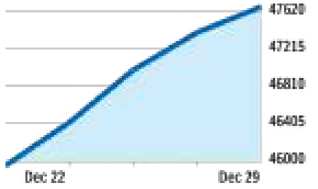
WEDNESDAY • DECEMBER 30, 2020
MUMBAI
₹10 • Pages 10 • Volume 27 • Number 316



Sensex
47613.08
(+259.33)

	LATEST	CHANGE
Nifty 50	13932.60	+59.40
P/E Ratio (Sensex)	33.34	+0.25
US Dollar (in ₹)	73.42	-0.07
Gold Std 10 gm (in ₹)	49877.00	-59
Silver 1 kg (in ₹)	67086.00	-656

THE HINDU

BusinessLine

www.businessline.in
businessline
thehindubusinessline

START-UPS STALLED
Firms folded, funding derailed and jobs culled, 2020 was a tough year for the start-up ecosystem p2

NEEDED, A FACELIFT
Stakeholders find yawning gaps in the Centre's Faceless Assessment Scheme for direct taxes p3

BUILDING HOPES
Wooing home buyers with discounts and delayed EMIs, the realty sector is eyeing an uptick in residential sales in 2021 p7

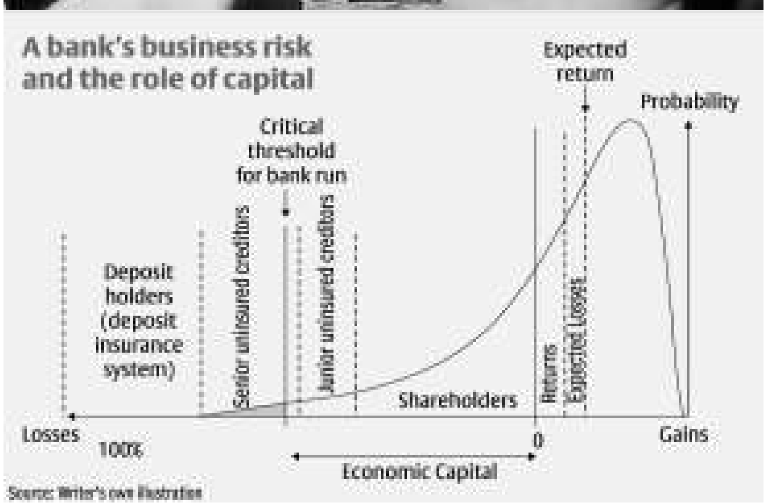
Bengaluru Chennai Coimbatore Hubballi Hyderabad Kochi Kolkata Madurai Malappuram Mangaluru Mumbai Noida Thiruvananthapuram Tiruchirapalli Tirupati Vijayawada Visakhapatnam

Regd. TN/ARD/14/09-11, RNI No. 55320/94

Risk adjustment, key for bank solvency

Banks must set up effective internal risk measurement methods to ensure safety of depositors

ARINDAM BANDYOPADHYAY



Banks play a very important role in the credit intermediation process in India. Their capital requirement is influenced by business growth, asset quality and efficiency in asset management. Banking is a dynamic business in which new opportunities and threats are constantly emerging.

Banks are in the business of incurring, transforming and managing risk. They are also highly leveraged since they operate their business by accepting deposits. As banks, by nature, have to take on more risk, the regulatory agency is accountable for creating a sound financial environment by setting a framework where the supervisory agency monitors the financial viability of banks.

The implementation of an effective and efficient risk management system is essential for banks to safeguard their financial resources and thereby protect the interest of the liability holders.

Depositors' safety

Bank capital acts as a buffer against potential losses. Banks are required to operate their business with a desired target solvency level to ensure depositors' safety. The deposit is a liability owed by the bank to the deposit-holders.

The given chart illustrates how gains and losses may impact the creditors of the bank. The initial negative returns may immediately impact the shareholders and the bank may face erosion of market value. However, for higher level of shocks due to business risks, the standard deviations (or volatility of a bank's earnings) will be large and may adversely affect junior creditors, and then, senior unsecured creditors.

Therefore, it is essential for banks to examine the critical threshold of economic capital (EC) to safeguard them from a bank run. In order to maintain solvency and give enough protection to the deposit-holders, banks are required to set proper internal definition and quantitative measurement of risks. This has been illustrated below with example.

If an investment yields a good return, the bank will do well. However, the risk manager will choose a confidence level of 99 per cent and the corresponding 'z' value must be multiplied by the standard deviation of portfolio returns to measure the tail risk. The 'z' values can be obtained from the areas under the normal curve from a statistical table.

Suppose, the actual daily standard deviation of the portfolio over one trading year is estimated as 4 per cent. The 'z' score for the 99 per cent is 2.326. Therefore, the VaR of the portfolio, under the 99 per cent confidence level is -9.304 per cent (-2.326×4 per cent). This measures the bank's required level of internal capital to absorb losses arising due to business risks.

The negative sign arises because risk translates into large adverse returns at the tail side of the return distribution. Therefore, there is a 1 per cent probability that the portfolio loss would exceed 9.304 per cent over the given time horizon.

Additional cushion

However, actually, portfolio returns may follow non-normal distribution due to abnormality in returns, and hence banks need to keep additional capital cushion in terms of Tier-I capital. Capital infusion and capital planning at regular intervals is crucial for maintaining the desired solvency level, as capital can absorb the bank's business risks (credit, market and operational).

When it comes to capital adequacy assessment, it is essential to carefully examine the internal capital requirements of banks and enhancement of corporate governance, audit and internal control process.

The Indian banking sector is going through a consolidation phase, with many mergers happening — especially in the public sector space. Though consolidation of business by amalgamating entities may provide scale advantage, poor asset quality in the loan books of distressed banks may create large deviations and increase the concentration risk in the merged entity.

Hence, it is worthwhile to assess the impact of these mergers from the point of view of risk adjusted performance and shareholders' value creation. Bank mergers can increase or decrease loan spreads, depending on whether the increased market power outweighs efficiency gains.

Studies have observed that even for the larger acquiring banks with well diversified portfolios, concentration risk accounts for two-third of the total unexpected variability of losses. Merged banks can reduce the concentration risk and unexpected variability of losses by keeping credit relationships with high-quality obligors and closing those with risky borrowers.

It is, therefore, essential to examine and compare the return versus portfolio risk position of banks.

Risk management

The effect of a merger on system-level concentration risk must not be viewed lightly. If risk is not managed within a conglomerate, the repercussions could extend beyond a single institution and may have adverse effect on the whole financial sector.

It is the central bank's responsibility to provide a financial system in which the users of financial services can benefit from healthy competition between financial institutions and also ensure depositors' confidence in the monetary system as a whole.

An effective implementation of risk adjusted performance-based utilisation of scarce capital (through RAROC) will enable the bank to manage its business risk effectively and safeguard the depositors' money.

The writer is Associate Professor (Finance), Acting Director and Dean Education, National Institute of Bank Management.
The writer acknowledges research assistance provided by Ashok Kumar