





## Contents

1. Executive Summary	2
2. Basel III	
1. Capital	
2. Liquidity	
3. Market Disclosure	
4. Base Rate Computation	
3. HFT	6

## **Executive Summary**

In the era of increased globalization, it is imperative that every economy be integrated with the global economic and financial system. Some of the key initiatives precluding this integration include:

- Opening up the economy with limited or no capital controls;
- Increasing the breadth and depth of the financial market–both equity and fixed income; and
- A robust institutional framework around regulations and statutes making it easier to do business.

There is plenty of academic evidence to show that greater diversification resulting from opening up an economy ultimately reduces its inherent risk. However, one needs to be cognizant of the contagion effect today, whereby open economies are exposed to the capital flow volatility generated by the fiat money policies (a.k.a. currency printing) adopted by central banks such as the Fed (US Federal Reserve) BOJ (Bank of Japan) and ECB (European Central Bank). This is one of the key reasons the Indian Government and regulators are taking calculated steps toward increased liberalization, as the process needs to be balanced with the stability of the domestic economic system.

Below are some of the key initiatives over the past year with the twin objectives of increased liberalization and domestic economic stability:

- Initiating the creation of India as an International Finance Centre through the GIFT city program;
- Liberalizing capital controls through enhanced limits under the LRS (Liberalized Remittance Scheme);
- · Credit risk rationalization initiatives through:
- Introduction of the Bankruptcy code
- Regulatory initiatives towards rationalizing NPA (non-performing assets) such as standard asset categorization, joint lending forums, strategic debt restructuring, forensic reviews and early warning systems
- Basel III initiatives such as leverage ratio and liquidity coverage ratio in light of increased stress on banking capital due to growth in NPA;
- Financial inclusion initiatives through the differentiated bank license regime—small finance banks and payment banks;
- Capital market initiatives
- Rationalization of FPI (Foreign Portfolio Investor) on-boarding



### Basel III

#### **Capital**

The need for Basel III implementation cannot be overstated in the context of the issues banks face with regards to asset quality and balance sheet management.

As capital becomes scarce due to passive enforcement of underwriting rules and basic provisioning—particularly among India's public sector banks—there is concern that full implementation of Basel III capital norms could be delayed beyond the 2019 deadline currently set by RBI (the Reserve Bank of India).

"The application of default recognition and provisioning remains unclear," according to Deep Mukherjee, chief product officer, CIBIL. "It is important that India's provisioning standards be the first line of defense for withstanding NPA shocks and that the regulator needs to ensure greater clarity and stronger enforcement of these norms."

With regulatory forbearance for restructured loans withdrawn in April last year, NPA numbers have worsened, leading to higher capital consumption. A Moody's report released in February 2016 estimated that NPA (non-performing asset) ratios have rocketed from 0.89% to 4.12% as a direct result of the change in rules on NPA calculations.

In a research note for Credit Suisse, Ashish Gupta, the bank's head of equity research outlined the challenges facing public sector banks:

"A large number of PSU banks are now under severe stress with total impaired asset levels at >15% and un-provided problem loans at >100% of net worth. After the next quarter results, the level of reported impaired assets for these weaker banks will likely go up further. Average NPA for PSU banks is likely to reach 8% by Mar-16.

Under-provisioning has gone up sharply with un-provided problem loans for ~60% of banks (by loans) already above 100% with the share likely to move up by Mar-16. NPLs as a % of net worth are at 50-70% for the majority of PSU banks."

The stretched timeline for Basel III, prompted by banks' need to delay big changes to their balance sheet, appears to have precipitated a crisis it was intended to prevent. Mukherjee comments that "the 2008 crisis – despite being seen as an indictment of Basel II – was aggravated because most banks were not fully compliant under those norms."

Even as the Indian banking sector is struggling with asset quality, the global situation is also deteriorating. Implementation of the Basel III norms is likely to be postponed by another two to three years.

"Given the situation in the world economy, Basel norms will have to be diluted or delayed. The former seems highly unlikely, so it seems that the only option available is delaying the implementation of the Basel III norms," said Mukherjee.

India's public sector banks face an uphill task as any capital infusion from the government will require consideration of the government's fiscal target.

According to estimates by Moody's, public sector banks will require INR1.45 trillion (USD21.6 billion) in capital over FY16-19.

It is unlikely the government will want to sell its stake in public sector banks to under 51%, given the present cyclical low valuations caused by these very issues.

Mukherjee points out that divestment will not immediately help the banks, as their legacy of bad business practices will prevent new investors from injecting more money into them. "We are facing a virtual logjam. Given the India-specific situation, and if you overlay the global and economic climate, postponing Basel III implementation is becoming more inevitable by the day."

However, Rajat Sharma, CEO of Sana Securities, says that the government's sale stake will be an important first step in ensuring the long term viability of public sector banks. He says that although valuations are low, the government's move to divest will send a positive signal about its commitment to reform the public banks and help reverse the low valuations and negative news cycle faced by these banks today.

"By divesting, public sector banks will boost the governance of these banks, replacing government officials on bank boards with qualified members of civil society. A share sale may not be the only option available to the government. A qualified institutional placement will allow value investors to pick up stake in these banks at attractive valuations," he says.

The most immediate result of the current logjam is slow loan growth over the next five years. In his speech to the CII Banking Summit, Mumbai, in February 2016, RBI governor Raghuram Rajan underlined that his commitment to cleaning up bank balance sheets took precedence over credit growth.

He went on to state: "The silver lining message in slower credit growth is that banks have not been lending indiscriminately in an attempt to reduce the size of stressed assets in an expanded overall balance sheet, and this bodes well for future slippages. In sum, to the question of what comes first, clean up or growth, I think the answer is unambiguously 'Clean up!'"

#### Liquidity

The LCR (liquidity coverage ratio) requires banks to hold a substantial portion of their assets in highly liquid, short-term securities rated AA or above. Banks will need to cover at least 100% of their total net liquidity outflows over 30 days with these high-quality, liquid

In an attempt to help banks transition from the domestic SLR (statutory liquidity ratio) regime to the LCR regime under Basel III, the RBI cut SLR requirements from 22% to 21.5% in February last year.

According to Mukherjee, banks have traditionally held 28-29% of their assets in government securities-much more than the statutory norm. "The reduction in SLR is the RBI gradually aligning itself with the LCR regime with the understanding what would previously have been counted under SLR will now be counted under the combined SLR and LCR requirement," said Mukherjee.

#### **Market Disclosure**

Disclosure norms under Pillar 3 require greater work, according to market participants. Investors consider the level of disclosure of working capital and liquidity provisions to be lacking under current rules. Mukherjee at CIBIL gives the example of the disparity in the annual report published by ICICI Bank under the SEC regime for its GDR (global depository receipt) investors versus that under RBI's regime. The quality of disclosure under the former is higher.

"The RBI needs to do more to improve the level of disclosure among banks and bring it at par with its global peers," suggested Mukherjee.

#### **Base Rate Computation**

The RBI issued draft norms for the computation of the base rate in September last year. The base rate will depend on the banks' marginal cost of funds in order for it to improve monetary policy transmission.

According to market participants, the regulator should not involve itself in the calculation of lending rates that banks use. Global best practices dictate lending rates

be based on a robust, liquid market-based benchmark. It is important for the regulator to work towards strengthening MIBOR (the Mumbai Interbank Offered Rate), which is the best candidate for this benchmark.

Once MIBOR becomes a credible rate, regulating base rate calculations becomes unnecessary as long as they are benchmarked to a moving average of the market rate. This will also increase the efficiency of monetary policy transmission as MIBOR is sensitive to repo rate changes.

"This is an example of ineffective regulation. The regulator is replacing one layer of complexity with another by replacing one non-transparent way of calculating the interest rate with another non-transparent way of calculating it," comments Mukherjee.



# High-frequency Trading (HFT)

The most important public debate in the HFT space is the perception that unfair advantage is being given to institutional investors who, unlike individual retail investors and mutual funds, are unable to afford expensive trading platforms, coders and traders.

The concept of a level playing field for both retail and institutional traders is an important goal of any mature, inclusive capital market. Indeed, institutional investors do better and trade faster than retail clients when considering latency numbers. For example, price feeds for retail clients can be delayed by almost 1 second compared to the 10 microseconds for institutional investors.

So while institutional traders are reacting to immediate pricing, a retail trader may be reacting to a price which is no longer in the market. This makes the issue of creating a level playing field pressing, and occupies much of the public narrative on high frequency and algorithmic trading.

The industry counters this narrative by asserting that the ability to trade at 10 microseconds comes at a high cost to the institutional trader. Initial investment on a good trading system will clock in upwards of INR1-2 crores, far beyond what a retail trader is willing to pay.

Furthermore, as market dynamics change, trading strategies need to be updated on a weekly or monthly basis. This adds to the cost of maintenance and programming.

The flexibility to trade at faster speeds comes at a price.

The codes that execute trades and fixes orders, based on particular strategies, have begun to evolve as rapidly as market dynamics develop. Building and coding strategies is a costly affair as it requires hiring coders and developers. In addition to the fixed capital expenditure, firms must evolve new strategies on a weekly and monthly basis. Accordingly, the return threshold for institutional investors is that much higher.

Despite the media narrative around HFT, especially since the release of Michael Lewis' bestseller *Flash Boys* and high profile HFT-led crashes—such as the Knight Capital incident in the US—SEBI (the Securities and Exchange Board of India) has been more circumspect around the issue of HFT and algorithmic trading.

At its first international conference in 2014, SEBI chose HFT, algorithmic trading and co-location as its key subject and invited academics, regulators and practitioners from around the world to discuss the impact of HFT and "re-leveling the field" using regulatory mechanisms.

Although SEBI acknowledges HFT's positive impacts in its various publications (greater liquidity, depth and potential for narrower spreads), the potential risks have prompted a cautious embrace. According to SEBI, technological failures and rogue algorithms can result in extreme events that undermine confidence in the regulators and market's ability to allocate equity capital efficiently.

SEBI put in place broad guidelines for algorithmic trading in 2012, requiring additional risk management and de-minimizing risk controls, load management at exchanges, discouraging high daily order-to-trade ratios and penalties for breaches. In 2013, it further directed exchanges not to allow algorithmic and high-frequency trading in mini and micro contracts to "enable the small and retail participants in the value chain to hedge their risk."

The regulator is currently accepting comments from select industry participants to implement a minimum resting time between orders, randomization of the execution of trade orders, creating an auction (instead of continuous) market and barring exchanges from providing tick-by-tick data. These measures are intended to take away the speed advantage from traders that can hurt market liquidity and cause the entire infrastructure created around algorithmic and high-frequency trading go to waste.

Further, services to institutional investors who want to trade at high speeds have formed an important source of revenue for exchanges. Renting out server racks and co-location services to ensure the fastest possible price feeds as well as providing tick-by-tick feeds (the fastest form of price feed available) are important to the business models of exchanges.

As a service user, institutional investors have to pay a high price for these facilities. Although they have the ability to trade faster, it comes at a cost which needs to be recovered. If this is not possible, it makes no business sense for such investors to buy ever-faster and more sophisticated trading infrastructure.

In its document introducing its 2014 international summit on HFT, SEBI acknowledged that speed is a "point of difference" in the broking industry, contributing to the success of the business models of some market participants: "It has been observed that investors, apart from the factor of cost (brokerage), regard speed of access to the trading platform as an important factor in short-listing a stock broker."

Most institutional investors rate the country's current regulatory landscape on high frequency and algorithmic trading as fairly competitive and evolved. As opposed to other markets in Asia-Pacific-Japan or Hong Kong-India's current regulatory regime is viewed as optimal, with any further curbs potentially discouraging HFT.

Further tightening of rules is unlikely to help and could actually prove counter-productive. The industry requires correct implementation of current rules and a lot of progress has been made on this front in the past one vear.

For instance, although exchanges require all orders by brokerages to go through a risk management system (RMS), many firms have gamed this requirement by showing the presence of an RMS during the exchange approval process but switching it off while actually trading on the exchange. This is because using the RMS system would delay the processing of orders, removing any speed advantage.

This is changing, however, as SEBI requires exchanges to implement a more thorough check on brokerages' RMS before providing approval. The regulator also requires periodic audits by the exchange to ensure the RMS is in use during trading hours.





## Acknowledgements

Deep Mukherjee, Chief Product Officer, CIBIL
Ashish Gupta, Head of Equity Research, Credit Suisse
Rajat Sharma, CEO, Sana Securities
SEBI
Regulation Asia

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. Please see www.deloitte.com/about for a more detailed description of DTTL and its member firms. This material is prepared by Deloitte Touche Tohmatsu India LLP (DTTILLP).

This material (including any information contained in it) is intended to provide general information on a particular subject(s) and is not an exhaustive treatment of such subject(s) or a substitute to obtaining professional services or advice. This material may contain information sourced from publicly available information or other third party sources. DTTILLP does not independently verify any such sources and is not responsible for any loss whatsoever caused due to reliance placed on information sourced from such sources. None of DTTILLP, Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the "Deloitte Network") is, by means of this material, rendering any kind of investment, legal or other professional advice or services. You should seek specific advice of the relevant professional(s) for these kind of services. This material or information is not intended to be relied upon as the sole basis for any decision which may affect you or your business. Before making any decision or taking any action that might affect your personal finances or business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person or entity by reason of access to, use of or reliance on, this material. By using this material or any information contained in it, the user accepts this entire notice and terms of use.

 $\hbox{@2016 Deloitte Touche Tohmatsu India LLP. Member of Deloitte Touche Tohmatsu Limited}\\$ 

Deloitte Touche Tohmatsu India Private Limited (U74140MH199 5PTC093339), a private company limited by shares, was converted into Deloitte Touche Tohmatsu India LLP, a limited liability partnership (LLP Identification No. AAE-8458) with effect from October 1, 2015