

MOODY'S

INVESTORS SERVICE

BANKING SYSTEM OUTLOOK

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Banking System Outlook: India

We have changed our outlook on the Indian banking system for the next 12-18 months from stable to negative, as we expect the operating environment, capitalization levels, asset quality and profitability to deteriorate.

Summary Opinion

Moody's outlook for the Indian banking system is negative. This reflects our view of an increasingly challenging operating environment that will adversely affect asset quality, capitalization and profitability.

Operating environment: India's economic momentum is slowing because of high inflation, monetary tightening and rapidly rising interest rates. Under our baseline scenario, we currently assume that India's GDP growth will decelerate to about 7.5% in FY2011/12, from 8.6% in FY2010/11.

We also are concerned that a more adverse economic scenario is possible due to: (i) renewed concerns over the sustainability of the recovery in the US and Europe, and (ii) the increase in the borrowing program of the Indian government, which could drain funds away from the private credit market.

Asset Quality: In the current tightening environment, we anticipate asset quality to deteriorate over the next 12-18 months, thereby causing an increase in provisioning needs for the banks in FY2012 and FY2013.

In assessing the likely future direction of asset quality, we take into consideration that the average borrowing rates have risen by more than 200 basis points in FY2011, which has considerably reduced the repayment capacity of some corporate borrowers, especially small and medium enterprises. And deterioration in external demand would only exacerbate the pressure on many Indian firms whose businesses rely on exports.

As discussed in more detail in the report, our adverse scenario analysis (mild stress test) indicates that losses associated with an increase in non-performing loans (NPLs) to 7% would be entirely absorbed by profits and provisions, leaving capital unaffected. However, our analysis also shows that capital levels are considerably sensitive to a more adverse scenario, especially at firms that have large concentrated exposures. Under our highly adverse scenario (severe stress), banks would see their capital ratios decline to below 6% on average.

Capitalization: We expect loan growth to be a strain on banks' capital over the horizon of this outlook. As monetary conditions tighten and economic activities slow, we expect bank loan growth to fall to 16%-18% in FY2012 and FY2013, from 21% in FY2011. Yet even at this slower pace, and aside from the risk of asset quality deterioration, we expect loan growth to push core Tier 1 capital ratio to below 9% by FY2013, suggesting persistent need for capital injection for the industry as a whole.

Public sector banks have received equity injections from the government to support their double-digit loan growth over the past year, and the government has openly stated its commitment to support public banks and infused equity in FY2011. However, we are concerned by the timing, amount, and the form of support it will provide in the future. The fact that the government could face tighter fiscal constraints from the recent increase in its fiscal deficit only adds to these uncertainties. In contrast, private sector banks have raised capital from time to time and most of them have sufficient capital to maintain their growth and provisioning requirements over the next two years.

Profitability: Over the past few years, the increase in net interest margins, as a result of lending rates being re-priced ahead of the deposit rates in a tightening cycle, has helped Indian banks' profitability. The higher margins have also helped offset increases in both the provisioning costs for non-performing loans and the provision cover mandated by regulators. As a result, in FY2011, banks reported return on assets of 1.03% and pre-provision profits/average total assets of 2.21%, both marginally higher than the previous year. However, we expect profitability to come under pressure due to lower interest margins as deposit rates re-price and get a further push from the latest liberalization on savings deposit rates.

While this could lead to some deterioration in profitability, it should be seen in the context of the improvement in financial metrics over the past few years and not as the beginning of a loss-making trend. Nonetheless, we are also aware of the potential for further liberalization measures that could significantly raise competitive pressure in the industry, with one example being a recent proposal from the Reserve Bank of India (RBI) to relax regulation on corporate ownership of banks.

On the positive side, we recognize Indian banks' stable customer deposit base and high level of government securities holdings provide them with a resilient funding and liquidity profile that buffer them against destabilizing shocks. We also expect the Indian government to remain committed towards providing support to both public and private banks. This translates to an average one notch uplift to the banks' debt and deposit ratings to Baa2, compared with their standalone base line credit assessment (BCA) of Baa3.

Bank ratings might come under pressure Our negative outlook on the Indian banking system contrasts with the stable outlook assigned to the standalone ratings (or bank financial strength ratings - BFSR) of 14 of the 15 banks we rate.

For banks that have weaker capital ratios on average and higher asset quality pressures for their individual rating level, the standalone ratings are likely to come under pressure as underscored by our downgrade of State Bank of India's BFSR to D+/Stable/Baa3 from C-/Stable/Baa2 on 4 October 2011.

Definition of Outlook

Banking system outlook publications represent Moody's view on the broad operating environment in which banks of a given system operate and, more specifically, on the influence that macroeconomic, competitive, and regulatory trends may have on banks' asset quality and capital and, ultimately, on their funding and profitability.

As such, a "stable" outlook is one that implies an environment that favors sustainable profitability and limited volatility for a period of at least four to six quarters (i.e., for the time horizon of our outlooks).

A "negative" outlook is one that is characterized by volatility and uncertain conditions.

A "positive" outlook is one in which banks are expected to rest on solid ground for the duration of our time horizon and in which banks are expected to grow steadily as a result of a favorable environment during that period.

Rating Universe

- » We rate 15 commercial banks in India (Figure 1) that together account for about 66% of the banking system's total assets as of March 2011. The Indian banking system is dominated by public sector banks, which account for around 75% of the market in terms of assets. Private banks have a market share of about 20%.
- » State Bank of India, a public sector bank, is the largest bank in India, with a market share of 17%, and ICICI Bank, which is the largest private sector bank and is the second-largest bank with a market share of 6%. The list of rated banks is given below.

FIGURE 1

Banking System Outlook: India

Name	Total assets as of Mar 2011 (INR ¹ Bn)	Domestic Market Share (Loans, in %)	Domestic Market Share (Deposits, in %)	Long-term Bank Deposit Rating (local currency) and Outlook	Standalone credit strength* and Outlook	Notches of uplift for external support
Public Sector Banks						
State Bank of India	12,237	17%	16%	Baa2/STA	D+/STA/Baa3	1
Punjab National Bank	3,783	6%	5%	Baa2/STA	D+/STA/Baa3	1
Bank of Baroda	3,584	5%	5%	Baa2/STA	D+/STA/Ba1	2
Bank of India	3,512	5%	5%	Baa2/STA	D+/STA/Ba1	2
Canara Bank	3,361	5%	5%	Baa2/STA	D+/STA/Baa3	1
IDBI Bank Limited	2,534	4%	3%	Baa3/STA	D-/STA/Ba3	3
Union Bank of India	2,360	3%	3%	Baa2/STA	D+/STA/Ba1	2
Central Bank of India	2,098	3%	3%	Baa3/STA	D-/STA/Ba3	3
Indian Overseas Bank	1,788	3%	3%	Baa3/STA	D/ STA/Ba2	2
Oriental Bank of Commerce	1,613	2%	2%	Baa2/NEG	D+/NEG/Ba1	2
Syndicate Bank	1,565	3%	2%	Baa2/STA	D+/STA/Ba1	2
Private Sector Banks						
ICICI Bank Limited	4,062	5%	4%	Baa2/STA	C-/STA/Baa2	0
HDFC Bank Limited	2,774	4%	4%	Baa2/STA	C-/STA/Baa2	0
Axis Bank Limited	2,427	3%	3%	Baa2/STA	C-/STA/Baa2	0
Yes Bank Limited	590	1%	1%	Baa3/STA	D+/STA/Ba1	1
Average ratings (asset-weighted)				Baa2/STA	D+/Baa3/Baa3	1.30

Notes: * The table shows banks' standalone credit strength as indicated by our Bank Financial Strength Ratings (BFSR) ratings (on a scale from A to E), the corresponding trend, and the BFSR mapped to our traditional long-term scale. A bank's standalone credit strength reflects its creditworthiness without considering support assumptions. Long-Term Bank Deposit Ratings reflect a bank's stand-alone credit strength and support considerations. For more detail, see [Moody's banking methodology webpage](#) (follow hyperlink).

Source: Moody's

- » The weighted average (asset weighted) stand-alone BFSR for our rated banks in India is D+, mapped to a Baseline Credit Assessment (BCA) of Baa3. We have a stable outlook on 14 of the 15 banks we rate.
- » The average long-term deposit rating for our rated Indian banks is Baa2/Prime-2.

¹ Indian Rupee

Key Developments since the last Banking System Outlook

- » **Continued monetary tightening:** The RBI, which is the regulator for Indian banks, has stepped up its fight against inflation, which was 9.7% as of September 2011. It raised its benchmark lending rate or repo rate by 2.50 percentage points between November 2010 and October 2011, to the current rate of 8.50%.
- » **Slowdown in GDP growth:** Monetary tightening, high inflation and rising interest rates have slowed real GDP growth to 7.7% in the first quarter of FY2012 from 8.6% in FY2011.
- » **Deregulation of interest rates on savings deposits:** The RBI increased interest rates on savings deposits to 4.0% in May from 3.50% earlier. In its latest monetary policy review on 25 October, RBI has deregulated the interest rates offered by banks on savings deposits.
- » **Draft guidelines for new bank licenses:** The RBI issued draft guidelines on 29 August 2011 that propose allowing the issuance of new bank licenses to Indian corporations and conversion of existing non-bank finance companies to banks. This is a deviation from RBI's long-held position that bars any corporate from running or interfering with banks. However, we do not expect this proposal to come to fruition within the horizon of our outlook.
- » **Some public sector banks received additional capital infusions from the government:** The Indian government infused equity in a number of public sector banks during FY2011 to boost their Tier 1 capital. It has indicated its intention to follow up with further equity infusion and aims to raise public banks' Tier 1 capital ratio to at least 8% and increase its shareholding to at least 58%.
- » **Increased NPL provision coverage requirement:** The RBI has also increased minimum provision requirements. Provisioning for substandard assets is now 15% versus 10% previously, and for doubtful assets is now 25% versus 20% previously. The unsecured portion of doubtful assets and loss assets continue to carry 100% provisions.

Key Drivers

Strengths

- » Favorable funding profile - Strong retail deposit franchise, minimal dependence on wholesale funds
- » Sound liquidity, driven by the large portfolio of government securities
- » Strong demonstrated sovereign support

Weaknesses

- » Asset quality challenges driven by rising interest rates and slowing economic growth
- » Recent sharp depreciation in the Indian rupee could hurt borrower's repayment capacity
- » High inflation and continually overshooting fiscal deficit target could push up market interest rates
- » Challenges of improving core Tier 1 capital in compliance to proposed Basel III norms and support future loan growth.

Uncertainties

- » The timing and the magnitude of future government equity infusion to public sector banks and the portion of the capital that the banks will need to raise from the markets are uncertain.
- » Regulatory uncertainty over implementation of Basel III norms and IFRS accounting standards.

Key System Performance Measures

Operating Environment

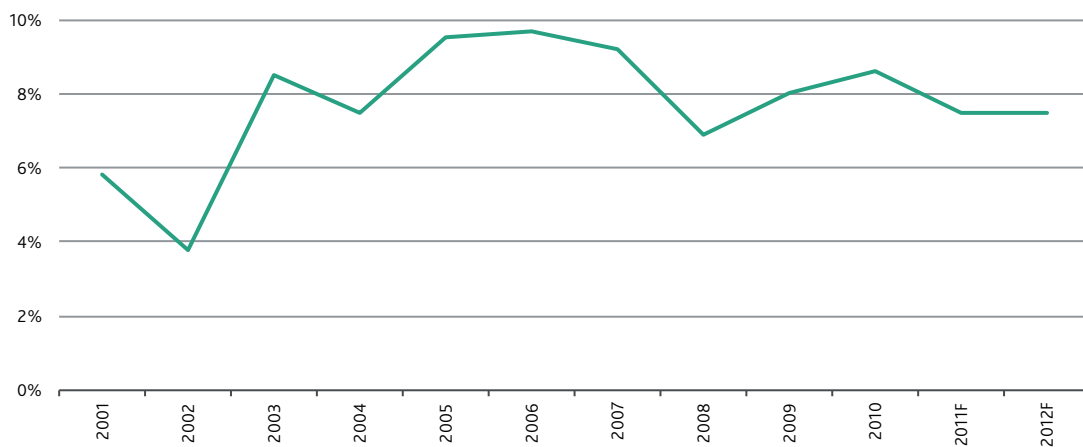
Economic Environment

Muted GDP growth

In keeping with our baseline scenario, we now expect the Indian economy to grow around 7.5% in FY2012, a slowdown from growth of 8.6% in FY2011 and more than 9% before the global financial crisis (Figure 2).

Specifically, while the combination of high inflation and high interest rates at home has undermined domestic demand growth, we expect a weak global economy to translate into subdued export growth.

FIGURE 2
Real GDP growth rates



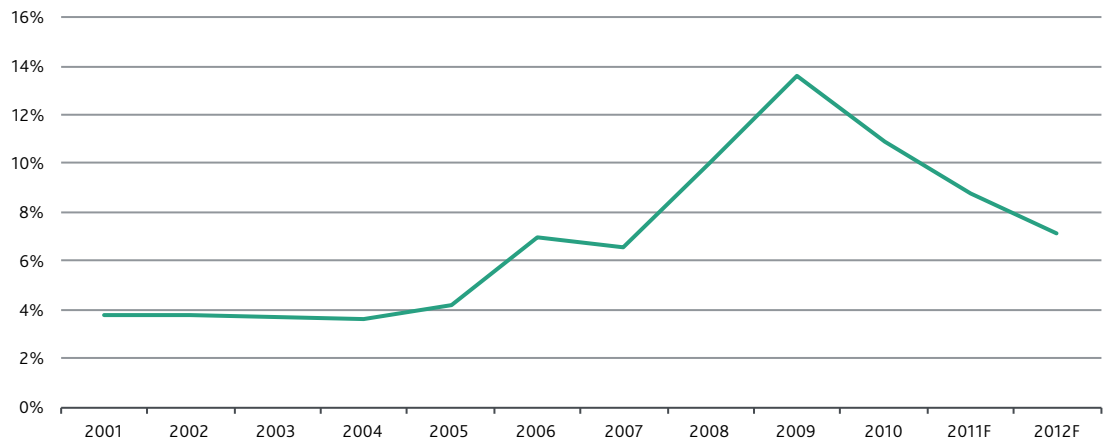
Source: Moody's

Challenging operating environment driven by stubborn inflation

A combination of supply and demand has pushed inflation above 9% for most of the past year (Figure 3). This has forced the RBI to accelerate its monetary policy tightening and raise its policy rate by more than 300 basis points since March 2010 (Figure 4).

Despite the recent concerns over the weakness in global economic growth, the RBI is unlikely to change its hawkish stance as long as inflation remains stubbornly high.

FIGURE 3
Inflation



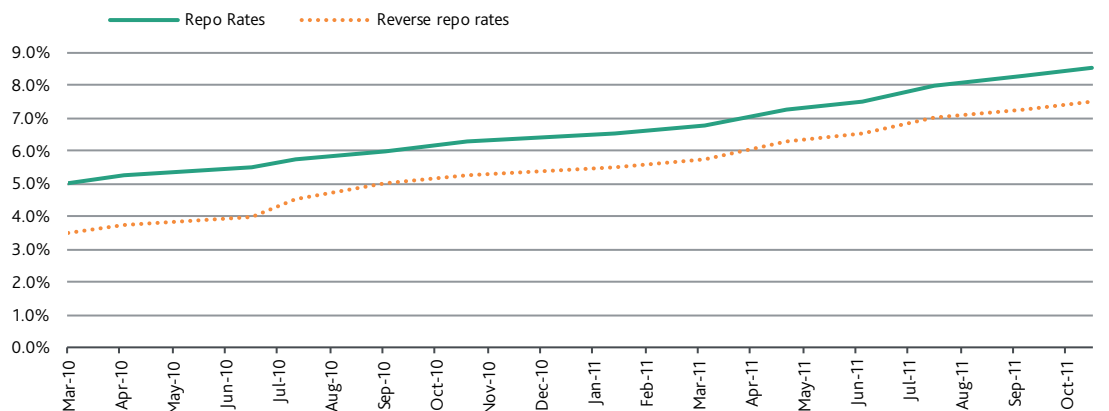
Source: Moody's

RBI's continuous monetary tightening and the increase in interest rates

Moreover, in combination with a likely widening of the budget deficit over the course of the year, the government's recent upwards revision of its borrowing target by INR530 billion for FY2012, is adding further pressure to interest rates.

The government announced this increase in borrowing target on 28 September 2011; on the next day, 10-year benchmark yields jumped 10 basis points to 8.44%. During October 2011, benchmark yields further hardened and peaked to 8.89%, which is very close to the three-year peak of 8.82%.

FIGURE 4
Interest rates

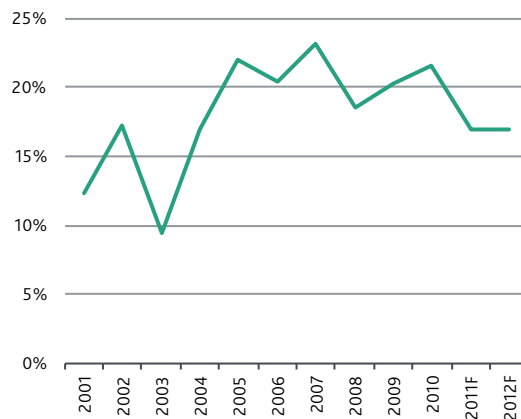


Source: Reserve Bank of India

The benchmark yields are likely to remain elevated over the next few months owing to increased government bond issuance. Previously, the benchmark yields crossed 9% after Lehman's bankruptcy in September 2008, to a peak at 9.55%.

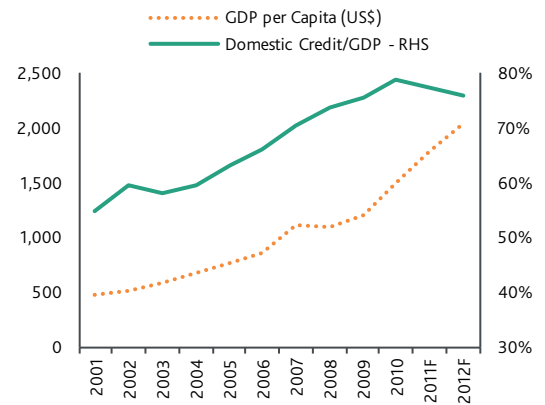
The sudden announcement of the increase in the borrowing program underscores the growing pressure on the fiscal deficit and suggests a slower path to fiscal consolidation than previously expected.

FIGURE 5

Growth in domestic credit

Source: Moody's

FIGURE 6

Bank loans/GDP & Per Capita Income

Source: Moody's

Slowdown in credit growth

We believe that these developments will on balance result in slower credit growth over the period of this outlook. Anecdotal evidence suggests that some companies are beginning to react to tightening monetary conditions by cutting back on fresh investment projects and are only continuing with investments that are critical to maintain business volumes.

High local interest rates are also prompting the larger corporates to raise funds internationally. We expect these developments to slow down business loan growth to 16%-18%, from 21% in FY2011 (Figure 5).

On the other hand, household loan growth continues to grow at a robust rate of 15%, up from 8% a year earlier, driven by the growing demand for mortgage loans, vehicle loans and personal loans. The bank loans/GDP ratio (Figure 6) has risen continuously in the last decade, from 55% in FY2001 to 76% in FY2011, a trend that highlights the rising per capita income and financial deepening. However, these cyclical developments point to moderation ahead.

Competitive Environment*Public sector banks have maintained their market share so far*

The Indian banking sector continues to be dominated by public sector banks, which have seen their market share exceed 75% in recent years in terms of both total deposits and loans (Figure 7 & 8). This is despite the fact that the so-called "new generation" private banks have been trying to take away market share from the public sector banks by launching newer banking products and services.

One of the reasons for the growth is that the global financial crisis increased risk aversion among depositors, leading them towards public sector banks that are perceived to enjoy stronger government support, at the expense of foreign banks. As the global environment remains fragile, we expect this preference for safety will continue and strengthen the bias for public sector banks.

But deregulation could increase competitive pressure

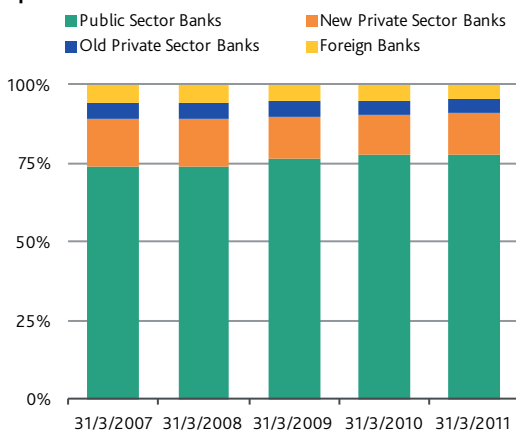
Latest developments suggest that competition will intensify. On October 25, the RBI deregulated interest rates on savings accounts, which account for a quarter of the system deposits. We believe that a direct consequence of this policy change is that banks can, and will, offer higher interest rates to compete for savings deposits.

Following deregulation, smaller private banks (total 3% market share) have been the first movers, with some having already raised their interest rates to 6% from 4%. Yet public banks and the larger private banks have opted for a wait-and-see approach for now. In our view the larger banks (public or private) are in a stronger competitive position as other smaller banks will have to match any interest increase they announce these deposits. On the other hand, the new regime should allow individual banks to develop their own niche by finding the best combination of interest rates and banking services to offer, adding diversity to the industry.

Another development that could raise the bar on competition over the next 18-36 months is a relaxation in the regulation for new entrants. In August 2011, the RBI released a set of draft guidelines proposing that large Indian conglomerates be allowed to own and run banks, and existing non-banking finance companies be allowed to convert themselves into banks. This marks a shift in RBI's long-held position that bars any corporate from running a bank or interfering with a bank. Nonetheless, we do not expect this proposal to come to fruition within the horizon of this outlook.

FIGURE 7

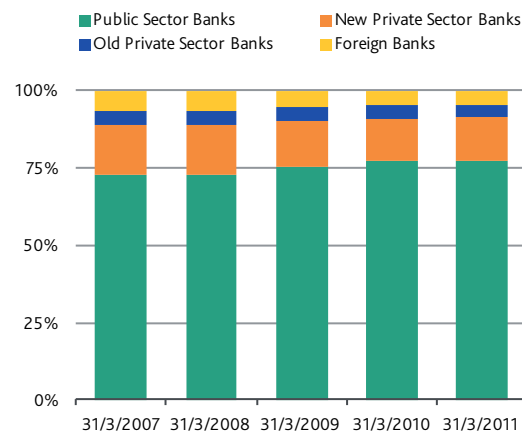
Deposits



Source: Reserve Bank of India

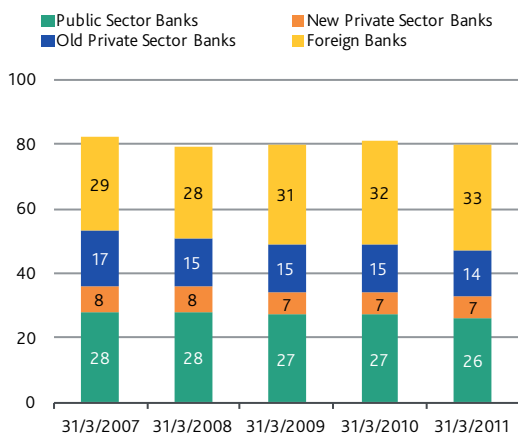
FIGURE 8

Loans



Source: Reserve Bank of India

FIGURE 9

Number of banks

Source: Reserve Bank of India

The Indian Banking Sector has witnessed mergers and consolidation in recent years

We believe the current operating environment and competitive dynamics could lead to further consolidation.

Many local banks, both public and private, have consolidated in the last five years (Figure 9). For example two of SBI's banking subsidiaries, State Bank of Indore and State Bank of Saurashtra, merged with their parent.

Systemic Support and Regulatory Environment

We consider that India is a country in which systemic support remains high. The Indian government provides strong support to the banking sector despite the absence of an explicit guarantee on deposits. Its support comes in the form of equity infusion for public sector banks, and liquidity line provision for private sector banks.

In FY2011, the government provided equity support of more than INR200 billion to public sector banks as part of a plan to increase Tier 1 capital to a minimum of 8% and government holding to a minimum of 58% in public sector banks.

Since the second round of bank nationalization in 1980, the government's support has been timely even for small private sector banks that were facing financial troubles. These troubled banks were initially provided regulatory support and then merged with larger public sector banks or private sector banks.

We believe these support measures will continue and remain in place over the horizon of this outlook. Even though India is a G20 country, there seems to be little interest in imposing losses on private sector bank creditors as part of a troubled bank resolution regimes. The strong support results in uplifts of up to three notches in our debt and deposit ratings relative to our standalone rating.

Asset Quality and Capital

We expect deterioration in asset quality over the 18-month horizon of this outlook, a reversal from the improvement in FY2011, due to a slowdown in economic growth and higher interest rates, given the central bank's hawkish policy and the government's fiscal slippage.

We expect SMEs and the export sector to have the highest exposure to repayment pressures. The sharp depreciation in the Indian rupee recently is also indicative of a period of capital flow volatility that could put some borrowers with foreign liabilities at risk.

In the next 12-18 months, given the economic environment, credit growth is likely to slow down but would remain in the double digits. The higher provision required for the deterioration in asset quality would increase risks on net income and therefore internal capital generation.

Although we do not expect industry-wide losses, these factors will put downward pressure on the banking industry's capital ratios, which have already declined over the past year despite the government's fresh equity infusion to public sector banks.

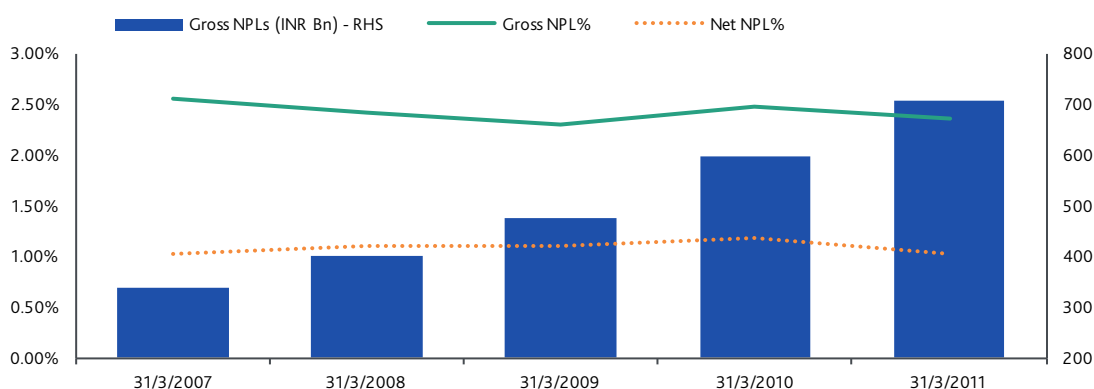
Asset quality

Strong loan growth masks a jump in NPLs

Headline NPL ratios improved in FY2011, when the gross NPL/gross loans ratio fell to 2.35% from 2.47% in FY2010, and the net NPL/net loans ratio also receded to 1.02% from 1.17%.

This improvement, however, was completely due to the strong 21% growth in loans last year. In absolute terms, gross NPLs increased in FY2011 to over INR700 billion from INR596 billion in FY2010 (Figure 10), driven by fresh NPLs from restructured accounts and a shift by the banks from manual- to system-based NPL recognition.

FIGURE 10
Asset Quality



Source: Moody's

Further downside risks to asset quality in this outlook

The current risk is biased towards a further increase in NPLs in the next 12-18 months. Indian banks have restructured loans estimated at around 3.5% of the total outstanding loans. In the past, banks have witnessed the formation of NPLs of around 20% from this portfolio. We expect both the share of

restructured loans and the share of NPL formation to increase due to the deterioration in the operating environment.

Separately, the shift to system-based NPL recognition mandated by the RBI will also lead to an increase in NPL by removing the flexibility banks used to have in identifying NPLs under the previous manual system.

In addition, the increase in loans to the infrastructure sector, mainly the power sector, which faces uncertainties related to execution and project delays, could lead to an increase in NPLs and thereby downside risks to asset quality.

High loan concentrations added risk factor

Indian banks have high loan concentrations. They are allowed to lend up to 15% of their capital funds (Tier 1 and Tier 2) to a single corporate and up to 40% of their capital funds to the same conglomerate. If a corporate or a conglomerate belongs to an infrastructure sector (roads, ports, airports, oil & gas, etc) then the banks can lend up to 20% of their capital funds to a single corporate or 50% of their capital funds to a single conglomerate. Most banks operate near these limits and some of them have exceeded them.

We view these limits as too high and that they could expose banks to event risks associated with one single/group borrower, with recent concerns over banks' exposure to state-owned power sector companies being an example of such risks. Also, the absence of sub-limits (for various types of funded and non-funded limits) aggravates the situation.

Higher provision cover provides comfort

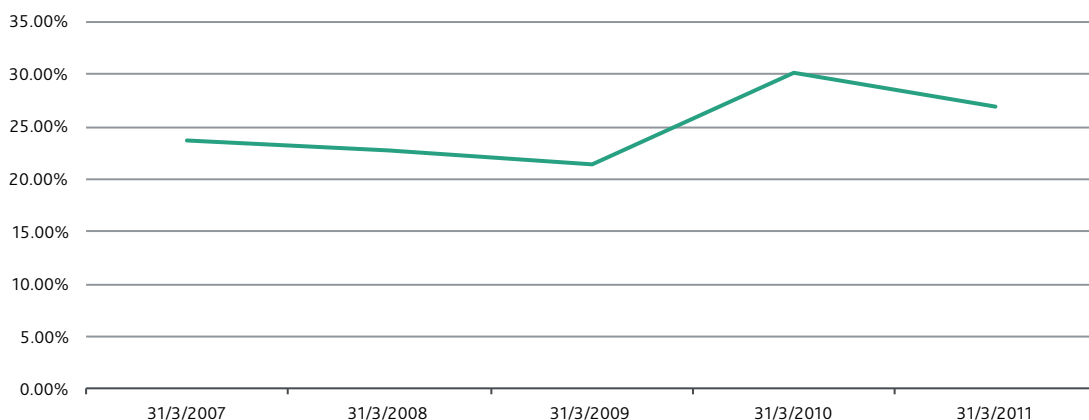
Banks have increased their provision cover in the past two years, following an RBI directive in FY2010 that required them to have a provision cover of 70% on gross NPLs by September 2010, versus the previous cover of 45%-55% (Figure 11).

As a result, the current industry provision cover stands at 65%-70%. However, State Bank of India could not achieve this provision cover due to its low profitability and weak asset quality, and requested the RBI for extra time to achieve this target.

The FY2011 results indicate that the other rated banks have achieved the required provision cover. In May, RBI further increased provisioning requirements for various NPL categories.

This drive to increase provisioning will help banks prepare for a likely deterioration in asset quality over the horizon of this outlook.

FIGURE 11
Loan Loss Provisions/Pre-Provision Income



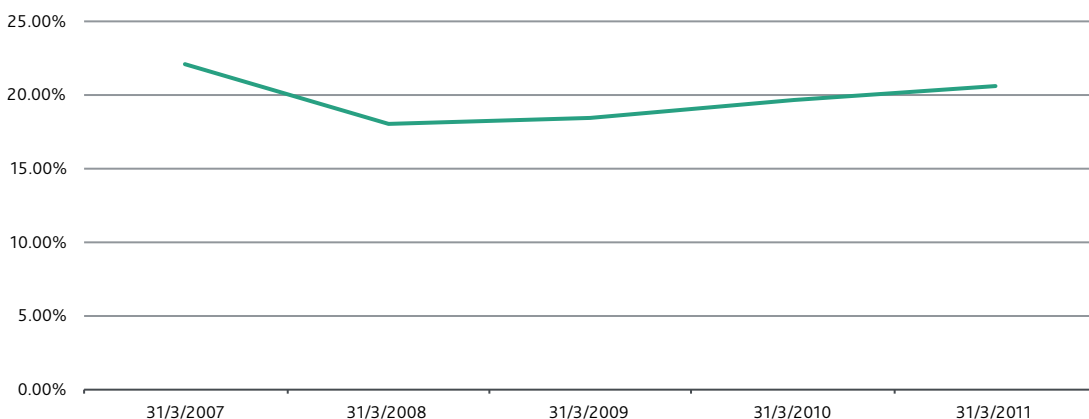
Source: Moody's

Deteriorating gross NPL/capital ratio

Despite Indian banks increasing provision cover, gross NPLs as a percentage to total equity and loan-loss reserves deteriorated to 21% in FY2011, from 20% in FY2010 (Figure 12).

While the deterioration in asset quality would affect the ratio, the impact is likely to be muted given the increase in the requirement for provisioning cover on gross NPLs.

FIGURE 12
Gross NPL / (Total equity + Loan loss reserves)



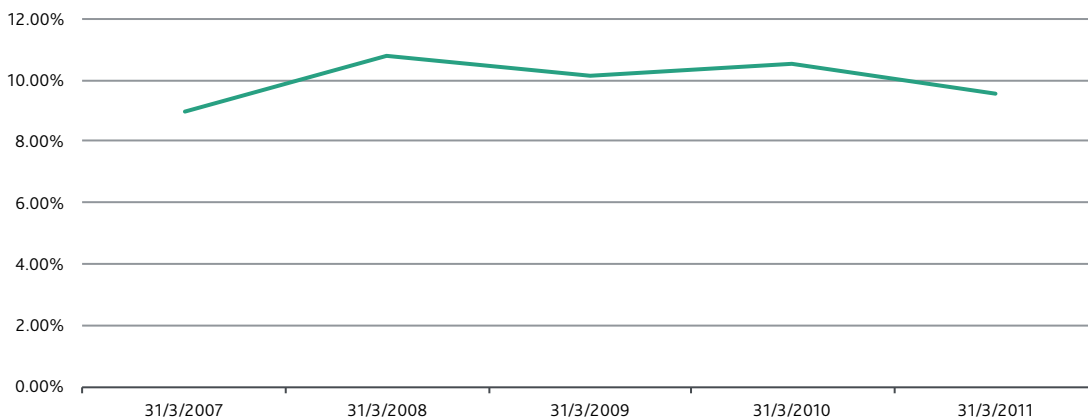
Source: Moody's

Capital

Declining core Tier 1 despite capital injection from government

Concerns remain over whether the current capitalization of Indian banks is enough to sustain the industry given the likely rise in NPLs. Despite the government's equity infusion of more than INR200 billion to public banks in FY2011, gross NPLs as a percentage of total equity and loan-loss reserves has deteriorated to 21%, and Tier 1 capital ratio declined to 9.5%, from 10.5% in FY2010 (Figure 13).

FIGURE 13

Core Tier 1 capital/RWA

Source: Moody's

This suggests that the increase in capital over the past year has not met the capital requirements of growing risk weighted assets and provisions required for the increase in NPLs.

Loan growth to further strain core Tier 1 capital

We expect the strain on capital to continue over the horizon of our outlook. Monetary tightening and rising interest rates have reduced our loan growth expectation to 16%-18% in FY2012 and FY2013 from 21% in FY2011. Even with this slowdown, we believe that Indian banks' internal capital generation will still fall short of meeting this pace of loan growth. With current capital level, we project a decline in core tier 1 capital ratio to below 9% by FY2013. As such, we believe Indian banks will need to raise fresh core tier I capital to support loan growth and to build a cushion for Basel III norms.

While the government has allocated another INR60 billion in equity infusion for public sector banks in FY2012, we believe that the timing of this infusion is uncertain and could be delayed as the government faces fiscal pressures. Recently, the government delayed providing additional capital to State Bank of India, which witnessed a significant decline of nearly two percentage points in its Tier 1 capital in FY2011. We believe that since the government will continue to face fiscal pressures over the next 12-18 months, further equity infusion plans for public sector banks are uncertain.

In contrast, private banks have raised capital from time to time and most of them have sufficient capital to maintain their growth and provisioning requirements over the next two years. We are witnessing many Indian banks passing enabling resolutions so that they can tap equity markets at an opportune time.

Low proportion of hybrid capital lowers the impact of proposed Basel III norms

We do not expect the implementation of Basel III norms to have a material impact on Indian banks' capitalization ratios as the core Tier 1 capital still comprises 95% of the industry's total Tier 1 capital.

While Indian banks have raised hybrid Tier 1 and Tier 2 capital before, the issuances were primarily in local currency and were bought by domestic investors with only few large banks like State Bank of India and ICICI Bank tapping the global markets for these instruments.

Stress test

Under our adverse scenario, stress applied to all Indian banks (see appendix 1 for assumptions), system gross NPLs would reach around 7% (probability of default proxy)².

Assuming loss given default of 45%, the expected loss would be around 3.1% of gross loans; of this, 1.3 percentage points would be absorbed by accumulated loan-loss provisions, while the rest would be absorbed by pre-provision income (3.6% of gross loans). This scenario thus has little impact on Tier 1 capitalization, which remains at a strong 9.5%.

Under our highly adverse scenario (severe stress case), we assume a gross NPL ratio (probability of default proxy) for Indian banks at around 12%³, combined with a loss given default of 60%, resulting in the overall expected loss of around 7.2% of total gross loans. The same scenario also discounts a drop in pre-provision income to 1.8% of gross loans, thus implying a 4.1 percentage-point-hit to the equity base after deducting loan-loss provisioning of 1.3 percentage points. This would push the system's core Tier 1 ratio to around 5.6%, compared with 9.5% as of March 2011.

These results thus warn of potential capital depletion in the system should the current operating environment deteriorate significantly. While this is not our base case scenario, recent weakening in growth sentiments clearly warns of the downside risk potential.

Peer comparison of Indian Banking system: Weighted Basel II - Tier 1 capital ratio

Indian banks rank at the low end versus their peers in Brazil, Russia, China, and Southeast Asia in terms of capitalization (Figure 14); the banks' Tier 1 capital ratio of 9.2% in 2010 was higher than only that of their peers in the Philippines (8.9%) and Vietnam (8.0%).

This is in line with our view that, while the system's capitalization position has improved from the level in mid-2000s, partly due to the government's capital injection, the improvement has been marginal and is not sufficient to protect the sector from challenges.

FIGURE 14
Tier 1 Capital – Basel II



Source: Moody's

² This assumption is above the latest reported problem-loan level, including restructured loans estimated at 3.5% of gross loans of 6%, as of March 2011

³ Though some individual Indian banks have a higher loan concentration, this is not reflected in the stress test, which suggests that the affected banks may see their losses reaching extreme levels long before the industry as a whole faces what the test would consider as critical thresholds.

Funding and Liquidity

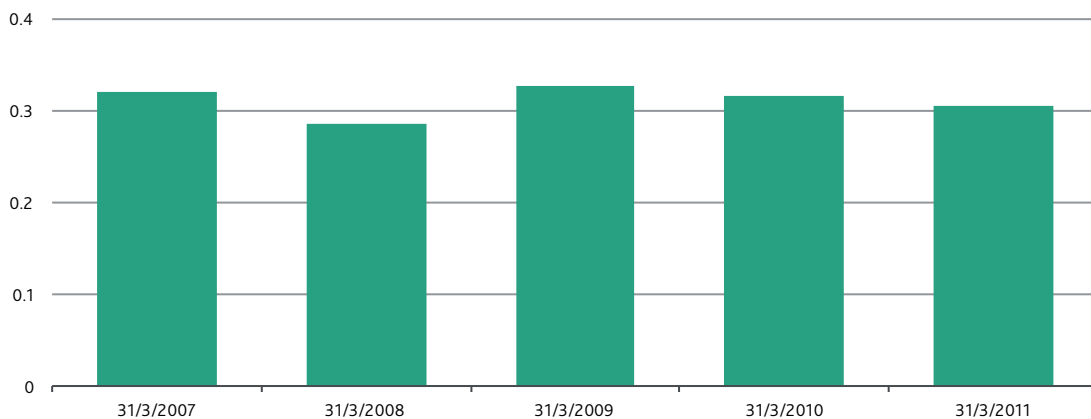
We expect funding to be the key strength for Indian banks, which are mainly funded by stable customer deposits and have a low proportion of interbank and wholesale funds.

Domestic currency liquidity levels are comfortable due to the high levels of government securities held by Indian banks, to meet the statutory liquidity ratio norms prescribed by the RBI.

Liquid assets were 31% of total assets as of March 2011 and have been more than 30% in the last three years (Figure 15). The system loan to deposit ratio was 79%. Customer deposits continued to account for over three quarters of total deposits and grew 20.6% in FY2011, in line with the loan growth of 21% in the same period.

FIGURE 15

Liquid Assets/Total Assets

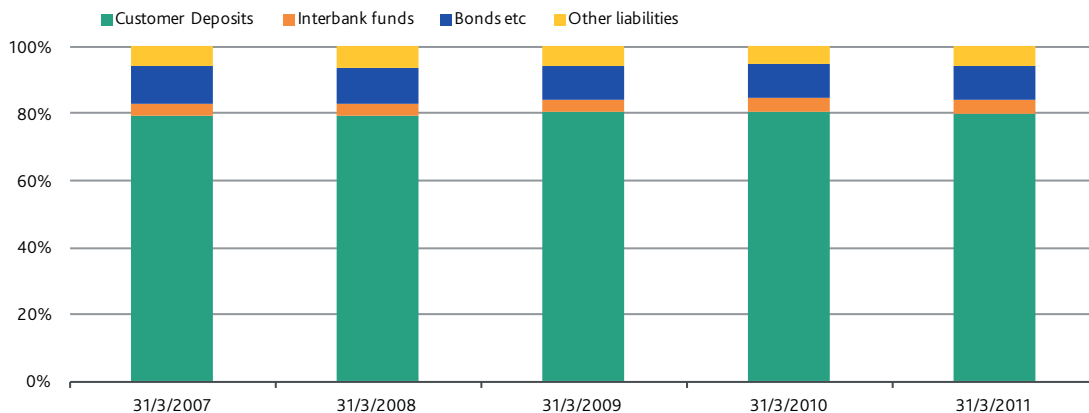


Source: Moody's

Low dependence on wholesale funds

Dependence on wholesale funds is low as shown by the negative market funds ratio and we have noted no large-ticket refinancing needs that require immediate attention. Customer deposits account for nearly 80% of total liabilities (Figure 16) with the top 20 depositors accounting for less than 10% of total customer deposits.

FIGURE 16
Funding Profile



Source: Moody's

Market funds, including inter-bank funds and borrowings, account for around 15% of total funding. In FY2011, deposit growth of 20% was sufficient to fund credit growth of 21%, providing stability to the overall funding profile.

We do not foresee any significant shift in Indian banks' deposit profile over the next 12-18 months, and expect deposit growth to be about 20%.

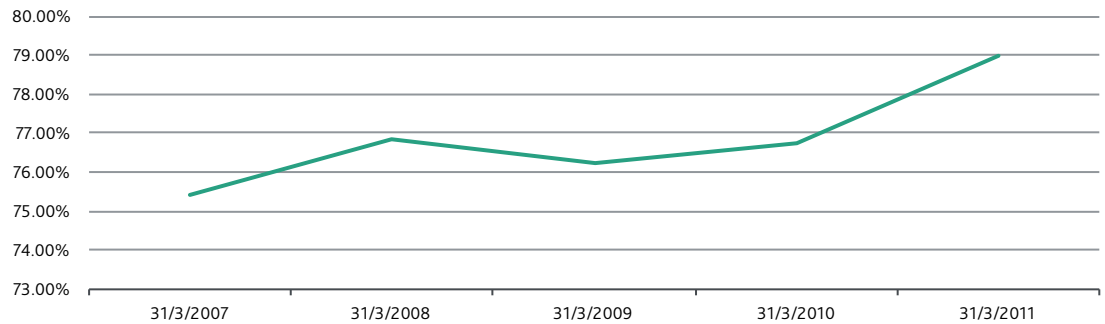
Nearly 35% of total deposits are in lower cost current/savings account, with the rest in term deposits. The recent deregulation of interest rates offered on savings accounts will add to the funding costs of banks and also increase competition amongst banks for the much sought after funding source.

With the interest rates increasing, banks may see a further shift towards term deposits, also adding to their funding costs. Local currency deposits constitute 99% of total deposits and are sourced locally, providing additional stability to the funding source of Indian banks.

In the absence of alternative saving products, we expect bank deposits to remain the key repository for household savings. The government is currently driving a financial inclusion program through banks to deepen the penetration of financial services to the population that is currently outside the banking system. The industry is also strengthening nationwide branch and ATM networks. These measures will further support the deposit profile and the funding base of Indian banks.

The system loan to deposit ratio increased to 79% in FY2011 as loan growth outpaced deposit growth (Figure 17).

FIGURE 17

Total Loan/Total deposit

Source: Moody's

But, we expect loan growth to moderate to 16%-18% over the next 12-18 months, while deposits growth will remain at 20%. This could result in a decline of 1.5 percentage points in the loan to deposit ratio, which could slip to 77.5% in FY2012 and possibly to 76% in FY2013.

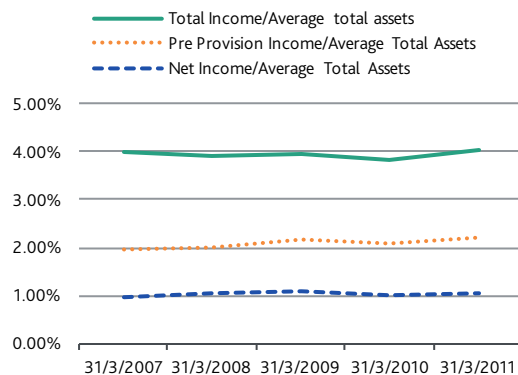
Indian banks have a matched foreign currency asset to foreign currency liability profile at 100%, due to regulatory controls set by the RBI on foreign currency positions of Indian banks. One percent of total deposits is in foreign currency and hence does not pose a significant risk to the funding or liquidity profile of Indian banks.

Profitability and Efficiency

Indian banks have been able to stay profitable as growth in net interest margins have helped offset increases in both provisioning costs/NPLs and provision cover mandated by the regulators. The return on average assets was 1.03% and pre-provision income as percentage of average total assets was 2.21% in FY2011, both marginally higher than FY2010. However, we expect profitability to decline due to lower net interest margins and higher provisioning needs as a result of a potential deterioration in asset quality.

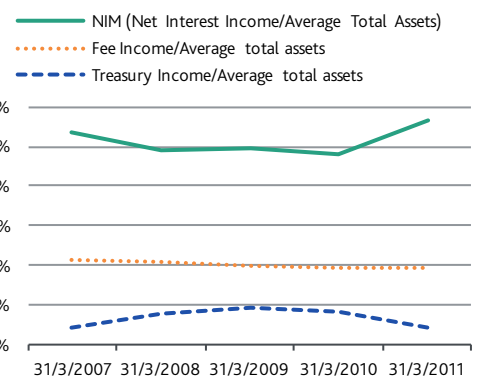
Profitability

FIGURE 18

Profitability

Source: Moody's

FIGURE 19

Profitability

Source: Moody's

Stable headline income failed to reflect higher interest margins

Profit indicators have been stable, with net income/average total assets staying at about 1% in recent years (Figure 18), although net interest margins grew by 43 basis points in FY2011 to 2.84% (Figure 19). This significant improvement was driven by rising interest rates in India. Since deposits are re-priced with a lag due to their fixed rate/fixed term nature, and loans are re-priced immediately, banks benefited from wider net interest margins in this re-pricing process.

Treasury income declined

However, the benefit the net interest margin growth has brought to the bottom-line was negated by a fall in treasury income (Figure 19) as rising interest rates reduced the value of the fixed income securities traded by banks. Profit on exchange transaction also declined as derivatives businesses took a hit after the RBI fined some of the large banks in India for mis-selling derivative products.

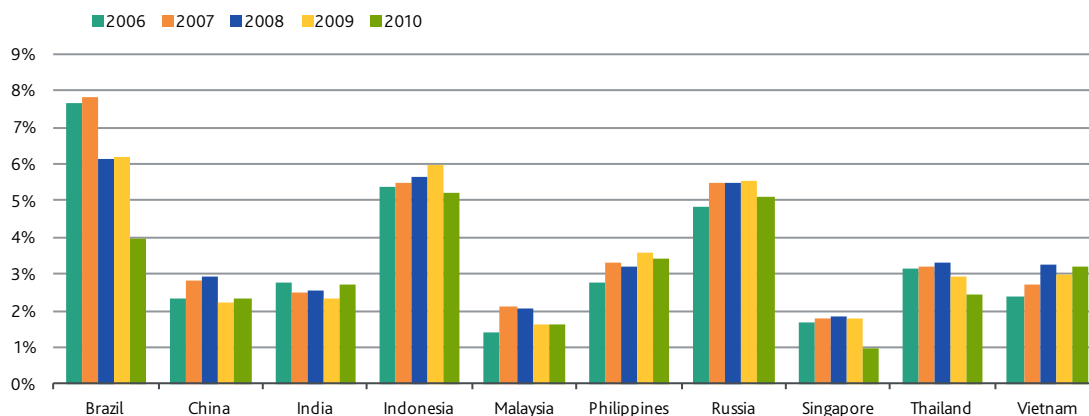
Modest deterioration in profitability indicators likely

In the next 12-18 months, net interest margins could decline by around 20-25 basis points to about 2.6% as funding costs rise due to the deregulation of savings account interest rates, and deposits get re-priced in a rising interest rate scenario. In addition, higher operating costs, due to the increase in pension liabilities and wage revisions, would limit the upside for recurring earnings, especially for public sector banks. Provisioning costs required for deterioration in asset quality and mark-to-market impairment on fixed income government securities portfolio will also increase risks to net income.

Peer Comparison of Indian Banking System: Profitability

FIGURE 20

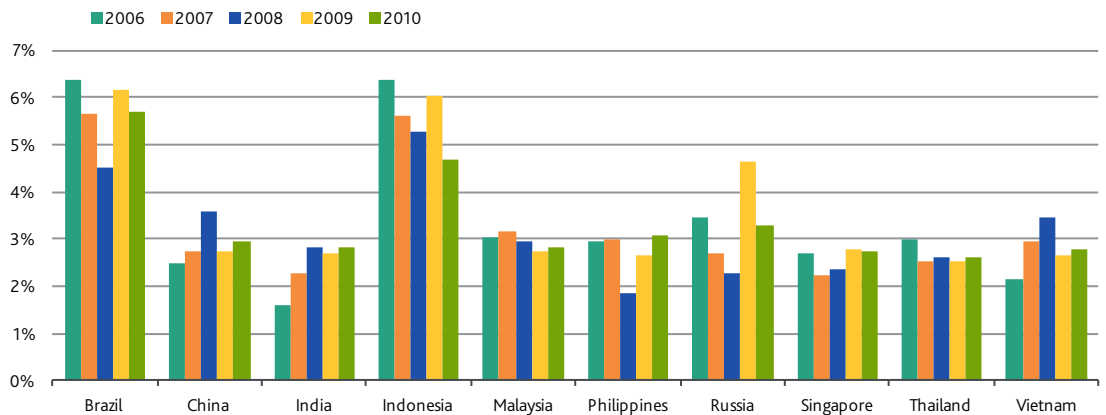
Net Interest Margin (Net Interest Income / Average Earning Assets)



Source: Moody's

The net interest margins of Indian banks have been stable in recent years and compare well against those in China, Malaysia, Thailand and Singapore (Figure 20). In 2010, lending rates were re-priced faster than saving rates in a tightening cycle, which boosted margins. Nonetheless, we expect this re-pricing to catch up with savings rates, which along with the latest announced savings deposit deregulation will put NIM under pressure in 2012.

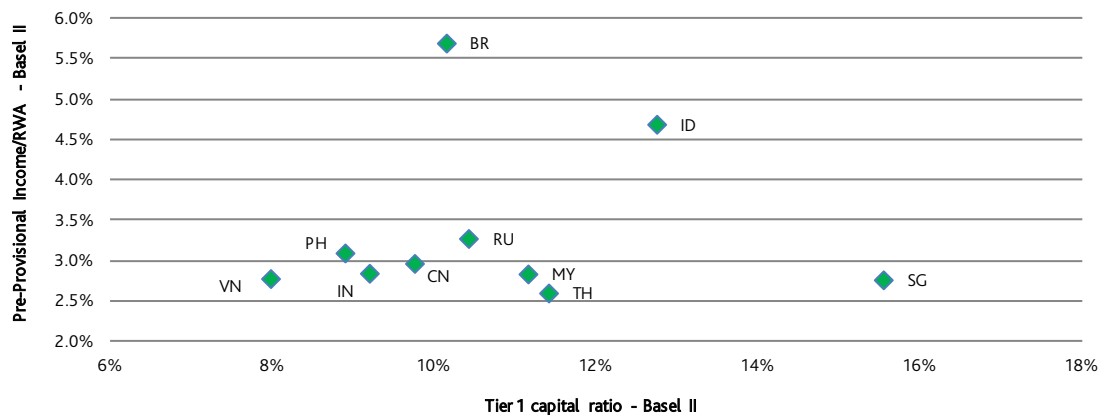
FIGURE 21
Pre provision Income / RWA- Basel II



Source: Moody's

The income ratio for Indian banks has improved from a low base in 2006 and is now in line with most other systems in SE Asia, though it still lags the banks in Brazil, Russia and China (Figure 22). Yet, our outlook is for some deterioration in the coming year on a narrower interest margin.

FIGURE 22
Scatter plot of profitability vs. capitalization - 2010 data



Source: Moody's

Indian banks compare weakly with Brazil, Russia, China and Southeast Asian countries in terms of Tier 1 capital ratio and pre-provision income/RWA (Figure 22).

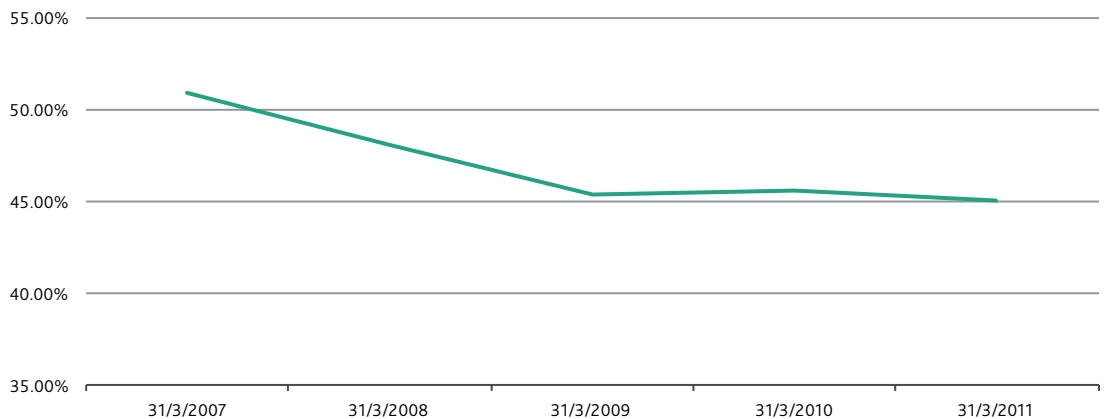
We expect both capitalization and profitability of Indian banks to remain weak over the next 12-18 months.

Efficiency

Stable cost income ratios

Efficiency indicators have stabilized following a sharp improvement in FY2008 and FY2009, with the cost/income rates little changed at 45% in FY2011 (Figure 23), despite the significant increase in branch networks and the various investments made in implementing IT-based banking solutions in recent years. This indicates the industry's modest success in maintaining good cost control discipline.

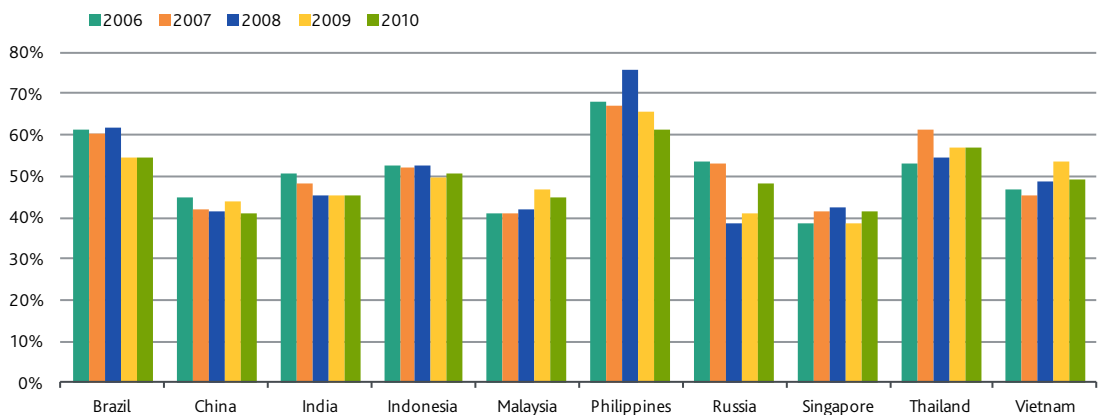
FIGURE 23
Cost / Income Ratio



Source: Moody's

We continue to expect efficiency indicators to be stable over the next 12-18 months; significant improvement is unlikely until banks undertake manpower rationalization scheme and allow the full benefits of IT-based core banking solutions implemented over the last few years to surface.

FIGURE 24
Peer Comparison of Indian Banking System: Efficiency
Cost Income Ratio



Source: Moody's

Indian banks' cost ratio compares favorably with peers in Southeast Asia and Brazil, Russia and China (Figure 24). However, due to a likely increase in competition given the recent liberalization measures, more incumbents may feel the pressure to upgrade their human resources and system infrastructure, which could lead to higher costs going forward.

Moody's Related Research

Rating Methodologies:

- » [Incorporation of Joint-Default Analysis into Moody's Bank Ratings: A refined Methodology, March 2007 \(102639\)](#)
- » [Bank Financial Strength Ratings: Global Methodology, February 2007 \(102151\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Banking System Outlook Table

As of 24 October 2011 Banking System Outlook: India

Banking System	Positive	Stable	Negative
Argentina			Negative
Australia		Stable	
Azerbaijan		Stable	
Bahrain			Negative
Baltic Countries			Negative
Belarus			Negative
Belgium and Luxembourg			Negative
Bolivia		Stable	
Brazil		Stable	
Bulgaria			Negative
Chile		Stable	
China		Stable	
Colombia		Stable	
Cyprus			Negative
Czech Republic		Stable	
Denmark			Negative
Egypt			Negative
Finland			Negative
France		Stable	
Germany			Negative
Greece			Negative
Hong Kong		Stable	
Hungary			Negative
India			Negative
Indonesia		Stable	
Ireland			Negative
Israel		Stable	
Italy			Negative
Japan			Negative
Kazakhstan			Negative
Korea		Stable	
Kuwait		Stable	
Lebanon		Stable	
Malaysia		Stable	
Mexico		Stable	
Netherlands			Negative
New Zealand		Stable	
Norway			Negative
Oman		Stable	
Pakistan			Negative
Peru		Stable	
Philippines		Stable	

Banking System	Positive	Stable	Negative
Poland		Stable	
Portugal			Negative
Russia			Negative
Saudi Arabia		Stable	
Singapore		Stable	
Slovakia		Stable	
Slovenia			Negative
South Africa		Stable	
Spain			Negative
Sweden			Negative
Switzerland		Stable	
Taiwan		Stable	
Thailand		Stable	
Turkey		Stable	
Ukraine			Negative
United Arab Emirates			Negative
United Kingdom			Negative
United States			Negative
Uruguay		Stable	
Uzbekistan		Stable	
Vietnam			Negative

Appendices

Appendix 1: Assumption for stress tests

Loan Portfolio breakdown	Adverse Scenario			Highly Adverse Scenario		
	PD	LGD	EL	PD	LGD	EL
Corporate & Commercial	5.00%	40.00%	2.00%	8.00%	50.00%	4.00%
Export-Oriented Corporates	8.00%	50.00%	4.00%	13.00%	60.00%	7.80%
Construction & Real Estate	12.00%	60.00%	7.20%	20.00%	70.00%	14.00%
SMEs	10.00%	50.00%	5.00%	18.00%	60.00%	10.80%
Retail						
<i>Residential Mortgages</i>	3.00%	30.00%	0.90%	5.00%	40.00%	2.00%
<i>Personal / Consumer</i>	8.00%	60.00%	4.80%	15.00%	70.00%	10.50%
<i>Credit Cards</i>	20.00%	90.00%	18.00%	40.00%	95.00%	38.00%

Appendix 2: Excerpt from Sovereign Credit Opinion (September 2011)

India	Foreign Currency	Local Currency
Government Bond Rating	Baa3/STA	Ba1/POS
Country Ceiling	Baa2/STA	Aa3
Bank Deposit Ceiling	Ba1/STA	A1

Summary and Outlook

India's Baa3 foreign currency government bond rating and Ba1 local currency government bond rating are based on credit strengths such as (i) strong actual and potential growth, (ii) a diversified economic structure, (iii) a high domestic savings rate and (iv) a comfortable balance of payments position. The ratings also reflect challenges such as (i) weak government finances, (ii) a policy process often hamstrung by domestic politics, (iii) susceptibility to inflationary pressures, and (iv) the constraints that poor social and physical infrastructure place on future growth.

The outlook on the country's Baa3 foreign currency government bond rating is stable. The gap between the Baa3 foreign currency debt and Ba1 local currency debt ratings reflects the potential likelihood that the government could prioritize its external obligations over its domestic obligations, since external obligations, owed mostly to official creditors, are a relatively small proportion (5%-6%) of the government's total debt and are easily repayable, given the country's strong external reserves position.

The government's rupee debt, rated Ba1, constitutes the bulk (95%) of the government's liabilities, and interest payments on it consume about 25% of annual revenues. It is predominantly owed to domestic institutional investors over whom the authorities wield considerable statutory control.

However, the authorities' recent efforts to deepen the domestic bond market suggest that they are increasingly unlikely to prioritize external obligations over domestic as that would destabilize the domestic markets they are trying to strengthen. Therefore, and as reflected in the positive outlook on the Ba1 rating, Moody's would consider unifying India's local and foreign currency ratings at Baa3 upon ascertaining that continued growth and incremental steps towards fiscal consolidation would improve domestic debt sustainability and that a commitment to strengthening the domestic bond market eliminates the likelihood of the government prioritizing external over domestic obligations.

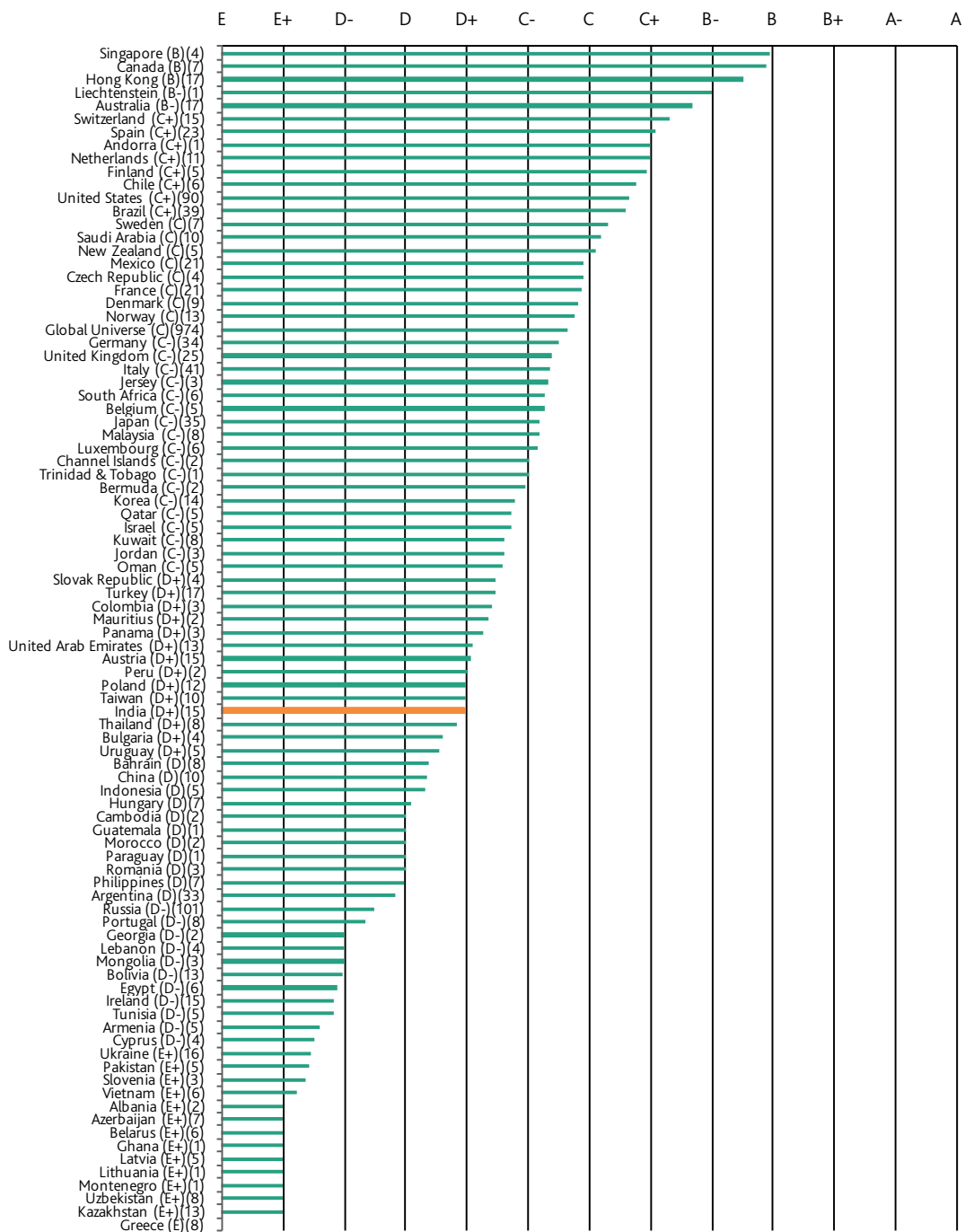
Appendix 3: BFSR / BCA Mapping Table

BFSR/Baseline Credit Assessment Mapping

BFSR	Baseline Credit Assessment (BCA)
A	Aaa
A-	Aa1
B+	Aa2
B	Aa3
B-	A1
C+	A2
C	A3
C-	Baa1
C-	Baa2
D+	Baa3
D+	Ba1
D	Ba2
D-	Ba3
E+	B1
E+	B2
E+	B3
E	Caa1
E	Caa2
E	Caa3

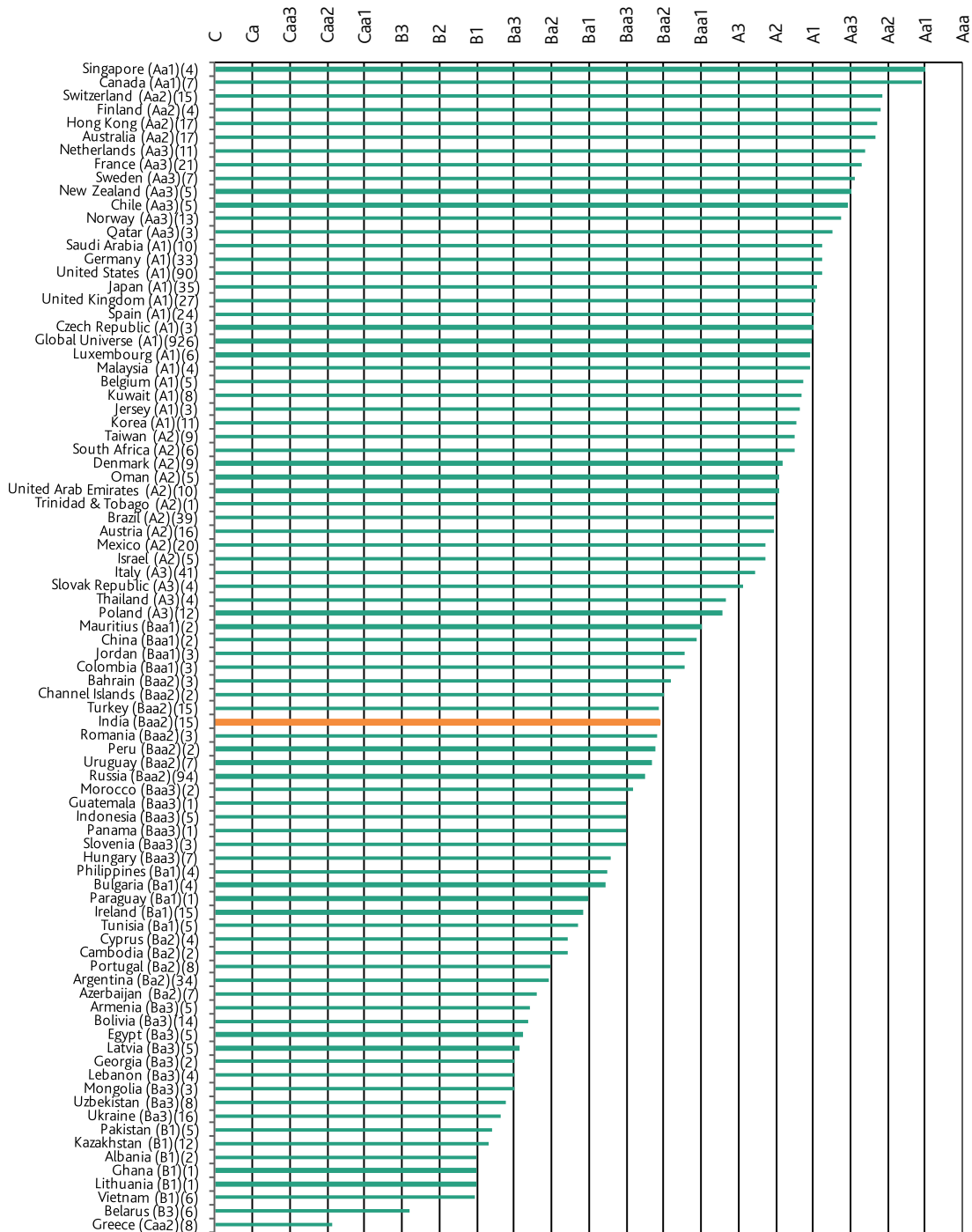
Appendix 4: Global Comparison Charts

Average* Bank Financial Strength Ratings by Country (as of 1 November 2011)



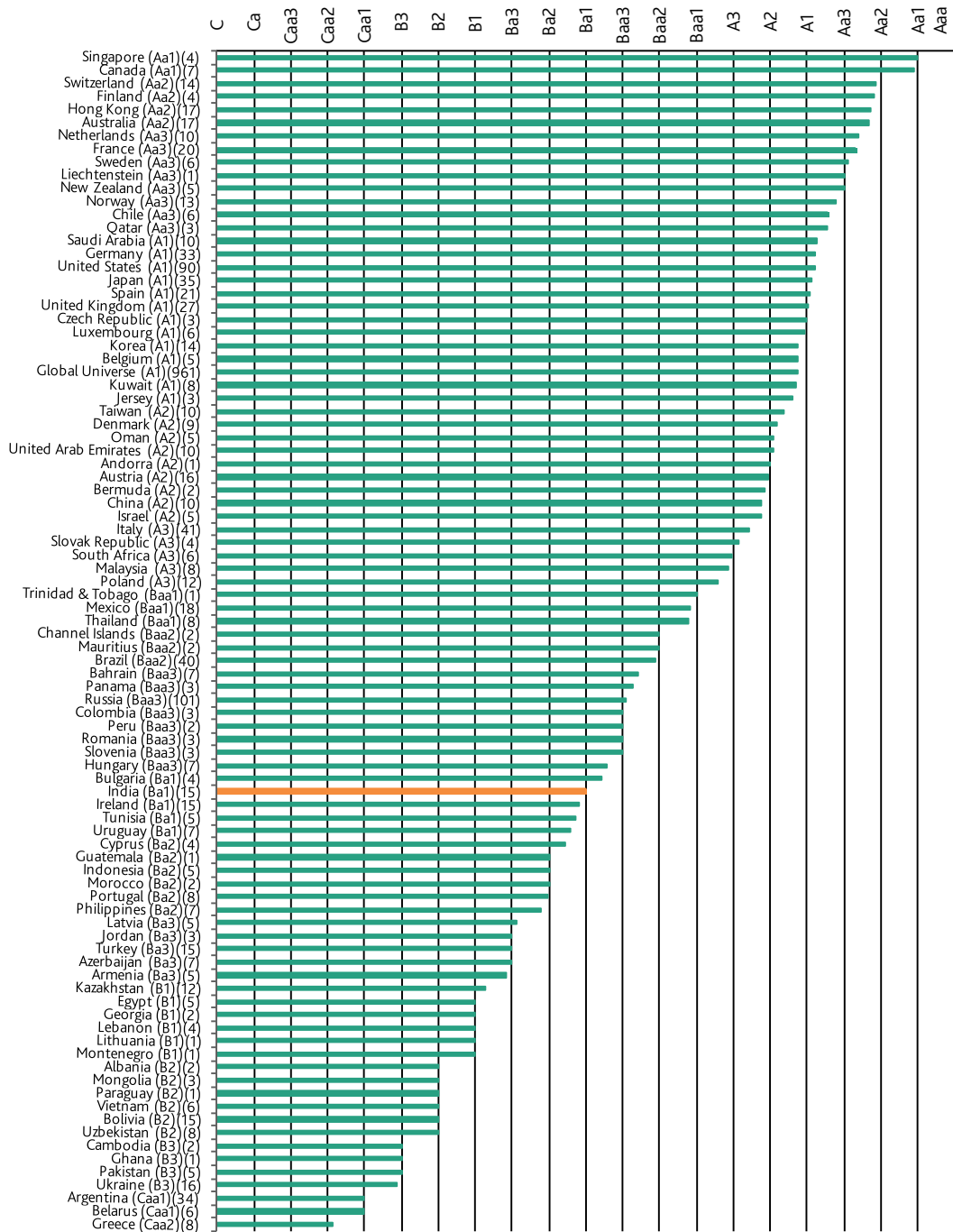
* Chart shows asset-weighted average standalone Bank Financial Strength Rating (BFSR) of all banks in each specified domicile. The rating next to each domicile is the rounded asset weighted average BFSR for banks in that domicile. The number next to each domicile is the number of banks with active BFSRs in that domicile.

Average* Long-Term Bank Deposit Ratings by Country (as of 1 November 2011) - Domestic Currency



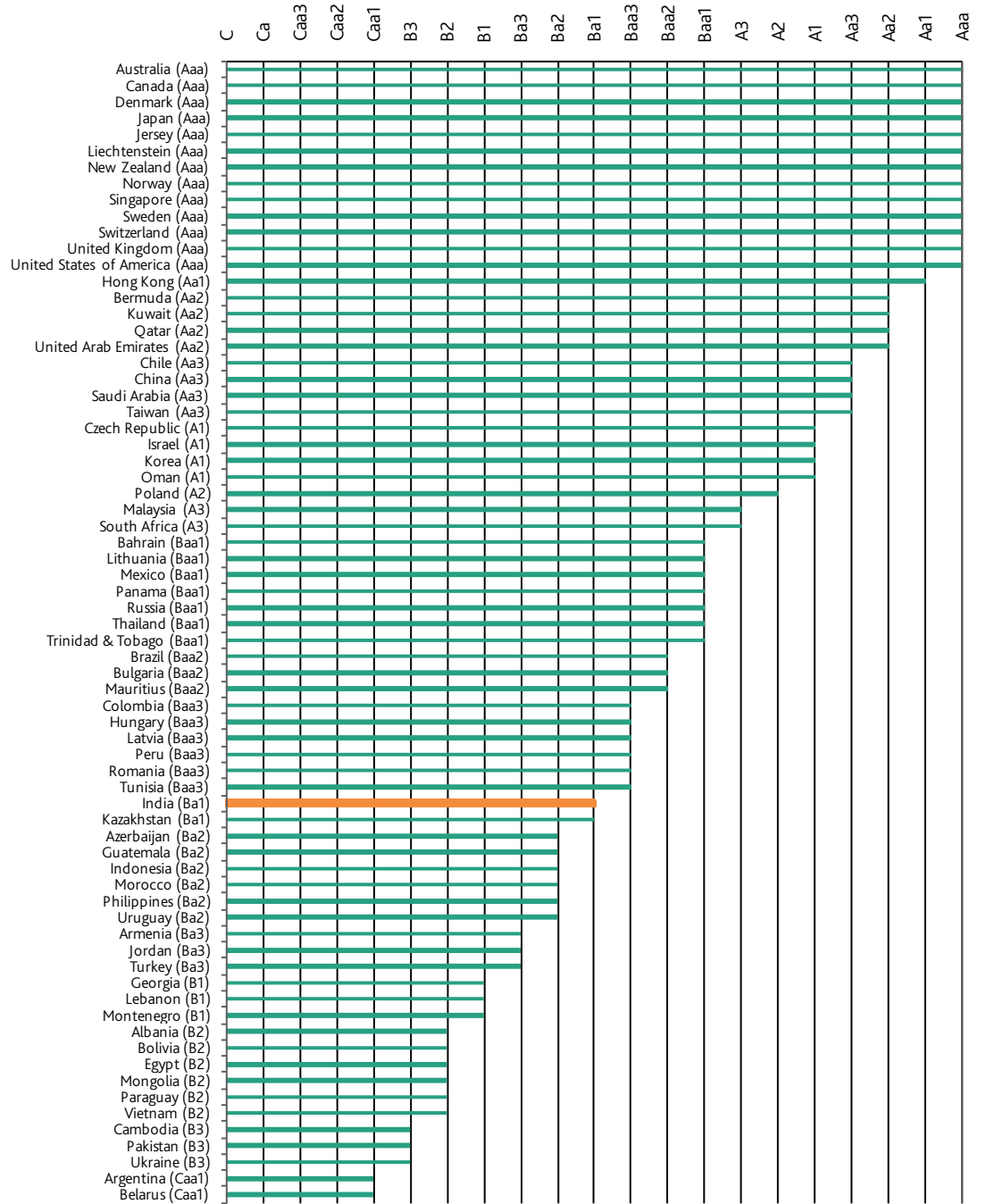
* Chart shows asset-weighted average standalone Bank Financial Strength Rating (BFSR) of all banks in each specified domicile. The rating next to each domicile is the rounded asset weighted average BFSR for banks in that domicile. The number next to each domicile is the number of banks with active BFSRs in that domicile.

Average* Long-Term Bank Deposit Ratings by Country (as of 1 November 2011) - Foreign Currency



* Chart shows asset-weighted average standalone Bank Financial Strength Rating (BFSR) of all banks in each specified domicile. The rating next to each domicile is the rounded asset weighted average BFSR for banks in that domicile. The number next to each domicile is the number of banks with active BFSRs in that domicile.

Country Ceilings For Long-Term Bank Deposit Ratings (as of 1 November 2011) - Foreign Currency



Report Number: 137036

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