7.8%	-7.4%	-4.2%	-4.5%	-6.1%
<b>Total Earning Impact</b>	<b>7.2%</b>	<b>5.4%</b>	<b>8.4%</b>	<b>9.3%</b>	<b>6.7%</b>	<b>6.9%</b>	<b>7.2%</b>

Note: \*Interest earning assets (IEA), net loan and total credit figures are of banks, while total earning impacts are based on the group (if applicable) NPs. \*\*For HFG, IEA, net loan and total credit figures are Hana Bank + KEB  
Source: Citi Research Estimates

Figure 173. Korea – Economic Indicators

	2006	2007	2008	2009	2010	2011	2012	2013F	2014F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	954.0	1,048.0	929.1	834.7	1,014.9	1,114.8	1,129.3	1,182.5	1,304.2
Nominal GDP, local currency bn	908,744	975,013	1,026,452	1,065,037	1,173,275	1,235,161	1,272,460	1,322,896	1,404,341
GDP per capita, US\$	19,722	21,565	18,981	16,972	20,540	22,395	22,584	23,546	25,865
Population, mn	48.4	48.6	48.9	49.2	49.4	49.8	50.0	50.2	50.4
Unemployment, % of labour force	3.5	3.2	3.2	3.6	3.7	3.4	3.2	3.2	3.2
<b>Economic Activity</b>									
Real GDP, % yoy	5.2	5.1	2.3	0.3	6.3	3.7	2.0	2.9	3.7
Real investment growth % yoy	4.4	3.5	0.0	-13.5	15.8	1.4	-1.8	2.5	2.9
Real consumption growth % yoy	5.1	5.1	2.0	1.2	4.1	2.3	2.2	2.5	3.2
private consumption growth % yoy	4.7	5.1	1.3	0.0	4.4	2.4	1.7	2.0	3.3
Real export growth, % yoy	11.4	12.6	6.6	-1.2	14.7	9.1	4.2	4.3	4.8
Real import growth, % yoy	11.3	11.7	4.4	-8.0	17.3	6.1	2.5	4.0	4.6
<b>Prices, Money &amp; Credit</b>									
CPI, % yoy	2.1	3.6	4.1	2.8	3.0	4.2	1.4	3.0	2.7
CPI, % avg	2.2	2.5	4.7	2.8	3.0	4.0	2.2	1.9	2.8
Nominal wages, % yoy	5.7	0.7	3.1	2.6	6.8	1.0	5.3	4.3	5.2
Credit extension to private sector, % yoy	14.7	12.4	15.0	2.3	3.6	5.1	1.9	5.3	7.0
Policy interest rate, % eop	4.50	5.00	3.00	2.00	2.50	3.25	2.75	2.50	2.50
91-Day CD Rate, % eop	4.76	5.73	4.68	2.82	2.80	3.55	2.89	2.70	2.70
Long term yield, % eop	5.00	5.78	3.77	4.92	4.08	3.46	2.97	2.80	3.00
lc/US\$, eop	930	936	1263	1166	1121	1159	1064	1127	1036
lc/US\$, avg	955	929	1102	1275	1156	1108	1127	1119	1077
<b>Balance of Payments, US\$ bn</b>									
Current account	14.1	21.8	3.2	32.8	29.4	26.1	43.1	33.6	22.8
% of GDP	1.5	2.1	0.3	3.9	2.9	2.3	3.8	2.8	1.7
Trade balance	16.1	14.6	-13.3	40.4	41.2	30.8	28.3	22.5	18.0
Exports	325.5	371.5	422.0	363.5	466.4	555.2	547.9	561.6	591.7
Imports	309.4	356.8	435.3	323.1	425.2	524.4	519.6	539.1	573.7
Service balance	-13.3	-12.0	-5.7	-6.6	-8.6	-5.8	2.7	2.7	2.3
Income balance	-4.0	-3.4	3.8	1.6	-2.1	0.3	2.1	3.1	0.3
FDI, net	-7.6	-17.9	-16.9	-14.9	-22.2	-16.4	-18.6	-12.5	-8.6
International reserves	238.9	262.2	201.1	270.0	291.5	304.2	323.2	331.1	345.7
Total Amortisations	17.7	43.8	42.9	43.6	40.0	42.0	46.0	44.0	41.0
<b>Public Finances, % of GDP</b>									
Consolidated government balance	0.4	3.5	1.2	-1.7	1.4	1.5	1.5	0.9	2.3
Consolidated gov primary balance	1.7	4.9	2.6	-0.2	2.8	2.9	2.7	2.3	3.7
Public debt	30.1	29.7	29.0	32.5	31.9	32.6	33.0	35.0	33.0
of which Domestic	28.9	28.6	28.1	31.4	31.0	31.8	32.6	34.4	32.3
<b>Foreign Assets &amp; Liabilities, US\$ bn</b>									
External debt	225.2	333.4	317.4	345.7	359.8	398.7	413.4	426.0	441.8
Private	225.0	333.1	317.1	345.4	359.4	358.3	373.2	384.8	399.6
Public	0.2	0.3	0.3	0.3	0.4	40.4	40.2	41.2	42.2
External debt / GDP	23.6	31.8	34.2	41.4	35.5	35.8	36.6	36.0	33.9
External debt / XGS	58.9	75.0	61.9	79.1	65.0	61.3	62.9	63.0	61.3
Short-term debt	113.8	160.3	149.9	149.2	139.8	137.4	126.7	130.3	140.4
Short-term debt/International Reserves (%)	47.6	61.1	74.5	55.3	48.0	45.2	39.2	39.4	40.6
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1F	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	3.4	2.8	2.4	1.6	1.5	1.5	2.0	3.6	4.3
CPI, % yoy	4.2	2.6	2.2	2.0	1.4	1.3	1.5	2.0	3.0
Policy interest rate, % eop	3.25	3.25	3.25	3.00	2.75	2.75	2.50	2.50	2.50
91-Day CD Rate, % eop	3.55	3.55	3.54	3.09	2.89	2.81	2.69	2.70	2.70
Long term yield, % eop	3.46	3.70	3.42	2.87	2.97	2.58	2.68	2.75	2.80
lc vs USD, eop	1159.3	1131.9	1141.3	1113.7	1063.6	1111.4	1115.8	1121.4	1127.1

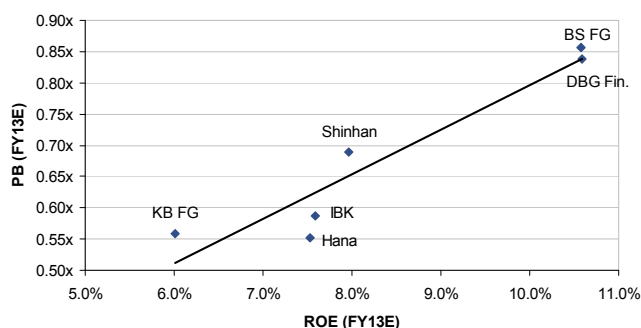
Source: CEIC Data Company Ltd, Fitch, IFS, Moody's and Citi Research Estimates

Figure 174. Korea — Banks Valuation Snapshot

Stock, Rating, Ric	Price (KRW)	TP (KRW)	ETR (%)	Mkt Cap (KRW b)	Net Profit (KRW Bn)		EPS (KRW)		EPS Chg YoY%		P/E (x)		NBV/S (KRW)		P/NBV (x)		Net DPS (KRW)		Yield (%)		ROAE (%)	
					13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
Shinhan, 1, 055550.KS	39,650	49,000	25.6	18,802	2,062	2,197	4,348	4,634	-9.8	6.6	9.2	8.7	58,307	61,960	0.69	0.65	800	850	2.0	2.1	8.0	8.0
KB FGI, 1, 105560.KS	36,850	45,000	23.9	14,237	1,510	1,852	3,908	4,792	-11.3	22.6	9.5	7.8	66,696	70,789	0.56	0.53	650	700	1.7	1.9	6.0	7.0
Hana, 1, 086790.KS	36,650	53,000	46.2	10,625	1,325	1,586	4,572	5,469	-30.7	19.6	8.2	6.9	68,203	73,208	0.55	0.51	600	650	1.6	1.7	7.5	7.7
IBK, 2H, 024110.KS	12,400	15,000	24.2	6,822	1,027	1,118	1,588	1,725	-12.3	8.6	7.9	7.2	21,318	22,643	0.59	0.55	400	400	3.2	3.2	7.6	7.8
BS Fin, 2, 138930.KS	15,200	17,000	14.1	2,939	360	398	1,861	2,059	-0.4	10.7	8.4	7.6	18,344	20,003	0.86	0.78	350	400	2.2	2.5	10.6	10.7
DBG Fin, 2H, 139130.KS	16,900	18,700	12.7	2,265	278	303	2,075	2,263	1.8	9.1	8.2	7.5	20,362	22,225	0.84	0.77	350	400	2.1	2.3	10.6	10.6

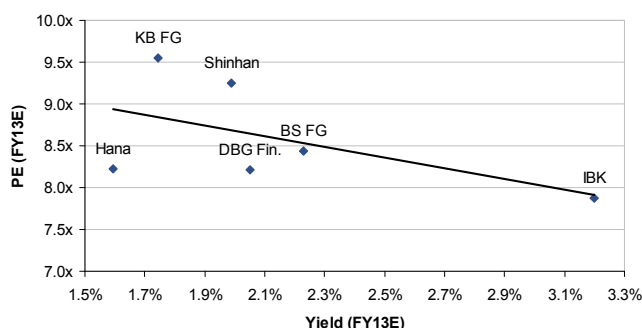
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 175. Price-Book vs. ROAE 2013E



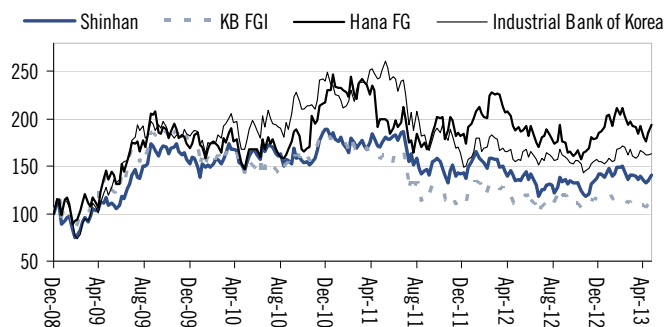
Source: Citi Research Estimates

Figure 176. P/E vs. Dividend Yield 2013E



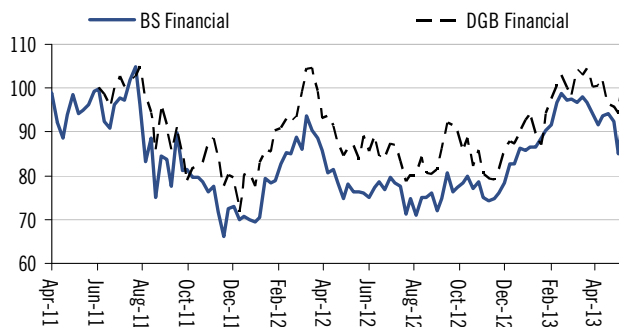
Source: Citi Research Estimates

Figure 177. Big-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 178. Mid-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 179. Korea Banks – Current vs. Target Valuation and Historical P/B & P/E Ranges

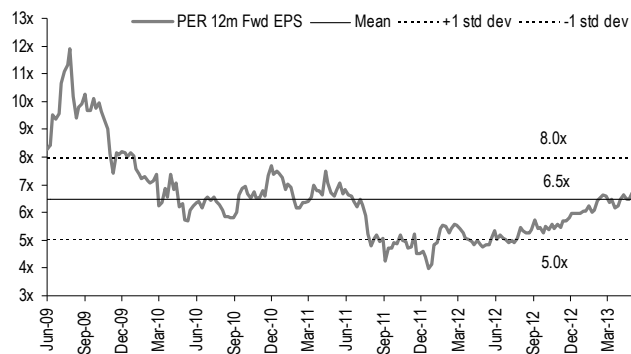
	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (KRW)	CY13E P/B (x)	CY13E P/E (x)	Target Price (KRW)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
Shinhan Financial Group	39,650	0.7	9.1	49,000	0.8	11.3	0.8	1.1	1.4	6.2	7.7	9.3
KB Financial Group	36,850	0.6	9.4	45,000	0.7	11.5	0.7	1.1	1.4	6.0	7.8	9.5
Industrial Bank of Korea	12,400	0.6	7.8	15,000	0.7	9.4	0.5	0.8	1.1	5.0	6.5	8.0
Hana Financial Group	36,650	0.5	8.0	53,000	0.8	11.6	0.5	0.8	1.0	5.9	7.5	9.1
BS Financial Group	15,200	0.8	8.2	17,000	0.9	9.1	0.7	1.0	1.2	5.5	6.2	6.9
DGB Financial Group	16,900	0.8	8.1	18,700	0.9	9.0	0.7	1.0	1.3	5.4	6.0	6.7

Note: Priced as on 23 May 2013

Source: Citi Research Estimates

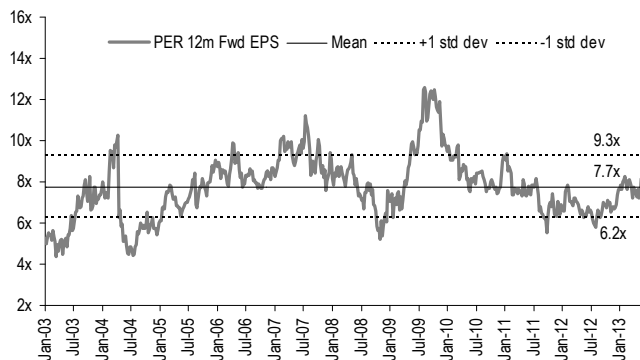
## Korea Banks – Valuation Charts

Figure 180. IBK – 12M Forward Consensus P/E Chart



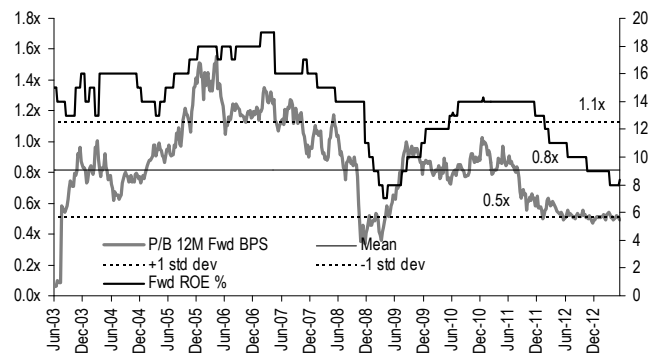
Source: DataStream, Citi Research

Figure 182. Shinhan – 12M Forward Consensus P/E Chart



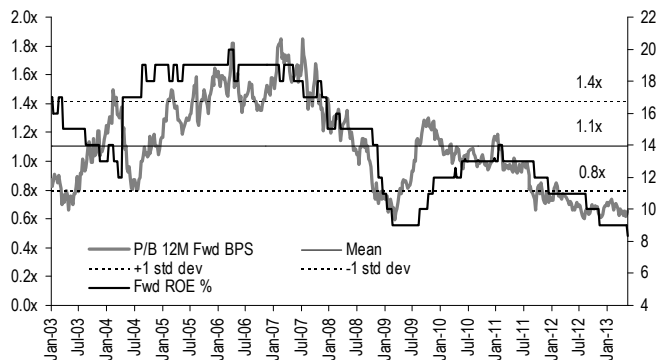
Source: DataStream, Citi Research

Figure 181. IBK – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

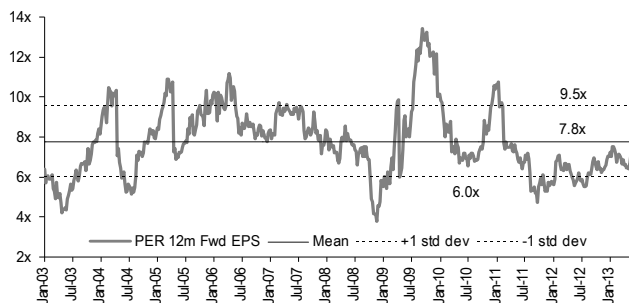
Figure 183. Shinhan – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

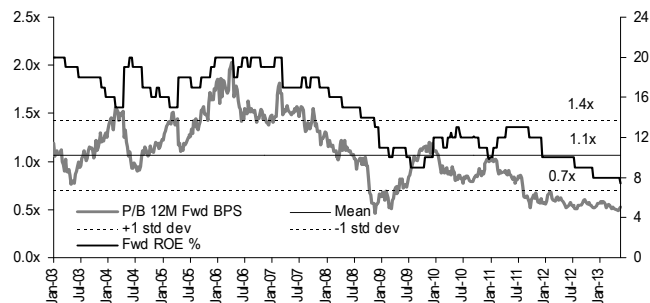
## Korea Banks – Valuation Charts (Cont'd)

Figure 184. KB FGI – 12M Forward Consensus P/E Chart



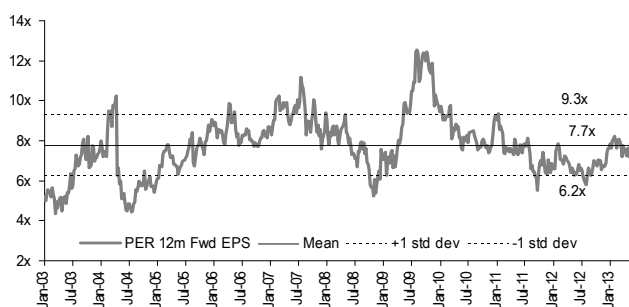
Source: DataStream, Citi Research

Figure 185. KB FGI – 12M Forward Consensus P/B Chart



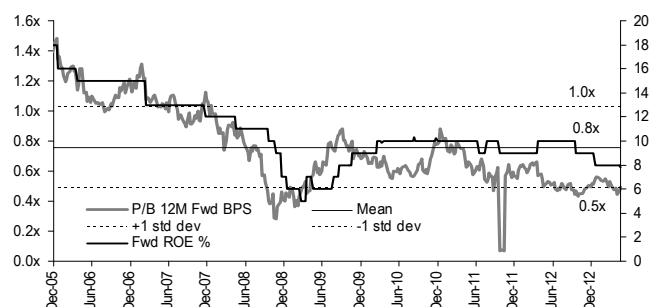
Source: DataStream, Citi Research

Figure 186. Hana – 12M Forward Consensus P/E Chart



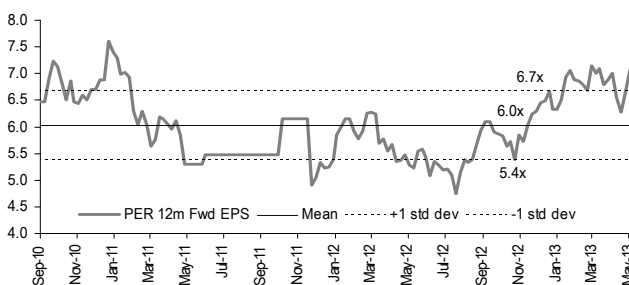
Source: DataStream, Citi Research

Figure 187. Hana – 12M Forward Consensus P/B Chart



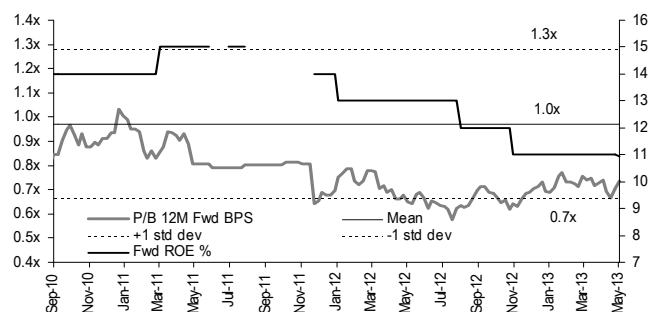
Source: DataStream, Citi Research

Figure 188. DGB Financial – 12M Forward Consensus P/E Chart



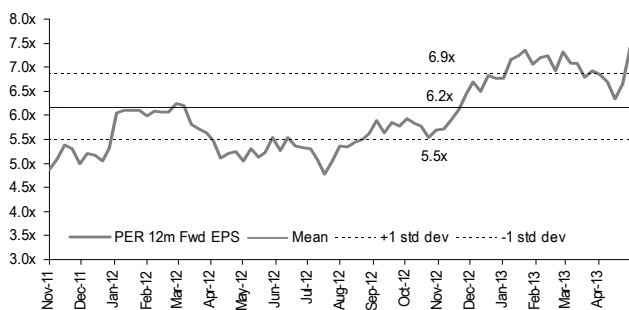
Source: DataStream, Citi Research

Figure 189. DGB Financial – 12M Forward Consensus P/B Chart



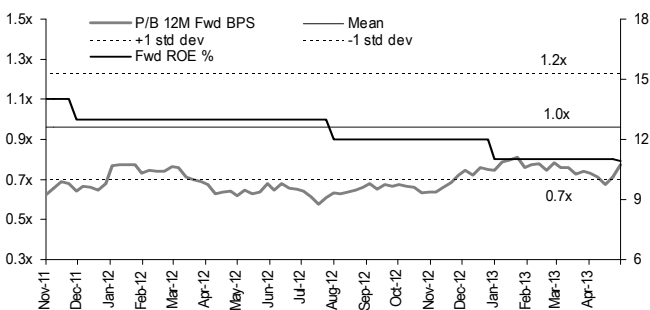
Source: DataStream, Citi Research

Figure 190. BS Financial – 12M Forward Consensus P/E Chart



Source: Citi Research

Figure 191. BS Financial – 12M Forward Consensus P/B Chart



Source: Citi Research

Figure 192. Korea – Bank Earnings Forecasts and Key Assumptions (Local Currency Millions Unless Stated)

	Shinhan				KB FGI				DGB Fin				IBK			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
Loan Growth (%)	4.0	2.4	2.7	2.8	0.3	(0.4)	1.8	1.9	11.0	9.7	7.5	7.6	3.4	3.5	3.4	4.8
Net Interest Margin (bps)	254	230	230	230	266	251	256	260	288	262	264	264	240	210	210	214
Net Interest Income (KRW b)	6,980	6,616	6,874	7,135	7,116	6,754	6,949	7,225	924	928	1,001	1,070	4,468	4,127	4,304	4,596
NII Growth (%)	(1.4)	(5.2)	3.9	3.8	0.2	(5.1)	2.9	4.0	(2.5)	0.4	7.8	6.9	(4.7)	(7.6)	4.3	6.8
Non Interest Income (KRW b)	1,580	1,633	1,608	1,674	775	1,068	1,161	1,212	83	86	93	102	198	243	223	237
Non-II Growth (%)	(24.3)	3.4	(1.5)	4.1	(55.5)	37.8	8.7	4.3	27.8	3.7	9.0	9.0	(39.9)	23.2	(8.6)	6.6
-Fee Income (KRW b)	1,543	1,339	1,354	1,367	1,593	1,378	1,403	1,455	73	82	88	96	409	350	363	377
-Fee Growth (%)	(12.3)	(13.2)	1.1	0.9	(11.3)	(13.5)	1.8	3.7	(2.2)	12.1	8.2	8.2	(10.5)	(14.3)	3.5	4.1
-Other Income (KRW b)	36.9	293.8	253.2	306.5	(817.6)	(310.3)	(241.8)	(243.5)	9.8	4.0	5.0	6.1	(211.0)	(106.7)	(140.0)	(140.0)
-Other Income Growth (%)	(89)	697	(14)	21	1,498	(62)	(22)	1	(200)	(59)	24	22	65	(49)	31	(0)
Total Income (KRW b)	8,560	8,249	8,482	8,808	7,891	7,822	8,111	8,437	1,007	1,014	1,094	1,172	4,665	4,371	4,527	4,833
Total Income Growth (%)	(6.6)	(3.6)	2.8	3.8	(10.8)	(0.9)	3.7	4.0	(0.6)	0.7	7.9	7.1	(7.0)	(6.3)	3.6	6.8
Non-II % of Total Income	18.5	19.8	19.0	19.0	9.8	13.7	14.3	14.4	8.2	8.5	8.5	8.7	4.2	5.6	4.9	4.9
Operating Costs (KRW b)	4,062	4,126	4,189	4,252	3,885	4,087	4,119	4,232	494	479	515	547	1,878	1,773	1,835	1,989
Costs Growth (%)	(1.8)	1.6	1.5	1.5	(1.2)	5.2	0.8	2.7	5.7	(3.0)	7.5	6.3	12.6	(5.6)	3.5	8.4
Costs % of Total Income	47.4	50.0	49.4	48.3	49.2	52.3	50.8	50.2	49.0	47.2	47.0	46.7	40.2	40.6	40.5	41.2
Pre-Provision Profit (KRW b)	4,498	4,123	4,293	4,557	4,006	3,735	3,991	4,204	514	535	579	625	2,788	2,597	2,692	2,844
PPP Growth (%)	(10.6)	(8.3)	4.1	6.1	(18.5)	(6.8)	6.9	5.3	(5.9)	4.1	8.3	7.9	(16.8)	(6.8)	3.6	5.6
PPOP/Avg Loans (Bps)	229.0	203.4	206.6	213.4	188.6	175.9	186.6	193.0	209.1	197.3	196.9	197.5	192.4	173.3	173.6	176.1
Provision Charges (KRW b)	1,320	1,243	1,211	1,250	1,608	1,717	1,520	1,563	154	169	179	195	1,194	1,236	1,208	1,316
- NPL Ratio (%)	0.9	0.8	0.8	0.8	1.3	1.3	1.3	1.3	1.0	1.0	0.9	0.9	1.4	1.4	1.4	1.4
- Provision Coverage (%)	171.3	141.7	141.6	141.5	176.4	173.1	174.7	173.5	118.4	135.1	139.7	139.6	109.3	149.0	151.9	112.3
- Provisions bps of Loans	67.2	61.3	58.3	58.5	75.7	80.9	71.1	71.7	62.6	61.7	60.8	61.5	82.4	82.4	77.9	81.5
Others (KRW b)	53	55	55	55	(137)	0	0	0	3	0	0	0	(63)	9	0	0
Pre-tax Profit (KRW b)	3,231	2,936	3,137	3,362	2,261	2,018	2,471	2,642	362	366	400	430	1,531	1,370	1,484	1,528
Tax (KRW b)	738	704	759	814	549	488	598	639	89	88	97	104	364	337	359	370
Minorities (KRW b)	170.0	170.3	180.7	191.8	9.1	19.9	21.5	23.3	0.0	0.0	0.0	0.0	0.9	6.3	6.9	7.4
Net Profit (KRW b)	2,322	2,062	2,197	2,357	1,703	1,510	1,852	1,979	273	278	303	326	1,166	1,027	1,118	1,151
FD EPS (KRW)	4,823	4,348	4,634	4,970	4,408	3,908	4,792	5,122	2,039	2,075	2,263	2,433	1,811	1,588	1,725	1,776
FD EPS Growth (%)	(23.9)	(9.8)	6.6	7.3	(28.2)	(11.3)	22.6	6.9	(11.2)	1.8	9.1	7.5	(19.6)	(12.3)	8.6	3.0
BVPS (KRW)	55,477	58,307	61,960	65,900	63,438	66,696	70,789	75,161	18,823	20,362	22,225	24,208	20,566	21,318	22,643	23,919
BVPS Growth (%)	7.8	5.1	6.3	6.4	6.9	5.1	6.1	6.2	10.1	8.2	9.1	8.9	5.7	3.7	6.2	5.6
RoRWA (%)	1.84	1.58	1.63	1.69	1.16	1.02	1.24	1.30	1.18	1.11	1.11	1.11	0.96	0.80	0.84	0.83
Tier 1 ratio (%)	12.6	12.6	12.8	13.1	10.9	11.5	12.0	12.6	10.9	10.7	10.9	11.0	8.9	9.0	9.3	9.5
Core Tier 1 ratio (%)	12.6	12.6	12.8	13.1	10.8	11.5	12.0	12.5	9.2	9.2	9.5	9.7	8.2	8.3	8.6	8.9
CAR (%)	15.8	15.7	16.0	16.3	14.4	15.1	15.5	16.0	14.6	14.0	14.1	14.3	12.4	12.1	12.6	12.9
Loan to Deposit ratio (%)	115.6	115.2	116.3	115.5	109.4	107.1	107.1	107.2	105.4	103.0	102.6	102.3	194.3	190.9	189.7	190.1
EPS SENSITIVITY STUDY																
	FY13E				FY14E				FY15E				FY13E			
EPS Base Case (KRW)	4,348				4,634				4,970				1,588			
% Impact from																
Loan Growth: +1% Chg	2.8				2.7				2.5				3.8			
NIM: +10bps Chg	17.3				16.9				16.4				23.8			
Cost Income %: +1% Chg	5.0				4.8				4.6				5.3			
Provisions / Loans: +10bps Chg	12.2				11.7				11.3				18.2			
ROA/ROE DECOMP (%)																
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
Net interest income	2.35	2.11	2.09	2.08	2.54	2.40	2.44	2.48	2.82	2.59	2.58	2.58	2.33	2.02	2.00	2.04
Total operating income	2.89	2.63	2.57	2.57	2.82	2.78	2.85	2.90	3.07	2.82	2.82	2.83	2.43	2.14	2.11	2.15
Operating expenses	-1.37	-1.31	-1.27	-1.24	-1.39	-1.45	-1.45	-1.45	-1.51	-1.33	-1.33	-1.32	-0.98	-0.87	-0.85	-0.89
Op profit before provisions	1.52	1.31	1.30	1.33	1.43	1.33	1.40	1.44	1.57	1.49	1.49	1.51	1.45	1.27	1.25	1.27
Provisions	-0.45	-0.40	-0.37	-0.36	-0.57	-0.61	-0.53	-0.54	-0.47	-0.47	-0.46	-0.47	-0.62	-0.61	-0.56	-0.59
Non-recurring items	0.02	0.02	0.02	0.02	-0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	-0.03	0.00	0.00	0.00
Tax	-0.25	-0.22	-0.23	-0.24	-0.20	-0.17	-0.21	-0.22	-0.27	-0.25	-0.25	-0.25	-0.19	-0.16	-0.17	-0.16
Net profit (ROA)	0.78	0.66	0.67	0.69	0.61	0.54	0.65	0.68	0.83	0.78	0.78	0.79	0.61	0.50	0.52	0.51
Leverage (x)	13.0	12.1	12.0	11.8	11.8	11.2	10.7	10.3	13.6	13.7	13.6	13.3	14.9	15.1	15.1	14.9
ROE	10.19	7.97	8.02	8.07	7.18	6.01	6.97	7.02	11.35	10.59	10.63	10.48	9.05	7.59	7.85	7.63

Source: Company Reports and Citi Research Estimates

Figure 193. Korea – Bank Earnings Forecasts and Key Assumptions (Local Currency Millions Unless Stated)

	Hana				BS Financial				Sector (6 Banks)			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	<b>52.0</b>	<b>4.1</b>	<b>3.9</b>	<b>4.0</b>	<b>12.0</b>	<b>7.7</b>	<b>7.7</b>	<b>7.7</b>	<b>11.9</b>	<b>2.7</b>	<b>3.3</b>	<b>3.6</b>
Net Interest Margin (bps)	212	171	176	181	285	272	276	279	250	225	227	230
<b>Net Interest Income (KRW b)</b>	<b>4,595</b>	<b>4,560</b>	<b>4,865</b>	<b>5,214</b>	<b>1,140</b>	<b>1,176</b>	<b>1,279</b>	<b>1,388</b>	<b>25,223</b>	<b>24,161</b>	<b>25,272</b>	<b>26,628</b>
NII Growth (%)	43.3	(0.8)	6.7	7.2	11.2	3.2	8.7	8.6	4.9	(4.2)	4.6	5.4
<b>Non Interest Income (KRW b)</b>	<b>2,826</b>	<b>2,119</b>	<b>2,308</b>	<b>2,395</b>	<b>123</b>	<b>108</b>	<b>112</b>	<b>114</b>	<b>5,584</b>	<b>5,257</b>	<b>5,505</b>	<b>5,733</b>
Non-II Growth (%)	120.0	(25.0)	8.9	3.8	(11.3)	(12.4)	3.5	2.0	(1.1)	(5.9)	4.7	4.2
-Fee Income (KRW b)	1,550	1,701	1,797	1,885	109	106	110	112	5,277	4,956	5,116	5,292
-Fee Growth (%)	58.5	9.7	5.7	4.9	13.0	(2.9)	3.5	2.0	2.3	(6.1)	3.2	3.5
-Other Income (KRW b)	1,275.3	418.1	510.5	509.9	14.1	2.0	2.0	2.0	307.5	300.8	388.9	440.9
-Other Income Growth (%)	317	(67)	22	(0)	(67)	(86)	0	(0)	(37)	(2)	29	13
<b>Total Income (KRW b)</b>	<b>7,421</b>	<b>6,679</b>	<b>7,173</b>	<b>7,609</b>	<b>1,263</b>	<b>1,284</b>	<b>1,390</b>	<b>1,502</b>	<b>30,807</b>	<b>29,418</b>	<b>30,776</b>	<b>32,361</b>
Total Income Growth (%)	65.3	(10.0)	7.4	6.1	8.5	1.7	8.3	8.1	3.7	(4.5)	4.6	5.1
Non-II % of Total Income	38.1	31.7	32.2	31.5	9.8	8.4	8.0	7.6	18.1	17.9	17.9	17.7
<b>Operating Costs (KRW b)</b>	<b>3,813</b>	<b>3,765</b>	<b>3,919</b>	<b>4,116</b>	<b>574</b>	<b>589</b>	<b>623</b>	<b>662</b>	<b>14,705</b>	<b>14,819</b>	<b>15,199</b>	<b>15,797</b>
Costs Growth (%)	80.9	(1.3)	4.1	5.0	17.5	2.5	5.8	6.3	14.9	0.8	2.6	3.9
Costs % of Total Income	51.4	56.4	54.6	54.1	45.5	45.8	44.8	44.0	47.7	50.4	49.4	48.8
<b>Pre-Provision Profit (KRW b)</b>	<b>3,608</b>	<b>2,914</b>	<b>3,254</b>	<b>3,493</b>	<b>689</b>	<b>695</b>	<b>768</b>	<b>840</b>	<b>16,102</b>	<b>14,599</b>	<b>15,578</b>	<b>16,564</b>
PPP Growth (%)	51.4	(19.2)	11.7	7.4	2.0	1.0	10.4	9.5	(4.7)	(9.3)	6.7	6.3
PPOP/Avg Loans (Bps)	221.7	145.5	156.2	161.3	226.1	208.0	213.2	216.8	208.7	176.8	183.2	188.3
<b>Provision Charges (KRW b)</b>	<b>1,627</b>	<b>1,211</b>	<b>1,203</b>	<b>1,206</b>	<b>201</b>	<b>211</b>	<b>232</b>	<b>250</b>	<b>6,104</b>	<b>5,786</b>	<b>5,554</b>	<b>5,780</b>
- NPL Ratio (%)	0.6	0.6	0.6	0.6	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0
- Provision Coverage (%)	172.7	148.7	152.0	152.0	120.9	122.0	122.8	123.6	155.0	154.0	155.7	145.2
- Provisions bps of Loans	100.0	60.4	57.8	55.7	65.9	63.3	64.5	64.6	77.3	68.8	64.3	64.6
Others (KRW b)	(24)	73	41	20	(9)	(9)	(10)	(11)	(177)	129	86	65
<b>Pre-tax Profit (KRW b)</b>	<b>1,958</b>	<b>1,777</b>	<b>2,092</b>	<b>2,307</b>	<b>479</b>	<b>475</b>	<b>525</b>	<b>579</b>	<b>9,822</b>	<b>8,942</b>	<b>10,110</b>	<b>10,849</b>
Tax (KRW b)	250	428	506	558	118	115	127	140	2,108	2,161	2,447	2,625
Minorities (KRW b)	105.4	23.2	0.0	0.0	0.0	0.0	0.0	0.0	285.4	219.7	209.1	222.5
<b>Net Profit (KRW b)</b>	<b>1,602</b>	<b>1,325</b>	<b>1,586</b>	<b>1,749</b>	<b>361</b>	<b>360</b>	<b>398</b>	<b>439</b>	<b>7,428</b>	<b>6,562</b>	<b>7,454</b>	<b>8,001</b>
FD EPS (KRW)	6,593	4,572	5,469	6,032	1,868	1,861	2,059	2,271	4,421	3,718	4,248	4,578
FD EPS Growth (%)	31.1	(30.7)	19.6	10.3	(12.2)	(0.4)	10.7	10.3	(14.2)	(15.9)	14.2	7.8
BVPS (KRW)	64,090	68,203	73,208	78,692	16,833	18,344	20,003	21,824	51,366	54,176	57,740	61,570
BVPS Growth (%)	12.1	6.4	7.3	7.5	10.2	9.0	9.0	9.1	8.5	5.5	6.6	6.6
RoRWA (%)	1.84	1.47	1.68	1.78	1.32	1.22	1.25	1.28	1.36	1.19	1.30	1.35
<b>Tier 1 ratio (%)</b>	<b>9.6</b>	<b>10.3</b>	<b>10.7</b>	<b>11.0</b>	<b>10.5</b>	<b>10.7</b>	<b>10.9</b>	<b>11.1</b>	<b>11.0</b>	<b>11.3</b>	<b>11.6</b>	<b>11.9</b>
Core Tier 1 ratio (%)	9.3	10.1	10.4	10.8	9.7	10.0	10.2	10.5	10.3	10.6	11.0	11.3
CAR (%)	13.9	14.3	14.5	14.7	14.9	15.2	15.4	15.7	14.6	14.7	15.1	15.4
<b>Loan to Deposit ratio (%)</b>	<b>110.8</b>	<b>112.9</b>	<b>114.6</b>	<b>116.3</b>	<b>113.5</b>	<b>113.8</b>	<b>113.4</b>	<b>113.1</b>	<b>121.0</b>	<b>120.5</b>	<b>121.1</b>	<b>121.5</b>
<b>EPS SENSITIVITY STUDY</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (KRW)</b>		4,572	5,469	6,032		1,861	2,059	2,271		3,718	4,248	4,578
% Impact from												
<b>Loan Growth: +1% Chg</b>		3.1	2.8	2.7		3.0	3.0	2.9		3.5	3.2	3.1
<b>NIM: +10bps Chg</b>		25.0	21.7	20.5		14.9	14.5	14.1		20.3	18.5	18.0
<b>Cost Income %: +1% Chg</b>		6.3	5.6	5.4		4.4	4.3	4.2		5.6	5.1	5.0
<b>Provisions / Loans: +10bps Chg</b>		18.8	16.3	15.4		11.5	11.2	11.0		15.6	14.2	13.7
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	1.99	1.57	1.59	1.64	2.77	2.65	2.69	2.72	2.35	2.06	2.07	2.10
Total operating income	3.21	2.29	2.35	2.39	3.07	2.89	2.92	2.94	2.87	2.51	2.52	2.55
Operating expenses	-1.65	-1.29	-1.28	-1.29	-1.40	-1.32	-1.31	-1.30	-1.37	-1.27	-1.25	-1.24
Op profit before provisions	1.56	1.00	1.07	1.10	1.67	1.57	1.61	1.65	1.50	1.25	1.28	1.30
Provisions	-0.70	-0.42	-0.39	-0.38	-0.49	-0.48	-0.49	-0.49	-0.57	-0.49	-0.46	-0.45
Non-recurring items	-0.01	0.03	0.01	0.01	-0.02	-0.02	-0.02	-0.02	-0.02	0.01	0.01	0.01
Tax	-0.11	-0.15	-0.17	-0.18	-0.29	-0.26	-0.27	-0.27	-0.20	-0.18	-0.20	-0.21
<b>Net profit (ROA)</b>	<b>0.69</b>	<b>0.45</b>	<b>0.52</b>	<b>0.55</b>	<b>0.88</b>	<b>0.81</b>	<b>0.84</b>	<b>0.86</b>	<b>0.69</b>	<b>0.56</b>	<b>0.61</b>	<b>0.63</b>
Leverage (x)	15.8	16.5	14.9	14.5	13.2	13.1	12.8	12.6	13.5	13.3	12.8	12.5
<b>ROE</b>	<b>10.96</b>	<b>7.53</b>	<b>7.74</b>	<b>7.94</b>	<b>11.63</b>	<b>10.58</b>	<b>10.74</b>	<b>10.86</b>	<b>9.34</b>	<b>7.44</b>	<b>7.82</b>	<b>7.87</b>

Source: Company Reports and Citi Research Estimates

# Malaysia

## Impact Relatively Neutral

### Key Scenario Assumptions

- **CPI inflation moves up to 4%** – assume 4% from current inflation rate of 1.7%. Citi's economist expects inflation to rise to 2-2.5% in 2H13, on the assumption that the investment led recovery continues and the government rationalizes fuel prices after elections. Over the next 2-3 years at least, on the assumption of stable government, a combination of demand pressures, subsidy rationalization and minimum wage hikes should push inflation to 3% levels or higher, though some of the demand pressures could be tempered by capacity increases from the current investment recovery cycle. In 2008, CPI rose to 5.4% (2007: 2%) but Bank Negara kept OPR at 3.5% until Oct 2008 (since Apr 2006) before lowering it by 25bps to 3.25% in Nov 2008.
- **Interest rates normalizes at 3.5%** – assume overnight policy rate of 3.5% vs. 3% currently. Citi's economist expects Bank Negara to keep OPR stable this year, but hike 50bps in 1H14 on the condition that inflation is seen to approach 3% levels (BNM's implicit inflation tolerance threshold) as subsidy rationalization commences. Based on history, the "normalized" OPR should be around 3.5% vs 3% currently.
- **5Y MGS yields** – likely to creep up above the 3.50% levels towards 4%, though tempered by continued foreign inflows.

### Implications for Malaysia Banks

- **Expect NIMs to rise 15bps following a 50bps rise in OPR** – NIMs have been under pressure since 2H 2010 mainly due to competition for loans and in more recent times, the fight for deposits. For 2013, banks are guiding for a 10-12bps compression in margin.

In Malaysia, any adjustment in the OPR usually results in a similar change in banks' base lending rate (BLR). Recent trend suggests that a hike in OPR would lead to higher NIM in the immediate quarter but margins would then go on a gradual decline in the three quarters after.

A 50bps rise in OPR could result in approx. a 15bps improvement in NIM. Our sensitivity analysis suggests that every 10bps rise in NIM, with all else equal, adds approx. 5%-5.5% to net profit. From a base case ROE of 15.5%, a 10bps hike in NIM would raise ROE by 0.8%-point to 16.3%.

- **Credit demand to remain unchanged** – we believe higher inflation of 4% would not have material impact on demand for credit. Loan growth, which has slowed to 10.4% in 2012, from 13.6% in 2011, is projected to moderate to 9-10% in 2013. Consumer lending is expected to grow at a steady pace of 9% while large infrastructure projects would be funded through the debt market.
- **No significant deterioration in asset quality** – Banking system NPLs are at a low with gross NPL ratio at 2.02% in Jan 2013 (Dec 2011: 2.69%) while loan loss coverage is at a comfortable 99%. Credit cost for stocks under coverage has declined from 75bps in 2009 to a low of 23bps, partly due to adoption of FRS139. Public Bank, which has one of the best asset qualities among Malaysian banks, guides for normalized credit cost of around 25bps in 2013. Barring a spike in unemployment (2012: 3%), banks do not expect any significant deterioration in asset quality.

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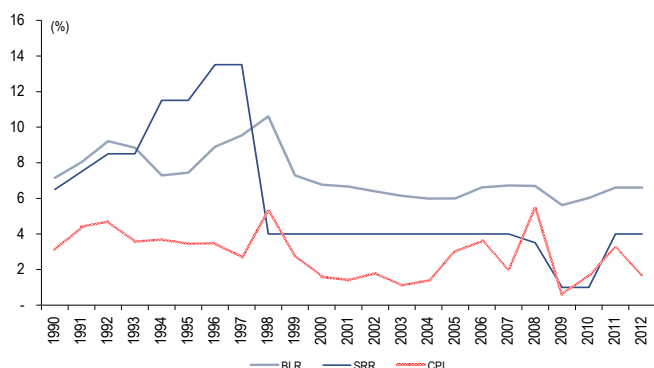
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Our sensitivity analysis suggests that every 10bps rise in provision charges would trim sector net profit by circa 4%. This would lower ROE to 14.9% from our base case of 15.5%.

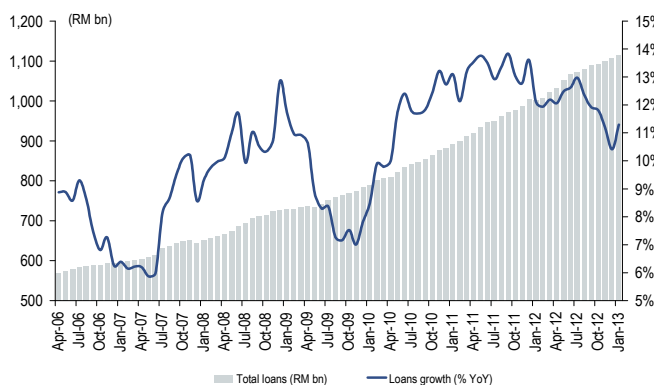
- **Cost-income ratio relatively stable at 46%-47%** – Between 2009 and 2012, cost-income ratio has been relatively stable at 46%-47%. Among large banking groups, Public Bank has the lowest cost-income ratio of 30%. We believe it would be challenging for management to bring that down further. CIMB's cost-income ratio spiked in 2012 mainly due to acquisition of RBS' APAC investment banking business. CIMB Group CEO has highlighted cost management has been as a key priority for 2013. Maybank is also focusing on cost control and growing non-interest income to drive improvement in cost-income ratio. Should CPI rise to 4%, banks' operating expenses could be impacted by higher personnel, marketing and admin costs. Our sensitivity analysis suggests that every 1%-point rise in the cost-income ratio could reduce net profit by approx. 2%. This would lower ROE to 15.2% from our base case of 15.5%.

Figure 194. Malaysia – Interest Rates



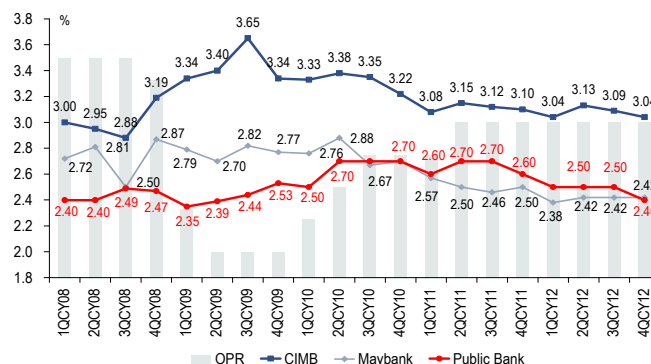
Source: Citi Research

Figure 196. Malaysia – Banking Sector Loan Growth



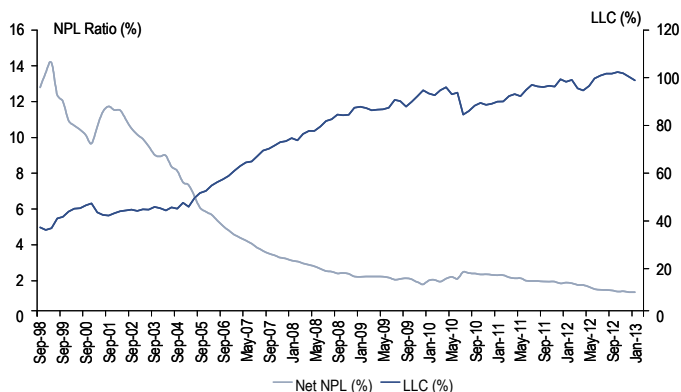
Source: Citi Research

Figure 195. Malaysia Banks – Net Interest Margins



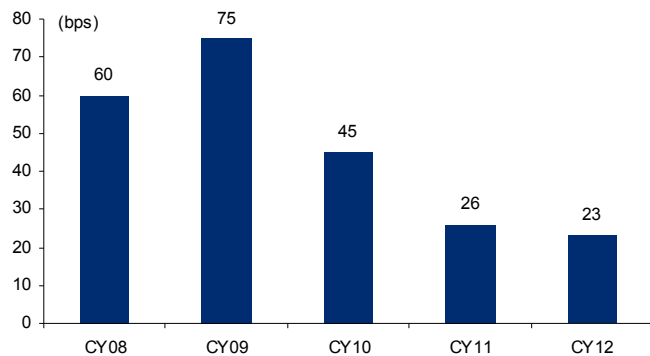
Source: Citi Research

Figure 197. Malaysia – Banking System NPLs and Loan Loss Coverage



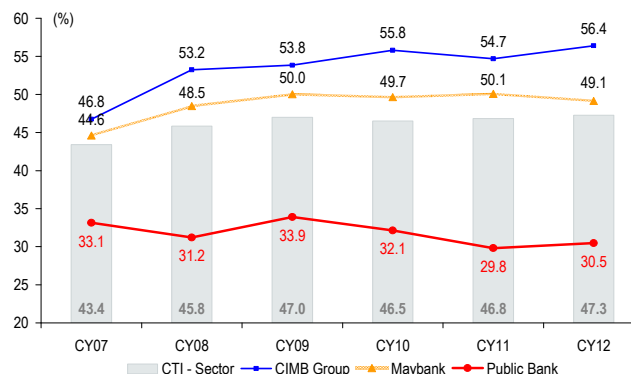
Source: Citi Research

Figure 198. Malaysia Banks – Annualized Credit Cost



Source: Citi Research

Figure 199. Malaysia Banks – Cost Income Ratio



Source: Citi Research

## Overall Impact

ROE expected to rise 0.3%pt to 15.8%

With ROEs forecasted to be 15.5% in 2013E for the companies in our coverage, their reported ROEs could rise by 0.3%pt to 15.8% under the above scenario for a 2% earnings uplift.

Figure 200. Malaysia Banks – Overall Impact

		Earnings impact	ROE impact
NIM	+15bps	8%	1.2%
Loan growth	Minimal	0%	0.0%
Non-interest income	Minimal	0%	0.0%
Cost/income	+100bps	-2%	-0.3%
Credit cost	+10bps	-4%	-0.6%
<b>Net impact</b>		<b>2%</b>	<b>0.3%</b>

Source: Citi Research Estimates

Maybank and Public would most benefited on a higher CASA ratio and a lower cost-income ratio, respectively

Among the top three banking groups, we believe Maybank and Public Bank would be see better overall impact on earnings – Maybank helped mainly by its higher CASA ratio (35% vs. Public's 25%) and Public Bank mainly by its lower cost-income ratio. CIMB would be hampered by its higher overhead expenses and its lower-yield assets.

Figure 201. Malaysia – Economic Indicators

	2006	2007	2008	2009	2010	2011	2012	2013F	2014F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	162.8	193.7	231.1	202.4	247.7	289.3	305.0	322.8	355.0
Nominal GDP, local currency bn	597	665	770	713	797	884	941	998	1,079
GDP per capita, US\$	6,067	7,123	8,393	7,255	8,664	9,987	10,398	10,797	11,640
Population, mn	26.8	27.2	27.5	27.9	28.6	29.0	29.3	29.9	30.5
Unemployment, % of labour force	3.3	3.2	3.3	3.7	3.2	3.1	3.0	2.9	2.9
<b>Economic Activity</b>									
Real GDP, % yoy	5.6	6.3	4.8	-1.5	7.4	5.1	5.6	5.2	6.0
Real investment growth % yoy	8.6	9.1	1.8	-9.4	25.3	2.3	22.3	14.2	11.1
Real consumption growth % yoy	6.4	9.7	8.4	1.4	6.2	8.6	7.1	5.7	5.6
private consumption growth % yoy	6.6	10.4	8.7	0.6	6.9	6.8	7.7	7.2	7.0
Real export growth, % yoy	6.7	3.8	1.6	-10.9	11.1	4.6	-0.1	1.2	4.1
Real import growth, % yoy	8.2	5.9	2.3	-12.7	15.6	6.1	4.7	4.1	5.5
<b>Prices, Money &amp; Credit</b>									
CPI, % yoy	3.1	2.3	4.5	1.0	2.1	3.0	1.2	2.6	3.0
CPI, % avg	3.6	2.0	5.4	0.6	1.7	3.2	1.6	2.0	2.8
Nominal wages, % yoy	2.1	4.3	4.5	2.5	8.2	3.8	6.4	5.0	5.0
Credit extension to private sector, % yoy	6.8	9.2	10.2	6.8	10.9	12.4	12.0	11.0	11.0
Policy interest rate, % eop	3.50	3.50	3.25	2.00	2.75	3.00	3.00	3.00	3.50
1 month inter-bank rate, % eop	3.71	3.61	3.37	2.17	2.98	3.22	3.21	3.21	3.70
Long term yield, % eop	3.70	3.78	3.00	3.79	3.39	3.23	3.24	3.40	3.80
lc/US\$, eop	3.53	3.31	3.45	3.42	3.08	3.17	3.06	3.09	3.07
lc/US\$, avg	3.67	3.44	3.33	3.52	3.22	3.06	3.09	3.08	3.08
<b>Balance of Payments, US\$ bn</b>									
Current account	26.2	29.7	39.4	31.4	27.1	33.5	18.6	16.1	14.2
% of GDP	16.1	15.4	17.1	15.5	10.9	11.6	6.1	5.0	4.0
Trade balance	37.4	37.7	51.5	39.9	42.5	49.5	40.7	26.2	27.0
Exports	160.8	176.1	199.2	157.0	199.0	228.6	227.6	236.2	242.0
Imports	123.4	138.4	147.6	117.1	156.6	179.1	187.0	210.0	215.0
Service balance	-2.0	0.8	0.0	1.1	-0.4	-2.0	-4.5	-1.0	-3.0
Income balance	-4.7	-4.1	-6.9	-4.0	-8.2	-7.1	-11.7	-12.0	-12.0
FDI, net	0.0	-2.7	-7.8	-6.3	-4.3	-3.1	-7.0	-2.0	-1.0
International reserves	82.5	101.3	91.5	96.7	106.5	133.6	139.7	151.0	157.0
Total Amortisations	5.3	7.8	6.3	9.8	11.3	9.0	9.3	10.0	10.0
<b>Public Finances, % of GDP</b>									
Consolidated government balance	-3.2	-3.1	-4.6	-6.7	-5.4	-4.8	-4.5	-4.0	-3.5
Consolidated gov primary balance	-1.1	-1.2	-3.0	-4.7	-3.5	-2.8	-2.4	-1.8	-1.3
Public debt	40.6	40.1	39.8	50.8	51.1	51.6	53.3	53.7	53.0
of which Domestic	36.4	37.1	37.2	48.9	49.0	49.5	51.5	52.0	51.5
<b>Foreign Assets &amp; Liabilities, US\$ bn</b>									
External debt	52.0	56.2	66.6	68.3	72.6	81.5	82.8	94.7	98.5
Private	30.8	37.8	41.5	41.9	44.7	53.7	55.6	89.0	93.0
Public	21.2	18.4	25.2	26.3	27.9	27.8	27.1	5.7	5.5
External debt / GDP	32.0	29.0	28.8	33.7	29.3	28.2	27.1	29.3	27.7
External debt / XGS	28.5	27.4	29.0	36.9	31.4	30.8	31.2	33.9	34.3
Short-term debt	12.1	16.3	22.5	22.7	25.4	32.9	30.4	40.0	42.0
Short-term debt/International Reserves (%)	14.6	16.1	24.6	23.5	23.8	24.6	21.8	26.5	26.8
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1F	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	5.3	5.1	5.6	5.3	6.5	4.1	4.7	6.1	5.8
CPI, % yoy	3.0	2.1	1.6	1.3	1.2	1.6	2.3	2.4	2.6
Policy interest rate, % eop	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
1 month inter-bank rate, % eop	3.22	3.19	3.19	3.20	3.21	3.21	3.21	3.21	3.21
Long term yield, % eop	3.29	3.23	3.27	3.24	3.24	3.22	3.25	3.30	3.40
lc vs USD, eop	3.17	3.06	3.17	3.06	3.06	3.09	3.05	3.07	3.09

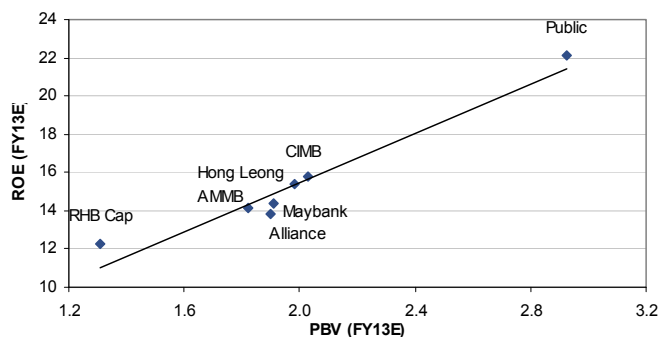
Source: CEIC Data Company Ltd, Fitch, IFS, Moody's and Citi Research Estimates

Figure 202. Malaysia — Banks Valuation Snapshot

Stock, Rating, Ric	Price (RM)	TP (RM)	ETR (%)	Mkt Cap (RM b)	Profit (RM m)		EPS (RM)		EPS Chg YoY (%)		P/E (x)		NBV/S (x)		P/NBV (x)		Net DPS (RM)		Yield (%)		ROAE (%)	
					13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
Public, 2, PUBM.KL	16.78	16.00	-1.4	41.5	4,226	4,651	1.20	1.32	8.3	10.1	14.0	12.7	5.74	6.47	2.92	2.59	0.54	0.58	3.2	3.5	22.1	21.6
Maybank, 1, MBBM.KL	10.08	11.26	16.1	85.4	6,222	6,720	0.74	0.80	1.4	8.0	13.7	12.7	5.27	5.61	1.91	1.80	0.44	0.47	4.4	4.7	14.3	14.6
CIMB Bank, 3, CIMB.KL	8.51	7.96	-3.5	64.8	4,691	5,060	0.63	0.68	7.7	7.9	13.5	12.5	4.20	4.61	2.03	1.85	0.25	0.27	2.9	3.2	15.8	15.5
AMMB, 3, AMMB.KL	7.28	6.91	-2.1	21.9	1,635	1,807	0.54	0.60	9.8	10.5	13.4	12.1	3.99	4.34	1.82	1.68	0.22	0.24	3.0	3.3	14.1	14.4
Hong Leong, 2, HLBB.KL	14.04	15.40	12.7	26.4	1,902	2,026	1.03	1.10	4.4	6.5	13.6	12.8	7.08	7.84	1.98	1.79	0.43	0.45	3.1	3.2	15.4	14.7
RHB Cap, 2, RHBC.KL	8.76	7.75	-7.9	21.8	1,935	2,134	0.79	0.87	-0.8	10.3	11.2	10.1	6.71	7.34	1.31	1.19	0.32	0.36	3.6	4.1	12.2	12.3
Alliance, 3, ALFG.KL	4.94	4.51	-5.3	7.6	538	566	0.35	0.37	7.1	5.2	14.0	13.3	2.60	2.79	1.90	1.77	0.17	0.18	3.4	3.7	13.8	13.6

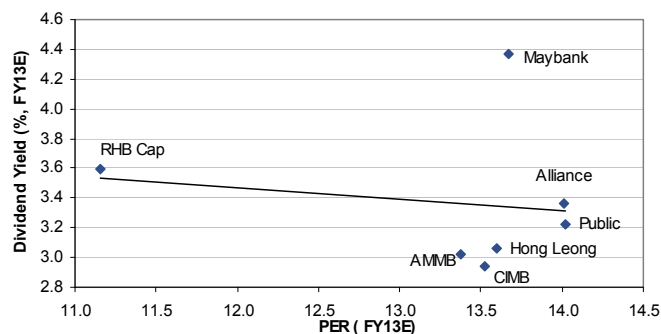
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 203. Price-Book vs. ROAE 2013E



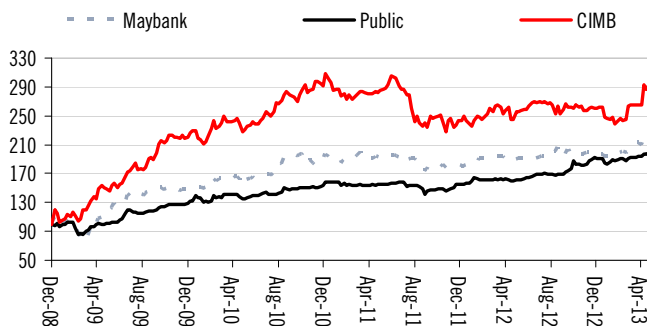
Source: Citi Research Estimates

Figure 204. P/E vs. Dividend Yield 2013E



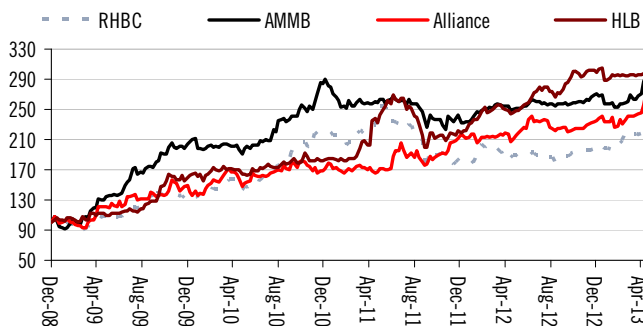
Source: Citi Research Estimates

Figure 205. Big-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 206. Mid-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

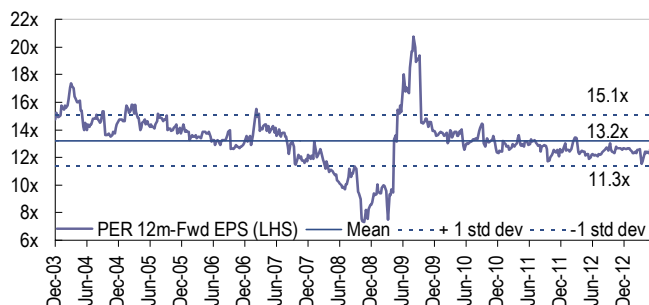
Figure 207. Malaysia Banks – Current vs. Target Valuation and Historical P/B & P/E Ranges

	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (RM)	CY13E P/B (x)	CY13E P/E (x)	Target Price (RM)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
Alliance	4.94	1.8	13.5	4.51	1.6	12.3	1.2	1.4	1.6	8.3	11.9	15.4
AMMB Hldgs	7.28	1.7	12.4	6.91	1.6	11.8	1.1	1.3	1.6	10.0	11.9	13.8
CIMB Group	8.51	2.0	13.5	7.96	1.7	11.4	1.4	1.8	2.1	11.1	12.6	14.1
Hong Leong Bank	14.04	1.9	13.2	15.40	2.1	14.4	1.5	1.7	1.9	11.0	12.2	13.5
Malayan Banking	10.08	1.9	13.7	10.00	1.9	13.6	1.6	2.0	2.4	11.3	13.2	15.1
Public Bank	16.78	2.9	14.0	16.00	2.8	13.4	2.4	2.8	3.3	12.1	13.3	14.6
RHB Capital	8.76	1.3	11.2	7.75	1.2	9.9	1.1	1.4	1.8	8.8	13.0	17.3

Note: Priced as on 23 May 2013; Source: Citi Research Estimates

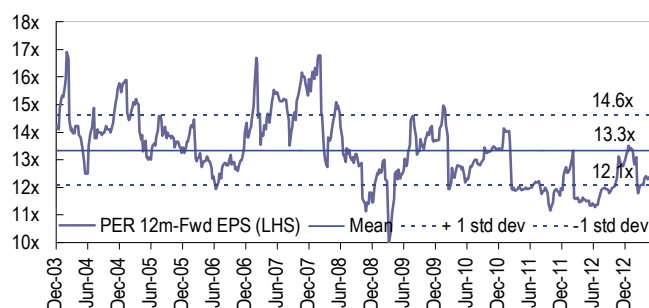
## Malaysia Banks – Valuation Charts

Figure 208. Maybank – 12M Forward Consensus P/E Chart



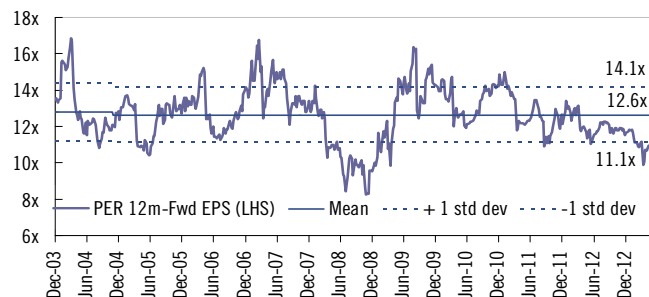
Source: DataStream, Citi Research

Figure 210. Public Bank – 12M Forward Consensus P/E Chart



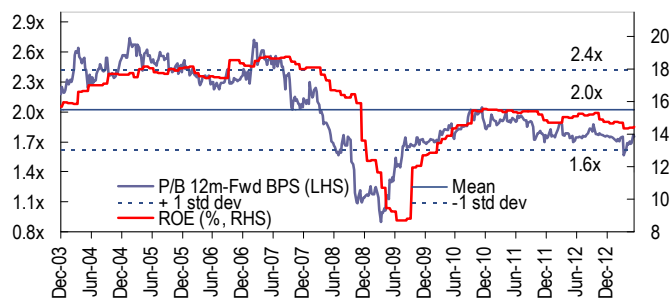
Source: DataStream, Citi Research

Figure 212. CIMB – 12M Forward Consensus P/E Chart



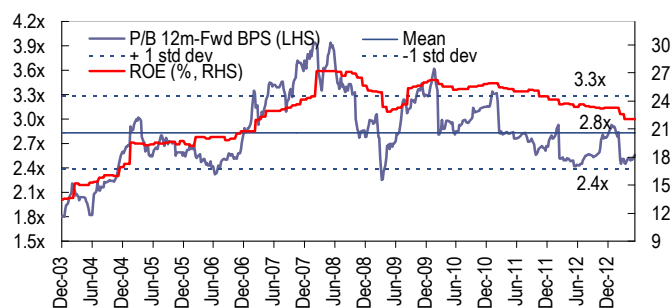
Source: DataStream, Citi Research

Figure 209. Maybank – 12M Forward Consensus P/B Chart



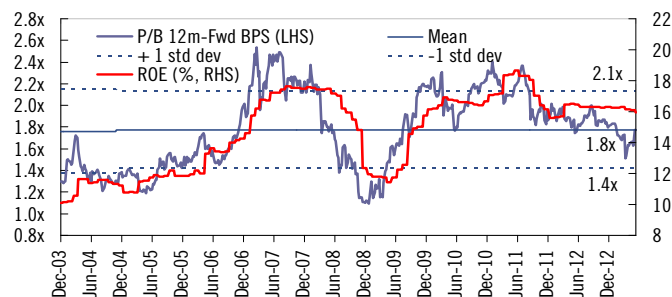
Source: DataStream, Citi Research

Figure 211. Public Bank – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

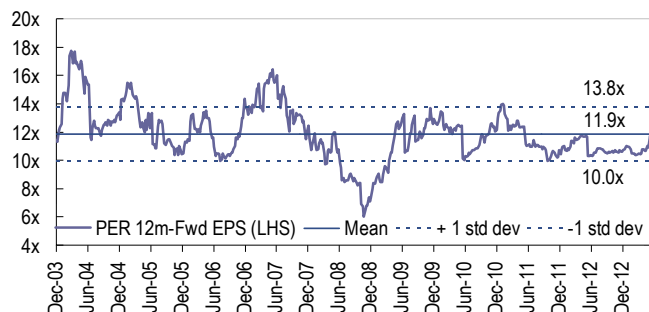
Figure 213. CIMB – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

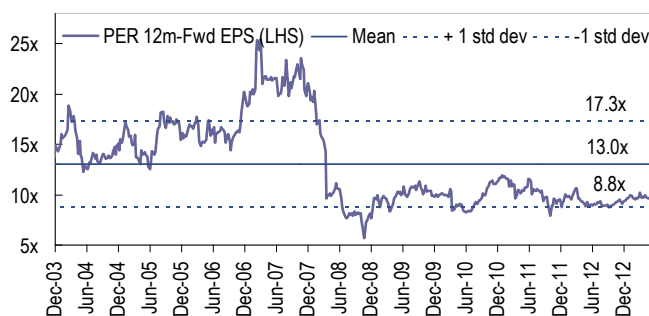
## Malaysia Banks – Valuation Charts (Cont'd)

Figure 214. AMMB – 12M Forward Consensus P/E Chart



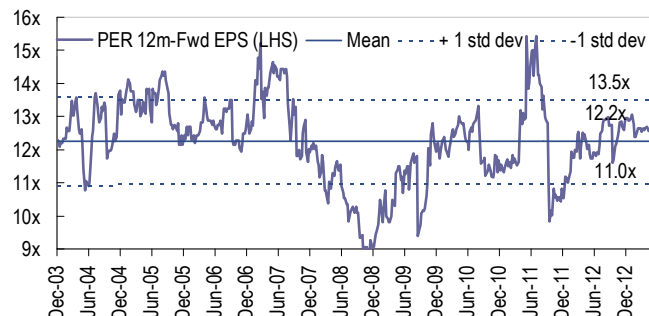
Source: DataStream, Citi Research

Figure 216. RHB Cap – 12M Forward Consensus P/E Chart



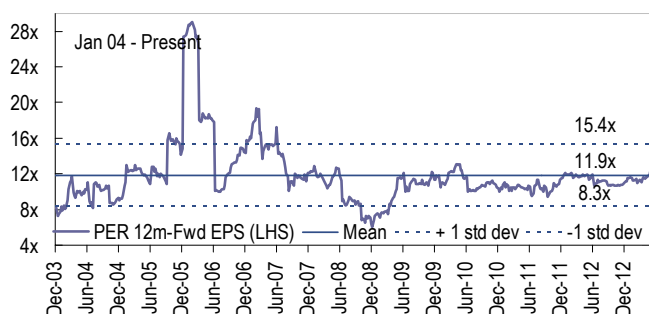
Source: DataStream, Citi Research

Figure 218. Hong Leong – 12M Forward Consensus P/E Chart



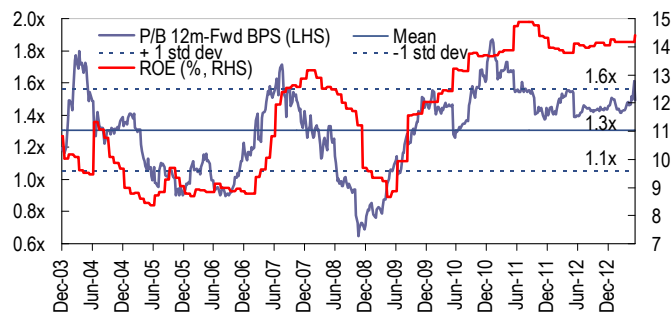
Source: DataStream, Citi Research

Figure 220. Alliance – 12M Forward Consensus P/E Chart



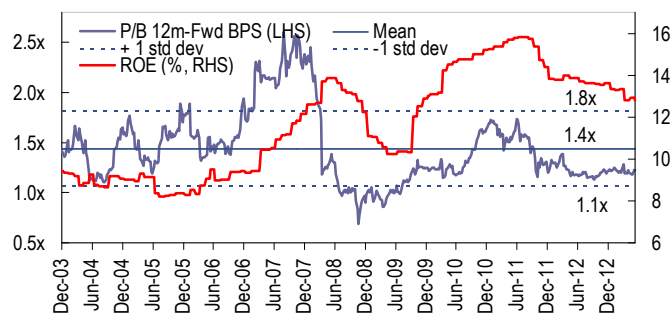
Source: DataStream, Citi Research

Figure 215. AMMB – 12M Forward Consensus P/B Chart



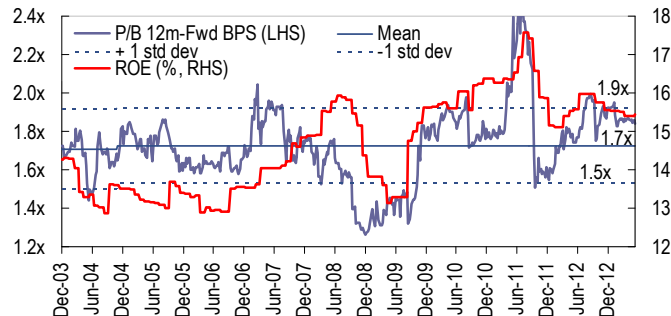
Source: DataStream, Citi Research

Figure 217. RHB Cap – 12M Forward Consensus P/B Chart



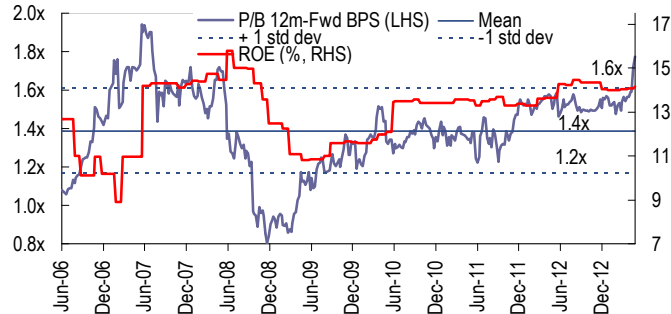
Source: DataStream, Citi Research

Figure 219. Hong Leong – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 221. Alliance – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 222. Malaysia – Bank Earnings Forecasts and Key Assumptions (Local Currency Millions Unless Stated)\*

	Alliance				AMMB				CIMB				Hong Leong			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	11.5	12.8	10.0	9.0	8.3	8.9	9.7	8.6	8.9	11.8	10.5	10.0	7.8	7.1	9.1	8.7
Net Interest Margin (bps)	183	184	179	177	210	200	190	185	256	249	245	241	182	170	173	169
<b>Net Interest Income (MYR m)</b>	<b>667</b>	<b>730</b>	<b>780</b>	<b>839</b>	<b>2,180</b>	<b>2,223</b>	<b>2,310</b>	<b>2,425</b>	<b>7,396</b>	<b>7,985</b>	<b>8,575</b>	<b>9,197</b>	<b>2,602</b>	<b>2,533</b>	<b>2,705</b>	<b>2,890</b>
NII Growth (%)	-0.5	9.5	6.8	7.6	3.1	1.9	3.9	5.0	10.8	8.0	7.4	7.3	57.1	-2.6	6.8	6.8
<b>Non Interest Income (MYR m)</b>	<b>577</b>	<b>603</b>	<b>680</b>	<b>750</b>	<b>2,124</b>	<b>2,142</b>	<b>2,645</b>	<b>2,885</b>	<b>6,099</b>	<b>6,900</b>	<b>7,388</b>	<b>7,888</b>	<b>1,292</b>	<b>1,510</b>	<b>1,715</b>	<b>1,890</b>
Non-II Growth (%)	25.9	4.4	12.8	10.3	15.4	0.8	23.5	9.1	12.0	13.1	7.1	6.8	44.2	16.9	13.6	10.2
-Fee Income (MYR m)	177	175	200	224	613	667	740	785	2,296	2,630	2,800	2,985	597	620	690	770
-Fee Growth (%)	20.2	-1.0	14.3	12.0	2.8	8.9	10.9	6.1	12.7	14.5	6.5	6.6	52.6	3.9	11.3	11.6
-Other Income (MYR m)	400	428	480	526	1,512	1,475	1,905	2,100	3,803	4,270	4,588	4,903	695	890	1,025	1,120
-Other Income Growth (%)	28.6	6.8	12.3	9.6	21.4	-2.5	29.2	10.2	11.6	12.3	7.4	6.9	37.7	28.0	15.2	9.3
<b>Total Income (MYR m)</b>	<b>1,244</b>	<b>1,333</b>	<b>1,460</b>	<b>1,589</b>	<b>4,305</b>	<b>4,364</b>	<b>4,955</b>	<b>5,310</b>	<b>13,495</b>	<b>14,885</b>	<b>15,963</b>	<b>17,085</b>	<b>3,894</b>	<b>4,043</b>	<b>4,420</b>	<b>4,780</b>
Total Income Growth (%)	10.2	7.1	9.5	8.8	8.8	1.4	13.5	7.2	11.3	10.3	7.2	7.0	52.6	3.8	9.3	8.1
Non-II % of Total Income	46.4	45.2	46.6	47.2	49.4	49.1	53.4	54.3	45.2	46.4	46.3	46.2	33.2	37.3	38.8	39.5
<b>Operating Costs (MYR m)</b>	<b>592</b>	<b>639</b>	<b>660</b>	<b>698</b>	<b>1,791</b>	<b>2,051</b>	<b>2,230</b>	<b>2,320</b>	<b>7,612</b>	<b>8,280</b>	<b>8,730</b>	<b>9,230</b>	<b>1,925</b>	<b>1,900</b>	<b>1,980</b>	<b>2,095</b>
Costs Growth (%)	8.6	8.0	3.2	5.8	14.7	14.5	8.7	4.0	14.8	8.8	5.4	5.7	58.9	-1.3	4.2	5.8
Costs % of Total Income	47.6	48.0	45.2	43.9	41.6	47.0	45.0	43.7	56.4	55.6	54.7	54.0	49.4	47.0	44.8	43.8
<b>Pre-Provision Profit (MYR m)</b>	<b>653</b>	<b>694</b>	<b>800</b>	<b>891</b>	<b>2,513</b>	<b>2,313</b>	<b>2,725</b>	<b>2,990</b>	<b>5,883</b>	<b>6,605</b>	<b>7,233</b>	<b>7,855</b>	<b>1,969</b>	<b>2,143</b>	<b>2,440</b>	<b>2,685</b>
PPP Growth (%)	11.8	6.3	15.3	11.4	5.0	-8.0	17.8	9.7	7.1	12.3	9.5	8.6	46.9	8.8	13.9	10.0
PPOP/Avg Loans (Bps)	260.9	245.8	269.9	274.6	322.8	272.9	306.6	308.2	282.4	283.5	294.9	290.5	217.4	220.9	240.6	243.2
<b>Provision Charges (MYR m)</b>	<b>-24</b>	<b>-25</b>	<b>40</b>	<b>50</b>	<b>480</b>	<b>134</b>	<b>240</b>	<b>270</b>	<b>362</b>	<b>590</b>	<b>670</b>	<b>710</b>	<b>78</b>	<b>-26</b>	<b>130</b>	<b>155</b>
- NPL Ratio (%)	2.5	2.1	2.1	2.2	2.4	2.0	2.0	2.0	3.8	3.8	3.8	3.7	1.7	1.4	1.5	1.5
- Provision Coverage (%)	83	78	79	80	115	129	131	131	78	80	82	83	130	141	141	142
- Provisions bps of Loans	-10	-9	13	15	64	16	27	28	18	27	27	26	9	-3	13	14
Others (MYR m)	-2	-5	-5	-5	0	1	0	0	157	168	180	190	219	270	288	308
<b>Pre-tax Profit (MYR m)</b>	<b>675</b>	<b>714</b>	<b>755</b>	<b>836</b>	<b>2,034</b>	<b>2,180</b>	<b>2,485</b>	<b>2,720</b>	<b>5,678</b>	<b>6,183</b>	<b>6,743</b>	<b>7,335</b>	<b>2,109</b>	<b>2,439</b>	<b>2,598</b>	<b>2,838</b>
Tax (MYR m)	172	176	189	209	501	486	559	626	1,281	1,422	1,618	1,760	461	537	572	639
Minorities (MYR m)	0	0	0	0	48	58	119	131	52	70	65	75	0	0	0	0
<b>Net Profit (MYR m)</b>	<b>503</b>	<b>538</b>	<b>566</b>	<b>627</b>	<b>1,484</b>	<b>1,635</b>	<b>1,807</b>	<b>1,963</b>	<b>4,345</b>	<b>4,691</b>	<b>5,060</b>	<b>5,500</b>	<b>1,648</b>	<b>1,902</b>	<b>2,026</b>	<b>2,199</b>
FD EPS (MYR)	0.33	0.35	0.37	0.41	0.50	0.54	0.60	0.65	0.58	0.63	0.68	0.74	0.99	1.03	1.10	1.19
FD EPS Growth (%)	24.5	7.1	5.2	10.7	11.0	9.8	10.5	8.6	7.8	7.7	7.9	8.7	27.0	4.4	6.5	8.5
BVPS (MYR)	2.43	2.60	2.79	3.02	3.69	3.99	4.34	4.71	3.82	4.20	4.61	5.05	6.69	7.08	7.84	8.70
BVPS Growth (%)	12.4	7.0	7.2	8.1	7.8	8.3	8.6	8.6	8.8	9.9	9.8	9.7	30.1	5.9	10.8	10.9
RoRWA (%)	2.06	1.93	1.94	1.96	1.76	1.78	1.88	1.88	2.21	2.07	2.14	2.14	1.80	1.92	1.96	1.95
<b>Tier 1 ratio (%)</b>	<b>12.4</b>	<b>12.7</b>	<b>12.5</b>	<b>12.3</b>	<b>11.2</b>	<b>10.6</b>	<b>10.8</b>	<b>11.0</b>	<b>10.7</b>	<b>10.1</b>	<b>10.3</b>	<b>10.3</b>	<b>11.1</b>	<b>12.8</b>	<b>13.1</b>	<b>13.3</b>
Core Tier 1 ratio (%)	12.4	12.7	12.5	12.3	9.2	8.9	9.3	9.5	9.5	8.9	9.2	9.3	11.1	12.8	13.1	13.3
CAR (%)	15.6	15.4	15.1	14.7	15.4	14.3	14.4	14.3	15.7	13.7	13.7	13.3	14.4	16.4	16.4	16.5
<b>Loan to Deposit ratio (%)</b>	<b>77.7</b>	<b>78.4</b>	<b>78.8</b>	<b>79.1</b>	<b>100.7</b>	<b>99.9</b>	<b>98.9</b>	<b>97.7</b>	<b>85.4</b>	<b>86.1</b>	<b>86.1</b>	<b>86.6</b>	<b>73.6</b>	<b>76.6</b>	<b>76.2</b>	<b>76.1</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (MYR)</b>	0.33	0.35	0.37	0.41	0.50	0.54	0.60	0.65	0.58	0.63	0.68	0.74	0.99	1.03	1.10	1.19
% Impact from																
Loan Growth: +1% Chg		0.6	0.7	0.7		0.7	0.7	0.7		0.9	0.9	0.9		0.6	0.6	0.6
NIM: +10bps Chg		5.6	5.8	5.7		5.3	5.2	5.1		5.3	5.2	5.3		6.1	6.0	6.0
Cost Income %: +1% Chg		1.9	1.9	1.9		2.1	2.1	2.1		2.4	2.4	2.4		1.7	1.7	1.7
Provisions / Loans: +10bps Chg		3.9	3.9	3.9		4.0	3.8	3.8		3.8	3.7	3.7		4.0	3.9	3.9
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	1.76	1.75	1.71	1.69	1.97	1.85	1.75	1.70	2.32	2.27	2.25	2.23	1.71	1.59	1.62	1.59
Total operating income	3.28	3.20	3.20	3.20	3.89	3.63	3.75	3.73	4.24	4.24	4.19	4.13	2.56	2.54	2.65	2.63
Operating expenses	-1.56	-1.53	-1.45	-1.40	-1.62	-1.71	-1.69	-1.63	-2.39	-2.36	-2.29	-2.23	-1.27	-1.19	-1.19	-1.15
Op profit before provisions	1.72	1.66	1.75	1.79	2.27	1.92	2.06	2.10	1.85	1.88	1.90	1.90	1.30	1.35	1.46	1.48
Provisions	0.06	0.06	-0.09	-0.10	-0.43	-0.11	-0.18	-0.19	-0.11	-0.17	-0.18	-0.17	-0.05	0.02	-0.08	-0.09
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.45	-0.42	-0.41	-0.42	-0.45	-0.40	-0.42	-0.44	-0.40	-0.40	-0.42	-0.43	-0.30	-0.34	-0.34	-0.35
<b>Net profit (ROA)</b>	<b>1.33</b>	<b>1.29</b>	<b>1.24</b>	<b>1.26</b>	<b>1.34</b>	<b>1.36</b>	<b>1.37</b>	<b>1.38</b>	<b>1.36</b>	<b>1.34</b>	<b>1.33</b>	<b>1.33</b>	<b>1.09</b>	<b>1.20</b>	<b>1.21</b>	<b>1.21</b>
Leverage (x)	11.2	11.2	11.4	11.5	10.6	11.0	10.9	10.8	12.4	12.3	12.1	12.0	16.5	12.9	12.6	12.4
<b>ROE</b>	<b>14.1</b>	<b>13.8</b>	<b>13.6</b>	<b>13.9</b>	<b>13.9</b>	<b>14.1</b>	<b>14.4</b>	<b>14.4</b>	<b>16.0</b>	<b>15.8</b>	<b>15.5</b>	<b>15.3</b>	<b>17.2</b>	<b>15.4</b>	<b>14.7</b>	<b>14.4</b>

\*Based on Fiscal Year end for individual companies (AMMB, Alliance – March Year end. Hong Leong – June Year end. Maybank, Public, RHB Cap – Dec Year end. Sector aggregates are calculated based on calendarized figures.  
Source: Company Reports and Citi Research Estimates

Figure 223. Malaysia – Bank Earnings Forecasts and Key Assumptions (Local Currency Millions Unless Stated)\*

	Maybank				Public				RHB Capital				Sector (7 banks)			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	12.2	11.7	10.4	10.0	11.3	11.7	10.9	10.2	14.3	10.5	10.1	na	11.1	11.2	10.4	9.9
Net Interest Margin (bps)	193	186	181	176	209	203	197	193	187	190	188	na	210	204	200	197
<b>Net Interest Income (MYR m)</b>	<b>8,481</b>	<b>8,950</b>	<b>9,560</b>	<b>10,120</b>	<b>5,255</b>	<b>5,605</b>	<b>6,020</b>	<b>6,455</b>	<b>2,930</b>	<b>3,395</b>	<b>3,675</b>	<b>na</b>	<b>27,330</b>	<b>29,198</b>	<b>31,315</b>	<b>29,501</b>
NII Growth (%)	11.2	5.5	6.8	5.9	5.6	6.7	7.4	7.2	5.1	15.9	8.2	na	12.1	6.8	7.2	6.7
<b>Non Interest Income (MYR m)</b>	<b>8,122</b>	<b>9,065</b>	<b>9,825</b>	<b>10,526</b>	<b>2,492</b>	<b>2,870</b>	<b>3,285</b>	<b>3,640</b>	<b>1,681</b>	<b>2,447</b>	<b>2,650</b>	<b>na</b>	<b>20,264</b>	<b>23,395</b>	<b>25,543</b>	<b>24,694</b>
Non-II Growth (%)	12.9	11.6	8.4	7.1	2.4	15.2	14.5	10.8	10.6	45.6	8.3	na	12.9	15.5	9.2	-3.3
-Fee Income (MYR m)	3,585	4,120	4,500	4,850	1,165	1,350	1,520	1,670	635	1,274	1,400	na	8,455	10,169	11,110	10,499
-Fee Growth (%)	19.2	14.9	9.2	7.8	4.1	15.8	12.6	9.9	11.7	100.6	9.9	na	16.3	20.3	9.3	8.1
-Other Income (MYR m)	4,538	4,945	5,325	5,676	1,327	1,520	1,765	1,970	1,046	1,173	1,250	na	11,809	13,226	14,433	14,195
-Other Income Growth (%)	8.4	9.0	7.7	6.6	0.9	14.6	16.1	11.6	9.9	12.1	6.6	na	10.6	12.0	9.1	-1.6
<b>Total Income (MYR m)</b>	<b>16,603</b>	<b>18,015</b>	<b>19,385</b>	<b>20,646</b>	<b>7,747</b>	<b>8,475</b>	<b>9,305</b>	<b>10,095</b>	<b>4,611</b>	<b>5,842</b>	<b>6,325</b>	<b>na</b>	<b>47,594</b>	<b>52,593</b>	<b>56,858</b>	<b>54,195</b>
Total Income Growth (%)	12.0	8.5	7.6	6.5	4.6	9.4	9.8	8.5	7.0	26.7	8.3	na	12.4	10.5	8.1	7.2
Non-II % of Total Income	48.9	50.3	50.7	51.0	32.2	33.9	35.3	36.1	36.5	41.9	41.9	na	42.6	44.5	44.9	45.6
<b>Operating Costs (MYR m)</b>	<b>8,158</b>	<b>8,720</b>	<b>9,250</b>	<b>9,790</b>	<b>2,361</b>	<b>2,534</b>	<b>2,750</b>	<b>2,965</b>	<b>2,105</b>	<b>2,920</b>	<b>3,100</b>	<b>na</b>	<b>22,753</b>	<b>24,993</b>	<b>26,470</b>	<b>24,778</b>
Costs Growth (%)	9.4	6.9	6.1	5.8	6.9	7.3	8.5	7.8	10.6	38.7	6.2	na	14.0	9.8	5.9	6.0
Costs % of Total Income	49.1	48.4	47.7	47.4	30.5	29.9	29.6	29.4	45.7	50.0	49.0	na	47.8	47.5	46.6	45.7
<b>Pre-Provision Profit (MYR m)</b>	<b>8,445</b>	<b>9,295</b>	<b>10,135</b>	<b>10,856</b>	<b>5,386</b>	<b>5,941</b>	<b>6,555</b>	<b>7,130</b>	<b>2,506</b>	<b>2,922</b>	<b>3,225</b>	<b>na</b>	<b>24,841</b>	<b>27,600</b>	<b>30,388</b>	<b>29,417</b>
PPP Growth (%)	14.7	10.1	9.0	7.1	3.6	10.3	10.3	8.8	4.2	16.6	10.4	na	11.0	11.1	10.1	8.3
PPOP/Avg Loans (Bps)	265.7	261.8	271.4	263.8	272.3	268.8	281.3	276.9	225.0	237.4	249.4	na	261.2	261.0	273.3	255.8
<b>Provision Charges (MYR m)</b>	<b>703</b>	<b>900</b>	<b>1,000</b>	<b>1,080</b>	<b>286</b>	<b>361</b>	<b>414</b>	<b>466</b>	<b>157</b>	<b>317</b>	<b>349</b>	<b>na</b>	<b>1,562</b>	<b>2,116</b>	<b>2,604</b>	<b>2,461</b>
- NPL Ratio (%)	1.8	1.9	1.9	1.9	0.7	0.7	0.7	0.7	3.2	3.1	3.0	na	2.2	2.1	2.1	2.0
- Provision Coverage (%)	106	106	107	108	126	127	127	126	64	66	67	na	91	92	94	100
- Provisions bps of Loans	23	27	27	26	15	17	18	18	15	27	27	na	17	21	23	23
Others (MYR m)	152	168	180	190	4	3	5	8	1	1	1	na	531	605	649	691
<b>Pre-tax Profit (MYR m)</b>	<b>7,895</b>	<b>8,563</b>	<b>9,315</b>	<b>9,966</b>	<b>5,104</b>	<b>5,583</b>	<b>6,146</b>	<b>6,672</b>	<b>2,350</b>	<b>2,606</b>	<b>2,877</b>	<b>na</b>	<b>23,810</b>	<b>26,089</b>	<b>28,433</b>	<b>27,647</b>
Tax (MYR m)	1,977	2,141	2,375	2,541	1,192	1,312	1,444	1,601	576	665	734	na	5,659	6,252	6,932	6,751
Minorities (MYR m)	173	200	220	235	42	45	50	55	3	7	9	na	271	322	344	365
<b>Net Profit (MYR m)</b>	<b>5,745</b>	<b>6,222</b>	<b>6,720</b>	<b>7,190</b>	<b>3,869</b>	<b>4,226</b>	<b>4,651</b>	<b>5,016</b>	<b>1,771</b>	<b>1,935</b>	<b>2,134</b>	<b>na</b>	<b>17,881</b>	<b>19,515</b>	<b>21,158</b>	<b>20,531</b>
FD EPS (MYR)	0.73	0.74	0.80	0.85	1.10	1.20	1.32	1.42	0.79	0.79	0.87	na	0.80	0.84	0.91	0.98
FD EPS Growth (%)	11.7	1.4	8.0	7.0	5.0	8.3	10.1	7.8	14.8	-0.8	10.3	na	10.8	4.9	8.6	7.9
BVPS (MYR)	5.00	5.27	5.61	5.94	5.08	5.74	6.47	7.27	6.13	6.71	7.34	na	4.92	5.33	5.84	6.24
BVPS Growth (%)	10.9	5.4	6.3	5.9	14.1	12.9	12.8	12.4	16.3	9.4	9.4	na	14.1	8.5	9.5	9.3
RoRWA (%)	2.12	1.98	2.06	2.04	2.26	2.13	2.22	2.16	1.96	1.65	1.74	na	2.12	1.98	2.06	1.95
<b>Tier 1 ratio (%)</b>	<b>13.7</b>	<b>12.0</b>	<b>11.9</b>	<b>11.8</b>	<b>11.4</b>	<b>11.2</b>	<b>11.2</b>	<b>11.3</b>	<b>12.9</b>	<b>12.5</b>	<b>12.4</b>	<b>na</b>	<b>12.1</b>	<b>11.5</b>	<b>11.5</b>	<b>11.4</b>
Core Tier 1 ratio (%)	11.5	10.0	10.0	10.1	9.1	9.1	9.4	9.6	12.3	12.0	12.0	na	10.6	10.1	10.3	10.2
CAR (%)	17.5	14.5	14.2	14.0	14.6	14.6	14.3	14.2	16.1	15.5	15.2	na	15.9	14.6	14.5	14.2
<b>Loan to Deposit ratio (%)</b>	<b>91.5</b>	<b>91.3</b>	<b>91.2</b>	<b>90.8</b>	<b>87.9</b>	<b>87.8</b>	<b>87.5</b>	<b>87.4</b>	<b>82.5</b>	<b>82.5</b>	<b>82.6</b>	<b>na</b>	<b>86.3</b>	<b>86.7</b>	<b>86.6</b>	<b>86.9</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (MYR)</b>	0.73	0.74	0.80	0.85	1.10	1.20	1.32	1.42	0.79	0.79	0.87	na	0.80	0.84	0.91	0.98
% Impact from																
Loan Growth: +1% Chg		0.7	0.7	0.7		0.7	0.7	0.7		0.8	0.8	na		0.8	0.8	0.8
NIM: +10bps Chg		5.8	5.8	6.0		5.0	5.0	5.1		6.9	6.8	na		5.6	5.6	5.6
Cost Income %: +1% Chg		2.2	2.1	2.1		1.5	1.5	1.5		2.2	2.2	na		2.0	2.0	2.0
Provisions / Loans: +10bps Chg		4.1	4.3			4.0	3.8	3.9		4.7	4.5	na		4.1	4.0	4.2
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	1.79	1.73	1.69	1.64	2.00	1.94	1.89	1.85	1.75	1.78	1.77	na	1.94	1.88	1.86	1.83
Total operating income	3.51	3.47	3.42	3.35	2.95	2.93	2.93	2.90	2.76	3.07	3.04	na	3.37	3.39	3.37	3.37
Operating expenses	-1.72	-1.68	-1.63	-1.59	-0.90	-0.88	-0.86	-0.85	-1.26	-1.53	-1.49	na	-1.61	-1.61	-1.57	-1.54
Op profit before provisions	1.78	1.79	1.79	1.76	2.05	2.06	2.06	2.05	1.50	1.53	1.55	na	1.76	1.78	1.80	1.83
Provisions	-0.15	-0.17	-0.18	-0.18	-0.11	-0.12	-0.13	-0.13	-0.09	-0.17	-0.17	na	-0.11	-0.14	-0.15	-0.15
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.42	-0.41	-0.42	-0.41	-0.45	-0.45	-0.45	-0.46	-0.34	-0.35	-0.35	na	-0.40	-0.40	-0.41	-0.42
<b>Net profit (ROA)</b>	<b>1.21</b>	<b>1.20</b>	<b>1.19</b>	<b>1.17</b>	<b>1.47</b>	<b>1.46</b>	<b>1.46</b>	<b>1.44</b>	<b>1.06</b>	<b>1.02</b>	<b>1.03</b>	<b>na</b>	<b>1.27</b>	<b>1.26</b>	<b>1.26</b>	<b>1.28</b>
Leverage (x)	12.9	12.5	12.8	13.2	16.3	15.9	15.4	15.0	13.6	12.6	12.5	na	13.6	13.0	13.0	13.0
<b>ROE</b>	<b>15.0</b>	<b>14.3</b>	<b>14.6</b>	<b>14.8</b>	<b>23.0</b>	<b>22.1</b>	<b>21.6</b>	<b>20.7</b>	<b>13.3</b>	<b>12.2</b>	<b>12.3</b>	<b>na</b>	<b>16.4</b>	<b>15.7</b>	<b>15.6</b>	<b>16.0</b>

\*Based on Fiscal Year end for individual companies (AMMB, Alliance – March Year end. Hong Leong – June Year end. Maybank, Public, RHB Cap – Dec Year end. Sector aggregates are calculated based on calendarized figures.  
Source: Company Reports and Citi Research Estimates

# Philippines

## Major NIM Beneficiary but Offset by Other Areas

### Key Scenario Assumptions

- **CPI Inflation doubles to 6%** – Current inflation is at 3%, at the lower end of the historical 3-5% range. Risk of doubling of inflation to 6% could be driven by 1) spike in oil prices in the near term; 2) faster pass-through effects to retail prices and, 3) higher inflationary expectations. Given that the hike is prompted by external price shocks (vs. domestic driven pressures), inflation will likely settle back to the historical range similar in 2008. CPI soared to a high of 10% YoY from July to Sept 2008 then settled back to single digit rate in December.
- **Short term interest rates (overnight borrowing rate and SDA rates)** – A sharp hike in inflation to 6% would probably prompt the BSP to raise its policy rate by 100bp to 150bp. The hike would probably not be immediate such as the 2008 experience wherein there was a lag of about two months from the start of the inflation pick-up before the BSP started hiking rates.
  - **SDA rates:** Currently at 2.0%, the BSP's deposit rate will likely be the first to be adjusted up, followed by the overnight rate, in case inflation continues to spike up. This measure of sterilizing onshore liquidity will likely be the first move in the policy tightening process.
  - **Time deposit rates** – Time deposit rates could likely move in line with the SDA rates but at a narrower spread. In 2008, time deposit rates rose by 60-90bps, which was about 30%-50% of the increase in 91 day T-bill rate of 198bp. Assuming similar relationship, a 100-150bp hike in SDA rates could prompt time deposit rates to increase by 40-60bp.
  - **Average lending rate** – Lending rates will likely track the SDA rate, which has become the benchmark rate after the collapse of the 91-day treasury bill rate (currently nearly 1%). We note, though, that given the current liquid environment and strong competitive environment the impact of a 100-150 bp rise in policy could just raise lending rates by 50-75 bp.
- **10 yr government bond rate rises by 50-75bp** – Long term bond yields, currently at a historic low of 3.05% vs. overnight rate of 3.5%, will likely push the 10-yr bond rate to rise by 50-75bp. If high inflation also prompts fiscal tightening (i.e. lower than programmed spending and deficit target) and thus lower fiscal borrowing risk, the long end need not adjust as much as the front end of the curve.

### Implications for Philippine Banks

- **Positive impact on NIMs due to large CASA deposits** – Rising rates are positive for Philippine bank earnings since 50% - 60% of deposits of the top banks are low cost CASA. We estimate that a 75bp change in benchmark rates could improve bank NIMs by around 45bp, raising net income by an average of 22% for the top banks we cover.
- **Limited impact on loan growth** – Loans have grown at a 1.5x ratio to nominal GDP growth. Given that the key driver of loan growth in the medium term would be big-ticket infrastructure lending, loan growth will likely not be affected significantly. Consumer loans will likely be more sensitive to a 75-100bp hike in rates. However, we do not expect mortgage loans to be immediately affected by a hike given that completion of residential property projects (pre-sold in 2010

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onwards when take-up started to surge) will prompt an increase in mortgage loans. Our sensitivity analysis suggests that a 1ppt decline in loan growth will lower earnings by 0.7%.

- **Non-interest income impacted by lower trading income** – The top Philippine banks posted trading losses in 2008 as they got hit by sharp drop in valuation of their trading account securities composed mostly of Philippine government bonds. Exposure to CDOs of Lehman hit big banks such as BDO and Metrobank. Improving liquidity of the longer tenor Philippine government bonds and lesser proportion of trading account securities to the banks' investment holdings should limit potential losses from rising interest rates. Nonetheless, a rising interest rate scenario would still result in a decline in trading income, following significant gains from the past two years on the back of falling rates. Our 2013 forecasts already assume declining trading income going forward but a further 20% cut in our trading income forecast could lower earnings by 6%, on average.

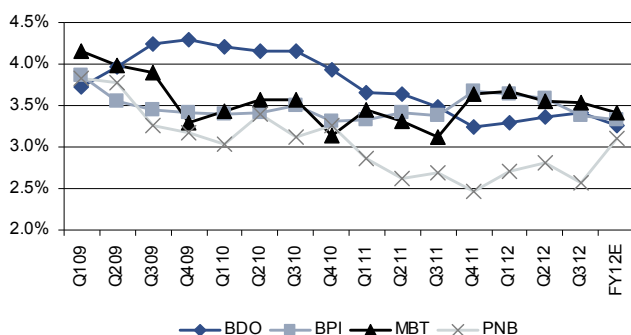
Figure 224. Investment securities and trading income profile

	Trading securities	AFS	HTM	Total	Trading gain	Forex Gain	Gains as % of Non-int. income	Gains % of total oper. profit	Unrealised gains in AFS
BDO	9,177	131,154	96,963	237,294	8,445	(212)	33.7%	13.6%	7,407
BPI	22,098	106,403	76,243	204,744	5,908	1,682	38.1%	16.0%	2,000
MBT	66,721	122,958	51,451	241,130	5,485	3,636	32.7%	15.5%	2,438
PNB	24,761	61,629	-	86,390	3,998	1,245	60.6%	37.2%	641

Source: Company Reports and Citi Research

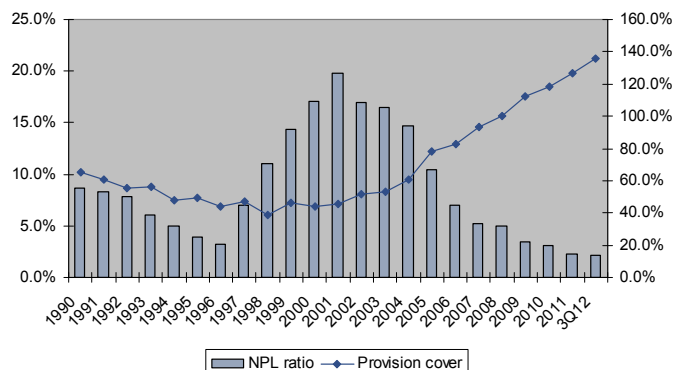
- **Consumer loan NPLs to rise 50bps** – Current industry NPL ratio of 2.1% is at a historic low, hence we expect NPLs to start picking up going forward. Consumer loans, particularly low middle market mortgage loans, will likely be more sensitive to rising lending rates. Assuming consumer loan NPL ratio rises by 50bps, we estimate credit cost could rise by about 11bps. This is estimated to trim earnings by an average of 5%. The over 100% provision cover of the top banks nonetheless gives them the flexibility to limit provision expense.
- **Cost-income ratio up 90bps** – Rising inflation will likely impact bank salary and occupancy costs, which account for about 55% of operating costs. Annual salary hikes are governed by 3-5 year CBA with the labor union, so there may be a lag in the adjustments. The annual salary increases are usually benchmarked to the inflation rate. We estimate that a 3 ppt increase in salary and occupancy costs estimates, in line with a doubling of inflation, will raise cost to income ratio by about 90bp and trim earnings by 3%.

Figure 225. Philippine Banks – NIM Trend (%)



Source: Citi Research

Figure 226. Philippines Asset Quality Trend (%)



Source: Citi Research

## Overall Impact

ROE likely to increase 0.9% to 13.2% under a 7.7% earnings uplift scenario

With ROE forecasted to be 12.3% in 2013E for the companies in our coverage, their reported ROEs could rise by 0.9%pt to 13.2% under the above scenario for a 7.7% earnings uplift.

Figure 227. Philippine Banks – Overall impact

		Earnings impact	ROE impact
NIM	+44bps	22%	2.3%
Loan growth	Minimal	0%	0.0%
Non-interest income	Assume 20% decline in trading income	-6%	-0.7%
Cost/income	+90 bps	-3%	-0.3%
Credit cost	+11bps	-5%	-0.6%
<b>Net impact</b>		<b>8%</b>	<b>0.9%</b>

Source: Citi Research Estimates

BDO seen to benefit more given its higher LDR and low-cost CASA

Given similar lending and deposit profiles for the top 3 banks, the general direction will likely benefit all of the banks. Among the top banks, based on our sensitivity analysis, BDO is seen to benefit more given its higher LDR of 84% and low cost CASA ratio of 62%.

Figure 228. Philippines — Economic Indicators

	2006	2007	2008	2009	2010	2011	2012	2013F	2014F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	122.4	150.2	173.4	168.6	200.0	224.7	250.6	280.8	309.6
Nominal GDP, local currency bn	6,271	6,893	7,721	8,026	9,003	9,736	10,568	11,542	12,695
GDP per capita, US\$	1,408	1,693	1,917	1,829	2,127	2,346	2,568	2,826	3,061
Population, mn	87.0	88.7	90.5	92.2	94.0	95.8	97.6	99.4	101.2
Unemployment, % of labour force	8.0	7.3	7.4	7.5	7.3	7.0	7.0	6.5	6.0
<b>Economic Activity</b>									
Real GDP, % yoy	5.2	6.6	4.2	1.1	7.6	3.9	6.6	6.2	6.6
Real investment growth % yoy	-15.1	-0.5	23.4	-8.7	31.6	8.1	-4.4	10.8	16.4
Real consumption growth % yoy	4.9	4.9	3.3	3.3	3.4	5.6	6.8	6.1	6.1
private consumption growth % yoy	4.2	4.6	3.7	2.3	3.4	6.3	6.1	5.8	6.0
Real export growth, % yoy	12.6	6.7	-2.7	-7.8	21.0	-4.2	8.7	6.3	7.7
Real import growth, % yoy	3.5	1.7	1.6	-8.1	22.5	0.2	4.2	7.6	10.9
<b>Prices, Money &amp; Credit</b>									
CPI, % yoy	4.3	3.9	8.0	4.3	3.6	4.2	2.9	2.8	3.5
CPI, % avg	6.3	2.8	9.3	3.2	4.1	4.7	3.1	2.8	3.2
Nominal wages, % yoy	7.7	3.4	5.5	0.0	5.8	5.4	7.0	6.5	6.0
Credit extension to private sector, % yoy	9.0	10.6	12.8	4.3	13.8	16.2	13.5	11.3	15.0
Policy interest rate, % eop	7.50	5.25	5.50	4.00	4.00	4.50	3.50	3.50	4.50
1 month Philippine Reference rate, % eop	6.35	6.03	5.20	4.11	0.75	1.68	-1.38	1.00	2.75
Long term yield, % eop	5.99	5.70	6.55	6.25	4.78	4.21	3.70	2.25	3.50
lc/US\$, eop	49.1	41.2	47.5	46.5	43.6	43.8	41.1	41.3	40.9
lc/US\$, avg	51.3	46.1	44.5	47.6	45.1	43.3	42.2	41.2	41.0
<b>Balance of Payments, US\$ bn</b>									
Current account	5.3	7.1	3.6	9.4	8.9	7.0	7.1	6.5	6.0
% of GDP	4.4	4.7	2.1	5.5	4.5	3.1	2.8	2.3	1.9
Trade balance	-6.7	-8.4	-12.9	-8.8	-11.0	-17.0	-15.2	-17.0	-17.4
Exports	46.5	49.5	48.3	37.6	50.7	38.3	46.3	49.5	56.1
Imports	53.3	57.9	61.1	46.5	61.7	55.2	61.5	66.5	73.5
Service balance	0.1	2.2	1.2	2.1	2.7	5.3	3.9	3.5	2.5
Income balance	11.9	13.3	15.4	16.1	17.2	18.7	18.4	19.9	20.9
FDI, net	2.8	-0.6	1.3	1.6	0.7	-1.3	-1.0	2.0	3.0
International reserves (ex-gold)	23.0	33.8	37.6	44.2	62.4	75.3	83.8	88.0	93.5
Total Amortisations	9.4	6.3	8.2	6.4	9.5	7.3	8.5	9.3	9.7
<b>Public Finances, % of GDP</b>									
Consolidated government balance	-1.0	-0.2	-0.9	-3.7	-3.5	-2.0	-2.3	-2.3	-2.0
Consolidated gov primary balance	3.9	3.7	2.6	-0.2	-0.2	0.8	0.7	0.7	1.0
Public debt	61.4	53.9	54.7	54.8	52.4	50.9	51.4	50.0	49.5
of which Domestic	34.3	31.9	31.3	30.8	30.2	29.5	32.8	32.5	32.0
<b>Foreign Assets &amp; Liabilities, US\$ bn</b>									
External debt	53.9	55.5	54.3	54.9	60.0	60.4	60.3	65.0	68.7
Private	16.5	17.5	13.7	11.6	13.9	14.1	15.2	17.0	21.2
Public	37.4	38.0	40.6	43.2	46.2	46.4	45.2	48.0	47.5
External debt / GDP	44.0	36.9	31.3	32.5	30.0	26.9	24.1	23.1	22.2
External debt / XGS	101.8	93.6	93.7	112.8	92.6	107.7	93.0	94.7	89.9
Short-term debt	5.0	7.1	7.0	4.0	6.3	7.0	8.5	10.5	11.8
Short-term debt/International Reserves (%)	21.8	21.0	18.6	9.0	10.1	9.3	10.1	11.9	12.6
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	4.0	6.3	6.0	7.2	6.8	6.0	5.8	6.4	6.7
CPI, % yoy	4.2	2.6	2.8	3.6	2.9	3.2	2.7	2.6	2.8
Policy interest rate, % eop	4.50	4.00	4.00	3.75	3.50	3.50	3.50	3.50	3.50
1 month Philippine Reference rate, % eop	1.68	3.13	2.61	0.85	-1.38	-0.36	0.50	0.75	1.00
Long term yield, % eop	4.21	4.48	4.70	4.35	3.70	2.93	2.25	2.10	2.25
lc vs USD, eop	43.8	42.9	41.9	41.7	41.1	40.9	41.5	41.4	41.3

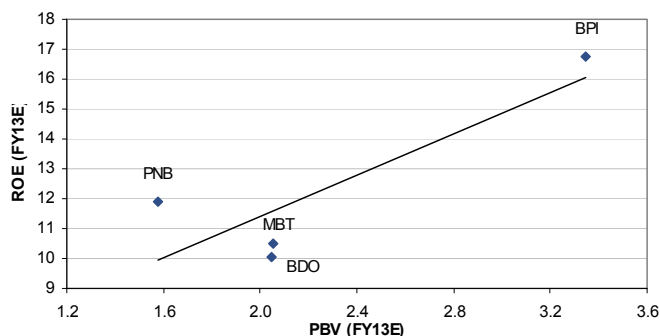
Source: CEIC Data Company Limited, IFS, Moody's and Citi Research Estimates

Figure 229. Philippines — Banks Valuation Snapshot

Stock, Rating, Ric	Price (PHP)	TP (PHP)	ETR (%)	Mkt Cap (PHP b)	Profit (PHP m)		EPS (PHP)		EPS Chg YoY (%)		P/E (x)		NBV/S (PHP)		P/NBV (x)		Net DPS (PHP)		Yield (%)		ROAE (%)	
					13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
BDO, 1, BDO.PS	94.9	88.0	-6.1	339.8	15,961	19,442	4.5	5.4	8.1	21.8	21.1	17.3	45.9	49.9	2.05	1.89	1.12	1.34	1.2	1.4	10.1	11.3
BPI, 3, BPI.PS	103.7	92.0	-9.5	368.8	17,177	19,063	4.8	5.4	8.8	11.0	21.0	19.0	30.4	33.9	3.35	3.00	1.80	1.80	1.8	1.8	16.7	16.7
MBT, 2, MBT.PS	134.5	115.0	-13.5	284.0	13,686	17,248	6.5	8.2	10.8	26.0	20.6	16.4	65.1	71.9	2.05	1.86	1.40	1.60	1.0	1.2	10.5	11.9
PNB, 2, PNB.PS	103.0	105.0	1.9	111.9	4,985	6,364	7.5	9.6	-0.2	27.7	13.9	10.9	66.3	74.4	1.58	1.40	0.00	0.00	0.0	0.0	11.9	13.7

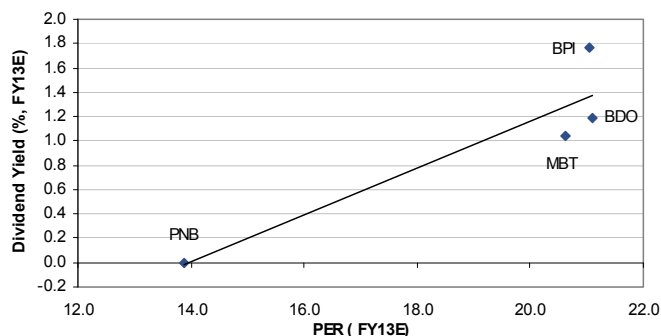
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 230. Price-Book vs. ROAE 2013E



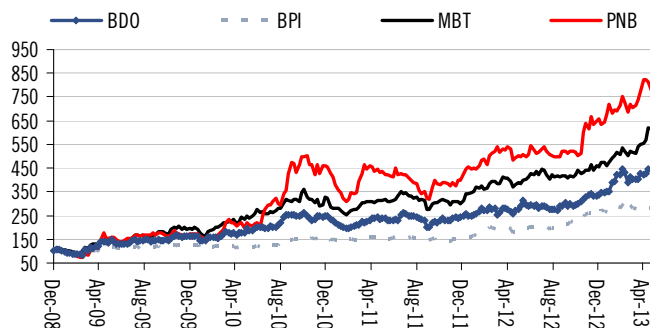
Source: Citi Research Estimates

Figure 231. P/E vs. Dividend Yield 2013E



Source: Citi Research Estimates

Figure 232. Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

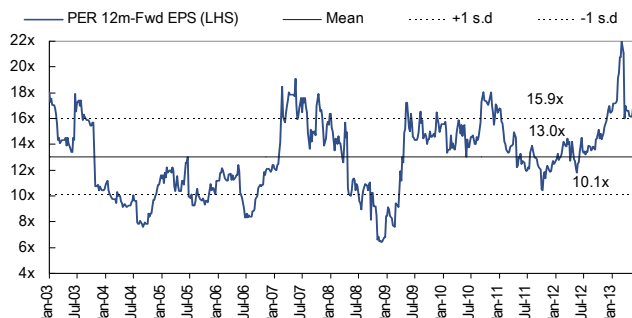
Figure 233. Philippine Banks – Current vs. Target Valuation and Historical P/B & P/E Ranges

	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (Peso)	CY13E P/B (x)	CY13E P/E (x)	Target Price (Peso)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
BDO	94.9	2.1	21.3	88.0	1.9	19.7	1.1	1.4	1.8	10.1	13.0	15.9
BPI	102.0	3.4	21.1	92.0	3.0	19.0	1.7	2.1	2.6	12.3	14.5	16.8
Metro Bank	134.5	2.1	20.7	115.0	1.8	17.7	0.8	1.1	1.4	9.7	12.2	14.6
PNB	103.0	1.6	13.7	105.0	1.6	13.9	0.5	0.9	1.2	7.0	13.5	20.1

Note: Priced as on 23 May 2013; Source: Citi Research Estimates

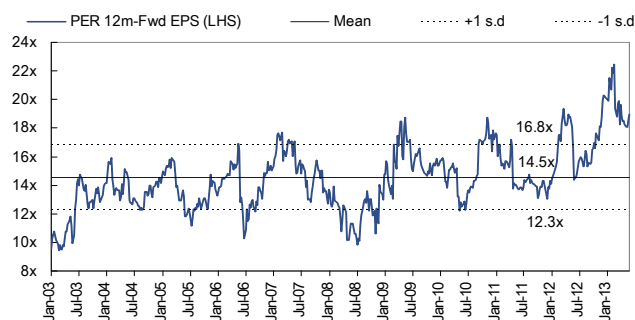
## Philippine Banks – Valuation Charts

Figure 234. BDO – 12M Forward Consensus P/E Chart



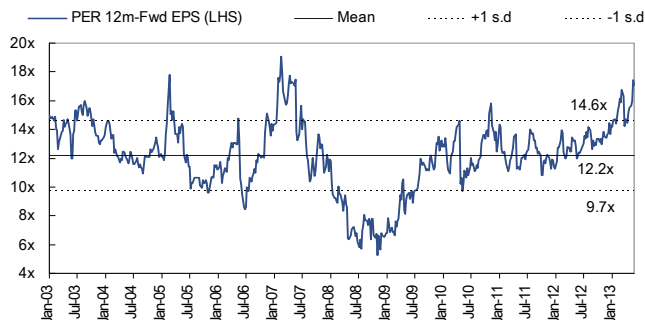
Source: DataStream, Citi Research

Figure 236. BPI – 12M Forward Consensus P/E Chart



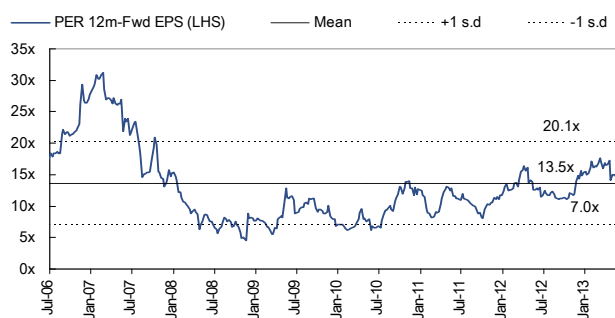
Source: DataStream, Citi Research

Figure 238. Metro Bank – 12M Forward Consensus P/E Chart



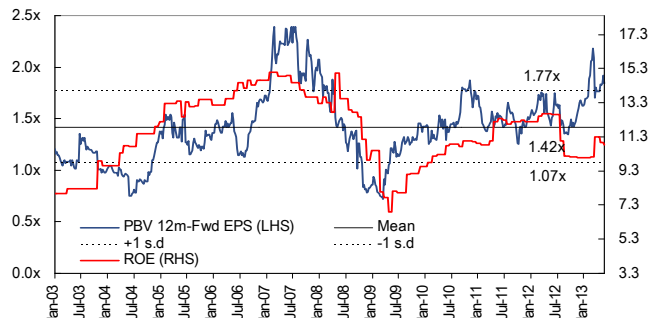
Source: DataStream, Citi Research

Figure 240. PNB – 12M Forward Consensus P/E Chart



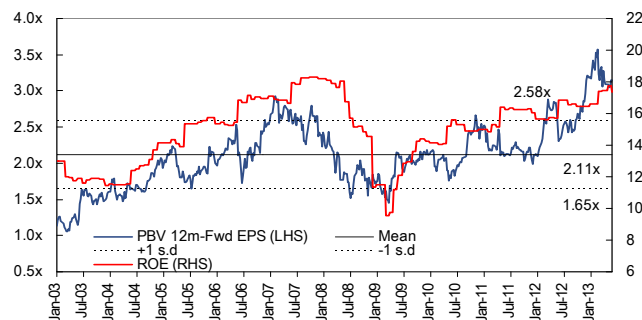
Source: DataStream, Citi Research

Figure 235. BDO – 12M Forward Consensus P/B Chart



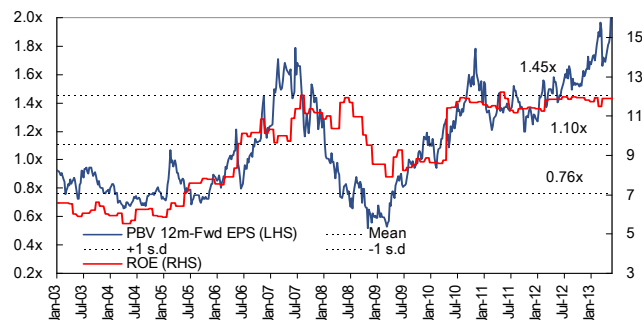
Source: DataStream, Citi Research

Figure 237. BPI – 12M Forward Consensus P/B Chart



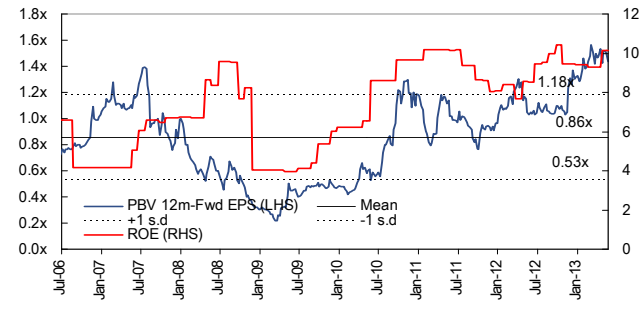
Source: DataStream, Citi Research

Figure 239. Metro Bank – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 241. PNB – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 242. Philippines – Bank Earnings Forecasts and Key Assumptions (Local Currency Millions Unless Stated)

	BDO				BPI				MBT			
	FY11A	FY12E	FY13E	FY14E	FY11A	FY12E	FY13E	FY14E	FY11A	FY12E	FY13E	FY14E
<b>Loan Growth (%)</b>	22.5	15.2	17.5	18.7	19.6	15.1	15.8	16.3	18.9	12.0	16.0	17.5
Net Interest Margin (bps)	339	325	331	345	321	333	333	340	345	341	353	369
<b>Net Interest Income (PHP m)</b>	<b>33,779</b>	<b>36,033</b>	<b>41,967</b>	<b>51,018</b>	<b>25,866</b>	<b>27,513</b>	<b>30,477</b>	<b>34,974</b>	<b>29,407</b>	<b>30,998</b>	<b>34,126</b>	<b>40,082</b>
NII Growth (%)	-1.1	6.7	16.5	21.6	9.5	6.4	10.8	14.8	11.4	5.4	10.1	17.5
<b>Non Interest Income (PHP m)</b>	<b>20,899</b>	<b>24,625</b>	<b>25,380</b>	<b>26,351</b>	<b>15,892</b>	<b>19,199</b>	<b>19,233</b>	<b>20,117</b>	<b>21,010</b>	<b>26,564</b>	<b>27,450</b>	<b>25,385</b>
Non-II Growth (%)	17.1	17.8	3.1	3.8	3.4	20.8	0.2	4.6	-3.2	26.4	3.3	-7.5
-Fee Income (PHP m)	10,528	11,568	13,037	15,406	4,607	5,034	5,638	6,314	7,711	8,482	9,330	10,263
-Fee Growth (%)	17.9	9.9	12.7	18.2	10.7	9.3	12.0	12.0	12.5	10.0	10.0	10.0
-Other Income (PHP m)	10,371	13,057	12,343	10,945	11,285	14,165	13,596	13,803	13,299	18,082	18,119	15,122
-Other Income Growth (%)	16.4	25.9	-5.5	-11.3	0.7	25.5	-4.0	1.5	-10.5	36.0	0.2	-16.5
<b>Total Income (PHP m)</b>	<b>54,678</b>	<b>60,658</b>	<b>67,347</b>	<b>77,370</b>	<b>41,758</b>	<b>46,712</b>	<b>49,711</b>	<b>55,091</b>	<b>50,417</b>	<b>57,562</b>	<b>61,576</b>	<b>65,467</b>
Total Income Growth (%)	5.2	10.9	11.0	14.9	7.1	11.9	6.4	10.8	4.8	14.2	7.0	6.3
Non-II % of Total Income	38.2	40.6	37.7	34.1	38.1	41.1	38.7	36.5	41.7	46.1	44.6	38.8
<b>Operating Costs (PHP m)</b>	<b>36,316</b>	<b>39,839</b>	<b>43,239</b>	<b>47,689</b>	<b>23,465</b>	<b>23,926</b>	<b>25,192</b>	<b>26,870</b>	<b>30,680</b>	<b>32,311</b>	<b>34,673</b>	<b>37,012</b>
Costs Growth (%)	4.4	9.7	8.5	10.3	12.0	2.0	5.3	6.7	10.3	5.3	7.3	6.7
Costs % of Total Income	66.4	65.7	64.2	61.6	56.2	51.2	50.7	48.8	60.9	56.1	56.3	56.5
<b>Pre-Provision Profit (PHP m)</b>	<b>18,362</b>	<b>20,819</b>	<b>24,108</b>	<b>29,681</b>	<b>18,293</b>	<b>22,786</b>	<b>24,519</b>	<b>28,221</b>	<b>19,737</b>	<b>25,250</b>	<b>26,902</b>	<b>28,455</b>
PPP Growth (%)	6.7	13.4	15.8	23.1	1.4	24.6	7.6	15.1	-2.7	27.9	6.5	5.8
PPOP/Avg Loans (Bps)	264.7	260.5	277.4	289.0	393.3	425.6	424.5	421.1	434.4	496.3	489.6	443.3
<b>Provision Charges (PHP m)</b>	<b>6,144</b>	<b>5,199</b>	<b>5,497</b>	<b>7,093</b>	<b>2,150</b>	<b>2,906</b>	<b>2,727</b>	<b>4,023</b>	<b>3,823</b>	<b>3,620</b>	<b>3,523</b>	<b>4,470</b>
- NPL Ratio (%)	3.3	2.9	2.6	2.6	2.5	2.2	2.1	2.3	2.2	2.1	2.1	2.2
- Provision Coverage (%)	118	130	133	129	91	105	105	103	147	152	141	131
- Provisions bps of Loans	98	70	63	69	50	58	47	60	91	75	64	70
Others (PHP m)	0	0	0	0	0	0	0	0	0	0	0	0
<b>Pre-tax Profit (PHP m)</b>	<b>12,218</b>	<b>15,620</b>	<b>18,611</b>	<b>22,588</b>	<b>16,143</b>	<b>19,880</b>	<b>21,791</b>	<b>24,198</b>	<b>15,914</b>	<b>21,630</b>	<b>23,379</b>	<b>23,986</b>
Tax (PHP m)	1,630	1,874	2,233	2,711	3,130	3,855	4,358	4,840	3,524	3,956	4,270	4,317
Minorities (PHP m)	57	73	87	105	191	238	256	295	1,359	1,739	1,852	1,959
<b>Net Profit (PHP m)</b>	<b>10,531</b>	<b>13,673</b>	<b>16,291</b>	<b>19,772</b>	<b>12,822</b>	<b>15,787</b>	<b>17,177</b>	<b>19,063</b>	<b>11,031</b>	<b>15,936</b>	<b>17,256</b>	<b>17,709</b>
FD EPS (PHP)	3.53	4.12	4.46	5.43	3.61	4.44	4.83	5.36	4.84	5.85	6.48	8.17
FD EPS Growth (%)	16.0	16.8	8.1	21.8	9.8	23.1	8.8	11.0	15.6	20.9	10.8	26.0
BVPS (PHP)	31.60	42.62	45.86	49.87	25.07	27.33	30.36	33.92	52.00	58.35	65.12	71.91
BVPS Growth (%)	6.3	34.9	7.6	8.7	10.0	9.0	11.1	11.7	13.4	12.2	11.6	10.4
RoRWA (%)	1.37	1.54	1.70	1.78	2.47	2.62	2.71	2.70	1.86	2.43	2.53	2.33
<b>Tier 1 ratio (%)</b>	<b>10.2</b>	<b>15.6</b>	<b>14.6</b>	<b>13.8</b>	<b>13.2</b>	<b>13.4</b>	<b>13.8</b>	<b>14.0</b>	<b>13.7</b>	<b>15.0</b>	<b>16.2</b>	<b>15.9</b>
Core Tier 1 ratio (%)	10.2	15.6	14.6	13.8	13.2	13.4	13.8	14.0	13.1	14.4	15.6	15.4
CAR (%)	15.9	21.8	20.1	18.5	14.9	15.0	15.2	15.3	17.4	17.0	18.0	17.5
<b>Loan to Deposit ratio (%)</b>	<b>81</b>	<b>86</b>	<b>85</b>	<b>85</b>	<b>68</b>	<b>71</b>	<b>74</b>	<b>76</b>	<b>67</b>	<b>71</b>	<b>77</b>	<b>77</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>
<b>EPS Base Case (PHP)</b>	3.53	4.12	4.46	5.43	3.61	4.44	4.83	5.36	4.84	5.85	6.48	8.17
% Impact from												
<b>Loan Growth: +1% Chg</b>		1.5	1.4	1.4		0.8	0.8	0.9		0.8	0.9	1.0
<b>NIM: +10bps Chg</b>		7.1	6.8	6.6		4.2	4.3	4.3		4.7	4.6	5.0
<b>Cost Income %: +1% Chg</b>		3.9	3.6	3.4		2.4	2.3	2.3		3.0	2.9	3.0
<b>Provisions / Loans: +10bps Chg</b>		5.1	4.7	4.6		2.7	2.7	2.8		2.6	2.6	3.0
<b>ROA/ROE DECOMP (%)</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>
Net interest income	3.22	3.11	3.19	3.34	3.01	3.11	3.12	3.20	3.19	3.16	3.29	3.46
Total operating income	5.21	5.23	5.11	5.06	4.85	5.29	5.09	5.04	5.46	5.88	5.93	5.65
Operating expenses	-3.46	-3.44	-3.28	-3.12	-2.73	-2.71	-2.58	-2.46	-3.32	-3.30	-3.34	-3.20
Op profit before provisions	1.75	1.80	1.83	1.94	2.13	2.58	2.51	2.58	2.14	2.58	2.59	2.46
Provisions	-0.59	-0.45	-0.42	-0.46	-0.25	-0.33	-0.28	-0.37	-0.41	-0.37	-0.34	-0.39
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.16	-0.16	-0.17	-0.18	-0.36	-0.44	-0.45	-0.44	-0.38	-0.40	-0.41	-0.37
<b>Net profit (ROA)</b>	<b>1.00</b>	<b>1.18</b>	<b>1.24</b>	<b>1.29</b>	<b>1.49</b>	<b>1.79</b>	<b>1.76</b>	<b>1.75</b>	<b>1.20</b>	<b>1.63</b>	<b>1.66</b>	<b>1.53</b>
Leverage (x)	12.6	10.0	8.9	9.6	9.9	9.9	10.0	10.1	9.7	8.6	8.3	8.6
<b>ROE</b>	<b>12.1</b>	<b>11.2</b>	<b>10.3</b>	<b>11.5</b>	<b>15.1</b>	<b>16.9</b>	<b>16.7</b>	<b>16.7</b>	<b>11.2</b>	<b>13.7</b>	<b>13.2</b>	<b>12.2</b>

Source: Company Reports and Citi Research Estimates

Figure 243. Philippines – Bank Earnings Forecasts and Key Assumptions (Local Currency Millions Unless Stated)

	PNB				Sector (4 banks)			
	FY11A	FY12E	FY13E	FY14E	FY11A	FY12E	FY13E	FY14E
<b>Loan Growth (%)</b>	<b>21.7</b>	<b>9.4</b>	<b>17.5</b>	<b>17.7</b>	<b>20.7</b>	<b>13.9</b>	<b>16.7</b>	<b>17.7</b>
Net Interest Margin (bps)	281	262	275	309	328	325	332	346
<b>Net Interest Income (PHP m)</b>	<b>7,219</b>	<b>7,283</b>	<b>8,279</b>	<b>10,076</b>	<b>96,271</b>	<b>101,827</b>	<b>114,848</b>	<b>136,150</b>
NII Growth (%)	-7.5	0.9	13.7	21.7	4.7	5.8	12.8	18.5
<b>Non Interest Income (PHP m)</b>	<b>9,480</b>	<b>11,338</b>	<b>10,343</b>	<b>11,014</b>	<b>67,281</b>	<b>81,726</b>	<b>82,406</b>	<b>82,868</b>
Non-II Growth (%)	7.4	19.6	-8.8	6.5	5.5	21.5	0.8	0.6
-Fee Income (PHP m)	2,137	2,028	2,205	2,417	24,983	27,112	30,210	34,400
-Fee Growth (%)	0.6	-5.1	8.7	9.6	13.2	8.5	11.4	13.9
-Other Income (PHP m)	7,343	9,310	8,138	8,598	42,298	54,614	52,196	48,468
-Other Income Growth (%)	9.6	26.8	-12.6	5.6	1.5	29.1	-4.4	-7.1
<b>Total Income (PHP m)</b>	<b>16,699</b>	<b>18,621</b>	<b>18,622</b>	<b>21,091</b>	<b>163,552</b>	<b>183,552</b>	<b>197,255</b>	<b>219,018</b>
Total Income Growth (%)	0.4	11.5	0.0	13.3	5.0	12.2	7.5	11.0
Non-II % of Total Income	56.8	60.9	55.5	52.2	41.1	44.5	41.8	37.8
<b>Operating Costs (PHP m)</b>	<b>10,259</b>	<b>10,847</b>	<b>11,513</b>	<b>12,275</b>	<b>100,720</b>	<b>106,923</b>	<b>114,617</b>	<b>123,846</b>
Costs Growth (%)	3.4	5.7	6.1	6.6	7.7	6.2	7.2	8.1
Costs % of Total Income	61.4	58.3	61.8	58.2	61.6	58.3	58.1	56.5
<b>Pre-Provision Profit (PHP m)</b>	<b>6,440</b>	<b>7,774</b>	<b>7,109</b>	<b>8,816</b>	<b>62,832</b>	<b>76,629</b>	<b>82,638</b>	<b>95,173</b>
PPP Growth (%)	-3.9	20.7	-8.5	24.0	1.0	22.0	7.8	15.2
PPOP/Avg Loans (Bps)	557.3	615.2	517.4	545.4	363.5	389.1	387.3	380.6
<b>Provision Charges (PHP m)</b>	<b>860</b>	<b>1,444</b>	<b>1,112</b>	<b>1,226</b>	<b>12,977</b>	<b>13,169</b>	<b>12,860</b>	<b>16,811</b>
- NPL Ratio (%)	6.0	5.4	5.0	4.6	3.1	2.7	2.6	2.6
- Provision Coverage (%)	196	208	203	197	128	139	138	131
- Provisions bps of Loans	82	119	81	76	79	72	60	67
Others (PHP m)	0	0	0	0	0	0	0	0
<b>Pre-tax Profit (PHP m)</b>	<b>5,579</b>	<b>6,329</b>	<b>5,997</b>	<b>7,590</b>	<b>49,854</b>	<b>63,460</b>	<b>69,778</b>	<b>78,362</b>
Tax (PHP m)	846	933	853	1,058	9,130	10,617	11,715	12,925
Minorities (PHP m)	8	400	159	169	1,615	2,449	2,354	2,529
<b>Net Profit (PHP m)</b>	<b>4,724</b>	<b>4,997</b>	<b>4,985</b>	<b>6,363</b>	<b>39,108</b>	<b>50,394</b>	<b>55,709</b>	<b>62,908</b>
FD EPS (PHP)	7.13	7.55	7.53	9.61	4.27	5.03	5.42	6.55
FD EPS Growth (%)	76.9	5.8	-0.2	27.7	21.2	17.9	7.8	20.8
BVPS (PHP)	52.74	60.29	66.30	74.41	36.90	43.46	47.83	52.83
BVPS Growth (%)	4.8	14.3	10.0	12.2	9.4	17.8	10.1	10.5
RoRWA (%)	2.23	2.21	2.15	2.57	1.87	2.12	2.22	2.23
<b>Tier 1 ratio (%)</b>	<b>14.5</b>	<b>13.6</b>	<b>14.6</b>	<b>na</b>	<b>12.5</b>	<b>14.5</b>	<b>14.8</b>	<b>14.5</b>
Core Tier 1 ratio (%)	14.5	13.6	14.6	na	12.7	15.0	15.2	14.9
CAR (%)	21.7	21.7	22.4	na	16.6	18.3	18.2	17.0
<b>Loan to Deposit ratio (%)</b>	<b>49</b>	<b>50</b>	<b>55</b>	<b>60</b>	<b>70</b>	<b>74</b>	<b>76</b>	<b>77</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>
<b>EPS Base Case (PHP)</b>	<b>7.13</b>	<b>7.55</b>	<b>7.53</b>	<b>9.61</b>	<b>4.27</b>	<b>5.03</b>	<b>5.42</b>	<b>6.55</b>
% Impact from								
Loan Growth: +1% Chg		0.5	0.6	0.6		0.9	1.0	1.1
NIM: +10bps Chg		4.7	5.2	4.4		5.2	5.2	5.2
Cost Income %: +1% Chg		3.2	3.2	2.9		3.0	2.9	2.9
Provisions / Loans: +10bps Chg		2.2	2.4	2.2		3.3	3.2	3.3
<b>ROA/ROE DECOMP (%)</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY11A</b>	<b>FY12E</b>	<b>FY13E</b>	<b>FY14E</b>
Net interest income	2.35	2.25	2.40	2.74	3.07	3.04	3.12	3.28
Total operating income	5.44	5.74	5.40	5.73	5.21	5.48	5.36	5.28
Operating expenses	-3.34	-3.34	-3.34	-3.34	-3.21	-3.19	-3.12	-2.99
Op profit before provisions	2.10	2.40	2.06	2.40	2.00	2.29	2.25	2.29
Provisions	-0.28	-0.45	-0.32	-0.33	-0.41	-0.39	-0.35	-0.41
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.28	-0.29	-0.25	-0.29	-0.29	-0.32	-0.32	-0.31
<b>Net profit (ROA)</b>	<b>1.54</b>	<b>1.54</b>	<b>1.44</b>	<b>1.73</b>	<b>1.25</b>	<b>1.51</b>	<b>1.52</b>	<b>1.52</b>
Leverage (x)	9.1	9.0	8.4	8.2	10.5	9.4	8.9	9.3
<b>ROE</b>	<b>13.8</b>	<b>13.4</b>	<b>11.9</b>	<b>13.7</b>	<b>12.8</b>	<b>13.7</b>	<b>12.9</b>	<b>13.2</b>

Source: Company Reports and Citi Research Estimates

# Singapore

## Major Beneficiary of NIM Expansion

### Key Scenario Assumptions

- **CPI inflation in the 3% range** – Currently at +3.5%, inflation is high versus historic norms (2%), due to country-specific issues which are driving up costs, notably housing, transport (cars) and also rising wages (tight labour supply). Even in a US recovery scenario, we view that Singapore CPI inflation may trend slightly lower (towards the 3% range) assuming the near-term cost issues are eventually overcome. Note that aside from 2008 when oil prices spiked for the first time in history to \$145/bbl (from just \$50/bbl one year before), to have inflation of 8% or higher in Singapore we would have to go back to the 1980s.
- **Interest rates** – Much like Hong Kong, Singapore's monetary policy centers on managing its exchange rate (SGD expected to remain at the strong end of the band given inflation concerns) and hence SGD interest rates (short term and long term) will likely trend with a recovery in US rates.
  - **Short term interest rates back to 3%** – 3M SGD SIBOR currently 38bps (real interest rates hence close to minus 3.2%). Based on past cycles, one could argue that in a full US recovery 3M SGD SIBOR has the potential to recover back to 3%.
  - **10Y government bond yield back to 3%-4%** – currently 1.55%, recovering to 3%-4% in our view seems reasonable in the context of historic trends in Singapore and the US.

### Implications for Singapore Banks

- **NIMs recover 40bps from present (all-time) lows** – Historic data suggests that 3M SGD SIBOR is a useful indicator of the broad direction of NIMs. Thus if short-term rates could recover from below 40bps to 3%, we view that we could see as much as 40bps recovery in NIMs from the present (all-time) lows. In contrast to loan growth, our model sensitivity studies suggest NIMs are a very important earnings driver, with every 10bps rise in NIMs, all else equal, adding about 6%-7% to earnings. Hence from a base case ROE of 11% **a 40bps rise in NIMs could raise ROE by 2.6%-3%pts or an earnings impact of 24%-28%**. DBS historically has shown the closest NIM relationship to changes in 3M SGD SIBOR, largely because of its higher SGD CASA ratio (2012: 84% versus 60%-70% for its peers) and its greater exposure to corporate loans (which tend to be benchmarked on market rates such as SGD SIBOR or SOR).
- **Provision charges likely to move up 20bps** – A little over 20bps for 2012 versus our estimate of normalized levels of 40bps. Our model sensitivity studies suggest that every 10bps rise in provision charges, all else equal, reduces earnings by about 5%. Hence from a base case ROE of 11% **an assumed 20bps rise in provision charges could lower ROE by 1.1%pts and earnings by 10%**. Over the past 10 years OCBC has enjoyed the lowest through the cycle provisions trend of its peers. UOB has been the highest, but that is in part due to the nature of the 2009 downturn, which directly hurt many SMEs and export-related manufacturing industries (such as electronics) and bank credit was withdrawn, plus UOB has to take impairments on a legacy portfolio of European bank debt papers, which it no longer owns. DBS also took specific provisions in 2008-09 relating to CDOs and Dubai, which we assume are not likely to repeat.

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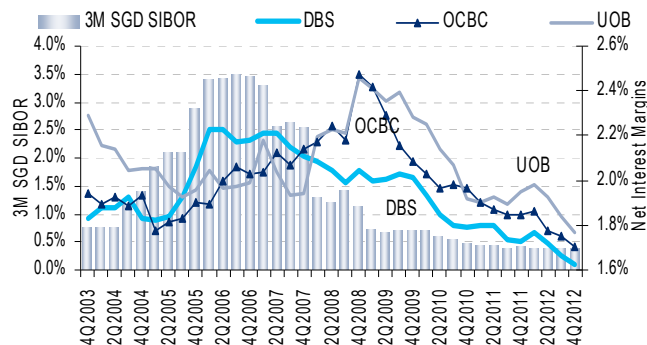
- **Non-interest income continues to rise** – In broad terms non-II income has trended between 0.8% of average assets in a poor year to 1.1% in a good year. Non-II income as percent of average assets in 4Q12 was 0.9% and a 0.1%pt increase would imply a 1.0% ROAA – consistent with a good year but not the best ever year.

Our sensitivity studies suggest that (from a base case ROE of 11%) a 0.1%pt ROAA rise to earnings from non-II (all else equal) would **add about 1.2%pts to ROE and lift earnings by about 11%** by extension. Among the 3 banks we view that UOB has demonstrated the most consistent growth in core (economy-related) fee income, OCBC has been the leader in wealth mgmt (largely due to its life insurance exposure) and DBS has typically been the leader in capital markets-related income. For overall fee income, UOB has in the past 3 years demonstrated the most consistent growth around the mid teens percent, showing that its active initiatives to grow fee streams are bearing fruit.

- **Cost-income increases 3%pts** – Banks tend to pace their costs to revenue progression maintaining a certain cost-income ratio - in an improving business situation costs would trend up plus banks would likely invest in expansion - as the charts show banks do not want their cost-income ratios to trend much above mid-40s%, but in tough times the banks try to trim cost-income to the low 40s%. Throughout most cycles the 3 banks have been able to manage cost income ratios in the 40%-45% range. Our sensitivity studies suggest that all else equal, every 1%pt rise in cost income ratio reduces earnings by about 2%. Hence from a base case ROE of 11% an assumed 3%pts rise in cost-income ratio could lower ROE by 0.7%pts to 10.3%) and lower earnings by about 6%.

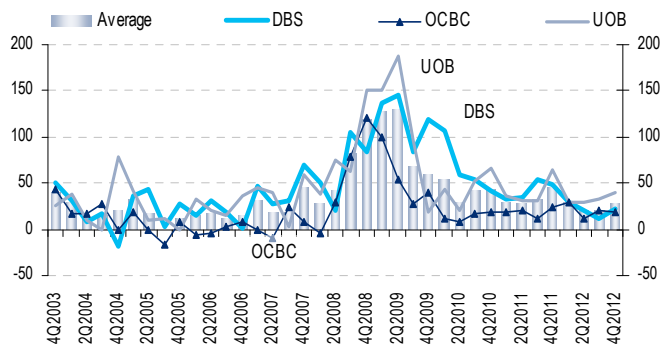
DBS has been in an investment phase (C-I trending up) for the past 3 years after the arrival of the new CEO, but the CEO has indicated that C-I "jaws" should stabilize in 2013E and hopefully trend lower thereafter. UOB has tended to manage costs fairly tightly by pacing investments with revenues, but it is also in the latter stages of a regional platform build-out. OCBC has also managed to maintain costs in a range, but has directed investment towards China, Indonesia and its wealth management (especially private banking) business.

Figure 244. Singapore Banks – Net Interest Margin (%)



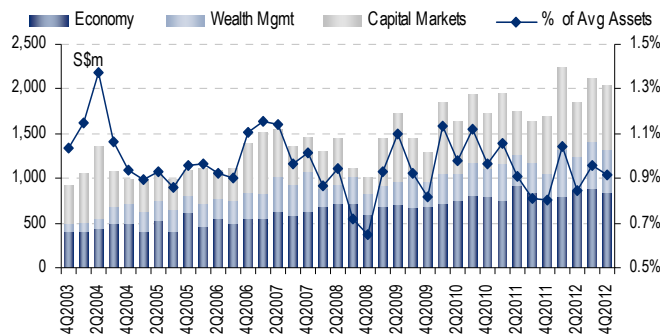
Source: Citi Research

Figure 245. Singapore Banks – Loan Loss Provision Coverage (%)



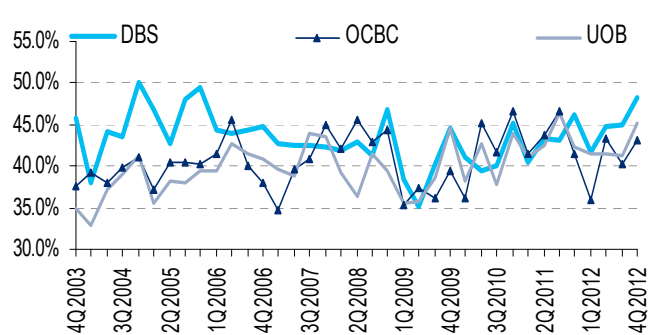
Source: Citi Research

Figure 246. Singapore Banks – Non-Interest Income



Source: Citi Research

Figure 247. Singapore Banks – Cost Income Ratio (%)



Source: Citi Research

## Overall Impact

**ROE forecasted to rise to 13%-13.4%  
from a base of 11%**

The overall ROE lift (from a base of 11%) in our study is indeed significant to roughly 13%-13.4%; this in turn implies a possible earnings boost by +19%-23%, with NIM expansion the most critical assumption.

Figure 248. Singapore Banks – Overall impact

		Earnings impact	ROE impact
NIM	+40bps	26%	2.8%
Loan growth	0%	0%	0.0%
Non-interest income	0.1 %pt ROAA	11%	1.2%
Cost/income	+3%pts	-6%	-0.7%
Credit cost	+20bps	-10%	-1.1%
<b>Net impact</b>		<b>21%</b>	<b>2.3%</b>

Source: Citi Research Estimates

**DBS followed by UOB are the most  
sensitive to these assumptions**

DBS should see the most overall sensitivity to these assumptions (NIM, capital markets non-II and better cost management), followed by UOB (economy-related non-interest income). We view that OCBC would have relatively the least overall sensitivity.

## Implications for Singapore Economy

**Little or no impact from higher mortgage  
risk weights on new mortgages**

**Mortgage rates and property market** – Singapore banks have the lowest mortgage risk weights in Asia at roughly 5%-8%. The computations below suggest how this plus near record low SGD SIBOR has enabled banks to offer record low mortgage rates (currently about 1.1%-1.2%) and still meet internal ROE targets, but also how higher mortgage risk weights, plus normalized short term interest rates could significantly raise mortgage rates. Despite a wide ranging set of property measures (round #7) being introduced in Jan-2013, recent new launches suggest that take-up remains healthy. We view that ample supply of cheap mortgage credit has helped to fuel such demand, and higher mortgage risk weights on *new* mortgages (thus rising mortgage rates) could have an immediate impact on both the attractiveness of the yield equation (current gross residential yield in the primary market is around 3%, net about 2.5%), as well as the supply of mortgage credit (as higher risk weights imply lower product ROEs). Banks are in our view comfortably capitalized hence there should be little or no impact from higher mortgage risk weights on *new* mortgages (as opposed to retroactive application to the stock of existing mortgages).

Figure 249. Asian Banks Mortgage Risk Weights

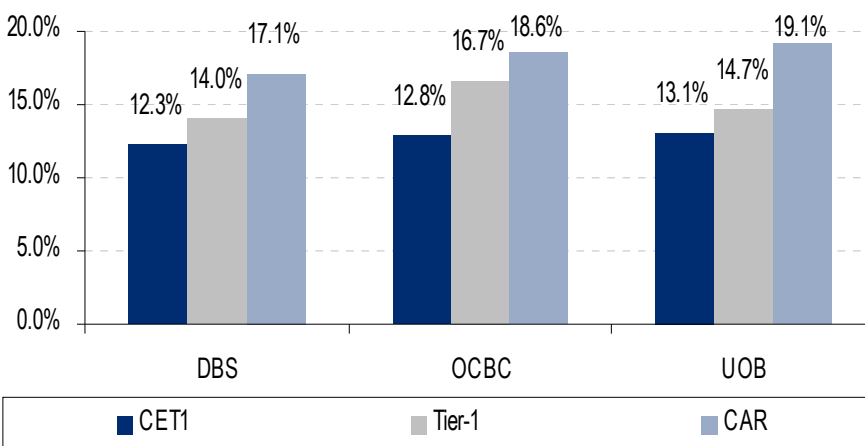
	Risk Weights %	Basel Approach [6]	Comments
Singapore [1]	6% - 14%	Basel 2 A-IRBA	Based on 2011 Annual reports. Banks Transitioning to Basel 3 from 1 Jan 2013 but this does not change mortgage weights
HK	Large banks: 7-16% Small banks: 35%	Large: Basel 2 A-IRBA, Small: Basel 2 SA	HKMA introduced a 15% risk weight floor for all NEW mortgages in Feb-2013
Australia [2]	Large banks: 15-20%	Basel 3	
Thailand	35%	Basel 2 SA	
Japan	25% - 40%	Basel 3	25-35% for A-IRBA, 30-40% for F-IRBA, 40% for SA
Korea	c50% 10% - 15% 35%	Basel 1 Basel 2 (IRBA-adopted) Basel 2 (SA-adopted)	Companies adopt Basel I at FHC level and Basel II at bank level. Under Basel II, F-IRBA is broadly used while IBK uses A-IRBA For BSFG/DGBFG specifically
Taiwan	40%	Basel 2 SA	Varies with LTV and collateral
Indonesia [3]	35% - 45%	Basel 2	Based on the LTV.
Malaysia [4]	23% - 75%	Basel 2	
China	50%	Basel 2 SA	China has only begun implementing Basel 2 and 3 since Jan 2013. On standardized approach, no change in mortgage risk weighting vs Basel 1.
India [5]	50% - 125%	Basel 2 SA	Rises with loan-to-value (LTV).
Philippines	50%	Basel 2	

Notes

- [1] Singapore DBS 6% (A-IRB)- although 96% of the mortgage book was at just 5% RW, OCBC 11% (A-IRB) - although 68% of the mortgage book was at just 5% RW, UOB 14% (A-IRB) - although 70% of the mortgage book was at just 8% RW
- [2] Australia WBC 15%, CBA 16%, ANZ 17.5%, NAB 20%
- [3] Indonesia 35% RW for LTV <70%, 40% RW for LTV 70-80%, 45% RW for LTV>80%
- [4] Malaysia Maybank (2011 annual report) - Standardized Approach: 35%-75% for residential mortgages, CIMB (2011 annual report) - A-IRB: 23-36% for residential mortgages, Public Bank (2012 annual report) - Standardized Approach: 43.6% for residential mortgages
- [5] India For LTV <75%: <INR 3m RW 50%, >INR 3m RW 75%. For LTV >75%: <INR 7.5m RW 100%, >INR 7.5m RW 125%.
- [6] Approach: SA = Standardized, F-IRBA & A-IRBA = Foundation & Advanced Internal Ratings Based

Source: Citi Research

Figure 250. Banks Remain Well Capitalized on a Basel 2 Basis (As of Dec 2012). Banks (DBS, UOB) guiding less than 100bps adjustment to CET1 to move to Basel 3 basis.



Source: Company reports, Citi Research

**Figure 251. Hypothetical Example — Mortgages Product ROE Analysis for Assumed Loan Spread and RWA Requirements**

	%	S\$	Assumptions/Notes
Assumed Mortgage Quantum (\$\$m)		1,000,000	
Lending Yield (%)	1.16%	11,577	Assumed loan yield to generate a 15% ROE target
Cost of Funding (%)	0.40%	4,000	3-mth S\$ SIBOR
Loan-Deposit Spread	0.76%		Required loan-deposit spread to generate a 15% ROE target
Net Interest Income		7,577	
OPEX, assuming Cost-Income Ratio of:	55%	4,167	Based on 2012 consumer bank C-I ratios: DBS Consumer Banking / Wealth Mgmt : 70% OCBC Global Consumer / Pte Banking : 64% UOB Global Retail: 55%
Pre-Provision Operating Profit (PPOP)		3,410	
Provision allowances (bps of loan)	20	2,000	Consumer bank 2012 impairment charges c.10-15bps over total assets, so assumed 20bps over average loans
PPOP		1,410	
Tax (%)	17%	240	
NPAT		1,170	
ROA		0.12%	
Equity Core T1 Ratio	13.0%		As of Dec 2012 DBS 13.5% OCBC 12.8% UOB 13.1%
Mortgage Risk Weight	6.0%		Singapore banks mortgage RWA 6% - 8%
Equity Required	0.8%	7,800	Allocated equity based on maintaining CET1
Target ROE		15.0%	Assumed target product ROE

Source: Company reports, Citi Research estimates

**Figure 252. Mortgage Rate Impact for Change in Risk Weight, Target ROE — At 15% ROE, Every 5%pt Hike in Risk Weight Suggests a Mortgage Rate Hike of 0.26%**

[1] SGD SIBOR = 0.40%	Target ROE				
	10.0%	12.5%	15.0%	17.5%	20.0%
Risk Weight					
6%	1.05%	1.11%	1.16%	1.21%	1.26%
10%	1.19%	1.28%	1.37%	1.45%	1.54%
15%	1.37%	1.50%	1.63%	1.76%	1.89%
20%	1.54%	1.71%	1.89%	2.06%	2.24%
25%	1.71%	1.93%	2.15%	2.37%	2.58%

**Base Case:** Assuming 3M SGD SIBOR at 0.40%, at a 6% mortgage risk weight and target product ROE 15%, the required loan spread over cost of funds would be 0.76%, for a headline mortgage rate of 1.16%.

**Sensitivity example:** If the mortgage risk weight were raised to 25%, to maintain a product ROE of 15%, the additional loan spread to compensate would be close to 1%, for a headline mortgage rate of 2.15%

[2] SGD SIBOR = 3.00%	Target ROE				
	10.0%	12.5%	15.0%	17.5%	20.0%
Risk Weight					
6%	3.65%	3.71%	3.76%	3.81%	3.86%
10%	3.79%	3.88%	3.97%	4.05%	4.14%
15%	3.97%	4.10%	4.23%	4.36%	4.49%
20%	4.14%	4.31%	4.49%	4.66%	4.84%
25%	4.31%	4.53%	4.75%	4.97%	5.18%

**Base Case:** Assuming 3M SGD SIBOR at 3.00%, at a 6% mortgage risk weight and target product ROE 15%, the required loan spread over cost of funds would be 0.76%, for a headline mortgage rate of 3.76%.

**Sensitivity example:** If the mortgage risk weight were raised to 25%, to maintain a product ROE of 15%, the additional loan spread to compensate would be close to 1%, for a headline mortgage rate of 4.75%

Source: Citi Research estimates

Figure 253. Singapore – Economic Indicators

	2006	2007	2008	2009	2010	2011	2012F	2013F	2014F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	145.8	178.2	190.8	189.4	232.2	265.8	276.8	291.0	320.7
Nominal GDP, local currency mn	231	268	270	275	316	334	346	361	388
GDP per capita, US\$	33,131	38,827	39,434	37,970	45,741	51,275	52,098	53,859	58,310
Population, mn	4.4	4.6	4.8	5.0	5.1	5.2	5.3	5.4	5.5
Unemployment, % of labour force	2.7	2.1	2.3	3.0	2.2	2.0	1.9	1.9	1.8
<b>Economic Activity</b>									
Real GDP, % yoy	8.6	9.0	1.7	-0.8	14.8	5.2	1.3	2.3	4.4
Real investment growth % yoy	17.2	16.8	28.5	-21.0	5.4	12.7	26.8	-0.3	1.2
Real consumption growth % yoy	4.5	5.9	3.6	0.5	7.2	3.7	0.9	3.5	3.3
private consumption growth % yoy	4.5	6.7	2.9	-0.5	6.2	4.6	2.2	1.9	2.8
Real export growth, % yoy	10.8	9.0	5.0	-7.6	18.6	3.5	0.3	1.1	3.8
Real import growth, % yoy	11.1	8.1	9.6	-11.2	15.9	3.6	3.2	1.5	3.1
<b>Prices, Money &amp; Credit</b>									
CPI, % yoy	0.8	3.7	5.5	-0.5	4.6	5.5	4.3	1.8	2.8
CPI, % avg	1.0	2.1	6.6	0.6	2.8	5.2	4.6	2.5	2.6
Nominal wages, % yoy	3.2	6.2	5.4	-2.7	5.6	6.0	2.3	5.0	5.5
Credit extension to private sector, % yoy	4.8	17.2	23.4	4.9	4.7	19.0	14.0	12.0	11.0
1 month inter-bank rate, % eop	3.44	2.38	1.00	0.69	0.44	0.38	0.38	0.30	0.40
Long term yield, % eop	3.05	2.68	2.05	2.66	2.71	1.63	1.30	1.70	2.40
lc/US\$, eop	1.53	1.44	1.43	1.41	1.28	1.30	1.22	1.24	1.21
lc/US\$, avg	1.59	1.51	1.41	1.45	1.36	1.26	1.25	1.24	1.22
<b>Balance of Payments, US\$ bn</b>									
Current account	36.1	46.4	28.8	33.5	62.1	65.4	51.5	40.7	43.3
% of GDP	24.8	26.0	15.1	17.7	26.7	24.6	18.6	14.0	13.5
Trade balance	50.6	57.8	42.8	49.3	66.0	72.7	61.0	59.8	66.0
Exports	281.0	312.5	354.5	288.6	371.2	434.4	436.0	443.9	456.0
Imports	230.4	254.7	311.7	239.3	305.2	361.7	375.1	384.1	390.0
Service balance	-7.3	-2.7	-1.6	-1.7	2.3	0.7	0.4	1.4	2.0
Income balance	-7.2	-8.7	-12.4	-14.1	-6.3	-8.0	-9.9	-18.7	-24.0
FDI, net	18.1	10.1	5.4	0.9	28.3	29.7	33.6	33.0	32.0
International reserves	136.3	163.0	174.2	187.8	225.8	237.7	259.3	260.0	270.0
<b>Public Finances, % of GDP</b>									
Consolidated government balance	0.0	2.8	0.1	-0.3	0.3	1.2	1.1	0.7	0.5
Consolidated gov primary balance	0.6	2.7	1.1	-0.8	0.2	1.3	1.5	0.4	1.0
Public debt	89.2	87.3	94.7	106.1	101.7	106.0	111.4	115.0	118.0
of which Domestic	89.2	87.3	94.7	106.1	101.7	106.0	111.4	115.0	118.0
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1F	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	4.0	1.5	2.3	0.0	1.5	0.2	0.0	3.9	4.9
CPI, % yoy	5.5	5.2	5.3	4.7	4.3	3.5	2.1	1.8	1.8
1 month inter-bank rate, % eop	0.38	0.38	0.38	0.38	0.38	0.38	0.30	0.30	0.30
Long term yield, % eop	1.63	1.66	1.61	1.47	1.30	1.54	1.40	1.60	1.70
lc vs USD, eop	1.30	1.26	1.27	1.23	1.22	1.24	1.24	1.24	1.24

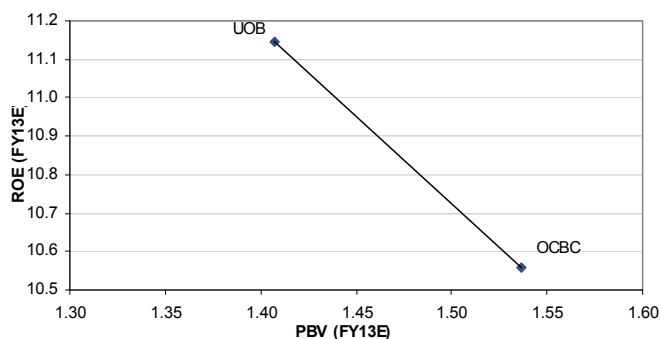
Source: CEIC Data Company Limited, IFS, Moody's and Citi Research Estimates

Figure 254. Singapore — Banks Valuation Snapshot

Stock, Rating, Ric	Price (\$)	TP (\$)	ETR (%)	Mkt Cap (\$ b)	Net Profit (\$m)		EPS (\$)		EPS Chg YoY (%)		P/E (x)		NBV/S (\$)		P/NBV (x)		Net DPS (\$)		Yield (%)		ROAE (%)	
					13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
OCBC, 3, OCBC.SI	10.86	9.60	-8.5	37.4	2,490	2,640	0.7	0.8	-8.0	5.9	14.6	13.8	7.07	7.50	1.54	1.45	0.34	0.34	3.1	3.1	10.6	10.6
UOB, 1, UOBH.SI	21.67	20.30	-3.0	34.5	2,628	2,778	1.7	1.8	-1.7	5.7	12.9	12.2	15.40	16.38	1.41	1.32	0.73	0.78	3.4	3.6	11.1	11.1

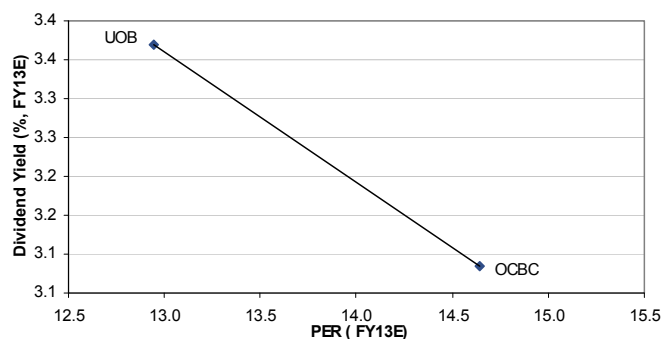
Note: Priced as on 23 May 2012; Source: Citi Research Estimates

Figure 255. Price-Book vs. ROAE 2013E



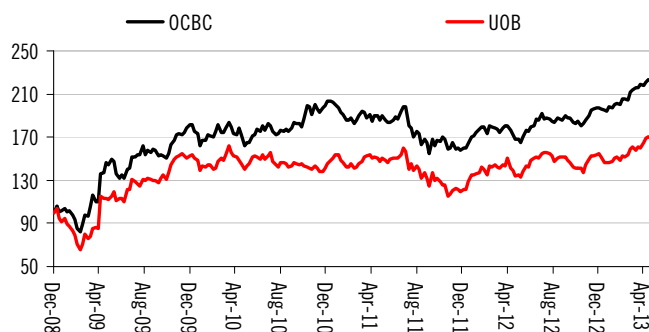
Source: Citi Research Estimates

Figure 256. P/E vs. Dividend Yield 2013E



Source: Citi Research Estimates

Figure 257. Bank Share Performance Dec 2008 to Present



Source: DataStream

Figure 258. Singapore Banks – Current vs. Target Valuation and Historical P/B & P/E Ranges

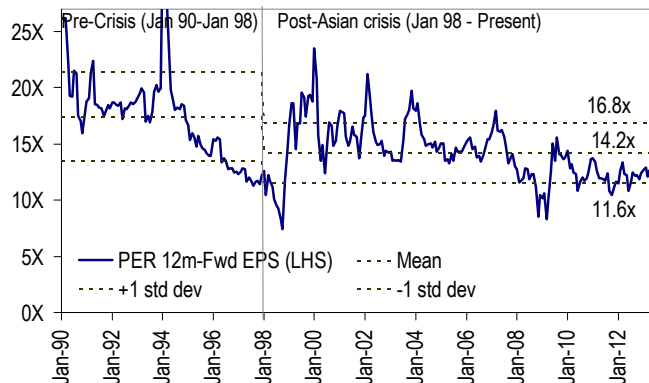
	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (\$)	CY13E P/B (x)	CY13E P/E (x)	Target Price (\$)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
OCBC	10.9	1.5	14.6	9.6	1.4	12.9	1.3	1.6	1.9	11.6	14.2	16.8
UOB	21.7	1.4	12.9	20.3	1.3	12.1	1.3	1.5	1.7	10.3	12.5	14.6

Note: Priced as on 23 May 2013

Source: Citi Research Estimates

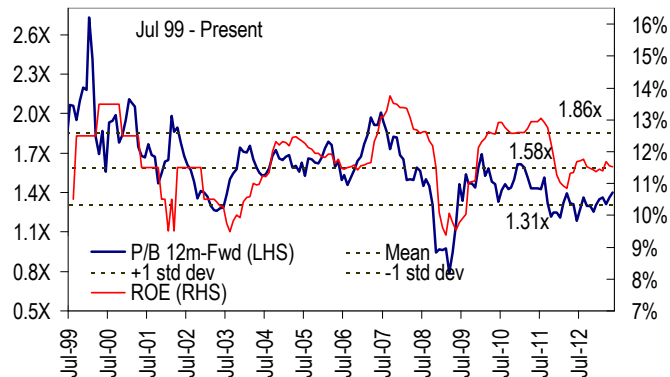
## Singapore Banks – Valuation Charts

Figure 259. OCBC – 1-Year Forward Consensus P/E Cycle Chart



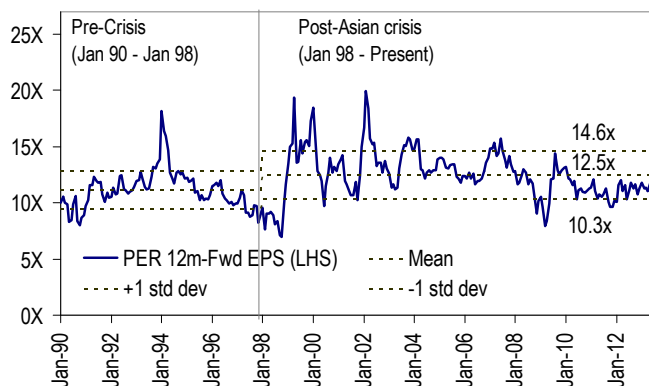
Source: DataStream, Citi Research

Figure 260. OCBC – 1-Year Forward Consensus P/BV Cycle Chart



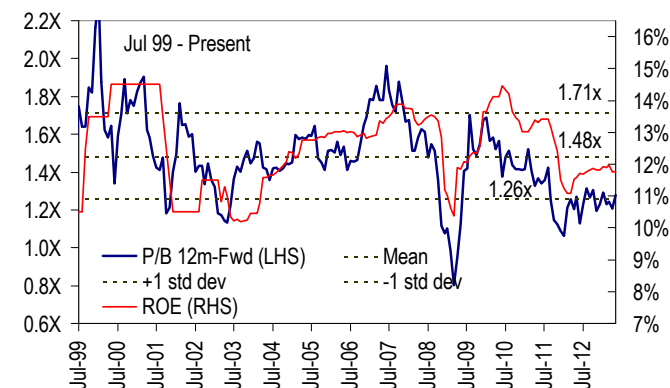
Source: DataStream, Citi Research

Figure 261. UOB – 1-Year Forward Consensus P/E Cycle Chart



Source: DataStream, Citi Research

Figure 262. UOB – 1-Year Forward Consensus P/BV Cycle Chart



Source: DataStream, Citi Research

Figure 263. Singapore – Bank Earnings Forecasts and Key Assumptions (Local Currency Millions Unless Stated)

	OCBC				UOB				Sector (2 banks)			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	6.6	9.0	9.6	10.5	8.3	9.1	9.4	10.2	8.2	9.5	9.4	10.3
Net Interest Margin (bps)	177	170	173	175	187	179	181	184	179	174	176	179
<b>Net Interest Income (SGD m)</b>	<b>3,748</b>	<b>3,820</b>	<b>4,140</b>	<b>4,480</b>	<b>3,917</b>	<b>4,040</b>	<b>4,400</b>	<b>4,830</b>	<b>12,945</b>	<b>13,460</b>	<b>14,530</b>	<b>9,310</b>
NII Growth (%)	9.9	1.9	8.4	8.2	6.5	3.1	8.9	9.8	8.7	4.0	7.9	9.0
<b>Non Interest Income (SGD m)</b>	<b>2,897</b>	<b>2,685</b>	<b>2,830</b>	<b>2,985</b>	<b>2,578</b>	<b>2,595</b>	<b>2,775</b>	<b>2,965</b>	<b>8,475</b>	<b>8,480</b>	<b>9,005</b>	<b>5,950</b>
Non-II Growth (%)	31.0	-7.3	5.4	5.5	27.6	0.7	6.9	6.8	20.4	0.1	6.2	-33.9
-Fee Income (SGD m)	1,198	1,320	1,450	1,590	1,508	1,700	1,870	2,050	4,406	4,870	5,320	3,640
-Fee Growth (%)	5.4	10.2	9.8	9.7	14.4	12.7	10.0	9.6	10.2	10.5	9.2	9.6
-Insurance Income (SGD m)	838	650	665	680	na	na	na	na	838	650	665	680
-Insurance Growth (%)	65.0	-22.4	2.3	2.3	na	na	na	na	65.0	-22.4	2.3	2.3
-Other Income (SGD m)	861	715	715	715	1,070	895	905	915	3,231	2,960	3,020	1,630
-Other Income Growth (%)	51.9	-17.0	0.0	0.0	52.3	-16.4	1.1	1.1	27.5	-8.4	2.0	-46.0
<b>Total Income (SGD m)</b>	<b>6,645</b>	<b>6,505</b>	<b>6,970</b>	<b>7,465</b>	<b>6,495</b>	<b>6,635</b>	<b>7,175</b>	<b>7,795</b>	<b>21,420</b>	<b>21,940</b>	<b>23,535</b>	<b>15,260</b>
Total Income Growth (%)	18.2	-2.1	7.1	7.1	14.0	2.2	8.1	8.6	13.0	2.4	7.3	7.9
Non-II % of Total Income	43.6	41.3	40.6	40.0	39.7	39.1	38.7	38.0	39.6	38.7	38.3	39.0
<b>Operating Costs (SGD m)</b>	<b>2,695</b>	<b>2,930</b>	<b>3,150</b>	<b>3,370</b>	<b>2,748</b>	<b>3,010</b>	<b>3,280</b>	<b>3,540</b>	<b>9,013</b>	<b>9,740</b>	<b>10,430</b>	<b>6,910</b>
Costs Growth (%)	10.9	8.7	7.5	7.0	12.2	9.5	9.0	7.9	10.1	8.1	7.1	7.5
Costs % of Total Income	40.6	45.0	45.2	45.1	42.3	45.4	45.7	45.4	42.1	44.4	44.3	45.3
<b>Pre-Provision Profit (SGD m)</b>	<b>3,950</b>	<b>3,575</b>	<b>3,820</b>	<b>4,095</b>	<b>3,747</b>	<b>3,625</b>	<b>3,895</b>	<b>4,255</b>	<b>12,407</b>	<b>12,200</b>	<b>13,105</b>	<b>8,350</b>
PPP Growth (%)	23.7	-9.5	6.9	7.2	15.3	-3.3	7.4	9.2	15.2	-1.7	7.4	8.2
PPOP/Avg Loans (Bps)	274.2	227.7	232.2	226.2	240.4	213.2	218.8	217.6	240.5	215.9	221.6	164.9
<b>Provision Charges (SGD m)</b>	<b>271</b>	<b>250</b>	<b>320</b>	<b>350</b>	<b>476</b>	<b>445</b>	<b>535</b>	<b>600</b>	<b>1,647</b>	<b>1,645</b>	<b>1,905</b>	<b>950</b>
- NPL Ratio (%)	0.8	0.8	0.8	0.7	1.5	1.4	1.4	1.3	1.2	1.2	1.2	1.0
- Provision Coverage (%)	144	129	117	109	124	113	106	102	125	119	117	104
- Provisions bps of Loans	19	17	19	19	32	27	30	31	32	29	31	25
Others (SGD m)	-33	-30	-30	-30	80	93	93	93	177	193	193	63
<b>Pre-tax Profit (SGD m)</b>	<b>3,646</b>	<b>3,295</b>	<b>3,470</b>	<b>3,715</b>	<b>3,351</b>	<b>3,273</b>	<b>3,453</b>	<b>3,748</b>	<b>10,937</b>	<b>10,748</b>	<b>11,393</b>	<b>7,463</b>
Tax (SGD m)	593	537	565	604	531	525	554	601	1,715	1,689	1,789	1,205
Minorities (SGD m)	228	178	175	171	17	18	19	17	444	399	394	188
<b>Net Profit (SGD m)</b>	<b>2,825</b>	<b>2,580</b>	<b>2,730</b>	<b>2,940</b>	<b>2,803</b>	<b>2,730</b>	<b>2,880</b>	<b>3,130</b>	<b>8,778</b>	<b>8,660</b>	<b>9,210</b>	<b>6,070</b>
FD EPS (SGD)	0.81	0.74	0.79	0.85	1.70	1.67	1.77	1.93	1.26	1.26	1.34	1.37
FD EPS Growth (%)	21.4	-8.0	5.9	7.8	20.0	-1.7	5.7	9.0	13.3	0.0	6.4	8.6
BVPS (SGD)	6.68	7.07	7.50	7.98	14.57	15.40	16.38	17.47	11.29	11.97	12.75	12.53
BVPS Growth (%)	11.0	5.9	6.1	6.4	10.2	5.7	6.4	6.7	8.6	6.0	6.5	6.6
RoRWA (%)	2.19	1.84	1.85	1.78	2.10	1.89	1.91	1.89	1.80	1.60	1.62	1.29
<b>Tier 1 ratio (%)</b>	<b>16.7</b>	<b>16.4</b>	<b>15.8</b>	<b>15.1</b>	<b>14.7</b>	<b>14.5</b>	<b>14.2</b>	<b>13.9</b>	<b>14.5</b>	<b>14.2</b>	<b>13.8</b>	<b>14.5</b>
Core Tier 1 ratio (%)	12.8	12.9	12.6	12.2	13.1	13.0	12.9	12.7	11.9	11.8	11.6	12.4
CAR (%)	18.6	18.2	17.4	16.5	19.1	18.6	17.9	17.3	17.5	17.0	16.3	16.9
<b>Loan to Deposit ratio (%)</b>	<b>87.2</b>	<b>87.2</b>	<b>87.3</b>	<b>87.6</b>	<b>85.6</b>	<b>86.3</b>	<b>86.5</b>	<b>86.9</b>	<b>87.0</b>	<b>87.3</b>	<b>87.4</b>	<b>87.2</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (SGD)</b>	0.81	0.74	0.79	0.85	1.70	1.67	1.77	1.93	1.26	1.26	1.34	1.37
% Impact from												
<b>Loan Growth: +1% Chg</b>		0.8	0.8	0.9		0.9	0.9	0.9		0.9	0.9	1.5
<b>NIM: +10bps Chg</b>		7.3	7.3	7.3		6.9	7.1	7.0		7.5	7.6	7.2
<b>Cost Income %: +1% Chg</b>		2.1	2.1	2.1		2.0	2.1	2.1		2.1	2.2	2.1
<b>Provisions / Loans: +10bps Chg</b>		5.1	5.0	5.2		5.2	5.2	5.2		5.5	5.4	7.0
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	1.31	1.25	1.27	1.26	1.60	1.54	1.56	1.58	1.46	1.43	1.44	1.41
Total operating income	2.32	2.14	2.13	2.09	2.65	2.53	2.55	2.56	2.42	2.33	2.33	2.31
Operating expenses	-0.94	-0.96	-0.96	-0.94	-1.12	-1.15	-1.16	-1.16	-1.02	-1.03	-1.03	-1.04
Op profit before provisions	1.38	1.17	1.17	1.15	1.53	1.38	1.38	1.39	1.40	1.29	1.30	1.26
Provisions	-0.09	-0.08	-0.10	-0.10	-0.19	-0.17	-0.19	-0.20	-0.19	-0.17	-0.19	-0.14
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.21	-0.18	-0.17	-0.17	-0.22	-0.20	-0.20	-0.20	-0.19	-0.18	-0.18	-0.18
<b>Net profit (ROA)</b>	<b>0.98</b>	<b>0.85</b>	<b>0.84</b>	<b>0.82</b>	<b>1.14</b>	<b>1.04</b>	<b>1.02</b>	<b>1.03</b>	<b>0.99</b>	<b>0.92</b>	<b>0.91</b>	<b>0.92</b>
Leverage (x)	13.6	13.3	13.6	14.1	11.6	11.5	11.7	11.9	12.5	12.5	12.7	13.0
<b>ROE</b>	<b>13.0</b>	<b>10.9</b>	<b>10.9</b>	<b>11.1</b>	<b>12.8</b>	<b>11.6</b>	<b>11.5</b>	<b>11.7</b>	<b>12.1</b>	<b>11.1</b>	<b>11.1</b>	<b>11.4</b>

Source: Company Reports and Citi Research Estimates

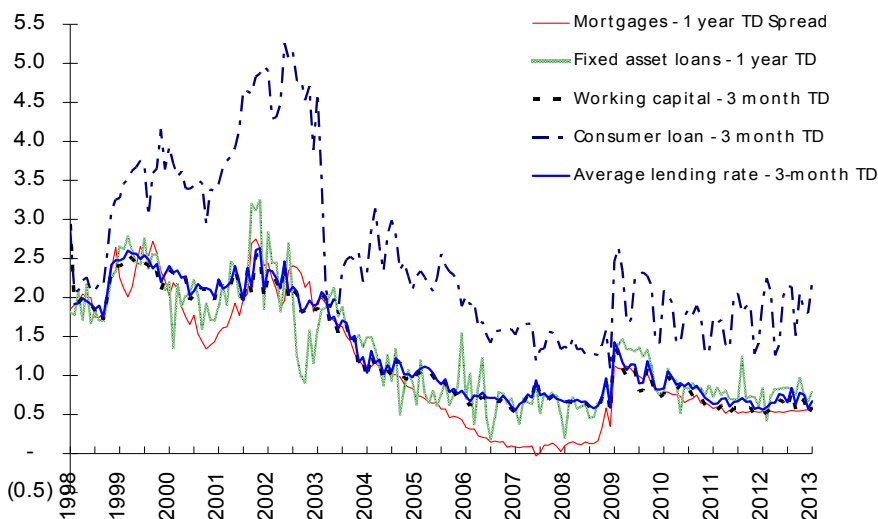
# Taiwan

## NIM Beneficiary but Offset by Credit Cost Normalization

### Key Scenario Assumptions

- **CPI inflation doubles to 3.3%** – A doubling of CPI estimate will mean 3.3% vs. our 2013E forecast of 1.7%. This would take it back to 2008 levels or early 1990s.
- **One-year deposit rates move up to 3%** – Taiwan typically moves policy rates in tandem with the Fed but with a lag in terms of timing and magnitude. On the assumption that policy rates double from 1.875% to 3.75%, we could see 1-yr TD rates move up to 3% from current 1.35%. This would take it up to pre-2002 levels. Despite excess liquidity situation, CBC would typically push banks to raise deposit rates alongside policy rates. To mitigate this situation, we could see banks continue to migrate customers away from time deposits and into demand deposits and wealth management products.
- **One-year lending rates rise to 3.25%** – Higher policy rates also give banks an excuse to increase lending rates, though competition is likely to cap upside especially for larger corporates. Again, on the assumption of a doubling in policy rates, we see weighted average lending rate rising to 3.25% from 1.6% and fixed asset investment loans to 3.75% from 2.1%, taking them to 2002-03 levels. If we see them going back to pre-2002 levels (similar to deposits), then lending rates could go back to > 4-5%. We expect this could further facilitate loan mix change in favor of higher margin SME and unsecured consumer loans
- **Short and long-term market interest rates** – ST market rates are well below policy rates right now, with 91D CP rate at 0.87% vs. policy rate at 1.875%. Given excess liquidity position, this gap has persisted since 2003 and has remained in place regardless of whether policy rates move up or down. Assuming policy rates at 3.75%, we could see ST rates rising around 1-1.5ppts to 2-2.5%. On the other hand, 10 yr TGB yield could rise to 2.5-3.0% (best case 3.5% if gap between short and long rates widens).

Figure 264. Taiwan Banks – Product Spreads



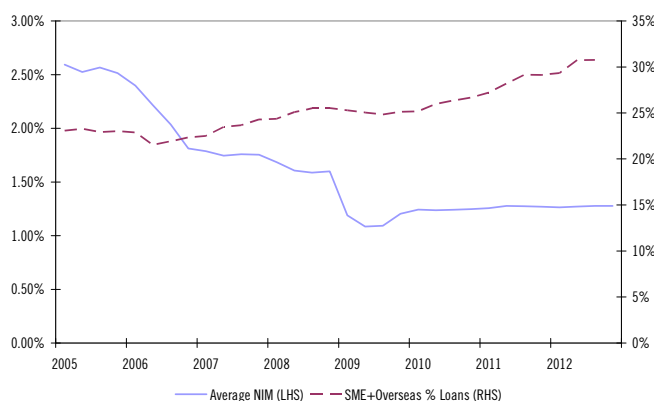
Source: CBC, Citi Research

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## Implications for Taiwan FIs

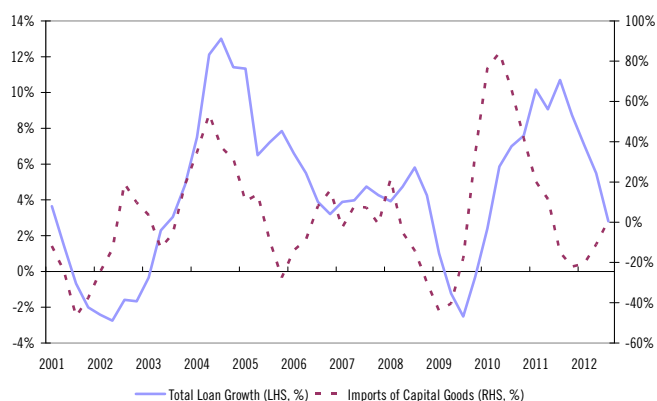
- **NIMs likely to expand 45-60bps** – We estimate a 3-4bps improvement in NIMs for every 12.5bps rise in policy rates. Hence if policy rates rise by 1.875%, we could see NIMs expanding by 45-60bps. However, as rates push up, it is only fair to discount the impact, given fierce competition amid a highly fragmented banking system. Arbitrarily applying a 50% discount, we see NIM improvement of 20-30bps or translating to 30% better earnings for the sector as impact is magnified given lower base case NIM and ROE.
- **SME and unsecured consumer loans to drive loan growth** – With inflation rising, CBC will likely tighten credit. But, excess liquidity should help mitigate impact on loans. Besides, if higher rates coincide with better global macro, then Taiwan should benefit given export nature of the economy. Assuming domestic demand continues to improve and progress on cross-strait continues, we could see focus on SME and unsecured consumer loans continue to drive loan growth.
- **Credit costs triple (up +40bps)** – NPL/credit costs will likely rise amid credit tightening. Although we have seen two credit bubbles over the past decade (once in late 1990s/early 2000s on property & construction bust and another in 2004 on the twin card crisis), one could argue that systemic risk on asset quality and hence credit cost will be less severe in the next 'crisis' as Taiwanese banks have been more conservative in pushing for growth in the past several years post these crises. But, given generally low credit cost for the system, we do expect a significant impact from an increase in NPLs. We estimate earnings fall 7% for every 10bps rise in credit cost. Hence, assuming credit costs triple (up +40bps) given increase in interest rates, we see earnings falling 28%.
- **Limited impact on costs** – We see limited impact on cost. But, a higher inflation rate may force the government to push up salaries for government bank employees resulting in a knock-on impact on private banks as well. As NIMs are also expected to increase, we do expect this to offset higher operating expenses. Based on our sensitivity, we see earnings fall 3% for every 1% rise in the cost-income ratio.

Figure 265. Taiwan Banks – Average NIMs vs SME + FX Loans % Total



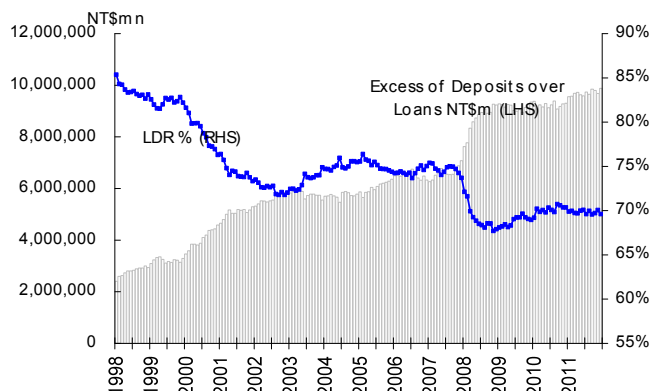
Source: Citi Research, TEJ

Figure 266. Taiwan Banks – Loan Growth vs. Capital Goods Imports



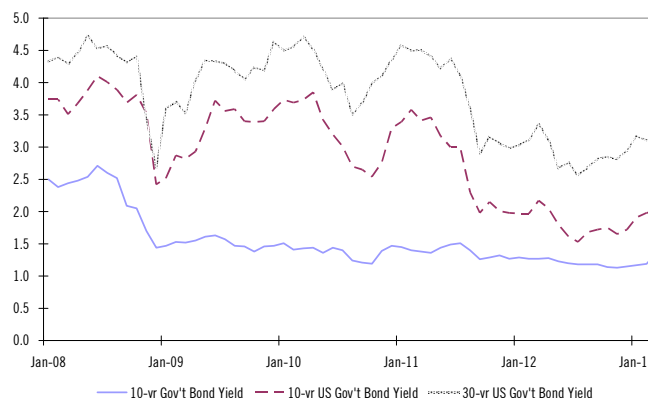
Source: Citi Research, TEJ

Figure 267. Taiwan Banks – LDR vs Excess Deposits



Source: CBC, Citi Research

Figure 268. Taiwan and US bond yield



Source: Citi Research, TEJ

## Overall Impact

We expect banks to benefit at the beginning of a rising rate cycle, supporting a further expansion in NIMs and underpinning new revenue opportunities from increased access to China and RMB markets. But, as a rate hike cycle unfolds to a later stage, we'd also be worried about asset quality risks, particularly as profitability and capital positions for Taiwanese banks have in general remained challenged. Hence, while the beginning impact is positive, the net impact is likely more neutral through the cycle. That said, a more cautious stance on loan growth and more stringent regulatory forbearance over the past several years since the twin card crisis should help mitigate the risk of credit deterioration.

Figure 269. Taiwan Banks – Overall impact

		Earnings impact	ROE impact
NIM	+30bps	30%	0.6%
Loan growth	Limited	0%	0.0%
Non-interest income	NA	NA	NA
Cost/income	Limited	0%	0.0%
Credit cost	+40bps	-28%	-0.5%
<b>Net impact</b>		<b>2%</b>	<b>0.0%</b>

Source: Citi Research Estimates

**Chinatrust, Mega and E.Sun have better franchises and niches with stronger capital levels to expand assets and NIMs**

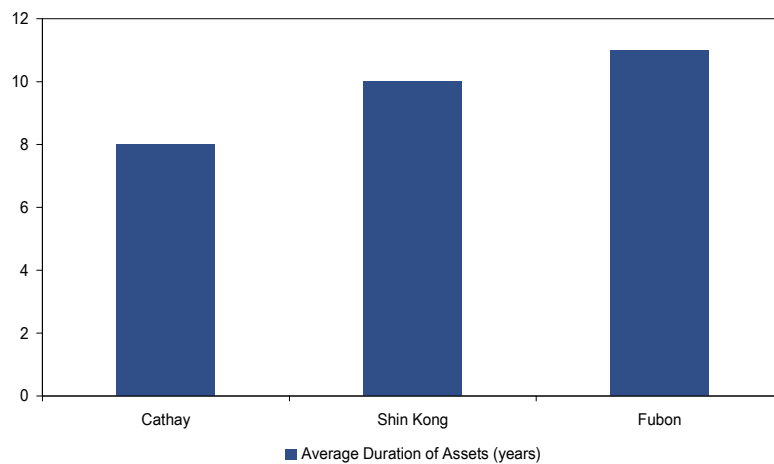
On individual stocks, it is reasonable to expect those with the lowest NIM and profitability will see the biggest positive impact from rising NIMs. But, in reality, banks with better franchises and niches along with stronger capital levels will likely be better positioned to expand assets and consequently NIMs, while at the same time maintaining credible risk mgmt practices. Within our universe, we like Chinatrust, Mega and E. Sun.

**Cathay to benefit from shorter duration assets, deep underweight and below mid-cycle valuations**

In addition to banks, we also see Insurers benefiting from a rising rate cycle, as re-investment risk tapers with assets priced up faster than liabilities especially if hike in interest rates occurs in tandem with better equity markets. Key risk would be MTM losses on fixed income investments classified as AFS as market rates rise, so managing the investment book carefully and maintaining a strong capital position will be critical as the rate cycle turns. We like Cathay (2882.TW; NT\$40.10; 1), given shorter duration assets vis-a-vis peers, stronger agent network to push

regular pay policies, deep underweight, and below mid-cycle valuations. We remain cautious on Fubon (2881.TW; NT\$40.70; 3) given peak valuations and Shin Kong (2888.TW; NT\$10.35; 3) on high B/S leverage and weak capital position.

**Figure 270. Taiwan Life Insurers – Average Asset Duration**



Source: Citi Research

Figure 271. Taiwan – Economic Indicators

	2006	2007	2008	2009	2010	2011	2012F	2013F	2014F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	376.3	393.1	400.2	377.6	428.2	464.0	474.0	493.8	528.0
Nominal GDP, local currency bn	12,243	12,911	12,620	12,481	13,552	13,674	14,037	14,750	15,631
GDP per capita, US\$	16,513	17,191	17,444	16,404	18,574	20,078	20,437	21,250	22,676
Population, mn	22.8	22.9	22.9	23.0	23.1	23.1	23.2	23.2	23.3
Unemployment, % of labour force	3.9	3.9	4.1	5.8	5.2	4.4	4.2	4.1	4.0
<b>Economic Activity</b>									
Real GDP, % yoy	5.4	6.0	0.7	-1.8	10.8	4.1	1.3	3.2	4.0
Real investment growth % yoy	0.5	-0.7	-7.9	-21.2	36.8	-7.5	-4.2	7.6	5.9
Real consumption growth % yoy	1.1	2.1	-0.6	1.3	3.3	3.0	1.3	1.5	2.4
private consumption growth % yoy	1.5	2.1	-0.9	0.8	4.0	3.1	1.5	1.8	2.7
Real export growth, % yoy	11.4	9.6	0.9	-8.7	25.6	4.4	0.1	4.5	4.3
Real import growth, % yoy	4.6	3.0	-3.7	-13.1	27.7	-0.5	-1.9	4.3	3.0
<b>Prices, Money &amp; Credit</b>									
CPI, % yoy	0.7	3.3	1.3	-0.2	1.2	2.0	1.6	2.7	2.0
CPI, % avg	0.6	1.8	3.5	-0.9	1.0	1.4	1.9	1.7	1.9
Nominal wages, % yoy	0.8	2.1	0.0	-4.9	5.5	2.7	0.3	1.8	3.0
Credit extension to private sector, % yoy	4.7	3.9	2.7	-0.8	6.7	5.7	4.2	5.5	7.0
Policy interest rate, % eop	2.75	3.38	2.00	1.25	1.63	1.88	1.88	1.88	2.13
1 month inter-bank rate, % eop	1.69	2.04	1.02	0.57	0.74	0.87	0.87	1.27	1.39
Long term yield, % eop	1.99	2.53	1.44	1.47	1.47	1.27	1.15	1.30	1.42
lc/US\$, eop	32.6	32.4	32.8	32.2	29.2	30.3	29.1	30.0	29.3
lc/US\$, avg	32.5	32.9	31.6	33.0	31.5	29.4	29.6	29.9	29.6
<b>Balance of Payments, US\$ bn</b>									
Current account	26.3	35.2	27.5	42.9	39.9	41.2	49.6	41.6	42.2
% of GDP	7.0	8.9	6.9	11.4	9.3	8.9	10.5	8.4	8.0
Trade balance	11.6	16.8	4.4	20.3	11.0	11.3	14.4	19.1	32.9
Exports	213.2	235.1	243.8	193.8	261.6	291.9	284.2	303.5	331.9
Imports	201.6	218.2	239.5	173.5	250.5	280.6	269.8	284.4	298.9
Service balance	-3.5	-1.6	1.9	2.0	2.5	3.9	6.1	18.4	11.6
Income balance	9.6	10.1	10.0	12.5	13.6	13.2	15.3	17.5	19.0
FDI, net	0.0	-3.3	-4.9	-3.1	-9.1	-14.7	-9.8	-8.5	-7.0
International reserves	266.1	270.3	291.7	348.2	382.0	385.5	403.2	425.0	450.0
Total Amortisations	5.8	3.8	8.8	2.5	3.2	6.8	3.0	3.3	4.5
<b>Public Finances, % of GDP</b>									
Consolidated government balance	0.1	0.3	-0.5	-3.5	-2.3	-1.9	-1.6	-1.2	-1.3
Consolidated gov primary balance	1.2	1.4	0.5	-2.5	-1.4	-0.9	-0.6	-0.3	-0.6
Public debt	29.6	28.8	29.9	33.1	33.5	34.9	39.2	39.5	42.0
of which Domestic	19.0	25.3	28.4	27.2	25.5	30.4	32.4	32.6	36.6
<b>Foreign Assets &amp; Liabilities, US\$ bn</b>									
External debt	85.8	94.5	90.4	82.0	101.6	122.5	124.0	125.5	127.0
Private	75.2	91.1	88.9	76.0	93.5	118.0	119.0	120.5	121.9
Public	10.6	3.5	1.5	5.9	8.0	4.5	5.0	5.0	5.1
External debt / GDP	22.8	24.0	22.6	21.7	23.7	26.4	26.2	25.4	24.1
External debt / XGS	33.5	33.4	30.9	34.7	32.1	34.7	35.5	34.5	32.4
Short-term debt	74.2	83.3	78.8	68.2	83.7	107.8	120.0	115.0	110.0
Short-term debt/International Reserves (%)	27.9	30.8	27.0	19.6	21.9	28.0	29.8	27.1	24.4
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1F	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	1.2	0.6	-0.1	0.7	3.7	1.6	3.0	3.9	4.1
CPI, % yoy	1.4	1.3	1.7	2.9	1.8	1.8	1.3	1.3	2.7
Policy interest rate, % eop	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88
1 month inter-bank rate, % eop	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.93
Long term yield, % eop	1.29	1.28	1.24	1.19	1.17	1.31	1.25	1.27	1.30
lc vs USD, eop	30.3	29.5	29.8	29.3	29.1	29.8	29.8	29.9	30.0

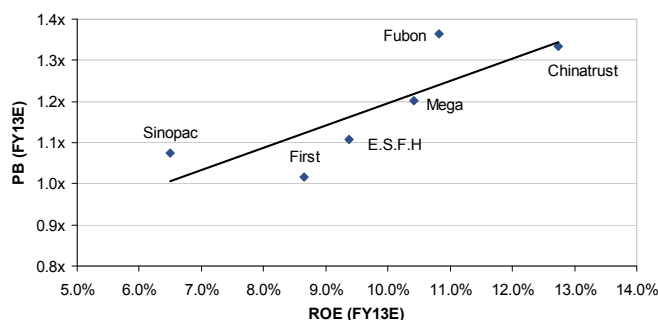
Source: CEIC Data Company Ltd, Fitch, IFS, Moody's and Citi Research Estimates

Figure 272. Taiwan — Banks Valuation Snapshot

Stock, Rating, Ric	Price (TWD)	TP (TWD)	ETR (%)	Mkt Cap (TWD b)	Net Profit (TWD b)		EPS (TWD)		EPS Chg YoY%		P/E (x)		NBV/S (TWD)		P/NBV (x)		Net DPS (TWD)		Yield (%)		ROAE (%)	
					13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
Fubon, 3, 2881.TW	40.4	38.0	-3.5	384.5	29.2	33.0	3.1	3.5	0.3	12.9	13.2	11.7	29.6	32.3	1.36	1.25	0.92	1.04	2.3	2.6	10.8	11.2
Mega, 1, 2886.TW	23.8	27.5	20.4	271.9	22.8	23.7	2.0	2.1	6.1	3.8	11.8	11.4	19.6	20.5	1.20	1.15	1.10	1.14	4.7	4.8	10.4	10.3
Chinatrust, 1, 2891.TW	18.5	21.0	15.8	254.4	22.5	24.1	1.7	1.7	-2.5	2.6	10.9	10.7	13.8	14.7	1.33	1.26	0.41	0.43	2.2	2.3	12.7	12.1
First, 1, 2892.TW	18.2	22.5	25.5	147.9	11.3	11.6	1.4	1.4	10.6	2.9	13.1	12.7	17.8	18.9	1.02	0.96	0.35	0.36	1.9	2.0	8.6	8.3
E.S.F.H, 1, 2884.TW	17.7	21.0	20.7	88.7	7.8	8.6	1.4	1.6	6.6	11.3	12.2	11.0	15.9	17.1	1.11	1.03	0.36	0.40	2.0	2.3	9.4	9.7
Sinopac, 3, 2890.TW	14.6	10.3	-28.4	110.1	6.5	6.7	0.9	0.9	-8.5	2.5	16.9	16.5	13.5	14.1	1.08	1.03	0.17	0.18	1.2	1.2	6.5	6.3

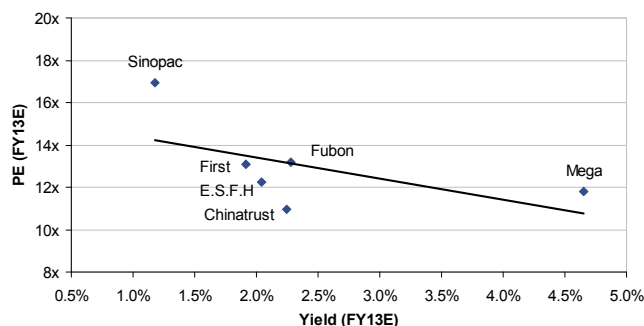
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 273. Price-Book vs. ROAE 2013E



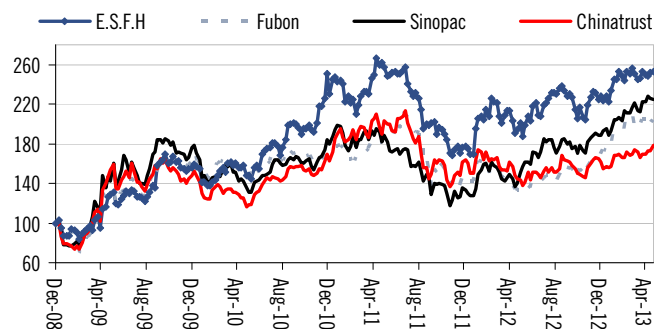
Source: Citi Research Estimates

Figure 274. P/E vs. Dividend Yield 2013E



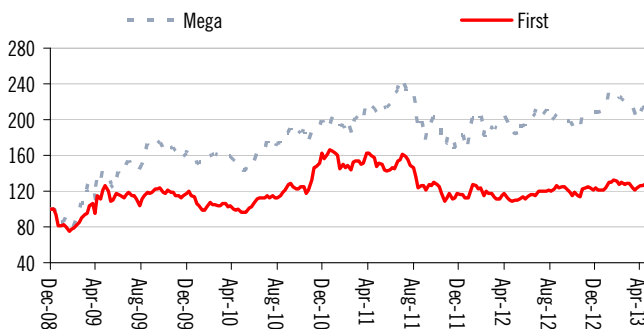
Source: Citi Research Estimates

Figure 275. Big-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 276. Mid-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

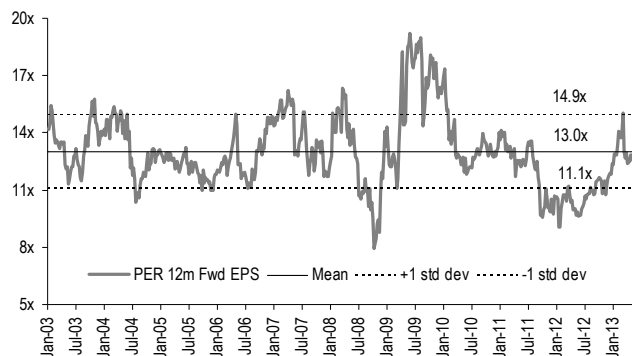
Figure 277. Taiwan Banks – Current vs. Target Valuation and Historical P/B & P/E Ranges

	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (TWD)	CY13E P/B (x)	CY13E P/E (x)	Target Price (TWD)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
Fubon Finan. Hldg	40.4	1.4	13.2	38.0	1.3	12.4	1.2	1.3	1.5	11.1	13.0	14.9
Mega Finan. Hldg	23.8	1.2	11.9	27.5	1.4	13.8	1.0	1.1	1.3	8.7	12.2	15.8
Chinatrust Finan. Hldg	18.5	1.3	11.0	21.0	1.5	12.5	1.2	1.5	1.8	9.7	11.7	13.7
First Finan. Hldg	18.2	1.0	13.1	22.5	1.3	16.2	0.8	1.4	2.0	10.4	13.0	15.5
SinoPac Finan. Hldg	14.6	1.1	17.0	10.3	0.8	12.0	0.8	1.0	1.2	9.3	13.2	17.2

Note: Priced as on 23 May 2013; Source: Citi Research Estimates

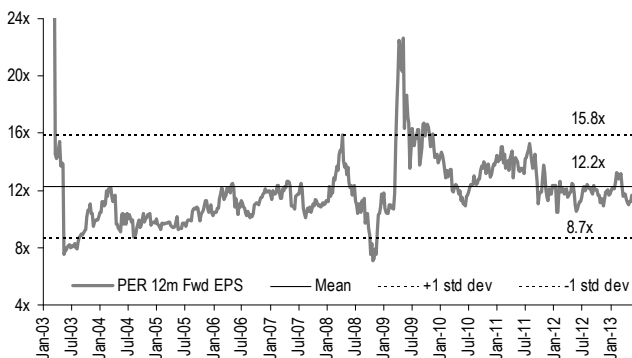
## Taiwan Banks – Valuation Charts

Figure 278. Fubon – 12M Forward Consensus P/E Chart



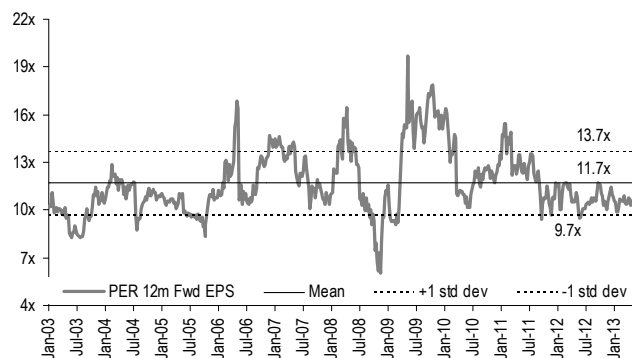
Source: DataStream, Citi Research

Figure 280. Mega – 12M Forward Consensus P/E Chart



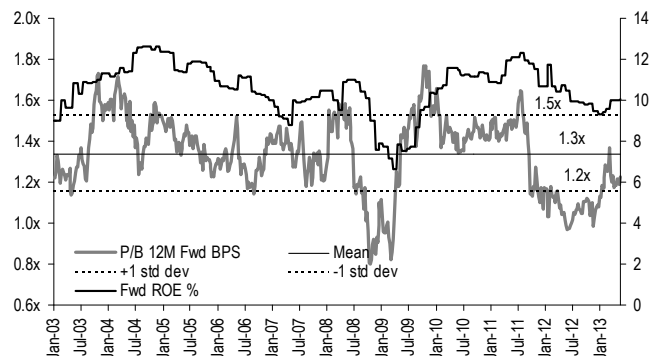
Source: DataStream, Citi Research

Figure 282. Chinatrust – 12M Forward Consensus P/E Chart



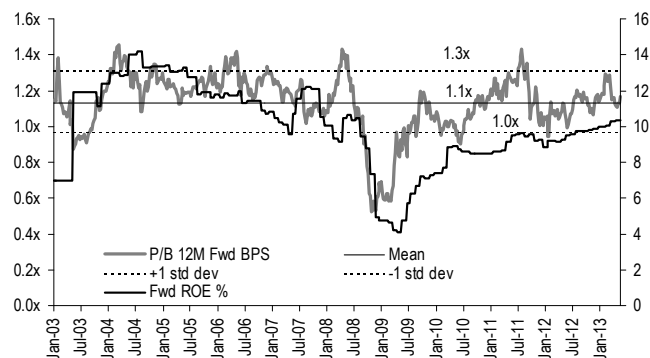
Source: DataStream, Citi Research

Figure 279. Fubon – 12M Forward Consensus P/B Chart



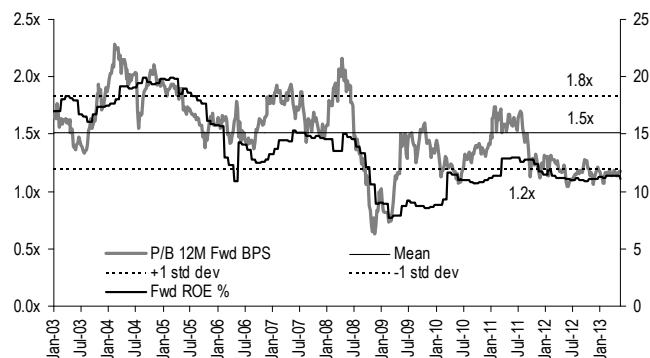
Source: DataStream, Citi Research

Figure 281. Mega – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

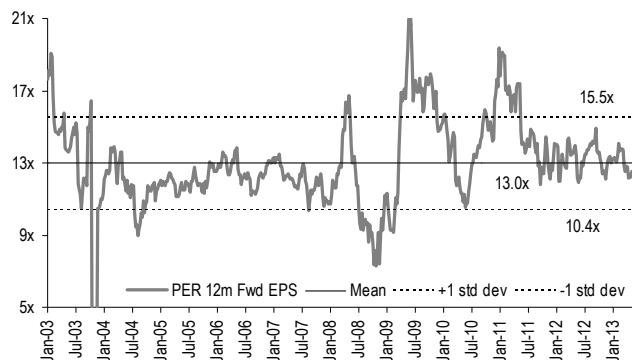
Figure 283. Chinatrust – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

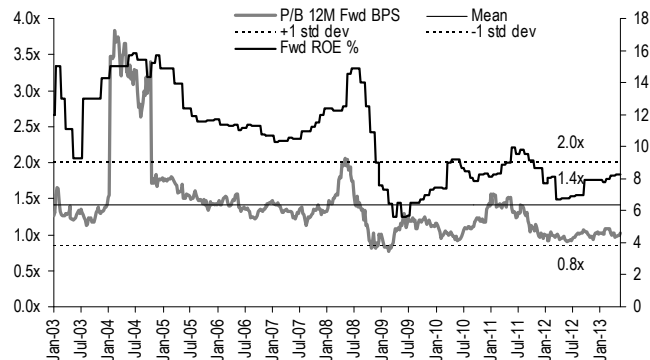
## Taiwan Banks – Valuation Charts (Cont'd)

Figure 284. First – 12M Forward Consensus P/E Chart



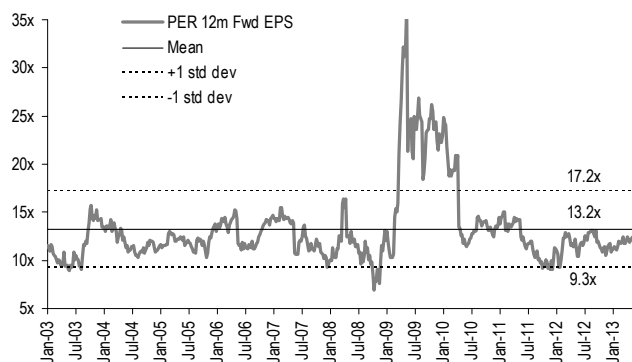
Source: DataStream, Citi Research

Figure 285. First – 12M Forward Consensus P/B Chart



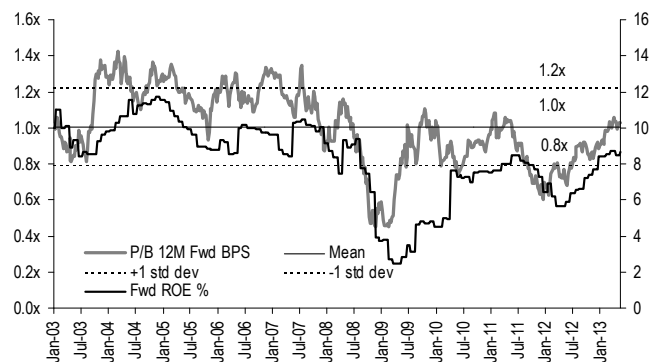
Source: DataStream, Citi Research

Figure 286. Sinopac – 12M Forward Consensus P/E Chart



Source: DataStream, Citi Research

Figure 287. Sinopac – 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 288. Taiwan – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	Fubon				Mega				Chinatrust				First Financial			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	5.1	5.4	5.3	5.3	6.0	6.1	8.1	8.0	3.9	6.4	6.2	6.1	4.0	5.1	5.1	5.1
Net Interest Margin (bps)	98	98	98	98	156	160	162	162	148	152	153	153	126	130	132	136
<b>Net Interest Income (TWD b)</b>	<b>19.3</b>	<b>20.4</b>	<b>21.5</b>	<b>22.7</b>	<b>31.0</b>	<b>33.6</b>	<b>36.1</b>	<b>38.6</b>	<b>24.9</b>	<b>26.8</b>	<b>28.5</b>	<b>30.4</b>	<b>23.2</b>	<b>24.8</b>	<b>26.2</b>	<b>28.0</b>
NII Growth (%)	4.5	6.1	5.3	5.5	10.4	8.4	7.5	6.9	7.7	7.9	6.4	6.6	11.7	6.8	6.0	6.8
<b>Non Interest Income (TWD b)</b>	<b>269.8</b>	<b>244.5</b>	<b>252.1</b>	<b>269.0</b>	<b>17.8</b>	<b>19.1</b>	<b>20.1</b>	<b>21.4</b>	<b>32.1</b>	<b>35.9</b>	<b>39.1</b>	<b>43.9</b>	<b>8.2</b>	<b>8.6</b>	<b>9.0</b>	<b>9.8</b>
Non-II Growth (%)	18.0	(9.4)	3.1	6.7	28.3	7.1	5.2	6.7	19.3	11.7	9.0	12.4	7.7	5.1	4.6	8.7
-Fee Income (TWD b)	10.5	12.3	14.0	15.7	8.9	9.9	10.9	12.0	21.9	24.4	26.5	29.5	4.8	5.4	6.0	6.7
-Fee Growth (%)	1.6	16.4	14.2	11.7	(1.1)	11.0	9.9	10.0	(0.4)	11.4	8.4	11.5	(1.2)	12.3	12.0	12.0
-Other Income (TWD b)	259.3	232.2	238.1	253.4	8.9	9.2	9.2	9.4	10.2	11.5	12.6	14.4	3.4	3.3	3.0	3.1
-Other Income Growth (%)	19	(10)	3	6	83	3	0	3	108	13	10	14	23	(5)	(8)	2
<b>Total Income (TWD b)</b>	<b>289.1</b>	<b>264.9</b>	<b>273.7</b>	<b>291.7</b>	<b>48.8</b>	<b>52.7</b>	<b>56.2</b>	<b>60.0</b>	<b>57.0</b>	<b>62.7</b>	<b>67.6</b>	<b>74.3</b>	<b>31.4</b>	<b>33.4</b>	<b>35.2</b>	<b>37.8</b>
Total Income Growth (%)	17.0	(8.4)	3.3	6.6	16.3	7.9	6.6	6.8	14.0	10.1	7.9	9.9	10.6	6.3	5.6	7.3
Non-II % of Total Income	93.3	92.3	92.1	92.2	36.5	36.2	35.7	35.7	56.4	57.2	57.8	59.1	26.1	25.8	25.5	25.9
<b>Operating Costs (TWD b)</b>	<b>64.1</b>	<b>64.4</b>	<b>66.6</b>	<b>69.7</b>	<b>22.1</b>	<b>22.2</b>	<b>23.0</b>	<b>23.8</b>	<b>32.5</b>	<b>34.1</b>	<b>35.8</b>	<b>38.2</b>	<b>15.7</b>	<b>17.0</b>	<b>18.0</b>	<b>19.0</b>
Costs Growth (%)	5.8	0.4	3.5	4.6	7.5	0.4	3.6	3.8	13.2	5.0	5.1	6.5	1.6	8.2	5.6	6.0
Costs % of Total Income	22.2	24.3	24.3	23.9	45.2	42.1	40.9	39.7	57.0	54.4	52.9	51.3	50.1	51.0	51.0	50.4
<b>Pre-Provision Profit (TWD b)</b>	<b>225.0</b>	<b>200.6</b>	<b>207.0</b>	<b>222.0</b>	<b>26.7</b>	<b>30.5</b>	<b>33.2</b>	<b>36.2</b>	<b>24.5</b>	<b>28.6</b>	<b>31.8</b>	<b>36.2</b>	<b>15.7</b>	<b>16.4</b>	<b>17.3</b>	<b>18.8</b>
PPP Growth (%)	20.7	(10.9)	3.2	7.2	24.8	14.1	8.8	8.9	14.9	16.8	11.2	13.7	21.5	4.5	5.6	8.6
PPOP/Avg Loans (Bps)	1,889	1,600	1,567	1,596	178	192	195	196	232	257	269	288	113	113	113	117
<b>Provision Charges (TWD b)</b>	<b>191.1</b>	<b>166.6</b>	<b>169.1</b>	<b>181.2</b>	<b>4.3</b>	<b>4.8</b>	<b>6.0</b>	<b>6.6</b>	<b>4.8</b>	<b>7.7</b>	<b>7.9</b>	<b>8.2</b>	<b>6.4</b>	<b>5.5</b>	<b>6.0</b>	<b>7.0</b>
- NPL Ratio (%)	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.7
- Provision Coverage (%)	666.3	622.3	593.6	550.5	641.2	560.0	500.0	470.0	288.0	273.6	275.1	282.6	230.0	207.5	186.0	167.0
- Provisions bps of Loans	1,605	1,329	1,280	1,302	28	30	35	36	46	69	67	65	46	38	40	44
Others (TWD b)	0.5	0.9	0.9	1.0	2.9	1.2	0.8	0.5	4.3	4.8	3.6	2.7	2.7	2.4	2.4	2.4
<b>Pre-tax Profit (TWD b)</b>	<b>34.4</b>	<b>34.8</b>	<b>38.8</b>	<b>41.8</b>	<b>25.4</b>	<b>26.9</b>	<b>28.0</b>	<b>30.0</b>	<b>24.0</b>	<b>25.7</b>	<b>27.6</b>	<b>30.7</b>	<b>12.0</b>	<b>13.2</b>	<b>13.6</b>	<b>14.2</b>
Tax (TWD b)	5.4	5.6	5.9	6.3	3.8	4.1	4.3	4.6	2.8	3.2	3.4	3.8	1.8	2.0	2.0	2.1
Minorities (TWD b)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Profit (TWD b)</b>	<b>29.0</b>	<b>29.2</b>	<b>33.0</b>	<b>35.5</b>	<b>21.5</b>	<b>22.8</b>	<b>23.7</b>	<b>25.5</b>	<b>21.2</b>	<b>22.5</b>	<b>24.1</b>	<b>26.9</b>	<b>10.2</b>	<b>11.3</b>	<b>11.6</b>	<b>12.1</b>
FD EPS (TWD)	3.05	3.06	3.46	3.72	1.88	1.99	2.07	2.22	1.73	1.69	1.73	1.93	1.25	1.39	1.43	1.49
FD EPS Growth (%)	(6)	0	13	8	22	6	4	7	13	(2)	3	11	28	11	3	4
BVPS (TWD)	26.97	29.59	32.32	35.26	18.70	19.61	20.51	21.60	12.72	13.83	14.69	15.86	16.74	17.82	18.90	20.03
BVPS Growth (%)	9.1	9.7	9.2	9.1	5.5	4.9	4.6	5.3	7.8	8.8	6.2	8.0	7.2	6.4	6.1	6.0
RoRWA (%)	3.14	3.08	3.28	3.37	1.31	1.34	1.32	1.33	2.08	2.11	2.11	2.19	0.81	0.84	0.82	0.81
<b>Tier 1 ratio (%)</b>	<b>10.0</b>	<b>10.1</b>	<b>10.3</b>	<b>10.6</b>	<b>9.6</b>	<b>9.8</b>	<b>9.8</b>	<b>9.9</b>	<b>11.3</b>	<b>11.5</b>	<b>11.7</b>	<b>11.8</b>	<b>8.1</b>	<b>8.2</b>	<b>8.3</b>	<b>8.4</b>
Core Tier 1 ratio (%)	10.0	10.1	10.3	10.6	9.6	9.8	9.8	9.9	11.3	11.5	11.7	11.8	8.1	8.2	8.3	8.4
CAR (%)	14.2	14.1	14.4	14.6	11.8	12.0	12.1	12.1	12.7	12.8	13.0	13.1	10.3	10.4	10.5	10.5
<b>Loan to Deposit ratio (%)</b>	<b>84.0</b>	<b>85.9</b>	<b>87.3</b>	<b>88.2</b>	<b>94.5</b>	<b>96.6</b>	<b>99.2</b>	<b>101.2</b>	<b>74.2</b>	<b>76.4</b>	<b>78.2</b>	<b>79.3</b>	<b>86.9</b>	<b>87.9</b>	<b>89.0</b>	<b>89.5</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY13E FY14E FY15E</b>				<b>FY13E FY14E FY15E</b>				<b>FY13E FY14E FY15E</b>				<b>FY13E FY14E FY15E</b>			
<b>EPS Base Case (TWD)</b>	3.1 3.5 3.7				2.0 2.1 2.2				1.7 1.7 1.9				1.4 1.4 1.5			
% Impact from																
<b>Loan Growth: +1% Chg</b>	0.5 0.4 0.4				1.3 1.3 1.3				0.8 0.8 0.8				1.9 2.0 2.0			
<b>NIM: +10bps Chg</b>	8.3 7.7 7.5				10.6 10.8 10.8				8.8 8.7 8.3				19.4 19.7 19.7			
<b>Cost Income %: +1% Chg</b>	10.6 9.6 9.5				2.7 2.7 2.7				3.1 3.1 3.1				3.4 3.5 3.6			
<b>Provisions / Loans: +10bps Chg</b>	5.0 4.6 4.5				8.0 8.3 8.3				5.6 5.5 5.2				14.8 15.1 15.2			
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	0.51	0.50	0.49	0.49	1.17	1.21	1.23	1.24	1.25	1.27	1.26	1.25	1.13	1.16	1.19	1.22
Total operating income	7.69	6.52	6.28	6.26	1.85	1.90	1.91	1.93	2.88	2.97	2.99	3.06	1.53	1.57	1.59	1.64
Operating expenses	-1.70	-1.58	-1.53	-1.50	-0.84	-0.80	-0.78	-0.76	-1.64	-1.61	-1.58	-1.57	-0.77	-0.80	-0.81	-0.83
Op profit before provisions	5.98	4.93	4.75	4.76	1.01	1.10	1.13	1.16	1.24	1.36	1.41	1.49	0.76	0.77	0.78	0.82
Provisions	-5.08	-4.10	-3.88	-3.89	-0.16	-0.17	-0.20	-0.21	-0.24	-0.36	-0.35	-0.34	-0.31	-0.26	-0.27	-0.30
Non-recurring items	0.01	0.02	0.02	0.02	0.11	0.04	0.03	0.02	0.22	0.23	0.16	0.11	0.13	0.11	0.11	0.11
Tax	-0.14	-0.14	-0.13	-0.14	-0.15	-0.15	-0.15	-0.15	-0.14	-0.15	-0.15	-0.16	-0.09	-0.09	-0.09	-0.09
<b>Net profit (ROA)</b>	<b>0.77</b>	<b>0.72</b>	<b>0.76</b>	<b>0.76</b>	<b>0.81</b>	<b>0.82</b>	<b>0.81</b>	<b>0.82</b>	<b>1.07</b>	<b>1.07</b>	<b>1.07</b>	<b>1.11</b>	<b>0.50</b>	<b>0.53</b>	<b>0.52</b>	<b>0.53</b>
Leverage (x)	15.3	15.1	14.8	14.5	12.7	12.7	12.8	12.9	13.1	11.9	11.4	11.4	16.9	16.3	15.9	15.5
<b>ROE</b>	<b>11.81</b>	<b>10.82</b>	<b>11.17</b>	<b>11.00</b>	<b>10.32</b>	<b>10.41</b>	<b>10.32</b>	<b>10.56</b>	<b>14.03</b>	<b>12.74</b>	<b>12.12</b>	<b>12.60</b>	<b>8.40</b>	<b>8.65</b>	<b>9.69</b>	<b>8.17</b>

Source: Company Reports and Citi Research Estimates

Figure 289. Taiwan – Bank Earnings Forecasts and Key Assumptions (Local Currency Billions Unless Stated)

	Sinopac				E.S.F.H				Sector (5 Banks)			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	4.1	4.2	4.1	na	7.5	9.6	9.6	9.6	5.1	6.2	6.7	6.7
Net Interest Margin (bps)	116	118	120	na	127	132	134	136	129	132	132	133
<b>Net Interest Income (TWD b)</b>	<b>14.0</b>	<b>14.8</b>	<b>15.6</b>	<b>na</b>	<b>14.1</b>	<b>15.6</b>	<b>17.1</b>	<b>18.6</b>	<b>112.4</b>	<b>121.3</b>	<b>129.5</b>	<b>138.3</b>
NII Growth (%)	0.4	5.8	5.5	na	9.3	11.0	9.2	8.8	8.9	7.9	6.8	6.8
<b>Non Interest Income (TWD b)</b>	<b>9.9</b>	<b>9.8</b>	<b>10.5</b>	<b>na</b>	<b>9.6</b>	<b>9.8</b>	<b>11.0</b>	<b>12.4</b>	<b>337.6</b>	<b>317.8</b>	<b>331.3</b>	<b>356.5</b>
Non-II Growth (%)	80.5	(1.6)	8.1	na	42.2	1.4	12.7	12.8	18.9	(5.9)	4.2	7.6
-Fee Income (TWD b)	5.5	6.1	6.8	na	6.5	7.8	8.8	10.1	52.7	59.7	66.2	73.9
-Fee Growth (%)	(1.8)	11.4	10.9	na	16.2	18.5	14.1	14.2	1.6	13.3	10.9	11.7
-Other Income (TWD b)	4.4	3.7	3.8	na	3.1	2.0	2.2	2.3	284.9	258.1	265.1	282.6
-Other Income Growth (%)	(6,000)	(18)	3	na	170	(35)	7	7	23	(9)	3	7
<b>Total Income (TWD b)</b>	<b>23.9</b>	<b>24.6</b>	<b>26.2</b>	<b>na</b>	<b>23.7</b>	<b>25.4</b>	<b>28.1</b>	<b>31.0</b>	<b>450.0</b>	<b>439.1</b>	<b>460.8</b>	<b>494.8</b>
Total Income Growth (%)	23.1	2.7	6.6	na	20.7	7.1	10.6	10.4	16.3	(2.4)	4.9	7.4
Non-II % of Total Income	41.4	39.7	40.3	na	40.6	38.4	39.2	40.1	75.0	72.4	71.9	72.1
<b>Operating Costs (TWD b)</b>	<b>14.2</b>	<b>14.7</b>	<b>15.4</b>	<b>na</b>	<b>12.4</b>	<b>13.7</b>	<b>14.5</b>	<b>15.7</b>	<b>146.8</b>	<b>151.3</b>	<b>157.8</b>	<b>166.4</b>
Costs Growth (%)	5.2	3.6	4.5	na	10.7	10.3	5.8	8.3	7.5	3.1	4.3	5.4
Costs % of Total Income	59.5	60.0	58.8	na	52.4	53.9	51.6	50.6	32.6	34.5	34.3	33.6
<b>Pre-Provision Profit (TWD b)</b>	<b>9.7</b>	<b>9.8</b>	<b>10.8</b>	<b>na</b>	<b>11.3</b>	<b>11.7</b>	<b>13.6</b>	<b>15.3</b>	<b>303.2</b>	<b>287.8</b>	<b>303.0</b>	<b>328.4</b>
PPP Growth (%)	64.0	1.4	9.7	na	33.8	3.6	16.1	12.7	21.0	(5.1)	5.3	8.4
PPOP/Avg Loans (Bps)	131	128	135	na	164	157	166	171	520	467	462	470
<b>Provision Charges (TWD b)</b>	<b>2.1</b>	<b>2.7</b>	<b>3.3</b>	<b>na</b>	<b>3.6</b>	<b>3.1</b>	<b>3.9</b>	<b>4.9</b>	<b>210.1</b>	<b>187.6</b>	<b>192.9</b>	<b>207.9</b>
- NPL Ratio (%)	0.5	0.6	0.6	na	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4
- Provision Coverage (%)	225.2	207.2	187.5	na	490.0	430.0	390.0	365.0	365.1	336.8	319.4	305.8
- Provisions bps of Loans	29	35	41	na	52	41	47	55	566	477	462	471
Others (TWD b)	0.7	0.6	0.5	na	0.5	0.4	0.3	0.3	10.9	9.6	8.0	6.9
<b>Pre-tax Profit (TWD b)</b>	<b>8.3</b>	<b>7.8</b>	<b>8.0</b>	<b>na</b>	<b>8.2</b>	<b>9.0</b>	<b>10.1</b>	<b>10.7</b>	<b>104.0</b>	<b>109.8</b>	<b>118.1</b>	<b>127.4</b>
Tax (TWD b)	1.1	1.3	1.3	na	1.2	1.3	1.4	1.5	15.1	16.2	17.0	18.3
Minorities (TWD b)	0.0	0.0	0.0	na	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net Profit (TWD b)</b>	<b>7.1</b>	<b>6.5</b>	<b>6.7</b>	<b>na</b>	<b>7.1</b>	<b>7.8</b>	<b>8.6</b>	<b>9.2</b>	<b>88.9</b>	<b>93.6</b>	<b>101.0</b>	<b>109.1</b>
FD EPS (TWD)	0.94	0.86	0.88	na	1.35	1.44	1.60	1.70	2.12	2.16	2.34	2.53
FD EPS Growth (%)	132	(9)	2	na	88	7	11	6	7	2	8	8
BVPS (TWD)	12.84	13.48	14.15	na	14.81	15.91	17.15	18.45	19.60	21.17	22.72	24.47
BVPS Growth (%)	6.5	5.0	4.9	na	2.7	7.4	7.8	7.6	7.5	8.0	7.4	7.7
RoRWA (%)	1.05	0.93	0.91	na	1.01	1.03	1.06	1.05	1.58	1.61	1.64	1.67
<b>Tier 1 ratio (%)</b>	<b>9.0</b>	<b>9.1</b>	<b>9.2</b>	<b>na</b>	<b>9.2</b>	<b>9.2</b>	<b>9.3</b>	<b>9.4</b>	<b>9.9</b>	<b>10.0</b>	<b>10.1</b>	<b>10.3</b>
Core Tier 1 ratio (%)	9.0	9.1	9.2	na	9.2	9.2	9.3	9.4	9.6	9.7	9.8	9.9
CAR (%)	13.3	13.4	13.5	na	12.4	12.3	12.4	12.5	12.7	12.7	12.9	13.0
<b>Loan to Deposit ratio (%)</b>	<b>74.2</b>	<b>75.3</b>	<b>76.4</b>	<b>na</b>	<b>70.7</b>	<b>73.7</b>	<b>76.8</b>	<b>79.8</b>	<b>83.2</b>	<b>85.2</b>	<b>87.1</b>	<b>88.6</b>
<b>EPS SENSITIVITY STUDY</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>		<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (TWD)</b>		0.9	0.9	na		1.4	1.6	1.7		2.2	2.3	2.5
% Impact from												
<b>Loan Growth: +1% Chg</b>		1.6	1.6	na		1.4	1.4	1.4		1.0	1.0	0.9
<b>NIM: +10bps Chg</b>		22.4	22.7	na		17.4	16.8	17.0		11.3	11.1	10.9
<b>Cost Income %: +1% Chg</b>		4.4	4.6	na		3.7	3.7	3.9		5.4	5.2	5.2
<b>Provisions / Loans: +10bps Chg</b>		13.7	14.0	na		11.0	10.8	11.1		7.6	7.4	7.3
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	1.12	1.14	1.16	na	1.18	1.23	1.26	1.28	0.97	0.98	0.99	0.99
Total operating income	1.91	1.89	1.93	na	1.99	2.00	2.07	2.13	3.87	3.56	3.51	3.55
Operating expenses	-1.13	-1.13	-1.14	na	-1.04	-1.08	-1.07	-1.08	-1.26	-1.23	-1.20	-1.19
Op profit before provisions	0.77	0.76	0.80	na	0.95	0.92	1.00	1.05	2.61	2.33	2.31	2.35
Provisions	-0.17	-0.20	-0.25	na	-0.30	-0.24	-0.29	-0.34	-1.81	-1.52	-1.47	-1.49
Non-recurring items	0.06	0.05	0.04	na	0.04	0.03	0.02	0.02	0.09	0.08	0.06	0.05
Tax	-0.09	-0.10	-0.10	na	-0.10	-0.10	-0.10	-0.10	-0.13	-0.13	-0.13	-0.13
<b>Net profit (ROA)</b>	<b>0.57</b>	<b>0.50</b>	<b>0.49</b>	<b>na</b>	<b>0.59</b>	<b>0.61</b>	<b>0.64</b>	<b>0.63</b>	<b>0.76</b>	<b>0.76</b>	<b>0.77</b>	<b>0.78</b>
Leverage (x)	13.2	13.0	12.9	na	15.9	15.3	15.2	15.1	14.5	14.1	13.8	13.7
<b>ROE</b>	<b>7.53</b>	<b>6.51</b>	<b>6.36</b>	<b>na</b>	<b>9.41</b>	<b>9.37</b>	<b>9.69</b>	<b>9.56</b>	<b>11.10</b>	<b>10.65</b>	<b>10.61</b>	<b>10.69</b>

Note: Sector averages do not include Sinopac due to lack of comparable data for all the time periods

Source: Company Reports and Citi Research Estimates

# Thailand

## Most Negative for Consumer Banks

### Key Scenario Assumptions

- **CPI inflation rises to 5%** – Current CPI run rate is at 2-3% p.a. but historically very volatile. Please note that Thailand inflation is very sensitive to oil prices. Two episodes of high inflation during 04-05 and 07-08 were mainly due to oil price surge. PPI (producer level) is much higher than CPI (consumer level), suggesting limited pricing pass-through and margin drop for some manufacturers. Not a surprise given some are mainly export manufacturers with limited pricing power. Barring a jump in oil price similar to 07-08, we believe inflation going back to the 5% level should be considered the high end of our scenario.
- **Interest rate move towards 4-4.25%** – Past response to inflation cycle - 2004-05 rate cycle was much sharper (from 1.25% to 5%) while 2007-08 cycle rate was raised from 1.25% to a peak of 3.5%. This was driven by the US rate cycle. A fair assumption in our 2% US rate hike and 2% spread between short vs long end would be for Thai policy rate to go up from the current 2.75% to 4-4.25% (we do *not* expect the rate to go one-on-one with the US as the current US rate downward trend was not matched by Thai policy rate either). A 4% short rate would leave the Thai rate about 2% above US, which is already a large gap vs the past.

### Implications for Thailand Banks

- **NIM: Positive to big banks; negative for small banks** – In our 1.5% policy rate hike assumption (from 2.75% to 4.25%), the NIM impact would vary across banks depending on asset liability mix and the proportion of fixed rate loans vs liabilities.

Figure 290. Thailand Banks – Asset Liability Structure

	BBL	SCB	KBANK	KTB	BAY	TISCO	TMB
Loans (Bt bn)	1,604	1,547	1,327	1,525	830	248	453
* Est Rate Sensitive Loans	88%	84%	85%	81%	64%	28%	96%
Corporate	61%	38%	34%	38%	26%	17%	48%
Government				12%			
SME	28%	19%	35%	20%	26%	10%	33%
Retail	11%	42%	31%	30%	49%	72%	18%
Mortgage		26%	15%	15%	13%		
HP and other retail		16%	15%	15%	36%	72%	
Total IEA	2,372	2,169	1,959	2,158	989	286	658
Deposit (Bt bn)	1,835	1,614	1,391	1,667	687	220	496
CASA	45%	52%	66%	58%	54%	13%	65%
Borrowing /BE	109	133	87	147	155	28	43
<b>P&amp;L Impact (p.a.)</b>							
Incremental Interest Income	7.5	6.4	5.6	6.5	2.3	0.4	2.2
Incremental Interest Expense	6.5	5.4	4.0	5.5	2.6	1.2	1.5
Net Interest Income Impact (Bt bn/year)	1.0	1.1	1.5	1.0	(0.4)	(0.8)	0.7
NIM Impact for 50bps hike (bps)	4.3	4.9	7.8	4.6	(3.5)	(26.7)	10.1
NIM bps impact - 150 bps hike	12.9	14.8	23.5	13.7	(10.6)	(80.1)	30.2
EPS % to 10bps NIM change	5.3	3.8	3.8	5.6	4.6	6.0	8.8
% EPS impact	6.8	5.6	8.9	7.7	(4.9)	(48.1)	26.6

Source: Company Reports and Citi Research Estimates

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Historical view: NIM vs policy rate cycle – Surge between 2001-05 was partly attributable to rate cycle but a major contributor was also declining NPLs. 2009-2011 reflects a normal rate cycle.

- **Asset quality: negative** – If inflation rises and policy rate tightens per our scenario, we expect NPL inflow to rise but, historically, Thai banks tend to mobilize the effort and ramp up NPL resolution (through restructuring, etc) and we see a muted increase in NPLs. Nonetheless, the credit cost will still be increasing in such event as the macro backdrop would be lower cost, lower purchasing power on retail front, and limited ability to pass on costs by manufacturers.

**NPL formation** – 2006-2007 episodes illustrate pressure on inflow of NPLs in prior inflation + rising rate situation. However, NPL resolution capacity tends to match and we still see contained NPL change in the system.

**Credit cost implication** – Given that LLR coverage has already reached 128% at system level (BBL now 207%; BAY near 150%; KTB at 93%), we expect only a slight increase in credit cost. Taking the flood impact as an example, system credit cost was nudged up by 12bps. We, therefore, believe that 10bps increase in credit cost should be sufficient.

**Figure 291. Thailand Banks – Impact of a 10bps increase in credit cost to earnings**

	BBL	KTB	KBANK	SCB	BAY	TMB	TISCO	Overall
Provision/Loans +10bps Chg	-3.7	-3.7	-2.5	-2.7	-3.7	-6.0	-5.1	-3.5

Source: Citi Research Estimates

- **Cost-income ratio likely to rise 1%pt** – Apart from periods of aggressive branch expansion during 2005-07 (notice the cost step-up in chart below), Thai banks have been vigilant in managing costs to match with revenue momentum. We believe the impact on rising rate could have been through a slower rise in revenue vs steady rise in cost, narrowing the cost to income.

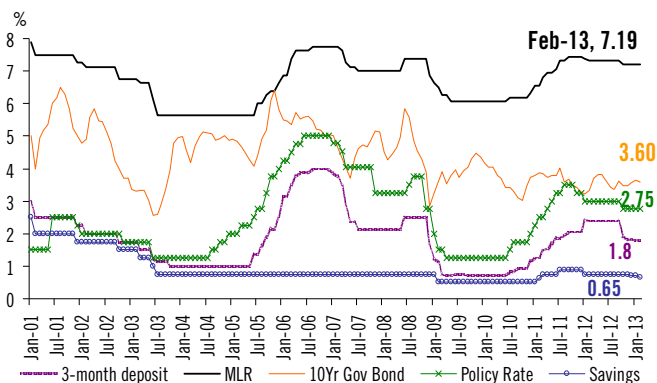
In case of an inflation spike and rising rates, we believe 1 percentage point increase in cost-income seems a fair assumption, which would trim sector earnings by c2%.

**Figure 292. Thailand Banks – Impact of a 1%pt increase in cost-income to earnings**

	BBL	KTB	KBANK	SCB	BAY	TMB	TISCO	Overall
Cost-Income: +1%pt Chg	-2.0	-2.0	-2.1	-1.9	-2.8	-3.4	-2.6	-2.2

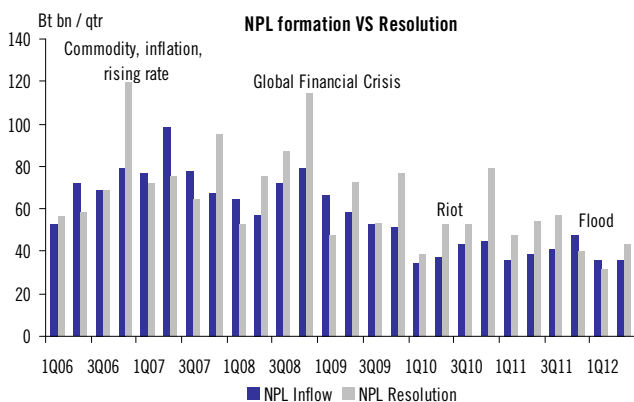
Source: Citi Research Estimates

Figure 293. Thailand – Interest Rates



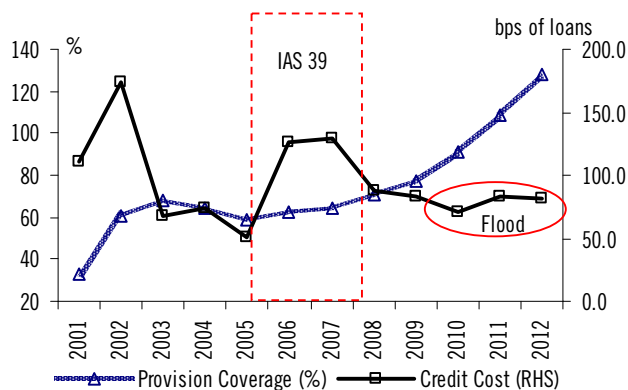
Source: Citi Research

Figure 295. Thailand Banks – NPL Formation vs. Resolution



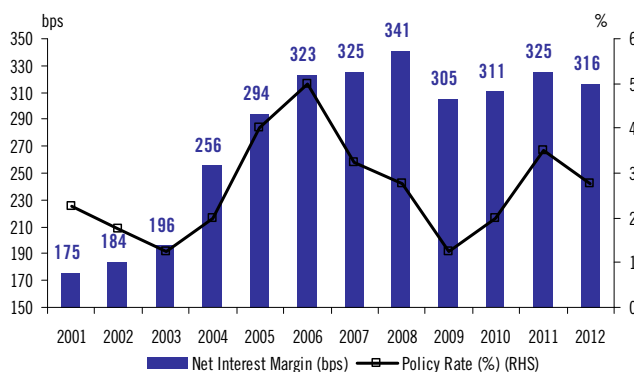
Source: Citi Research

Figure 297. Thailand Banks – Credit Cost over the cycle



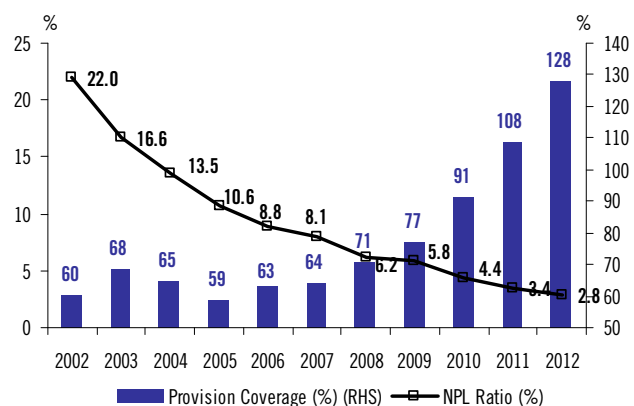
Source: Citi Research

Figure 294. Thailand Banks – Net Interest Margins (%)



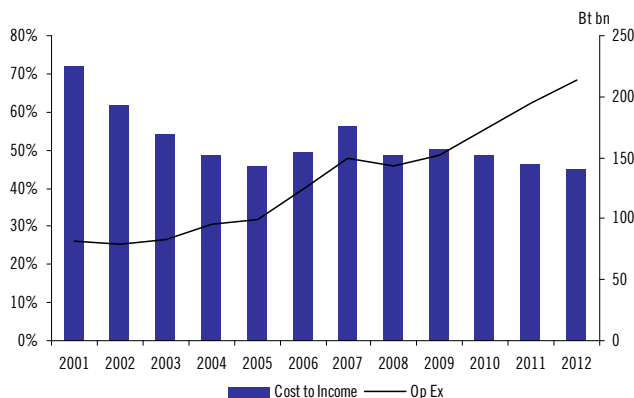
Source: Citi Research

Figure 296. Thailand Banks – NPL and LLR Coverage Trend



Source: Citi Research

Figure 298. Thailand Banks – Cost Income Trend



Source: Citi Research

## Overall Impact

**Earnings slight positive** – Our analysis suggested a slight positive earnings impact in a rate hike scenario for big banks (KBANK, KTB biggest beneficiary) but negative for consumer driven banks (BAY, TISCO).

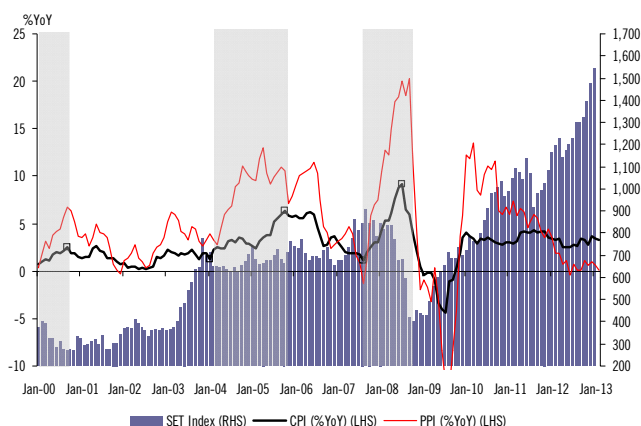
Figure 299. Thailand Banks – Overall impact

Summary EPS impact	BBL	KTB	KBANK	SCB	BAY	TMB	TISCO	Overall
NIM: +150bps rate hike	+6.8	+7.7	+8.9	+5.6	-4.9	+26.6	-48.1	+6.6
Cost-Income: +1%pt Chg	-2.0	-2.0	-2.1	-1.9	-2.8	-3.4	-2.6	-2.2
Provision/Loans +10bps Chg	-3.7	-3.7	-2.5	-2.7	-3.7	-6.0	-5.1	-3.5
<b>Total impact</b>	<b>+1.1</b>	<b>+2.0</b>	<b>+4.3</b>	<b>+1.0</b>	<b>-11.4</b>	<b>+17.2</b>	<b>-55.8</b>	<b>+0.9</b>
	Positive	Positive	Positive	Positive	Negative	Positive	Negative	

Source: Citi Research Estimates

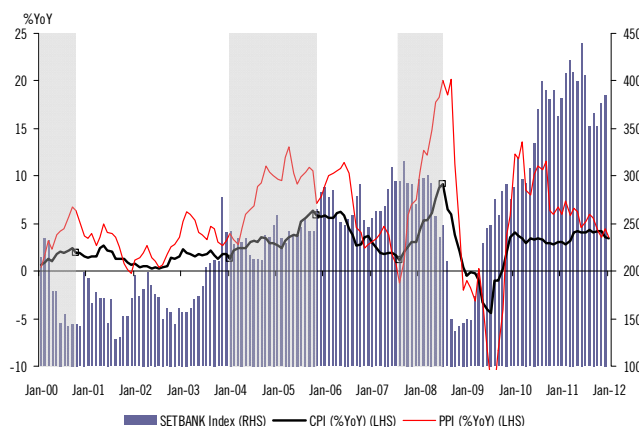
**Market reaction** – shoot first, reward later - Rate hike combined with cost push inflation pressure usually create near term negative headline and market response as market will suspect asset quality and slowdown in growth. Looking into past cycles, we notice that banks tend to de-rate first upon fear of asset quality. Then, NIM positive effect kicks in and asset quality usually holds up better than expected, resulting in re-rating.

Figure 300. Thailand – SET Index Performance vs. Inflation



Source: Citi Research

Figure 301. Thailand – Banks Index Performance vs. Inflation



Source: Citi Research

Figure 302. Thailand – Economic Indicators

	2006	2007	2008	2009	2010	2011	2012	2013F	2014F
<b>Summary Data</b>									
Nominal GDP, US\$ bn	207.4	265.2	276.1	263.8	319.3	346.1	366.4	401.6	427.1
Nominal GDP, local currency bn	7,845	8,525	9,080	9,042	10,105	10,540	11,375	12,222	13,126
GDP per capita, US\$	3,301	4,207	4,355	4,153	4,998	5,401	5,685	6,199	6,573
Population, mn	62.8	63.0	63.4	63.5	63.9	64.1	64.5	64.8	65.0
Unemployment, % of labour force	1.5	1.4	1.4	1.5	1.0	0.7	0.7	0.8	1.0
<b>Economic Activity</b>									
Real GDP, % yoy	5.1	5.0	2.5	-2.3	7.8	0.1	6.5	4.7	4.8
Real investment growth % yoy	-3.6	1.0	8.1	-25.2	28.7	0.1	16.8	7.2	6.7
Real consumption growth % yoy	3.0	2.9	2.9	0.1	5.1	1.3	6.8	3.6	3.1
private consumption growth % yoy	3.2	1.8	2.9	-1.1	4.8	1.3	6.7	3.7	3.1
Real export growth, % yoy	9.1	7.8	5.1	-12.5	14.7	9.5	3.1	6.2	8.5
Real import growth, % yoy	3.3	4.4	8.9	-21.5	21.5	13.7	6.2	6.3	8.4
<b>Prices, Money &amp; Credit</b>									
CPI, % yoy	3.6	3.1	0.4	3.5	3.1	3.5	3.6	2.3	2.8
CPI, % avg	4.6	2.2	5.5	-0.9	3.3	3.8	3.0	2.6	2.5
Nominal wages, % yoy	5.8	3.0	10.5	-1.9	5.8	7.2	11.9	5.5	4.0
Credit extension to private sector, % yoy	4.5	29.3	6.3	2.5	18.9	18.2	16.0	13.5	11.5
Policy interest rate, % eop	5.00	3.25	2.75	1.25	2.00	3.25	2.75	2.50	3.00
1 month inter-bank rate, % eop	5.22	3.74	3.07	1.28	2.03	3.26	2.79	2.55	3.15
Long term yield, % eop	5.04	5.13	2.84	4.37	3.74	3.28	3.55	3.25	3.65
lc/US\$, eop	35.5	30.1	34.8	33.4	30.1	31.6	30.6	30.4	30.1
lc/US\$, avg	37.9	32.3	33.0	34.3	31.7	30.5	31.1	30.0	30.3
<b>Balance of Payments, US\$ bn</b>									
Current account	2.3	15.7	2.2	21.9	10.0	5.9	2.7	1.1	-4.3
% of GDP	1.1	5.9	0.8	8.3	3.1	1.7	0.7	0.3	-1.0
Trade balance	13.7	26.6	17.3	32.6	29.8	17.0	8.3	3.3	-0.4
Exports	127.9	151.3	175.2	150.8	191.6	219.1	226.2	237.5	257.2
Imports	114.3	124.6	157.9	118.2	161.9	202.1	217.8	234.2	257.6
Net service and Transfer accounts	-8.0	-8.0	-12.9	-6.4	-10.7	-10.6	-3.2	-2.0	-3.8
Income balance	-3.4	-3.0	-2.3	-4.4	-9.0	-0.5	-2.4	-0.3	-0.1
FDI, net	8.5	8.3	4.4	0.7	4.5	-0.4	-3.3	4.2	3.1
International reserves	67.0	87.5	111.0	138.4	172.1	175.1	181.6	185.0	197.8
Total Amortisations	12.8	20.5	15.0	10.7	9.4	8.9	17.3	18.0	19.0
<b>Public Finances, % of GDP</b>									
Consolidated government balance	-0.7	-1.6	-1.0	-5.7	0.0	-1.0	-2.1	-2.2	-2.1
Consolidated gov primary balance	0.9	-0.3	0.2	-4.5	1.2	0.2	-0.8	-0.9	-0.7
Public debt	40.3	37.4	38.2	43.9	42.4	40.8	43.6	47.5	48.0
of which Domestic	34.3	32.7	33.7	39.7	38.8	37.5	40.5	41.2	42.3
<b>Foreign Assets &amp; Liabilities, US\$ bn</b>									
External debt	70.0	74.4	76.1	75.3	100.6	104.6	133.7	132.3	135.0
Private	64.7	71.6	72.7	69.4	87.9	88.4	107.4	106.7	108.4
Public	5.2	2.8	3.4	5.9	12.7	16.2	26.2	25.6	26.6
External debt / GDP	33.7	28.1	27.6	28.5	31.5	30.2	36.5	32.9	31.6
External debt / XGS	45.9	41.0	36.5	41.6	44.5	40.1	48.5	45.4	42.9
Short-term debt	27.2	34.0	33.6	33.1	50.7	47.3	60.6	60.0	59.8
Short-term debt/International Reserves (%)	40.7	38.9	30.3	23.9	29.4	27.0	33.4	32.4	30.2
<b>Quarterly Economic Indicators</b>									
	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1F	2013 Q2F	2013 Q3F	2013 Q4F
GDP, % yoy	-8.9	0.4	4.4	3.1	19.1	5.3	4.8	4.5	4.3
CPI, % yoy	3.5	3.4	2.6	3.4	3.6	2.7	2.5	2.4	2.3
Policy interest rate, % eop	3.25	3.00	3.00	3.00	2.75	2.75	2.50	2.50	2.50
1 month inter-bank rate, % eop	3.26	3.04	3.05	3.05	2.79	2.79	2.55	2.55	2.55
Long term yield, % eop	3.28	3.69	3.62	3.62	3.55	3.54	3.15	3.00	3.25
lc vs USD, eop	31.6	30.9	31.6	30.8	30.6	29.3	30.0	30.2	30.4

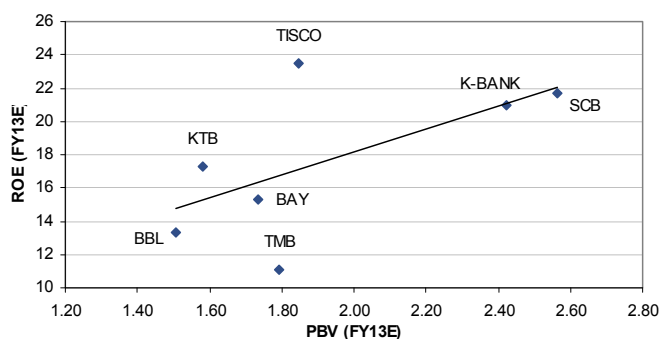
Source: CEIC Data Company Ltd, Fitch, IFS, Moody's and Citi Research Estimates

Figure 303. Thailand — Banks Valuation Snapshot

Stock, Rating, Ric	Price (Bt)	TP (Bt)	ETR (%)	Mkt Cap (Bt b)	Profit (Bt \$m)		EPS (Bt)		EPS Chg YoY (%)		P/E (x)		NBV/S (Bt)		P/NBV (x)		Net DPS (Bt)		Yield (%)		ROAE (%)	
					13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E	13E	14E
BBL, 2, BBLf.BK	222.0	220.0	2.6	423.8	36,948	40,393	19.4	21.2	11.9	9.3	11.5	10.5	147.2	159.9	1.51	1.39	7.74	8.46	3.5	3.8	13.3	13.8
K-BANK, 1, KBANf.BK	219.0	232.0	8.0	524.1	42,034	48,906	17.6	20.4	19.3	16.3	12.5	10.7	90.4	104.7	2.42	2.09	4.48	6.13	2.0	2.8	21.0	21.0
SCB, 1, SCB.BK	185.5	203.0	12.2	629.6	49,800	56,270	14.7	16.6	23.8	13.0	12.7	11.2	72.4	83.2	2.56	2.23	5.13	5.80	2.8	3.1	21.7	21.3
BAY, 1, BAY.BK	35.5	39.0	13.2	215.6	18,227	21,192	3.0	3.5	24.6	16.3	11.8	10.2	20.5	22.6	1.74	1.57	1.20	1.40	3.4	3.9	15.3	16.2
KTB, 1, KTB.BK	22.6	25.5	17.0	315.9	32,891	40,017	2.4	2.9	29.1	21.7	9.6	7.9	14.3	16.0	1.58	1.41	0.94	1.14	4.2	5.1	17.3	18.9
TMB, 3, TMB.BK	2.5	2.0	-19.3	110.8	6,601	7,481	0.2	0.2	311.1	13.3	16.8	14.8	1.4	1.5	1.79	1.66	0.05	0.06	2.0	2.2	11.1	11.6
TISCO, 3, TISCO.BK	50.3	46.8	-2.1	40.2	4,600	5,461	6.0	7.1	24.2	18.7	8.4	7.1	27.2	31.5	1.85	1.60	2.39	2.84	4.8	5.6	23.5	24.2

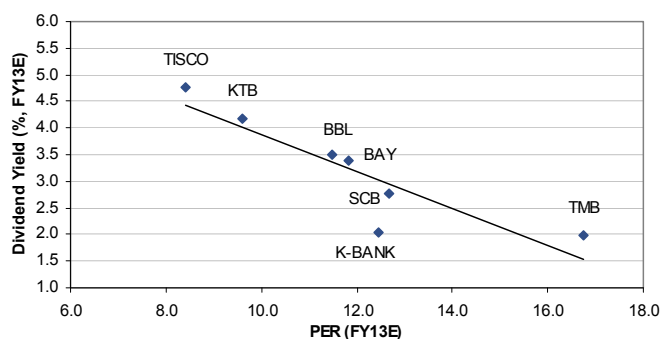
Note: Priced as on 23 May 2013; Source: Citi Research Estimates

Figure 304. Price-Book vs. ROAE 2013E



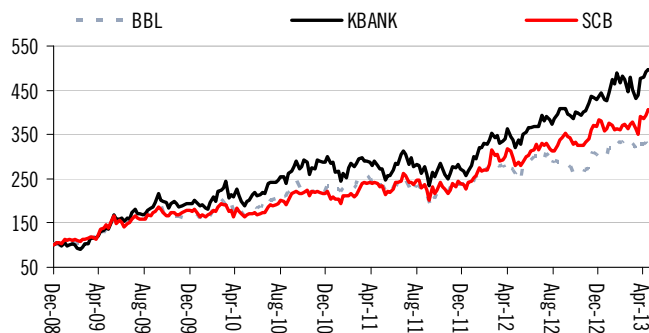
Source: Citi Research Estimates

Figure 305. P/E vs. Dividend Yield 2013E



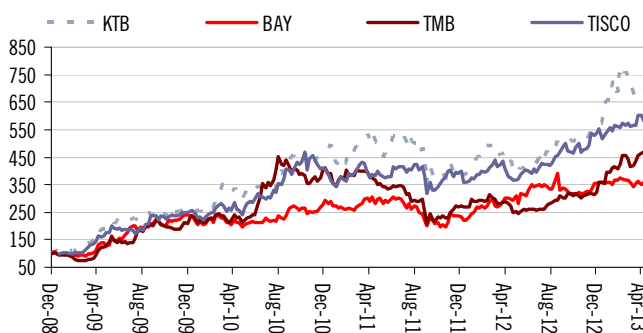
Source: Citi Research Estimates

Figure 306. Big-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

Figure 307. Mid-Cap Bank Share Performance Dec 2008 to Present



Source: DataStream, Citi Research

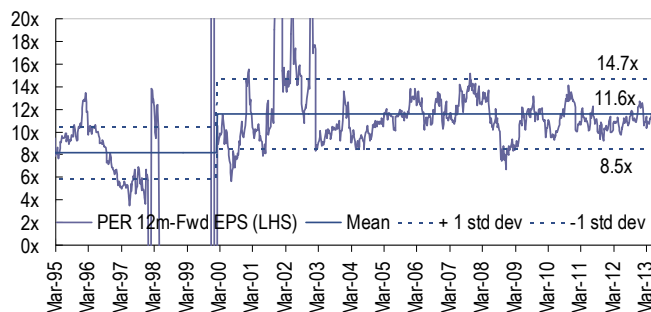
Figure 308. Thai Banks — Current vs. Target Valuation and Historical P/B & P/E Ranges

	Current Valuation			Citi Targets			12m Fwd P/B Range			12m Fwd P/E Range		
	Share Price (Bt)	CY13E P/B (x)	CY13E P/E (x)	Target Price (Bt)	CY13E P/B (x)	CY13E P/E (x)	-1 SD (x)	Mean (x)	+1 SD (x)	-1 SD (x)	Mean (x)	+1 SD (x)
Bank of Ayudhya	35.5	1.7	11.8	39	1.9	13.0	0.9	1.2	1.5	6.8	10.1	13.3
Bangkok Bank	222.0	1.5	11.5	220.0	1.5	11.4	1.0	1.2	1.4	7.0	8.9	10.8
Kasikornbank	219.0	2.4	12.5	232.0	2.6	13.2	1.3	1.6	1.9	8.0	9.9	11.7
Krung Thai Bank	22.6	1.6	9.6	25.5	1.8	10.8	0.9	1.2	1.4	6.8	8.2	9.7
Siam Commercial Bank	185.5	2.6	12.7	203.0	2.8	13.9	1.6	1.8	2.1	8.5	11.6	14.7
TMB Bank	2.5	1.8	16.8	2.0	1.4	13.2	0.7	1.0	1.4	5.6	10.6	15.6
TISCO Financial Group	50.3	1.8	8.4	46.8	1.7	7.8	1.1	1.4	1.7	6.7	8.4	10.1

Note: Priced as on 23 May 2013 Source: Citi Research Estimates

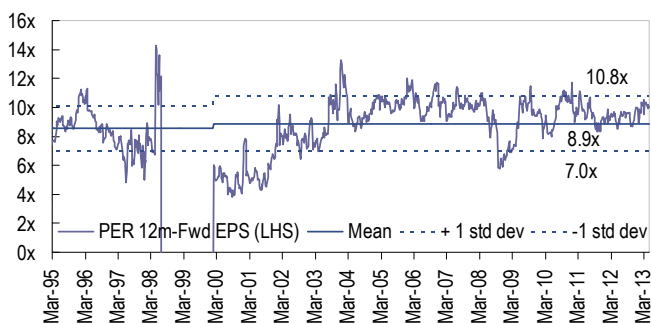
## Thailand Banks – Valuation Charts

Figure 309. SCB — 12M Forward Consensus P/E Chart



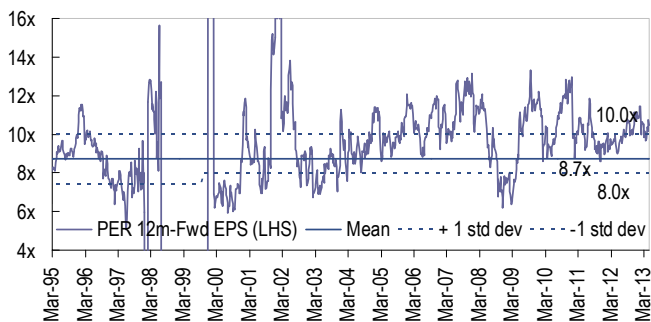
Source: DataStream, Citi Research

Figure 311. BBL — 12M Forward Consensus P/E Chart



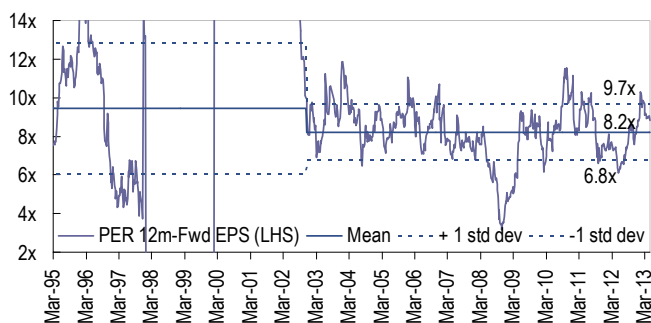
Source: DataStream, Citi Research

Figure 313. K-Bank — 12M Forward Consensus P/E Chart



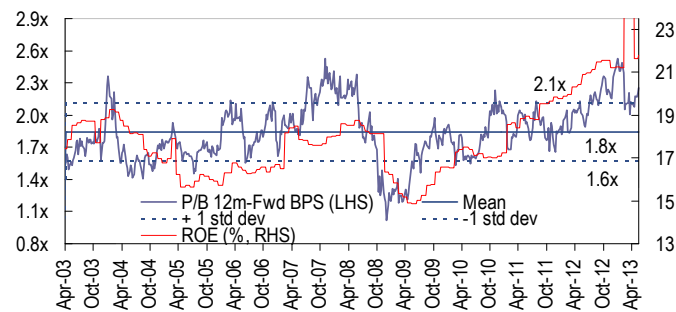
Source: DataStream, Citi Research

Figure 315. KTB — 12M Forward Consensus P/E Chart



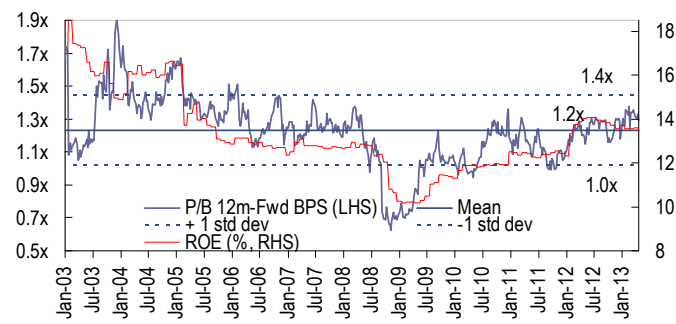
Source: DataStream, Citi Research

Figure 310. SCB — 12M Forward Consensus P/B Chart



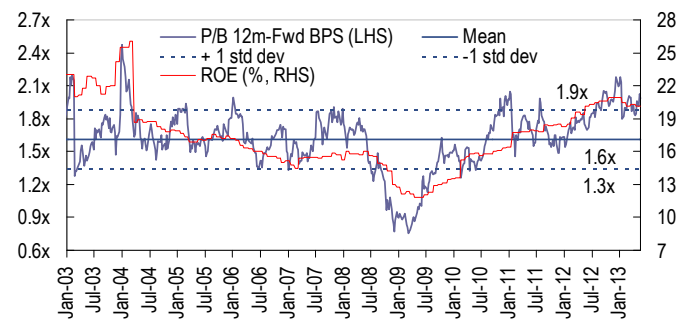
Source: DataStream, Citi Research

Figure 312. BBL — 12M Forward Consensus P/B Chart



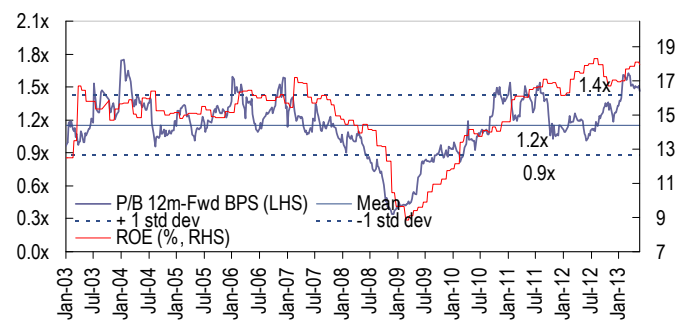
Source: DataStream, Citi Research

Figure 314. K-Bank — 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

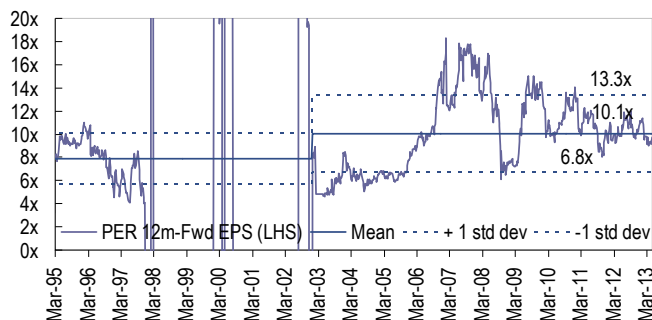
Figure 316. KTB — 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

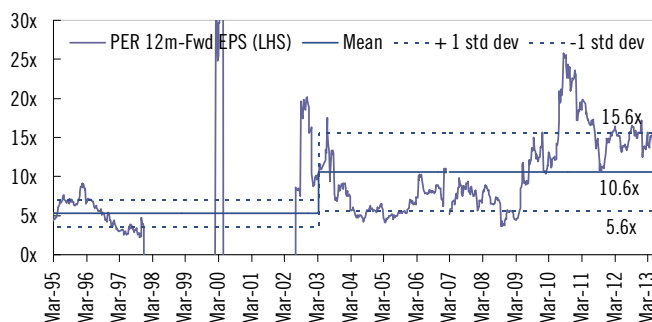
## Thailand Banks – Valuation Charts (Cont'd)

Figure 317. BAY— 12M Forward Consensus P/E Chart



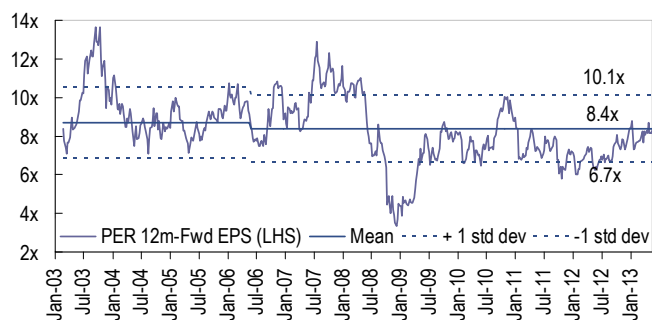
Source: DataStream, Citi Research

Figure 319. TMB — 12M Forward Consensus P/E Chart



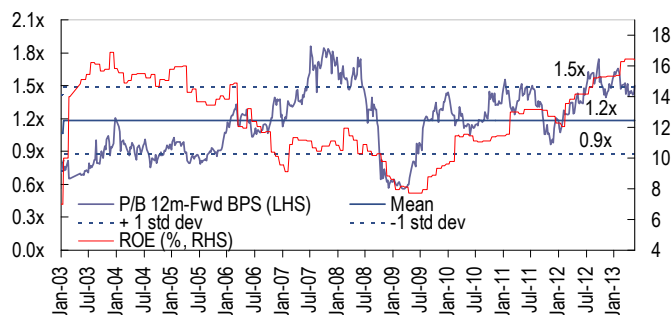
Source: DataStream, Citi Research

Figure 321. TISCO — 12M Forward Consensus P/E Chart



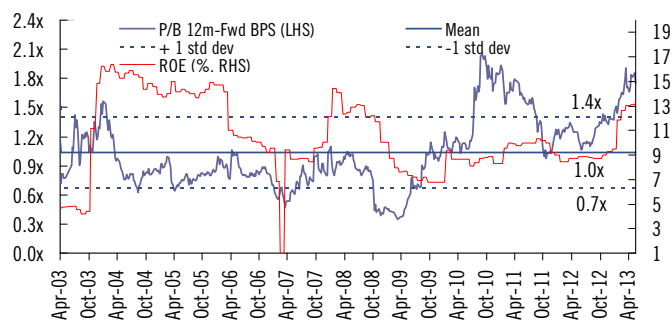
Source: DataStream, Citi Research

Figure 318. BAY — 12M Forward Consensus P/B Chart



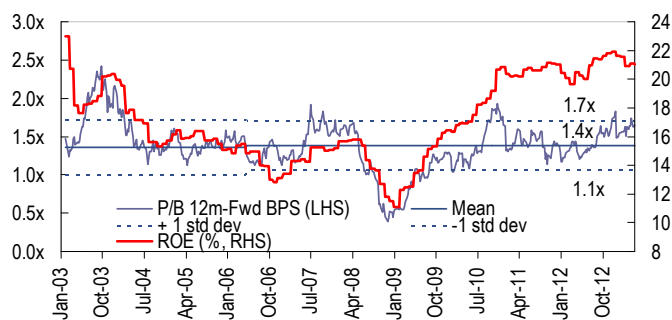
Source: DataStream, Citi Research

Figure 320. TMB — 12M Forward Consensus P/B Chart



Source: Citi Research

Figure 322. TISCO — 12M Forward Consensus P/B Chart



Source: DataStream, Citi Research

Figure 323. Thailand – Bank Earnings Forecasts and Key Assumptions (Local Currency Millions Unless Stated)

	BAY				BBL				K-Bank				KTB			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	15.4	12.1	10.7	10.2	9.1	11.3	10.4	9.0	9.6	10.4	10.4	9.9	7.2	13.1	11.9	10.6
Net Interest Margin (bps)	427	430	431	436	248	248	250	255	359	353	357	356	292	286	283	287
<b>Net Interest Income (THB m)</b>	<b>39,953</b>	<b>44,723</b>	<b>49,345</b>	<b>54,727</b>	<b>54,952</b>	<b>60,948</b>	<b>66,497</b>	<b>73,378</b>	<b>63,581</b>	<b>71,649</b>	<b>79,349</b>	<b>88,114</b>	<b>58,569</b>	<b>65,164</b>	<b>71,158</b>	<b>78,675</b>
NII Growth (%)	6.6	11.9	10.3	10.9	4.3	10.9	9.1	10.3	12.6	12.7	10.7	11.0	16.2	11.3	9.2	10.6
<b>Non Interest Income (THB m)</b>	<b>21,236</b>	<b>22,606</b>	<b>24,851</b>	<b>27,332</b>	<b>30,458</b>	<b>32,322</b>	<b>34,246</b>	<b>36,306</b>	<b>40,724</b>	<b>46,372</b>	<b>52,468</b>	<b>59,222</b>	<b>23,327</b>	<b>25,328</b>	<b>27,352</b>	<b>29,591</b>
Non-II Growth (%)	19.0	6.5	9.9	10.0	3.1	6.1	6.0	6.0	19.7	13.9	13.1	12.9	21.9	8.6	8.0	8.2
-Fee Income (THB m)	12,735	14,702	16,847	19,227	19,123	20,846	22,642	24,502	24,467	28,787	32,915	37,347	13,217	15,000	16,853	18,864
-Fee Growth (%)	18.1	15.4	14.6	14.1	5.5	9.0	8.6	8.2	18.6	17.7	14.3	13.5	16.2	13.5	12.4	11.9
-Other Income (THB m)	8,501	7,904	8,005	8,105	11,335	11,476	11,604	11,804	16,257	17,585	19,553	21,875	10,110	10,329	10,499	10,726
-Other Income Growth (%)	20.5	-7.0	1.3	1.2	-0.7	1.2	1.1	1.7	21.5	8.2	11.2	11.9	30.2	2.2	1.7	2.2
<b>Total Income (THB m)</b>	<b>61,188</b>	<b>67,330</b>	<b>74,196</b>	<b>82,058</b>	<b>85,410</b>	<b>93,270</b>	<b>100,743</b>	<b>109,684</b>	<b>104,305</b>	<b>118,021</b>	<b>131,817</b>	<b>147,336</b>	<b>81,896</b>	<b>90,492</b>	<b>98,509</b>	<b>108,266</b>
Total Income Growth (%)	10.6	10.0	10.2	10.6	3.9	9.2	8.0	8.9	15.2	13.1	11.7	11.8	17.8	10.5	8.9	9.9
Non-II % of Total Income	34.7	33.6	33.5	33.3	35.7	34.7	34.0	33.1	39.0	39.3	39.8	40.2	28.5	28.0	27.8	27.3
<b>Operating Costs (THB m)</b>	<b>30,798</b>	<b>33,242</b>	<b>35,401</b>	<b>37,988</b>	<b>37,861</b>	<b>40,400</b>	<b>43,043</b>	<b>45,674</b>	<b>46,934</b>	<b>51,135</b>	<b>55,319</b>	<b>60,005</b>	<b>35,304</b>	<b>38,080</b>	<b>40,844</b>	<b>43,512</b>
Costs Growth (%)	12.1	7.9	6.5	7.3	5.0	6.7	6.5	6.1	9.1	8.9	8.2	8.5	6.4	7.9	7.3	6.5
Costs % of Total Income	50.3	49.4	47.7	46.3	44.3	43.3	42.7	41.6	45.0	43.3	42.0	40.7	43.1	42.1	41.5	40.2
<b>Pre-Provision Profit (THB m)</b>	<b>30,390</b>	<b>34,088</b>	<b>38,795</b>	<b>44,071</b>	<b>47,550</b>	<b>52,870</b>	<b>57,700</b>	<b>64,011</b>	<b>57,371</b>	<b>66,887</b>	<b>76,498</b>	<b>87,330</b>	<b>46,592</b>	<b>52,413</b>	<b>57,665</b>	<b>64,753</b>
PPP Growth (%)	9.2	12.2	13.8	13.6	3.0	11.2	9.1	10.9	20.8	16.6	14.4	14.2	28.2	12.5	10.0	12.3
PPOP/Avg Loans (Bps)	366.1	366.4	395.8	407.1	296.4	296.1	307.3	310.8	432.4	456.7	496.5	514.8	305.5	303.9	315.5	318.6
<b>Provision Charges (THB m)</b>	<b>11,385</b>	<b>11,250</b>	<b>12,250</b>	<b>13,250</b>	<b>7,248</b>	<b>6,600</b>	<b>7,124</b>	<b>7,650</b>	<b>8,390</b>	<b>10,250</b>	<b>10,650</b>	<b>11,250</b>	<b>15,163</b>	<b>11,550</b>	<b>7,950</b>	<b>8,150</b>
- NPL Ratio (%)	2.6	2.3	2.2	2.0	2.6	2.5	2.3	2.1	2.5	2.3	2.1	2.0	3.9	4.4	3.8	3.3
- Provision Coverage (%)	146	154	160	169	207	203	206	214	132	148	161	174	93	80	87	93
- Provisions bps of Loans	147	128	125	122	47	39	38	37	66	73	69	66	103	71	43	40
Others (THB m)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Pre-tax Profit (THB m)</b>	<b>19,005</b>	<b>22,838</b>	<b>26,545</b>	<b>30,821</b>	<b>40,301</b>	<b>46,270</b>	<b>50,576</b>	<b>56,361</b>	<b>48,981</b>	<b>56,637</b>	<b>65,848</b>	<b>76,080</b>	<b>31,429</b>	<b>40,863</b>	<b>49,715</b>	<b>56,603</b>
Tax (THB m)	4,337	4,568	5,309	6,164	7,213	9,254	10,115	11,272	11,163	11,327	13,170	15,216	7,863	7,968	9,694	11,038
Minorities (THB m)	43	43	43	43	68	68	68	68	2,585	3,275	3,773	4,283	0	0	0	0
<b>Net Profit (THB m)</b>	<b>14,625</b>	<b>18,227</b>	<b>21,192</b>	<b>24,613</b>	<b>33,021</b>	<b>36,948</b>	<b>40,393</b>	<b>45,021</b>	<b>35,233</b>	<b>42,034</b>	<b>48,906</b>	<b>56,582</b>	<b>23,566</b>	<b>32,894</b>	<b>40,020</b>	<b>45,565</b>
FD EPS (THB)	2.41	3.00	3.49	4.05	17.30	19.36	21.16	23.59	14.72	17.56	20.43	23.64	1.82	2.35	2.86	3.26
FD EPS Growth (%)	57.9	24.6	16.3	16.1	20.8	11.9	9.3	11.5	45.4	19.3	16.3	15.7	27.3	29.1	21.7	13.9
BVPS (THB)	18.66	20.46	22.55	24.98	143.30	147.23	159.93	174.08	77.28	90.36	104.67	121.22	12.89	14.31	16.02	17.98
BVPS Growth (%)	10.6	9.7	10.2	10.8	12.2	2.7	8.6	8.8	19.5	16.9	15.8	15.8	18.1	10.9	12.0	12.2
RoRWA (%)	2.05	2.25	2.51	2.68	2.05	1.95	2.03	2.07	2.67	2.81	3.11	3.28	1.57	1.80	2.07	2.13
<b>Tier 1 ratio (%)</b>	<b>10.9</b>	<b>11.1</b>	<b>11.2</b>	<b>11.5</b>	<b>11.9</b>	<b>11.3</b>	<b>11.3</b>	<b>12.9</b>	<b>10.4</b>	<b>11.3</b>	<b>12.1</b>	<b>13.7</b>	<b>10.2</b>	<b>10.0</b>	<b>10.0</b>	<b>10.3</b>
Core Tier 1 ratio (%)	10.9	11.1	11.2	11.5	11.9	11.3	11.3	12.9	10.4	11.3	12.1	13.7	9.5	9.4	9.5	9.8
CAR (%)	16.9	16.8	16.7	16.8	16.3	15.2	15.0	15.2	16.0	16.5	17.0	18.1	16.3	15.4	14.9	14.7
<b>Loan to Deposit ratio (%)</b>	<b>121</b>	<b>118</b>	<b>118</b>	<b>117</b>	<b>87</b>	<b>88</b>	<b>89</b>	<b>89</b>	<b>95</b>	<b>94</b>	<b>94</b>	<b>95</b>	<b>91</b>	<b>92</b>	<b>93</b>	<b>95</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (THB)</b>	2.41	3.00	3.49	4.05	17.30	19.36	21.16	23.59	14.72	17.56	20.43	23.64	1.82	2.35	2.86	3.26
% Impact from																
<b>Loan Growth: +1% Chg</b>		1.6	1.5	1.5		0.9	0.9	0.9		0.9	0.9	0.8		1.1	1.0	1.0
<b>NIM: +10bps Chg</b>		4.6	4.3	4.1		5.3	5.3	5.1		3.9	3.6	3.5		5.6	5.1	4.8
<b>Cost Income %: +1% Chg</b>		3.0	2.8	2.7		2.0	2.0	1.9		2.2	2.2	2.1		2.2	2.0	1.9
<b>Provisions/Loans: +10bps Chg</b>		4.1	3.7	3.5		3.9	3.7	3.7		2.8	2.5	2.4		4.2	3.7	3.6
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	3.96	4.00	4.04	4.09	2.43	2.43	2.46	2.51	3.35	3.34	3.39	3.40	2.78	2.73	2.71	2.76
Total operating income	6.06	6.02	6.07	6.14	3.77	3.72	3.72	3.75	5.49	5.50	5.63	5.68	3.88	3.80	3.75	3.79
Operating expenses	-3.05	-2.97	-2.90	-2.84	-1.67	-1.61	-1.59	-1.56	-2.47	-2.38	-2.36	-2.31	-1.67	-1.60	-1.55	-1.53
Op profit before provisions	3.01	3.05	3.17	3.30	2.10	2.11	2.13	2.19	3.02	3.12	3.27	3.37	2.21	2.20	2.19	2.27
Provisions	-1.13	-1.01	-1.00	-0.99	-0.32	-0.26	-0.26	-0.26	-0.44	-0.48	-0.45	-0.43	-0.72	-0.48	-0.30	-0.29
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.43	-0.41	-0.43	-0.46	-0.32	-0.37	-0.37	-0.39	-0.59	-0.53	-0.56	-0.59	-0.37	-0.33	-0.37	-0.39
<b>Net profit (ROA)</b>	<b>1.45</b>	<b>1.63</b>	<b>1.73</b>	<b>1.84</b>	<b>1.46</b>	<b>1.47</b>	<b>1.49</b>	<b>1.54</b>	<b>1.85</b>	<b>1.96</b>	<b>2.09</b>	<b>2.18</b>	<b>1.12</b>	<b>1.38</b>	<b>1.52</b>	<b>1.60</b>
Leverage (x)	9.9	9.8	9.8	9.7	9.4	9.4	9.6	9.5	12.2	11.0	10.6	10.1	14.5	13.2	12.9	12.5
<b>ROE</b>	<b>13.6</b>	<b>15.3</b>	<b>16.2</b>	<b>17.1</b>	<b>12.8</b>	<b>13.3</b>	<b>13.8</b>	<b>14.1</b>	<b>20.7</b>	<b>21.0</b>	<b>21.0</b>	<b>20.9</b>	<b>15.2</b>	<b>17.3</b>	<b>18.9</b>	<b>19.2</b>

Source: Company Reports and Citi Research Estimates

Figure 324. Thailand – Bank Earnings Forecasts and Key Assumptions (Local Currency Millions Unless Stated)

	SCB				TISCO				TMB				Sector (7 banks)			
	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E	FY12A	FY13E	FY14E	FY15E
<b>Loan Growth (%)</b>	19.7	14.5	12.3	10.0	34.2	20.8	8.9	9.0	13.9	9.6	10.9	9.8	11.9	12.2	11.2	9.9
Net Interest Margin (bps)	318	314	313	312	278	284	276	278	261	285	291	294	318	317	317	319
<b>Net Interest Income (THB m)</b>	<b>62,105</b>	<b>72,479</b>	<b>81,412</b>	<b>90,832</b>	<b>7,044</b>	<b>8,951</b>	<b>9,880</b>	<b>10,771</b>	<b>17,065</b>	<b>19,191</b>	<b>20,792</b>	<b>22,715</b>	<b>296,225</b>	<b>334,154</b>	<b>368,553</b>	<b>408,441</b>
NII Growth (%)	22.9	16.7	12.3	11.6	2.0	27.1	10.4	9.0	19.9	12.5	8.3	9.2	13.2	12.8	10.3	10.8
<b>Non Interest Income (THB m)</b>	<b>40,880</b>	<b>45,764</b>	<b>48,969</b>	<b>53,186</b>	<b>6,138</b>	<b>7,255</b>	<b>7,239</b>	<b>7,402</b>	<b>7,628</b>	<b>8,343</b>	<b>9,061</b>	<b>9,798</b>	<b>164,254</b>	<b>180,737</b>	<b>196,946</b>	<b>215,435</b>
Non-II Growth (%)	0.9	11.9	7.0	8.6	47.4	18.2	-0.2	2.3	15.9	9.4	8.6	8.1	11.3	10.0	9.0	9.4
-Fee Income (THB m)	20,456	22,954	24,619	26,780	4,129	5,337	5,616	5,779	4,676	5,736	6,404	7,141	94,676	108,026	120,279	133,862
-Fee Growth (%)	3.3	12.2	7.3	8.8	44.7	29.3	5.2	2.9	25.3	22.7	11.6	11.5	12.1	14.1	11.3	11.3
-Other Income (THB m)	20,424	22,810	24,350	26,406	2,009	1,918	1,623	1,623	2,951	2,607	2,657	2,657	69,578	72,711	76,668	81,572
-Other Income Growth (%)	-1.3	11.7	6.8	8.4	53.3	-4.5	-15.4	0.0	3.6	-11.7	1.9	0.0	10.2	4.5	5.4	6.4
<b>Total Income (THB m)</b>	<b>102,985</b>	<b>118,244</b>	<b>130,382</b>	<b>144,018</b>	<b>13,182</b>	<b>16,206</b>	<b>17,119</b>	<b>18,174</b>	<b>24,693</b>	<b>27,534</b>	<b>29,853</b>	<b>32,513</b>	<b>460,478</b>	<b>514,891</b>	<b>565,500</b>	<b>623,875</b>
Total Income Growth (%)	13.1	14.8	10.3	10.5	19.1	22.9	5.6	6.2	18.6	11.5	8.4	8.9	12.5	11.8	9.8	10.3
Non-II % of Total Income	39.7	38.7	37.6	36.9	46.6	44.8	42.3	40.7	30.9	30.3	30.4	30.1	35.7	35.1	34.8	34.5
<b>Operating Costs (THB m)</b>	<b>42,402</b>	<b>46,016</b>	<b>49,151</b>	<b>52,552</b>	<b>6,447</b>	<b>7,150</b>	<b>7,328</b>	<b>7,636</b>	<b>14,275</b>	<b>15,145</b>	<b>16,288</b>	<b>17,322</b>	<b>207,574</b>	<b>224,017</b>	<b>240,046</b>	<b>257,053</b>
Costs Growth (%)	15.0	8.5	6.8	6.9	30.6	10.9	2.5	4.2	4.6	6.1	7.5	6.4	9.1	7.9	7.2	7.1
Costs % of Total Income	41.2	38.9	37.7	36.5	48.9	44.1	42.8	42.0	57.8	55.0	54.6	53.3	45.1	43.5	42.4	41.2
<b>Pre-Provision Profit (THB m)</b>	<b>60,584</b>	<b>72,228</b>	<b>81,231</b>	<b>91,466</b>	<b>6,736</b>	<b>9,056</b>	<b>9,791</b>	<b>10,538</b>	<b>10,418</b>	<b>12,389</b>	<b>13,565</b>	<b>15,191</b>	<b>252,905</b>	<b>290,874</b>	<b>325,454</b>	<b>366,823</b>
PPP Growth (%)	11.9	19.2	12.5	12.6	9.7	34.4	8.1	7.6	45.2	18.9	9.5	12.0	15.4	15.0	11.9	12.7
PPOP/Avg Loans (Bps)	391.5	407.5	431.8	437.6	271.3	301.8	312.5	308.6	230.1	249.7	259.3	263.2	347.1	355.9	377.1	384.6
<b>Provision Charges (THB m)</b>	<b>9,396</b>	<b>10,053</b>	<b>10,525</b>	<b>10,525</b>	<b>1,922</b>	<b>3,150</b>	<b>2,809</b>	<b>3,044</b>	<b>8,751</b>	<b>4,138</b>	<b>4,214</b>	<b>4,538</b>	<b>60,333</b>	<b>53,840</b>	<b>52,713</b>	<b>55,363</b>
- NPL Ratio (%)	2.3	2.2	2.8	2.3	1.2	1.3	2.1	1.8	4.9	4.3	3.9	3.4	2.8	2.7	2.7	2.4
- Provision Coverage (%)	145	149	114	137	165	160	101	127	113	124	134	147	137	135	135	148
- Provisions bps of Loans	66	61	56	50	89	115	90	89	206	87	81	79	83	69	62	59
Others (THB m)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Pre-tax Profit (THB m)</b>	<b>51,187</b>	<b>62,175</b>	<b>70,706</b>	<b>80,941</b>	<b>4,813</b>	<b>5,906</b>	<b>6,982</b>	<b>7,494</b>	<b>1,667</b>	<b>8,251</b>	<b>9,352</b>	<b>10,654</b>	<b>192,572</b>	<b>237,034</b>	<b>272,741</b>	<b>311,460</b>
Tax (THB m)	10,682	12,124	14,141	16,188	1,081	1,181	1,396	1,499	36	1,650	1,870	2,131	41,295	46,892	54,300	62,009
Minorities (THB m)	285	252	295	325	28	125	125	125	26	0	0	0	3,007	3,638	4,179	4,719
<b>Net Profit (THB m)</b>	<b>40,220</b>	<b>49,800</b>	<b>56,270</b>	<b>64,428</b>	<b>3,705</b>	<b>4,600</b>	<b>5,461</b>	<b>5,870</b>	<b>1,605</b>	<b>6,601</b>	<b>7,481</b>	<b>8,523</b>	<b>148,270</b>	<b>186,504</b>	<b>214,262</b>	<b>244,732</b>
FD EPS (THB)	11.83	14.65	16.55	18.95	4.81	5.97	7.09	7.62	0.04	0.15	0.17	0.20	10.63	12.63	14.32	16.33
FD EPS Growth (%)	10.9	23.8	13.0	14.5	13.4	24.2	18.7	7.5	-60.0	311.1	13.3	13.9	24.9	18.8	13.3	14.1
BVPS (THB)	62.89	72.41	83.17	95.48	23.63	27.22	31.47	36.04	1.32	1.42	1.53	1.66	67.15	74.07	83.38	94.00
BVPS Growth (%)	15.0	15.1	14.9	14.8	12.3	15.2	15.6	14.5	9.8	7.7	8.1	8.6	15.0	10.3	12.6	12.7
RoRWA (%)	2.90	2.88	3.07	3.18	2.56	2.32	2.64	2.61	0.37	1.37	1.49	1.57	2.13	2.26	2.47	2.57
<b>Tier 1 ratio (%)</b>	<b>10.9</b>	<b>11.2</b>	<b>11.7</b>	<b>13.4</b>	<b>8.5</b>	<b>8.2</b>	<b>8.7</b>	<b>9.1</b>	<b>11.1</b>	<b>11.2</b>	<b>11.1</b>	<b>11.1</b>	<b>10.9</b>	<b>11.1</b>	<b>11.4</b>	<b>12.6</b>
Core Tier 1 ratio (%)	10.9	11.2	11.7	13.4	8.5	8.2	8.7	9.1	10.2	10.3	10.3	10.4	10.7	10.8	11.1	12.2
CAR (%)	16.5	16.4	16.6	17.8	12.8	11.9	12.2	14.4	18.2	17.9	17.7	17.7	16.4	16.2	16.2	16.8
<b>Loan to Deposit ratio (%)</b>	<b>96</b>	<b>97</b>	<b>96</b>	<b>96</b>	<b>113</b>	<b>107</b>	<b>107</b>	<b>107</b>	<b>91</b>	<b>92</b>	<b>94</b>	<b>94</b>	<b>96</b>	<b>96</b>	<b>96</b>	<b>96</b>
<b>EPS SENSITIVITY STUDY</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
<b>EPS Base Case (THB)</b>	11.83	14.65	16.55	18.95	4.81	5.97	7.09	7.62	0.04	0.15	0.17	0.20	10.63	12.63	14.32	16.33
% Impact from																
Loan Growth: +1% Chg		0.8	0.8	0.8		1.2	1.2	1.2		1.6	1.5	1.5		1.0	1.0	0.9
NIM: +10bps Chg		3.7	3.7	3.6		5.5	5.2	5.3		8.2	7.6	7.3		4.6	4.4	4.3
Cost Income %: +1% Chg		1.9	1.9	1.8		2.8	2.5	2.5		3.3	3.2	3.1		2.2	2.1	2.0
Provisions/Loans: +10bps Chg		2.9	2.7	2.6		5.2	4.6	4.7		6.0	5.6	5.4		3.5	3.2	3.1
<b>ROA/ROE DECOMP (%)</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>	<b>FY12A</b>	<b>FY13E</b>	<b>FY14E</b>	<b>FY15E</b>
Net interest income	3.02	3.00	2.99	2.99	2.76	2.80	2.72	2.74	2.38	2.60	2.64	2.67	2.94	2.95	2.97	3.00
Total operating income	5.00	4.90	4.79	4.74	5.16	5.08	4.72	4.62	3.44	3.73	3.79	3.82	4.58	4.55	4.56	4.59
Operating expenses	-2.06	-1.91	-1.80	-1.73	-2.52	-2.24	-2.02	-1.94	-1.99	-2.05	-2.07	-2.04	-2.06	-1.98	-1.93	-1.89
Op profit before provisions	2.94	2.99	2.98	3.01	2.64	2.84	2.70	2.68	1.45	1.68	1.72	1.79	2.51	2.57	2.62	2.70
Provisions	-0.46	-0.42	-0.39	-0.35	-0.75	-0.99	-0.77	-0.77	-1.22	-0.56	-0.53	-0.53	-0.60	-0.48	-0.42	-0.41
Non-recurring items	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax	-0.52	-0.50	-0.52	-0.53	-0.42	-0.37	-0.39	-0.38	-0.01	-0.22	-0.24	-0.25	-0.41	-0.41	-0.44	-0.46
<b>Net profit (ROA)</b>	<b>1.95</b>	<b>2.06</b>	<b>2.07</b>	<b>2.12</b>	<b>1.45</b>	<b>1.44</b>	<b>1.51</b>	<b>1.49</b>	<b>0.22</b>	<b>0.90</b>	<b>0.95</b>	<b>1.00</b>	<b>1.47</b>	<b>1.65</b>	<b>1.73</b>	<b>1.80</b>
Leverage (x)	11.4	11.1	10.9	10.5	16.9	17.8	16.7	15.7	13.1	12.7	12.7	12.7	11.4	11.0	10.9	10.5
<b>ROE</b>	<b>20.1</b>	<b>21.7</b>	<b>21.3</b>	<b>21.2</b>	<b>21.5</b>	<b>23.5</b>	<b>24.2</b>	<b>22.6</b>	<b>2.9</b>	<b>11.1</b>	<b>11.6</b>	<b>12.2</b>	<b>15.7</b>	<b>17.3</b>	<b>17.9</b>	<b>18.2</b>

Source: Company Reports and Citi Research Estimates







# Appendix A-1

## Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

## IMPORTANT DISCLOSURES

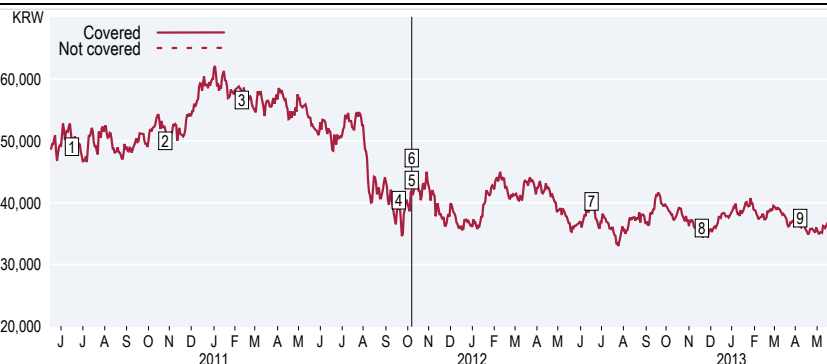
### KB Financial Group (105560.KS)

#### Ratings and Target Price History

#### Fundamental Research

Analyst: Michael S Chung

Covered since March 4 2013



	Date	Rating	Target Price	Closing Price
1	16-Jun-10	1L	*63,000.00	49,750.00
2	26-Oct-10	1L	*65,000.00	51,800.00
3	10-Feb-11	1L	*67,000.00	57,000.00

	Date	Rating	Target Price	Closing Price
4	20-Sep-11	1L	*57,000.00	39,100.00
5	7-Oct-11	Stock rating system changed		
6	7-Oct-11	*1	57,000.00	41,950.00

	Date	Rating	Target Price	Closing Price
7	18-Jun-12	1	*55,000.00	40,200.00
8	20-Nov-12	1	*50,000.00	34,900.00
9	8-Apr-13	1	*45,000.00	36,150.00

\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

### KB Financial Group (105560.KS)

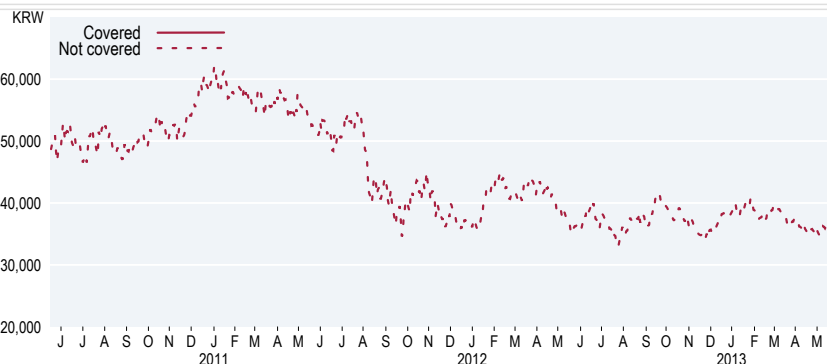
#### Ratings and Target Price History

#### Best Ideas Research

#### Relative Call (3 Month)

Analyst: Michael S Chung

Covered since March 4 2013



\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

### Hana Financial Group (086790.KS)

#### Ratings and Target Price History

#### Fundamental Research

Analyst: Michael S Chung

Covered since March 5 2013



	Date	Rating	Target Price	Closing Price
1	16-Jun-10	1L	*46,400.00	32,700.00
2	17-Feb-11	1L	*55,000.00	44,200.00
3	26-Sep-11	1L	*47,000.00	29,000.00

	Date	Rating	Target Price	Closing Price
4	7-Oct-11	Stock rating system changed		
5	7-Oct-11	*1	47,000.00	36,400.00
6	2-Dec-11	1	*57,000.00	40,700.00

	Date	Rating	Target Price	Closing Price
7	23-Nov-12	1	*53,000.00	32,300.00

\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

## Hana Financial Group (086790.KS)

### Ratings and Target Price History

#### Best Ideas Research

#### Relative Call (3 Month)

Analyst: Michael S Chung

Covered since March 5 2013



	Date	Rating	Target Price	Closing Price
1	21-Apr-11	*ADD MP	-	44,700.00
2	4-Nov-11	*REM MP	-	40,400.00

	Date	Rating	Target Price	Closing Price
3	4-Apr-12	*ADD MP	-	44,200.00
4	5-Mar-13	*REM MP	-	40,350.00

\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

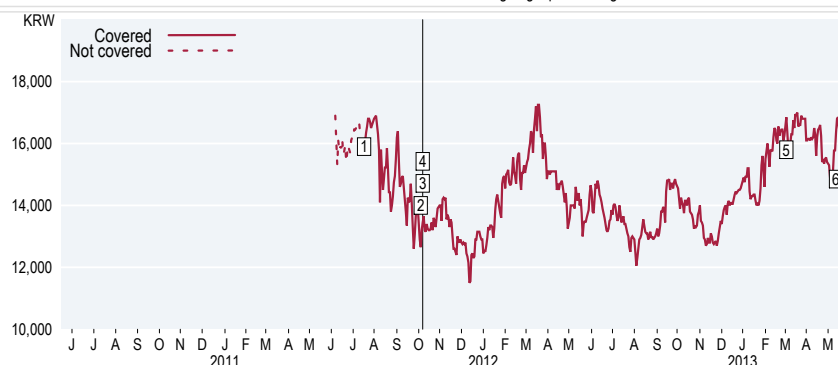
## DGB Financial Group (139130.KS)

### Ratings and Target Price History

#### Fundamental Research

Analyst: Michael S Chung

Covered since March 4 2013



	Date	Rating	Target Price	Closing Price
1	18-Jul-11	*1M	*21,500.00	16,050.00
2	5-Oct-11	1M	*18,300.00	12,650.00

	Date	Rating	Target Price	Closing Price
3	7-Oct-11	Stock rating system changed		
4	7-Oct-11	*1H	18,300.00	13,450.00

	Date	Rating	Target Price	Closing Price
5	4-Mar-13	*2H	18,300.00	16,850.00
6	13-May-13	2H	*18,700.00	16,350.00

\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

## DGB Financial Group (139130.KS)

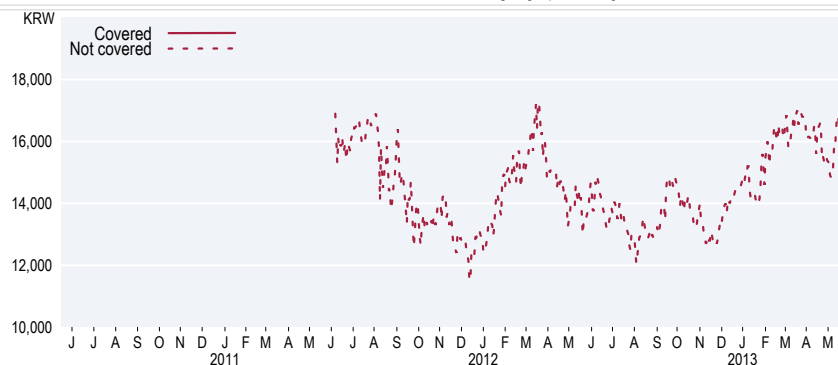
### Ratings and Target Price History

#### Best Ideas Research

#### Relative Call (3 Month)

Analyst: Michael S Chung

Covered since March 4 2013



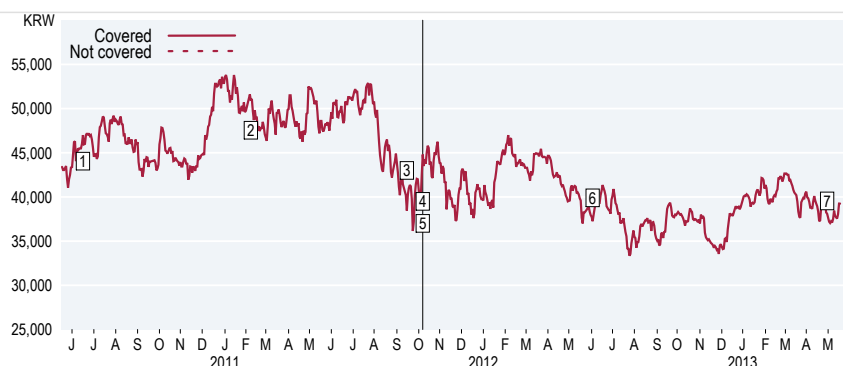
\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

## Shinhan Financial Group (055550.KS)

### Ratings and Target Price History Fundamental Research

Analyst: Michael S Chung  
Covered since March 4 2013



	Date	Rating	Target Price	Closing Price
1	16-Jun-10	1L	*55,700.00	47,000.00
2	8-Feb-11	1L	*60,000.00	50,900.00
3	15-Sep-11	1L	*54,000.00	38,450.00

	Date	Rating	Target Price	Closing Price
4	7-Oct-11	Stock rating system changed		
5	7-Oct-11	*1	54,000.00	44,800.00
6	4-Jun-12	1	*51,000.00	37,250.00

	Date	Rating	Target Price	Closing Price
7	30-Apr-13	1	*49,000.00	38,100.00

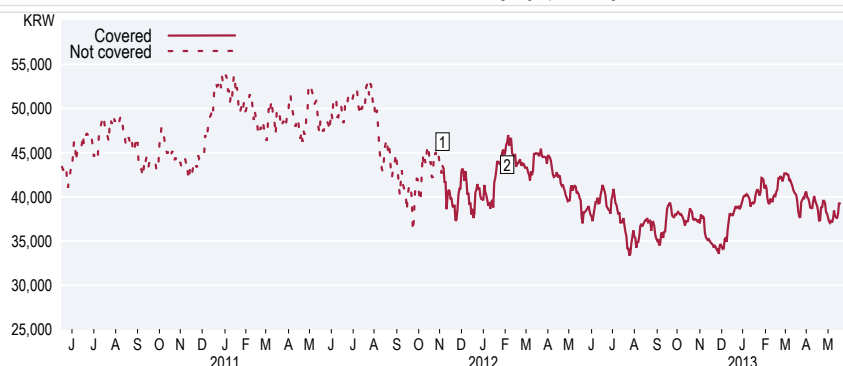
\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

## Shinhan Financial Group (055550.KS)

### Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Michael S Chung  
Covered since March 4 2013



	Date	Rating	Target Price	Closing Price
1	4-Nov-11	*ADD MP	-	43,500.00

	Date	Rating	Target Price	Closing Price
2	3-Feb-12	*REM MP	-	46,150.00

\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

## Industrial Bank of Korea (024110.KS)

### Ratings and Target Price History Fundamental Research

Analyst: Michael S Chung  
Covered since March 5 2013



	Date	Rating	Target Price	Closing Price
1	16-Jun-10	*2M	*17,000.00	15,250.00
2	21-Apr-11	2M	*19,500.00	17,800.00
3	6-Sep-11	2M	*17,000.00	14,650.00

	Date	Rating	Target Price	Closing Price
4	30-Sep-11	2M	*15,500.00	14,000.00
5	7-Oct-11	Stock rating system changed		
6	7-Oct-11	*2H	15,500.00	13,950.00

	Date	Rating	Target Price	Closing Price
7	30-Apr-13	2H	*15,000.00	12,600.00

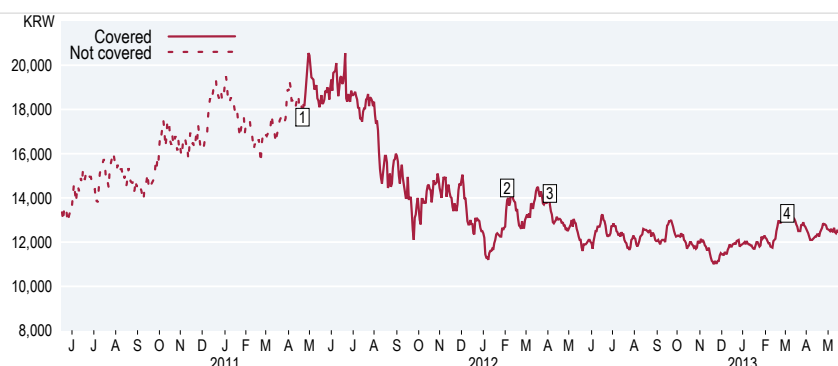
\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

## Industrial Bank of Korea (024110.KS)

### Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Michael S Chung  
Covered since March 5 2013



	Date	Rating	Target Price	Closing Price
1	21-Apr-11	*ADD LP	-	17,800.00
2	3-Feb-12	*REM LP	-	13,900.00

\* Indicates change

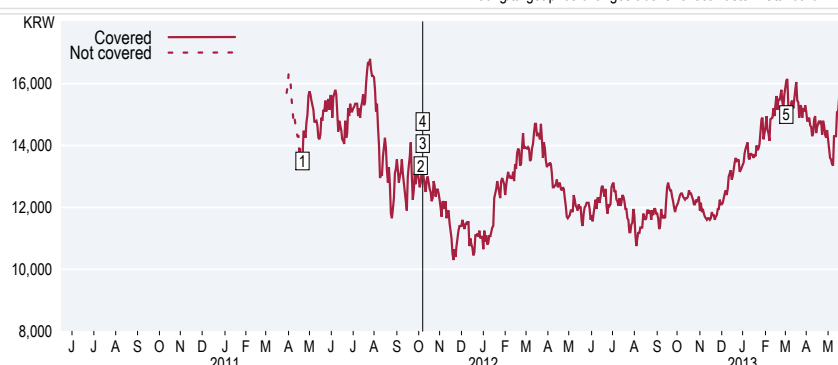
	Date	Rating	Target Price	Closing Price
3	4-Apr-12	*ADD LP	-	13,700.00
4	5-Mar-13	*REM LP	-	13,050.00

Rating/target price changes above reflect Eastern Standard Time

## BS Financial Group (138930.KS)

### Ratings and Target Price History Fundamental Research

Analyst: Michael S Chung  
Covered since March 4 2013



	Date	Rating	Target Price	Closing Price
1	21-Apr-11	*1M	*19,300.00	13,500.00
2	5-Oct-11	1M	*17,000.00	12,800.00

\* Indicates change

	Date	Rating	Target Price	Closing Price
3	7-Oct-11	Stock rating system changed	-	-
4	7-Oct-11	*1	17,000.00	13,350.00

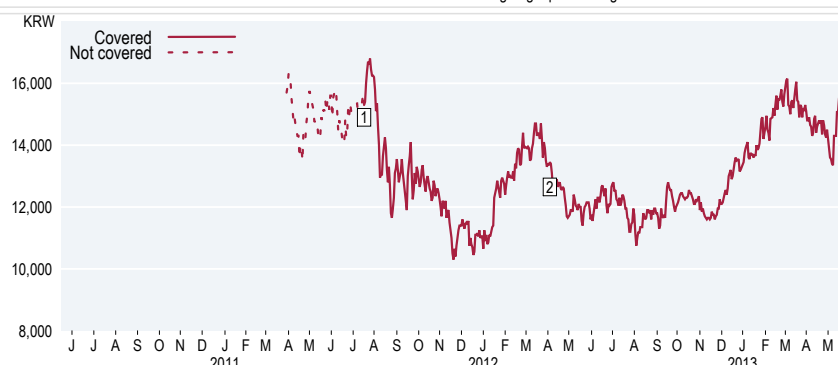
	Date	Rating	Target Price	Closing Price
5	4-Mar-13	*2	17,000.00	16,100.00

Rating/target price changes above reflect Eastern Standard Time

## BS Financial Group (138930.KS)

### Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Michael S Chung  
Covered since March 4 2013



	Date	Rating	Target Price	Closing Price
1	18-Jul-11	*ADD MP	-	15,300.00

\* Indicates change

	Date	Rating	Target Price	Closing Price
2	4-Apr-12	*REM MP	-	13,450.00

Rating/target price changes above reflect Eastern Standard Time

Citigroup Global Markets Inc. owns a position of 1 million USD or more in the debt securities of Standard Chartered PLC

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53%	49%	43%	65%	49%	51%

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