Established in 1875, BSE (formerly known as Bombay Stock Exchange Ltd.), is Asia’s first & the Fastest Stock Exchange in world with the speed of 6 micro seconds and one of India’s leading exchange groups. Over the past 141 years, BSE has facilitated the growth of the Indian corporate sector by providing it an efficient capital-raising platform. Popularly known as BSE, the bourse was established as “The Native Share & Stock Brokers’ Association” in 1875. Today BSE provides an efficient and transparent market for trading in equity, currencies, debt instruments, derivatives, mutual funds. It also has a platform for trading in equities of small-and-medium enterprises (SME). India INX, India’s 1st international exchange, located at GIFT CITY IFSC in Ahmedabad is a fully owned subsidiary of BSE. BSE is also the 1st listed stock exchange of India.

**Pahle India Foundation (PIF)** is an FCRA certified, not for profit policy think tank, established in June 2013 as a Section 8 company. PIF’s motto is “Facilitating Policy Change.” The motto guides all our activities. At PIF, we undertake research and disseminate its findings to contribute to the necessary paradigm shift in development thinking and practices in India. PIF is committed to enriching the public discourse and also to influence policy formulation that will help India successfully complete its triple transition in economic, political and social fields.

Our aim is to emerge as a credible, trustworthy and neutral bridge between economic agents like firms, farmers and professionals on the one hand and policy makers on the other and to contribute to bringing the three principle stakeholders viz government, industry and academia on the same page and pulling in the same direction - a key condition for ensuring India’s success in global markets. PIF currently has an analytically strong team of dedicated researchers who are self motivated. PIF’s highly qualified team specialises in analyzing India’s political economy and its engagement across verticals that are relatively underworked areas that will permit PIF to create a niche for itself in the research and think tank space in the country.
Policy Brief
November – February, 2016-17
Vol 1 – Issue 2

Financial Sector Seminar Series
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About the Seminar Series

India’s financial sector compared to its counterparts is still nascent. Our capital markets have not yet developed completely. Our stock and commodity markets are seen by retail investors as a tool for speculation rather than for capital formation. Clearly there is a need for greater research and discussion around policy issues in capital markets space.

With this in mind, Pahle India Foundation (PIF) and Bombay Stock Exchange (BSE) have come together to organise a monthly seminar series, “BSE-PIF Financial Sector Policy Series”. The objective of the Seminar Series is to contribute to policy advancement in this important area, by marshalling the available expertise and experience and publishing the proceedings as Policy Briefs.

We have always been committed to submitting a ‘Policy Brief’ that summarises the discussion after every session, to the regulators and other policymakers, to try and push the policy forward.
Banking Sector: Budget Dares
Nirupama Soundararajan, Arindam Goswami & Padmaja Pati
Banking Sector: Budget Dares

The demonetisation of 500 and 1000-rupee currency notes will be remembered as one of the most talked about and dynamic reforms that has been implemented in the India. In these past two weeks debate has been rife, with two very distinct points of views emerging. The point of debate has been on the effectiveness of such a daring initiative, its merits and its downsides, and on how it has been implemented. While, this debate will continue and the outcome will be evident long before “in the long run,” one thing is clear, gone are the days of gradualism, when incremental reforms used to define the course of growth of an economy. If India wants to play an active role in the global economy and if India is indeed serious about competing with China, then it is time to take big leaps. And for this, India may need many more “disruptive” reforms. With this in mind, in this seminar we suggest a few such “disruptive” reforms in the banking sector.

Banking Sector Consolidation

Indian banking sector consists of Public Sector Banks, Private Sector Banks, Regional Rural Banks, Co-operative Banks.

<table>
<thead>
<tr>
<th>Types of Banks</th>
<th>Number of Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Sector Banks (including SBI and its associates)</td>
<td>27</td>
</tr>
<tr>
<td>Private Sector Banks (including foreign banks)</td>
<td>20</td>
</tr>
<tr>
<td>Co-operative Banks (both scheduled and non-scheduled)</td>
<td>33</td>
</tr>
<tr>
<td>Regional Rural Banks (Functioning)¹</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>136</td>
</tr>
</tbody>
</table>

¹ [http://financialservices.gov.in/banking/List%20of%20RRBs.pdf](http://financialservices.gov.in/banking/List%20of%20RRBs.pdf)
Each of these are regulated by different entities and by different regulations. Managing and regulating such a diverse variety of banks is a complex task. The first disruptive reform suggested is to consolidate the banking sector such that banking activity is separated from non-banking activity (as in the case of co-operative banks), to bring the regulation of all banks under the purview of the Companies Act, and to pave the way for creating at least two or three banks that are comparable to their global peers. An extension of this would necessarily mean the liberalisation of mergers and takeovers of banks.

**Reducing Shareholdings of Government and RBI in Public Sector Banks to 51 per cent**

The average shareholding percentage of government and RBI in Public Sector Banks is 70.3 per cent (Appendix 1). By March 31, 2018, BASEL III would be fully implemented. Under the current BASEL III norms, banks are expected to maintain a minimum capital adequacy of 9 per cent and a Tier-I ratio of 7 per cent. It is estimated that PSBs will require INR 1,80,000 crore in the next four years, i.e., between 2016 and 2019. However, the government is to contribute only INR 70,000 crore from their end within this period, as of now (FY16-INR 25,000 crore; FY17-INR 25,000 crore; FY18- INR 10,000 crore and FY19- INR 10,000 crore). This leads to a deficit of INR 1,10,000 crore which have to be either be provided by the government or banks would have to find a way to raise capital. With limited access to capital markets, the pressure of capitalization is more than likely to fall on the government, which can and will result in a lot of pressure on the fisc. However, should the government divest its stake in PSBs, to say 51 per cent, the capital requirement of the government would drop to INR 91,800 crore. A reduction in shareholding is certainly a favourable proposition, without diluting the inherent nature of PSBs being state-owned. The objective of shareholding reduction is not just to meet the short-term requirements of the PSBs. It may also serve as a means to minimise the existing duel control that exists over PSBs.
Bank Investment Company

The P.J. Nayak Committee Report (2014) recommends that public sector banks make a structured migration from the corporate governance framework derived from the enactments under which they are presently constituted to one governed by the Companies Act and the Banking Regulation Act. This would thereby lead to a uniform framework for corporate governance for the entire banking sector, and would impose stronger governance standards on boards of public sector banks. This migration is envisioned by way of establishing a Banking Investment Company (BIC) for all the PSBs. Under BIC, the government would be transferring its entire equity stakes in the PSBs to the BIC. Formation of BIC also involves repealing of Bank Nationalisation Act of 1980 and 1990, State Bank of India Act and State Bank of India (Subsidiary Banks) Act, along with PSBs being incorporated under the Company Act 2002 as “banking companies”. In other words, BIC is the parent holding company while PSBs are its subsidiary companies. Government would be indirectly controlling the PSBs.

Implementation of BIC leads to greater autonomy for PSBs in India. Bank Investing Company distances the government from the banking operations, thereby discouraging any form of duel control. The biggest argument in favour of BIC is that it can borrow capital from the market, so the capital thus raised can be used by the PSBs to manage their NPA problem. BIC would also help in ensuring that government’s shareholding in PSBs is strategically reduced up to 51 per cent. Nations like Singapore, United Kingdom and Belgium have adopted Bank Investing Company approach. I was also recommended that until BIC is introduced, the government should create a Bank Board Bureau that would advise on all board appointment, bank chairman/CMD and Executive Directors that would in time morph into the BIC.

The RBI has always considered this suggestion as a “sub-optimal” solution. It has been their position that the creation of a BIC will lead to confusion in the minds of investors trading in individual bank shares. The RBI also believe that the BIC will fail in being able to distribute capital amongst PSBs.
Creation of Public Debt Management Agency (PDMA)

It was the Financial Sector Legislative Reforms Commission (FSLRC) that first proposed the creation of a Public Debt Management Agency. Chapter 12 of the report states,

“The main benefit of an independent public debt management agency will come through the integration of public debt management functions and various databases and information, which are currently dispersed. By unifying the public debt management function, and efficiently linking it with the cash and the investment management functions, there will be improved information, analysis and thus decision making. With specialised human resources at its disposal, the public debt management agency can contribute to a more effective interface with the market resulting in cost-efficient management of Government borrowings. A specialised, unified and independent agency will have significant comparative advantage over the existing structure of a fractured and uncoordinated Government borrowing programme spread across various agencies.”

Currently in India, both RBI and the Central government handle functions of the public debt management. RBI takes care of the market borrowings made by the Central and State governments (internal debt) while external debt is managed by the Central government. The duel management of public debt has led to questioning of efficiency and effectiveness of the existent system. For instance, no entity looks after cash and investment management. Information related to contingent and other liabilities are not consolidated. In addition, RBI has these dual and conflicting roles of being the banker as well as the manager of the Central government borrowings. A special independent agency that would independently manage the functions of public debt management seems the obvious route to take.

The 2015 bill had contained clauses on the PDMA which were then withdrawn due to some resistance from RBI. RBI contends that there exists no conflict of interest, but more importantly has taken refuge under the argument of why fix what is not broken.
A Public Debt Management Cell (PDMC) has been formed. PDMC would be involved only for advisory activities, which are:

- Work out on Centre’s borrowing plans,
- Manage the Central government liabilities,
- Monitor the cash balances and
- Develop an Integrated Debt Database System as a centralized database for all central government liabilities on a real time basis. PDMC would also
- Advise the central government on the matters related to capital market operations, investment and rates of interest on small savings and
- Simultaneously undertake needful preparatory work for PDMA.
- Fostering a liquid and efficient market for Government securities

A Joint Implementation Committee (JIC) would be formed to handle the transition process from PDMC to PDMA. The JIC in turn would be supervised by the monitoring group on cash and debt management, which would be co-chaired by Economic Affairs Secretary and RBI Deputy Governor.

The essence of PDMA is that it should operate as an independent entity without RBI and the Central government’s interventions and suasion. But PDMC does not meet this criteria. PDMC has not been assigned any function involving management of contingent liabilities as recommended by the Working Group Committee. PDMC would be dealing with only the borrowings of Central government; no steps have been taken regarding management of State governments’ borrowings.

Points for Discussion:

1. Does India need steady incremental reforms or big disruptive reforms to leap frog? 
2. The merits and demerits of the aforementioned four reforms

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3. The repercussions of implementation

4. Are they/would they be disruptive in nature – in terms of idea or implementation or impact?

5. Are there any other such disruptive reforms that are required?

Recommendations

a. The banking system in India continues to remain complex with existence of multiple banks managed and regulated by various entities. It is recommended that a suitable roadmap is drawn out for the consolidation of the banking sector such that banking activity is separated from non-banking activity (as in the case of co-operative banks), to bring the regulation of all banks under the purview of the Companies Act, and to pave the way for creating at least two or three banks that are comparable to their global peers. An extension of this would necessarily mean the liberalisation of mergers and takeovers of banks. However, utmost care should be taken during the consolidation process, so as not to merge a weak bank with a larger one in a manner which would adversely impact the profitability of the latter.

b. Past experience shows that banks hasn’t been good at raising capital through equity markets. Currently, banks have to raise a capital of INR 1.1 trillion from the equity market under Mission Indradhanush, but since the launch of this mission in August 2015, banks have barely been able to raise adequate funds through markets. It is therefore recommended that the government actively divest its stake in public sector banks from its average shareholding percentage of about 70 per cent to 51 per cent. This way, bank recapitalisation will be more fruitful and balance sheets of the banks may be fortified through greater public shareholding or strategic disinvestments.

c. The Government along with RBI should consider setting out a roadmap for establishing the Bank Investment Company (BIC). It has been established that BIC will lead to greater autonomy for PSBs in the country. However, since a holding company is expected to leverage its equity base, it was expected that this would help in lowering
the government burden of infusing funds into the PSBs. Capital needs of the PSBs are expected to rise due to increase in their NPAs and falling profitability.

d. While the PDMC currently set up at RBI acts more as an advisory body, it is time that the PDMC be upgraded to PDMA to operate as an independent entity without RBI and government interference.

Appendix 1

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Name of the Bank</th>
<th>Total Government &amp; RBI – Resident (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Allahabad Bank</td>
<td>60.8</td>
</tr>
<tr>
<td>3</td>
<td>Andhra Bank</td>
<td>61.0</td>
</tr>
<tr>
<td>4</td>
<td>Bank of Baroda</td>
<td>57.5</td>
</tr>
<tr>
<td>5</td>
<td>Bank of India</td>
<td>64.4</td>
</tr>
<tr>
<td>6</td>
<td>Bank of Maharashtra</td>
<td>79.8</td>
</tr>
<tr>
<td>7</td>
<td>Bharatiya Mahila Bank Ltd.</td>
<td>100.0</td>
</tr>
<tr>
<td>8</td>
<td>Canara Bank</td>
<td>69.9</td>
</tr>
<tr>
<td>9</td>
<td>Central Bank of India</td>
<td>81.5</td>
</tr>
<tr>
<td>10</td>
<td>Corporation Bank</td>
<td>63.3</td>
</tr>
<tr>
<td>11</td>
<td>Dena Bank</td>
<td>59.8</td>
</tr>
<tr>
<td>12</td>
<td>IDBI Bank Ltd.</td>
<td>76.5</td>
</tr>
<tr>
<td>13</td>
<td>Indian Bank</td>
<td>82.1</td>
</tr>
<tr>
<td>14</td>
<td>Indian Overseas Bank</td>
<td>73.8</td>
</tr>
<tr>
<td>15</td>
<td>Oriental Bank of Commerce</td>
<td>59.1</td>
</tr>
<tr>
<td>16</td>
<td>Punjab &amp; Sind Bank</td>
<td>79.6</td>
</tr>
<tr>
<td>17</td>
<td>Punjab National Bank</td>
<td>59.9</td>
</tr>
<tr>
<td>18</td>
<td>Syndicate Bank</td>
<td>69.2</td>
</tr>
<tr>
<td>19</td>
<td>UCO Bank</td>
<td>72.8</td>
</tr>
<tr>
<td>20</td>
<td>Union Bank of India</td>
<td>60.5</td>
</tr>
<tr>
<td>21</td>
<td>United Bank of India</td>
<td>82.0</td>
</tr>
<tr>
<td>22</td>
<td>Vijaya Bank</td>
<td>74.1</td>
</tr>
<tr>
<td>23</td>
<td>State Bank of India</td>
<td>58.6</td>
</tr>
</tbody>
</table>
Indian Banking Landscape and Basel III Norms

Nirupama Soundararajan, Arindam Goswami & Padmaja Pati
Indian Banking Landscape and Basel III Norms

The global financial crisis of 2008 was a revelation for the global banking industry. Banking sectors across many countries found it a severe challenge to withstand the financial downturn due to inadequate liquidity buffers; eroded quantity of capital base and excessive on and off-balance sheet leverage, leading either to the downfall or huge bail outs of giant banks, both of which in turn adversely affected the real economy. Therefore, to promote a more resilient banking sector worldwide the Basel Committee on Banking Supervision (BCBS) formulated BASEL III reforms in December 2010, which underwent further revision in 2011.

The primary objectives behind the BASEL III are-

• To improve the ability of the banking sector to tackle the disruptions arising from financial and economic downturns, thus protecting the real economy from the cascading effects of these shocks.
• To strengthen global capital and liquidity
• To improve governance and risk management; and
• To strengthen disclosure and transparency of banks.

On 2 May 2012, Reserve Bank of India (RBI) issued guidelines for capital regulation of banks operating in India as per the BASEL III norms. The implementation process started in a phased manner from 1 April 2013 onwards. The process is expected to complete by 31 March 2019. Appendix I provides detailed information about the rules and regulations associated with BASEL III.

There do however remain some points for discussion about BASEL III and their implications for the current Indian banking scenario.
Capitalisation

After the implementation of BASEL III both the quality and quantity of capital requirement has gone up. As per a study conducted by ASSOCHAM and NIBM, given the credit growth expected in the short to medium term Indian banks would need around INR 5,00,000 crore while meeting the BASEL III banking norms by 31 March, 2019. Various organisations have come up with their respective estimates of capital requirement which are available in appendix II. The Indian Public Sector Banks (PSBs) need and additional amount of INR 1,80,000 crores as capital until FY2019 to meet their capital requirements. The budgetary allocations of Government of India is only INR 70,000 crores for this period. This creates a deficit of INR 1, 10,000 crores (Department of Financial Services, 2015). With high stake of the government in the PSBs, would changing the shareholding structure of the PSBs be a way of reducing the burden of capitalization (and by extension on the fisc) for the government? Could greater access to market capital provide the relief required?

Effect on the Credit Growth Rate

With the government pushing for greater financial inclusion, the percentage of population would have access to and subsequently use formal credit sector is more than likely to increase. In addition, the focus on credit-intensive manufacturing sectors, MSMEs, Make in India and Start-up India are all likely to drive up credit demand. As credit expansion happens, banks would be expected to maintain even higher capital requirements under the BASEL III norms. In response to this, banks would be propelled to increase their lending rates, which would adversely affect the investment sentiment. And consequently, investment would fall and impact economic growth adversely. Therefore, the question here is whether high requirements of capital under BASEL III would indeed lead to increased cost of credit and slower economic growth?

Issue of Growing NPAs

Another pressing issue in the Indian banking scenario is the growing figure of non-performing assets (NPAs). According to the Financial Stability Report (2016), the gross
NPA was 7.6 per cent of the gross advances as on March 2016. (RBI, 2016). After the Asset Quality Review, banks were asked to make provisions for their stressed assets from their respective profits. As a result, the profitability of the entire banking sector has eroded considerably. Therefore, meeting the BASEL III capital needs from their profits is no longer feasible now or for some years to come. With no clear indication of the NPA crisis having bottomed out, negative investor sentiment has resulted in the falling prices of bank shares. Would this mean that access to capital markets as a way to raise capital is now going to be a greater challenge? What other options are available to Indian banks? What would be the cost of meeting higher capital requirements for banks operating in India? How the banks would be able to bring back buoyancy in their profits?

**Domestic and Global Systemically Important Banks (D-SIBs & G-SIBs)**

Presence of large banks and financial institutions in an economy exposes it to systemic risk. Failure of these “too big to fail” institutions would have a cascading effect on both financial sector and real economy, the effects of which would last for long. To mitigate systemic risk, BASEL III introduced new regulations for identifying Domestic Systemically Important Banks and Global Systemically Important Bank. Under these regulations, it would be mandatory for such banks to maintain a greater level of capital according to their level of systemic importance. The RBI identified State Bank of India (SBI) and ICICI Bank as Domestic Systemically Important Banks. In case of SBI, the additional common equity works out to be 0.6 per cent of risk weighted assets and for ICICI, the equity is 0.2 per cent. In the Indian banking context, especially since many are government owned, are not all banks domestically systemically important? Would not a failure of any PSB lead to loss of trust in its management, which in this case would be GoI?

**Recommendations**

a. It was agreed in unison that the consolidation of the banking sector should be rapidly pushed for creating two or three banks that are comparable to their global peers. This will help in building up both capital and capacity at the same time.
b. It was suggested that since the Bank Board Bureau is functional now the Government should consider setting up the Bank Investment Company (BIC) in line with recommendation of the PJ Nayak Committee Report. The setting up of BIC will help boost investor’s confidence which otherwise is apathetic towards PSBs.

c. It was agreed in unison that that the government lowers its stake in public sector banks from its average shareholding percentage of about 70 per cent to 51 per cent. This will create room to creatively approach the problem of raising capital. It was also suggested that introduction of the concept of golden share can be of great benefit to give PSBs the much needed flexibility to raise capital. It was pointed out that such a reform was suggested by Yashwant Sinha as the Finance Minister in 2000 but was shot down due to stiff resistance from various quarters.

d. Although contentious it was suggested that the Government can issue Masala Bonds in line with Resurgent India Bonds (of 1998) to seek help from NRIs for raising funds to recapitalise the banking sector. An out of the box idea to develop an NPA bank where all the banks can transfer their NPAs and start afresh with a clean balance sheet was also mooted by the discussants.

Appendix I

• Regulatory Capital

According to the RBI guidelines on BASEL III, banks are required to maintain a minimum capital to risk-weighted assets ratio (CRAR) of 9 per cent on an on-going business (apart from capital conservation buffer and countercyclical capital buffer, etc.). Relevant risk factors and internal capital adequacy assessments of each bank would be taken into consideration by RBI to ensure that the capital held by a bank is proportionate to its overall risk profile. RBI would observe the effectiveness of the bank’s risk management systems in identifying, assessing / measuring, monitoring and managing various risks including interest rate risk in the banking book, liquidity risk, concentration risk and residual risk and accordingly would prescribe a higher level of minimum capital ratio for each bank for greater risk management and supervision.
The components of regulatory capital under BASEL III:-

I. Tier 1 Capital (going-concern capital)
   a. Common Equity Tier 1
   b. Additional Tier 1

II. Tier 2 Capital (gone-concern capital)

Transitional Arrangements-Scheduled Commercial Banks (excluding LABs and RRBs)

<table>
<thead>
<tr>
<th>(% of RWAs)</th>
<th>April 1, 2013</th>
<th>March 31, 2014</th>
<th>March 31, 2015</th>
<th>March 31, 2016</th>
<th>March 31, 2017</th>
<th>March 31, 2018</th>
<th>March 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Common Equity Tier 1 (CET1)</td>
<td>4.5</td>
<td>5</td>
<td>5.5</td>
<td>5.5</td>
<td>5.5</td>
<td>5.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Capital conservation buffer (CCB)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.625</td>
<td>1.25</td>
<td>1.875</td>
<td>2.5</td>
</tr>
<tr>
<td>Minimum CET1 + CCB</td>
<td>4.5</td>
<td>5</td>
<td>5.5</td>
<td>6.125</td>
<td>6.75</td>
<td>7.375</td>
<td>8</td>
</tr>
<tr>
<td>Minimum Tier 1 capital</td>
<td>6</td>
<td>6.5</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Minimum Total Capital*</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Minimum Total Capital + CCB</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9.625</td>
<td>10.25</td>
<td>10.875</td>
<td>11.5</td>
</tr>
<tr>
<td>Phase-in of all deductions from CET1 (in %)#</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

* The difference between the minimum total capital requirement of 9% and the Tier 1 requirement can be met with Tier 2 and higher forms of capital;

# The same transition approach will apply to deductions from Additional Tier 1 and Tier 2 capital.

Source: (Implementation of Basel III Capital Regulations in India – Capital Planning, 2014)

- Leverage Ratio

Leverage ratio was introduced as a non-risk based supplementary measure to risk based capital requirements with the intention to restrict the build-up of leveraging and to help in avoiding destabilizing deleverage process. According to the BASEL III
report, banks have to maintain a leverage ratio in excess of 3 per cent. The Reserve Bank of India has set the leverage ratio to be 4.5 per cent for all the banks operating in India. Under BASEL III, leverage ratio is defined as a ratio between capital measure and exposure measure and is expressed in terms of percentage.

\[ \text{Leverage Ratio} = \frac{\text{Capital Measure}}{\text{Exposure Measure}} \]

Where capital measure is represented by the Tier-1 capital and exposure measure by the sum of on-balance sheet exposures, derivative exposures, securities financing transaction exposures; and off- balance sheet items.

Capital measure for the leverage ratio is the Tier-1 capital and exposure measure is the sum of on-balance sheet exposures; derivative exposures; securities. As per the RBI circular, the objectives behind introduction of leverage ratio are as follows:\(^3\):

- constrain the build-up of leverage in the banking sector to avoid destabilising deleveraging processes which can damage the broader financial system and the economy; and
- reinforce the risk-based requirements with a simple, non-risk based “backstop” measure.

Leverage ratio was proposed to be introduced by 1 April 2015.

- **Liquidity Norms**
  - There are two minimum standards for funding liquidity:
    - Liquidity Coverage Ratio (LCR)
    - Net Stable Funding Ratio (NSFR)

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[^3]: [https://rbidocs.rbi.org.in/rdocs/content/pdfs/58BS300685FL.pdf](https://rbidocs.rbi.org.in/rdocs/content/pdfs/58BS300685FL.pdf)
In addition to these standards, the Basel committee has a set of monitoring tools for the supervisory purpose.

LCR would ensure that banks have adequate unencumbered, high-quality liquid assets to offset the net cash outflows they might encounter under an acute short-term disruption lasting for thirty days. In India, LCR would be implemented in a phased manner, reaching minimum 100 per cent by 1 January 2019.

\[
\text{Liquidity Coverage Ratio} = \frac{\text{Stock of high-quality liquid assets}}{\text{Total Net Cash Outflows over the next 30 calendar days}} \geq 100
\]

On the other hand, NSFR is meant for contingencies related to liquidity mismatches, which are medium and long term in nature. NSFR aims to ensure that banks maintain a stable funding profile with respect to the composition of their assets and off-balance sheet activities. NSFR would be applicable in India from 1 January 2018 onwards, in excess to 100 per cent.

\[
\text{Net Stable Funding Ratio} = \frac{\text{Available amount of stable funding}}{(\text{NSFR}) \text{ Requisite amount of stable funding}} > 100
\]

- **Capital Conservation Buffer**

Capital Conservation Buffer is designed to make sure that banks build up capital buffers outside the periods of crisis, which could be used during a period of crisis. Banks are required to maintain capital buffers above their stipulated minimum. Capital Conservation Buffer is expected to provide banks strength to withstand economic downturns, curtail pro-cyclicality and teach those ways to rebuild capital during the preliminary stages of recovery of the economy.
Banks are required to maintain 2.5 per cent, comprised of Common Equity Tier 1 capital, above the regulatory minimum capital requirement of 9 per cent as capital conservation buffer. This buffer could only be drawn down when a bank faces a systemic or idiosyncratic stress.

<table>
<thead>
<tr>
<th>Common Equity Tier 1 Ratio after including the current periods retained earnings</th>
<th>Minimum Capital Conservation Ratios (expressed as a percentage of earnings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5% - 6.125%</td>
<td>100%</td>
</tr>
<tr>
<td>&gt;6.125%-6.75%</td>
<td>80%</td>
</tr>
<tr>
<td>&gt;6.75%-7.375%</td>
<td>60%</td>
</tr>
<tr>
<td>&gt;7.375%-8.0%</td>
<td>40%</td>
</tr>
<tr>
<td>&gt;8.0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

To rebuild the buffers banks could reduce their discretionary distributions of earnings like dividend payments, share buybacks and staff bonus payments. As an alternative method to rebuild one’s capital, banks could also raise new capital from the market.

- **Countercyclical Capital Buffer**

  Countercyclical capital buffer fulfils dual goals:

  - It would be used to maintain credit flow to the real sector during the times of crisis. However, the buffer is built up during the normal times.

  - It would also restrict the banking sector from venturing into indiscriminate lending during the periods of excess credit growth, which is often associated with the building up of system-wide risk.

The countercyclical capital buffer varies between 0 per cent and 2.5 per cent of total risk weighted assets (RWA) of the banks. It may also be maintained in the form of Common Equity Tier 1 (CET 1) capital only. The objective of this buffer is to mitigate the problem of pro-cyclicality.
Activation of countercyclical capital buffer would occur only when circumstances warrant, depending upon the indicators of countercyclical capital buffer. However, the framework of it has to be maintained prior to the activation. Credit-to-GDP gap is the main indicator for activation of countercyclical capital buffer. Nevertheless, credit-to-GDP gap is also used in conjunction with Gross Non-Performing Advances (GNPA) growth for the purpose. The Reserve Bank of India would also be take into consideration various supplementary indicators such as incremental C-D ratio for a moving period of three years (along with its correlation with credit-to-GDP gap and GNPA growth), Industry Outlook (IO) assessment index (along with its correlation with GNPA growth) and interest coverage ratio along with its credit-to-GDP gap).
## Appendix II

<table>
<thead>
<tr>
<th>Research House</th>
<th>Estimations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swamy (2012) study</td>
<td>Swamy (2012) study estimates that with an assumed growth of RWAs at 10 per cent, Indian banks would require additional minimum tier-1 capital of INR 2,51,106.57 crores. With RWAs growth at 12 per cent and 15 per cent, the requirement would be in the order of INR 3,36,390.41 crores and INR 4,74,168.60 crores respectively.</td>
</tr>
<tr>
<td>Ernst &amp; Young Study</td>
<td>Ernst &amp; Young study anticipates that by 2019, the Indian banking system is projected to require additional capital of INR 4,31,517 crores of which 70% will be required in the form of common equity.</td>
</tr>
<tr>
<td>ICRA Study</td>
<td>ICRA study pegs this figure at INR 6,00,000 crores of which 70-75 per cent will be the requirement of public sector banks.</td>
</tr>
<tr>
<td>PWC Study</td>
<td>PWC study estimates that India banks would have to raise INR 600,000 crores in the external capital over next 8-9 years, out of which 70-75 per cent would be required for the public sector banks and rest for the private sector banks. Further, the study observed that one percentage point rise in bank’s actual ratio of tangible common equity to risk-weighted assets (CAR) could lead to 0.20 per cent drop in GDP</td>
</tr>
<tr>
<td>Fitch Ratings</td>
<td>Fitch estimates the additional capital requirements at about INR 2.5 lakh crores to INR 2.75 lakh crores for Indian banks.</td>
</tr>
<tr>
<td>Macquarie</td>
<td>Indian banks would have to go on a massive capital raising to the extent of over USD 30 billion (INR 1.67 lakh crores) over the next five years to cater to their growth requirements and Basel-III implementation charges.</td>
</tr>
<tr>
<td>CRISIL</td>
<td>Indian banks may have to raise a total of about INR 2.4 trillion to meet growth needs in compliance with the Reserve Bank of India’s final guidelines on capital adequacy requirements under the new Basel III norms by March 2018.</td>
</tr>
</tbody>
</table>

*Source: Basel III: Implications of Indian Banking, Dr. Vigneshwar Swamy(Swamy)*
References


Introduction of a Bullion Spot Exchange in India
Nirupama Soundararajan & Arindam Goswami
Introduction of a Bullion Spot Exchange in India

Introduction:

India’s affinity for gold is a well-known fact, so is India’s dependence on gold imports to meet domestic demand. Ironically, despite this huge appetite for gold and such massive imports, our country stands nowhere when it comes to price setting in global bullion market. On the other hand, our next door neighbour and closest competitor, China, who overtook us as the largest consumer of gold few years back, has already made inroads into the global bullion market by becoming one of the members of the age old LBMA Benchmarking (erstwhile London Price Fix). China has in fact gone a step further and established its own benchmarking mechanism known as the Shanghai Price Fix, which market experts predict will complement or even challenge the LBMA benchmarking. It is high time that India shifts its role from being a mere price taker to a price influencer in the global bullion market. To achieve this India needs to develop its domestic bullion market. Currently, the Indian gold value chain faces challenges on both regulatory and operational fronts. Absence of a transparent price discovery mechanism, fragmented liquidity, lack of standardisation in the quality of gold, and inadequacy of transparent trading (buying and selling) market are only few of the many challenges that exist in the industry today. The need of the hour is to develop a comprehensive mechanism that can bring accountability and transparency in the market. It is imperative that both, policy makers and industry, come together and create a system which will enable for the market to develop without compromising on consumer protectionism and disruption of the existing formal trade.

Merits of a Gold Spot Exchange

More often than not, the setting up of a gold exchange has streamlined the business of gold in a country and Turkey and China are recent examples of this (see Appendix 1). A
bullion spot exchange will allow for uniform price discovery and bring homogeneity in gold standard. In addition to these, a regulated spot exchange will curtail grey market trading commonly known as ‘dabba’ trading and promote transparency to create a vibrant gold ecosystem. The introduction of a bullion spot exchange, by extension of being a regulated financial entity will ensure regulation in the currently un-regulated gold and jewellery market. A bullion exchange will further enhance market participation and will benefit market participants.

Some benefits of trading on a bullion spot exchange are:

- **Accessibility to a larger market:** As opposed to trading with a limited number of counterparties, a spot exchange would offer national level platform to trade to the market participants eliminating bilateral risks.
- **Increase in liquidity:** Being a nationwide platform, the participants would be able to tap a much larger pool of liquidity.
- **Professional risk management:** Trade on a spot exchange platform is backed by a Risk Management System which collects appropriate margins from all parties.
- **Guarantee compensation:** In the event of a counterparty default, the participants are assured of a compensation guarantee till the margins collected till date.
- **Accessibility to easy and reliable trade:** Exchange traded spots retains flexibility of customized norms for any commodity, quantity, quality specification, location, duration of contract and delivery date.
- **Better inventory management:** As it helps traders to have wider access to market and better inventory management.
- **Multiple options for delivery:** Trades can be settled either on a netted basis or on a trade-for-trade basis.
Challenges to Setting-up a Gold Spot Exchange

It was however mentioned during the discussion that setting up of a bullion spot exchange will not be an easy task, primarily on account of many legal and regulatory challenges.

- India has never envisaged a spot exchange, for any commodity. Hence the regulatory framework is absent.
- Regulation of all commodities, currently fall under the purview of the Ministry of Consumer Affairs (MoCA) and not under the Ministry of Finance. This has been the case because spot markets are almost always associated with agricultural commodities and not with bullion.
- Spot market trading falls under the ambit of the State Governments, under the head of “Markets and Fairs” in Schedule 7. Bullion has always been treated at par with agricultural and non-agricultural products in commodity market making even though bullion especially, gold and silver, are intrinsically different in nature.
- There is no definition of a spot exchange, either in the Central List or in any of the existing regulations. This means that before one plans for a regulatory framework for a bullion spot exchange, it will be necessary to define the same, preferably under Section 4 of the Union List.
- Spot contracts do not fall under the ambit of the Securities Contracts (Regulations) Act (SCRA). There is also no definition of a spot contract per se either under the SCRA or under the Stock Exchange and Clearing Corporation (SE&CC) Regulations which needs to be defined.
- Spot exchanges do not have a regulator. While SEBI may seem like an obvious choice, it is their opinion that they would only regulate derivatives and not the trade in the underlying. Even if a gold spot exchange is set up, a regulator for the same must be thought of.
Recommendations

- Setting up a bullion spot exchange will bring standardisation in the gold value chain by creating a good delivery standard, developing a transparent price discovery mechanism, formalising procurement of gold through recycling, and facilitating easier deliveries throughout the country. These will further bring self-regulation and parity in the fragmented gold market in India. The creation of a bullion exchange will also bring in the much needed trust in the gems and jewellery industry in India. Hence a gold spot exchange is key to building transparency in the gold market.

- The spot exchange may be set up under the centralised regulatory body on gold (known as the Gold Board) under a separate Statutory Act with formal guidelines and regulations. Alternatively, the justification for setting up a bullion spot exchange can be approached from the perspective of consumer protection. This will justify the fact that investor protection is needed for investors buying gold. This may serve as valid justification for amendment of the SEBI Act or for amending the SCRA to bring spot exchanges under the ambit of SEBI. Furthermore, the SEBI Act was created with a view to protect investors of capital market. Investor protection per se finds no mention in any of three lists of Schedule 7 and hence may be deemed to be under the Union List.

- The creation of a bullion exchange is only possibly only when supporting framework is created and upgraded wherever the demands arises. Certain prerequisites such as notification of an Indian Good Delivery Standard, a robust vaulting infrastructure, clearing mechanism and a formal delivery chain are must for creation of a bullion spot exchange. Hence, it was strongly recommended that the supporting framework be put in place before commencement of the exchange.

- Warehouse Development and Regulatory Authority of India must with immediate effect notify gold as a commodity whose vaults they would register and accredit. For any vaulting infrastructure for gold to develop in India, this must be done.
• The bullion spot exchange must record all transactions of gold that take place in the country including import, interstate trade and domestic sales and purchase over a particular ticket size. This will bring clarity and accountability in the gold market while reducing grey market trade.

• To encourage trade of gold through spot exchange, trade on exchange should be exempted from taxes. Tax should be imposed only when physical delivery of gold is taken i.e. when physical gold leaves the vault.

• The exchange must have two different contracts, one each for locally refined gold or recycled gold and one for imported gold.

Appendix 1: International Experience

More often than not, the setting up of a gold exchange has streamlined the business of gold in a country and Turkey and China are recent examples of this.

Internationally, Turkey leads the way in gold monetisation and standardisation of gold business. Turkey, like India, has a similar gold consumption pattern among its citizens. Prior to liberalisation of its economy in 1980, gold was one of the major investment products in Turkey, following which foreign exchange and commodity markets were deregulated. The Istanbul Gold Exchange was created on 26th July, 1995 as a way of liberalisation process of the Turkish economy and the Turkish gold market. It began operation with only a spot gold exchange and gradually went on to establish the future and options market in 1997. In 1999, non-standard gold transactions i.e. 14K, 18K and 22K was added to the Cash Gold Market. On 3rd April, 2013 Borsa İstanbul A.Ş. was created with the merger of Istanbul Stock Exchange and Istanbul Gold Exchange and Precious Stone and Precious Metal Market was formally launched. In the last two years i.e. from 2013 to 2015 the Turkish Precious Metal Market underwent significant policy and trade reforms. The Precious Metal Market has a member base of 96 participants consisting of 23 banks, 42 currency offices, 19 precious metal brokerage houses and 12 precious metal producing and marketing companies. The Precious Metal Lending Market consists of 12 banks and 2 precious metal producing and marketing companies.
Closer home, the Shanghai Gold Exchange (SGE) was formally created by the People’s Bank of China (PBoC) on 30th October 2002 and started operation as a membership based and self-regulated legal entity upon the approval of the State Council and registered with the State Administration for Industry and Commerce.

The SGE is authorized to:

- List gold, silver, platinum and other precious metals for spot, deferred and derivatives trading, as well as provide related services;
- Execute transactions through price matching, price asking or otherwise;
- Provide venues, facilities and related services for the trading of listed products, design products to be traded, arrange the listing of products, adopt trading rules, and organize, supervise, and regulate transactions, settlement, delivery and other related business activities;
- Draft standards for construction of the gold market infrastructures, formulate delivery standards, provide trade registration as well as services pertaining to accounts, custody, delivery, clearing and settlement, storage and transportation, and pledging and leasing;
- Supervise and regulate its members in accordance with the Articles of Association of the Shanghai Gold Exchange and the trading rules of the Exchange; and
- Perform any duty as otherwise prescribed by the PBoC.

The SGE currently has a network of 58 Certified Vaults (of which 55 are for gold storage and three are for silver storage) in 36 cities nationwide covering all major gold refinement and consumption regions, providing physical delivery, transfer, logistics, and transport services to enterprises and individuals across the country. Meanwhile, International Board Certified Vaults provide additional services relating to the trans-shipment of physical gold bullions between two foreign trading parties. Today, the SGE is a bustling trading venue that boasts 167 domestic members and 40 international members admitted to trading on the International Board. Nearly 8,000 corporate customers and over seven million individuals trade on the SGE through their carrying members.