

RMI data suggest positive outlook for Singapore banking sector

RMI data currently reflects a positive outlook for the Singapore banking sector, as the individual RMI probabilities of default (RMI PD) for the three major banks (Figure 1) are currently near lows not seen since before the escalation of the Eurozone Sovereign debt crisis in August 2011. RMI 1-year PDs are forward-looking views of the probability of default over the next year, based upon market and fundamental data. This contrasts with Moody's outlook change for the Singapore banking sector to negative from stable on June 15, which suggests that Moody's is more likely to downgrade Singapore banks over the next 12 to 18 months.

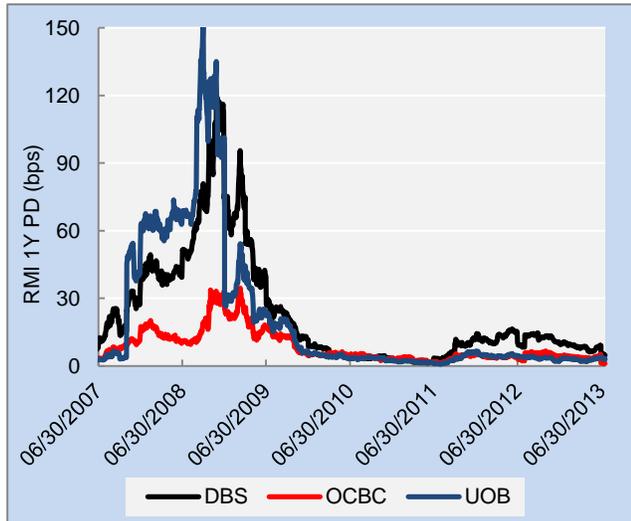


Figure 1: Individual RMI 1-year PDs for Singapore banks. RMI PDs have recently returned to lows seen in early-2011. Source: RMI

Financial Institution	Economy	RMI PD (bps)
Hang Seng Bank	HK	0.53
Australia & New Zealand Banking Group	AU	1.79
Bank of East Asia	HK	2.73
Oversea-Chinese Banking Corp	SG	2.90
United Overseas Bank	SG	2.98
National Australia Bank	AU	3.65
Wing Hang Bank	HK	4.51
Fubon Financial Holding Co	TW	6.77
DBS Group Holdings	SG	6.93
BOC Hong Kong Holdings	HK	7.00
Taiwan Cooperative Financial Holding Co	TW	8.07
Cathay Financial Holding Co	TW	8.43
Taishin Financial Holding Co	TW	8.47
Commonwealth Bank of Australia	AU	13.51
Shinhan Financial Group	KR	20.67
Westpac Banking Corp	AU	50.80
Hana Financial Group	KR	59.90
Woori Finance Holdings	KR	78.52
Mitsubishi UFJ Financial Group	JP	81.42
KB Financial Group	KR	97.05
Sumitomo Mitsui Financial Group	JP	127.51
Mizuho Financial Group	JP	176.40

Table 2: Regional competitors by RMI 1-year PD. Source: RMI

In RMI's upcoming Quarterly Credit Report for Q2 2013, the following key factors help support a positive outlook for the Singapore banking system:

- Favorable funding conditions. Banks fund the majority of activities through stable deposit bases, and market funding exposure is mostly constrained to international activities, where rates are expected to remain low for at least the next 12-months.

- Exceptional liquidity profiles. Banks have some of the highest liquidity ratios amongst peers.

- Measures introduced by the Monetary Authority of Singapore (MAS) to arrest asset bubbles, supporting domestic loan portfolios. Strong equity premiums reflect market confidence in prudent lending practices domestically and abroad, and are a primary driver in the current low RMI PDs for Singapore banks.

- Capital ratios are the highest among peers, supporting credit profiles. Ratios reportedly remain above prescribed minimums in various stress tests.

Economy	Asset-Weighted Average RMI PD (bps) ¹	Asset-Weighted Average Moody's Rating ²
Hong Kong	4.32	Aa3
Singapore	4.50	Aa1
Taiwan	8.91	A2
Australia	17.67	Aa2
South Korea	67.95	A1
Japan	89.05	A1

Table 1: Asset-weighted average RMI PDs for regional banking systems vs Moody's ratings. Source: RMI, Moody's

A peer group analysis of banks covered by RMI in developed Asia shows banks in Singapore have almost the highest credit quality among their peers, with only Hong Kong banks having a lower average RMI PD. This largely reflects current average ratings for Singapore banks from Moody's. Moreover, on an individual basis Singapore banks rank towards the top of their peer group (Table 2)

¹The RMI PDs shown here have a 1-year time horizon and were computed on July 23, 2013

²Moody's Investor Services, July 2013. Average ratings shown are for banks rated by Moody's.

Outlook change

Moody's changed its outlook for the Singapore banking system to negative from stable on July 15. The outlook adjustment was driven by recent rapid loan growth and increasing real estate prices in both Singapore, and in other regional markets in which the banks operate. These conditions, combined with the risk of a turn in the interest rate cycle, increase the probability of deterioration in the credit profiles of Singapore banks in Moody's view.

Markets hardly reacted to Moody's outlook change, as stock prices have continued to climb since July 15. Concerns highlighted by Moody's are not new, and have been discussed in various domains over the last year. The market continues to push up the price of Singapore bank stocks, placing downwards pressure on RMI PDs (Figure 2). At the same time, banks continue to build capital buffers (Figure 3), suggesting the market is confident banks have the wherewithal to absorb asset quality problems as the interest rate cycle turns.

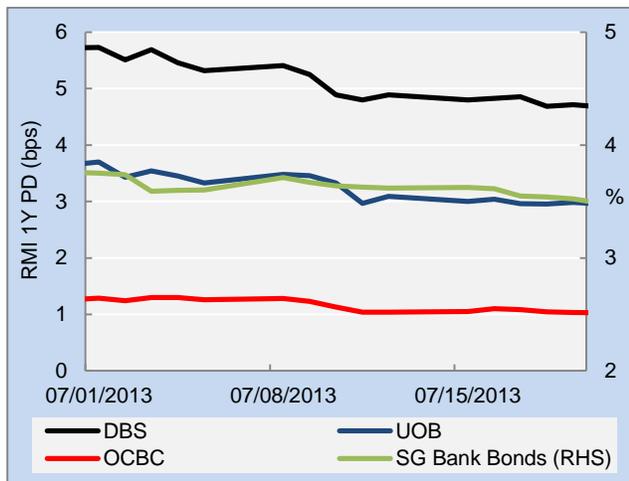


Figure 2: Weighted average yield on USD-denominated bonds issued by Singapore banks vs individual RMI 1-year PDs for Singapore banks. Source: RMI

Funding

The average loan-to-deposit ratio for Singapore banks was 89% as of March 31, 2013. Currency-wise, banks face an increasing funding deficit on USD loans, as they move deeper into trade finance businesses. This section of the loan book is largely financed in local USD interbank markets, where the yield curve has remained flat, despite recent interest rate volatility. The weighted average yield on USD-denominated subordinated bank bonds issued by Singapore banks (Figure 2) fell every day over the last week to 3.51% on July 19, after reaching as high as 3.84% in June.

Liquidity

Despite a decline in overall liquidity over the past two years (Figure 3), liquidity of Singapore banks remains well above peers. RMI has observed a similar pattern in the cash to total assets ratio, one of the key inputs into RMI PDs, for the same banking systems.

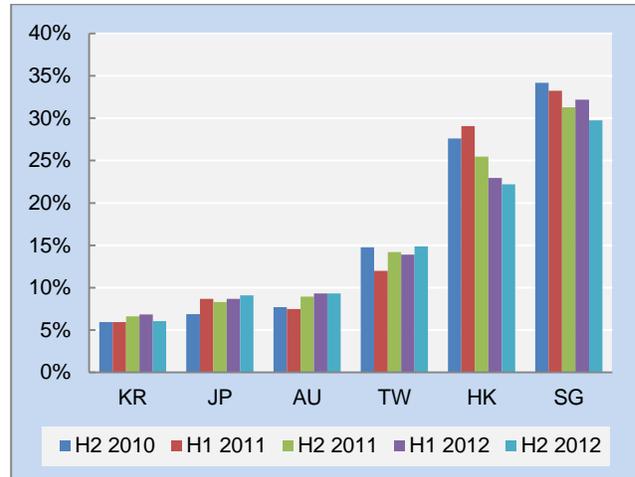


Figure 3: Average cash plus short-term assets to short-term liabilities ratio, listed banks in developed Asia. Source: RMI

MAS on asset quality

In response to the change in Moody's outlook, a spokesperson from the MAS noted the central bank had been monitoring the key risks related to domestic property markets, and together with the national government, had instigated several pre-emptive measures during the first half of 2013 to counteract a domestic real estate bubble. Implemented measures include tightening of loan-to-value ratios for housing loans, higher stamp duties on both residential and commercial property transactions, and requiring shorter loan tenures.

MAS has also introduced a framework to ensure borrowers have the capability to meet other outstanding debts when granting new property loans, and continues to monitor underwriting standards to ensure banks remain prudent. Property loans account for a substantial portion of Singapore bank's loan books, with around 30% residential property loans.

Moreover, the higher equity value the market continues to award to Singapore banks reflects a more prudent approach to risk compared with peers. This is incorporated into RMI PDs through several RMI PD model inputs that depend on a company's market capitalization. This helps alleviate some concerns raised by Moody's regarding asset quality in bank's overseas loan portfolios where the MAS has little supervisory power.

Capital more than sufficient to absorb stresses

In addition, average capital ratios are the highest amongst global peers, providing support to creditors (Figure 4). The MAS has committed to the implementation of even stricter capital ratios under its version of Basel III. The MAS also reports that banks maintain adequate capital buffers in regularly undertaken internal and external stress tests.

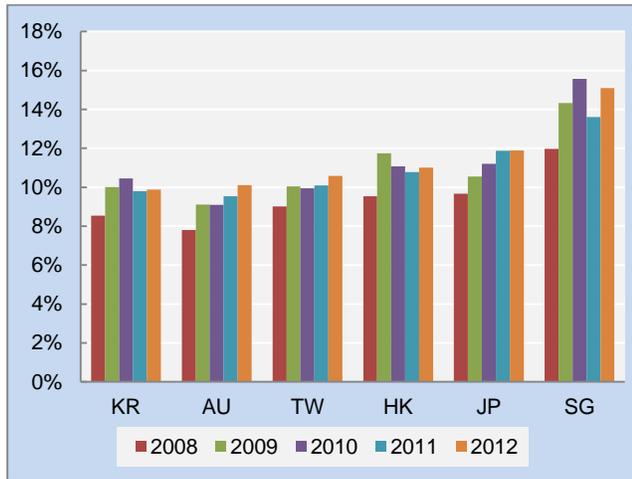


Figure 4: Average Tier 1 Capital Ratios, exchange listed banks in Developed Asia. Data is for year-end, except for Japan (Fiscal year ending 31 March). Source: *Bank financial statements*.

What could drive the RMI PDs up?

According to the most recent calibration of the RMI PD model, the following market or fundamental changes would lead to the largest increase in RMI PDs for the Singapore banks.

A steep and sudden decline in firm market capitalization, driven by either regional political or economic uncertainty.

Significantly slower growth in China, or an extended period of economic contraction in Europe could also be a key driver, although banks are less exposed to the latter.

This could be also by caused by significant unexpected provisioning, or by large asset write-downs. Given average provisioning coverage at the end of Q1 was around 140%, the likelihood of large unexpected provisioning is low. Moreover, any increase in credit costs is likely to be gradual, as the interest rate environment is unlikely to normalize over short period of time.

A sharp increase in leverage, as measured by distance-to-default, or volatility adjusted leverage.

For banks, a significant increase in short-term borrowings would be a major driver.

An increase in SGD three-month treasury rates

This is unlikely in the near term, as short term rates have remained unchanged despite a steepening in the longer-dated section of the Singapore Sovereign yield curve. Increases in short-term rates are likely to be gradual, and occur around the same time the US Federal begins increasing rates. RMI analysis shows the overall impact on bank credit profiles due to higher three-month rates is relatively low (Figure 5).

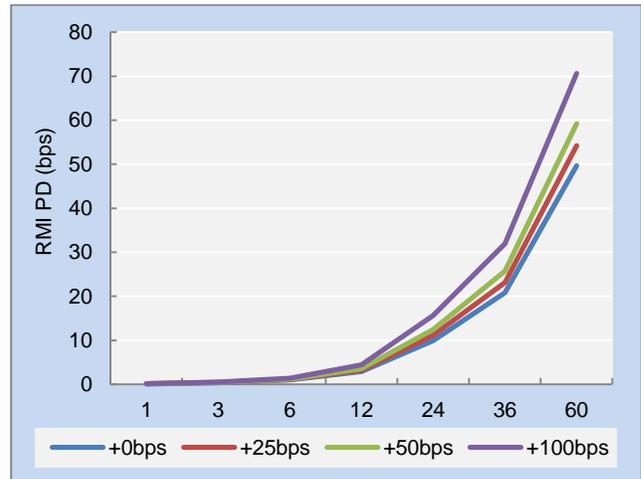


Figure 5: Average term structure of default for Singapore banks, and sensitivity to increases in Singapore three-month treasury rates, holding all other factors constant. Source: *RMI*

A significant decline in liquidity³ ratios.

This measure has been on a gradual decline over the past two years, as banks assets in overseas markets expanded as a percentage of their total asset base. The MAS prescribes much higher cash levels than central banks in outside jurisdictions. There is a low likelihood that liquidity ratios could come under pressure from tail events, including operational control breakdowns or regulatory penalties. Risks stemming from the latter are low though, as the recent rate-setting scandal has seen the MAS penalize banks involved by prescribing higher reserve levels, rather than monetary penalties.

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³ As measured by the cash to total assets ratio.