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Editorial

I am happy to present the October - December 2022 (Vol. 51, No. 3) issue of our flagship Journal, Prajnan. Since the publication of the previous issue, two important developments have taken place. First, the Editorial Advisory Board has been reconstituted. We are privileged to welcome three eminent personalities, *viz.* Shri N S Viswanathan (Former Deputy Governor, Reserve Bank of India, and Senior Fellow, Public Policy, IIM Bangalore), Shri B Sambamurthy (Former Director and CEO, IDRBT Hyderabad) and Dr Geeta Gouri (Former Member, Competition Commission of India), on the Board. I am sure that, with their sage counsel, our flagship journal will sparkle even further. We also put on record our deepest gratitude to the outgoing members, *viz.* Prof Anthony Saunders (Stern School of Business), Prof Ravi Jagannathan (Kellogg School of Management) and Shri A K Purwar (former Chairman, State Bank of India) for their invaluable advice and guidance, over the years.

I am also pleased to share that a new Editorial Committee has been formed, for the journal. This Committee consists of distinguished academicians and practitioners, from reputed institutions, in India and abroad. The editorial team at NIBM will work in tandem with the esteemed panel of external experts, to ensure that Prajnan continues to flourish. We request you to send your comments and suggestions on how further improvement in journal quality and outreach can be made, in the future.

In this issue, we offer four full-length papers and a brief article. The first paper is **Linking Risk Appetite to Limits: A Quantitative Approach for Practitioners**, by Goutam Sanyal and Srishti Mukherji. The authors define Risk Appetite in a quantitative manner and illustrate how it can be captured through a multidimensional system of limits. They also discuss the fixation of risk appetite under stressed conditions. In particular, the article shows how risk appetite for a credit portfolio can be translated into exposure limits on lower rated loan segments. The analysis will be useful for banks which wish to embed quantitative risk appetite models in a qualitative Risk Appetite Framework.

The second paper is **Policy Transmission in Indian Money Markets: Role of Announcement Effect and Liquidity Effect**, by Suvojit Lahiri Chakravarty and Sonia Goel. The authors explore how the fixation of policy repo rate to manage the economy, as well as liquidity operations by the RBI, affect the weighted average call money rate and other money market rates. It finds that these two measures do influence call money and other short-term rates like CP and CD. The article is salient, against the backdrop of sustained repo rate hikes, as Indian banks try to fund credit growth with higher borrowing in money markets.

The third article is **Credit Risk Measurement in Commercial Bank Lending to Mid-Corporates: An Indian Study**, by Renu Arora. It compares the effectiveness of different credit risk prediction models like Multilayer Perceptron Neural Networks, Multinomial Logistic Regression and Cluster Analysis. It uses loan data on Public Sector banks in India. It discusses which forecasting models fare better than others. It also concludes that financial variables have better explanatory power than non-financial variables. This study assumes significance, in light of the NPA crisis, because it provides banks a set of predictive tools to measure and manage credit risk.

The fourth paper is **Emotional Intelligence of Investors: Role of Investment Decisions and Risk Tolerance,** by Saloni Raheja. The author captures, in a Multiple Regression Framework, the linkage between Emotional Intelligence and the Investment Decisions and Risk Tolerance of investors. The article shows that Investment Decisions and Risk Tolerance levels are influenced by factors like self-awareness, empathy, ability to handle emotions, motivation and social skills. It makes a contribution to the literature on Behavioural Finance.

This issue concludes with a brief article on **Emerging Market Economies Under Global Liquidity,** by S Krishnakumar. The paper discusses how easy liquidity and low yields in advanced economies, in the wake of the Global Financial and Eurozone crises, have culminated in the rapid buildup of non-financial corporate debt in emerging markets. It makes a case for the imposition of capital controls, to stem such carry trades. The analysis also implies that, in view of the recent spike in interest rates across the world, such external commercial borrowing may be unsustainable for emerging markets.

We invite original research articles in all areas of banking and finance. Please submit you papers, comments and suggestions to editor_prajnan@nibmindia.org

We wish you a Happy New Year!

With warm regards,

Dr Sanjay Basu
Editor, Prajnan
Professor of Finance and Dean (Research and Consultancy),
NIBM, Pune.

Linking Risk Appetite to Limits: A Quantitative Approach for Practitioners

Goutam Sanyal
Srishti Mukherji

The concept of Risk Appetite gained new significance in the aftermath of the Global Financial Crisis (GFC). In its guidance on Risk Appetite in 2013, the Financial Stability Board (FSB) elucidated the features of an ideal Risk Appetite Framework (RAF), statements, limits etc., but stopped short of providing details for operationalizing Risk Appetite (RA), particularly in terms of limits. This paper attempts not only to define RA more precisely in quantitative terms, but also suggests a mechanism to operationalize the RA based on certain quantitative anchors. This addresses the crucial question of allocating the RA along business lines and provides a mechanism to track the risk profile of the portfolio against the limits. The paper uses a hypothetical corporate portfolio to demonstrate a practical translation of credit risk appetite into operational limits. Since the appropriateness of RA is often tested during macroeconomic downturns, this paper links the appetite setting process to stress testing.

Policy Transmission in Indian Money Markets Role of Announcement Effect and Liquidity Effect

Suvojit Lahiri Chakravarty
Sonia Goel

This paper looks into the role of announcement effect and liquidity effect in monetary transmission in Indian money market. It first looks into the impact of these two effects on the operational target that is, overnight call money market and then applies the same framework on other short term money market rates. The time period considered is from May 2011, when the new monetary policy framework was introduced till Feb 2021. The results show the presence of both the effects on the overnight call money rate and also on other short term rates. In addition to this, there is a presence of asymmetry in monetary transmission which is more prominent after fine-tuning of RBI's monetary operations.

Credit Risk Measurement in Commercial Bank Lending to Mid-Corporates: An Indian Study

Renu Arora

The study examines the nature of selected credit risk variables to develop credit risk prediction models by applying techniques of Multilayer Perceptron Neural Networks, Multinomial Logistic Regression and Cluster Analysis, and search for highly significant variables in grant of commercial credit to mid-sized corporates in Indian State-owned banks. Actual banking loans data to these entities has been analyzed to form multiple credit rating models. Comparative analysis of models indicated that the Neural Networks model performed better in training and testing samples, but the Multinomial Logistic Regression model outperformed Neural Network model in the holdout sample. The study also observes that the variables, current ratio and security

coverage ratio have higher credit risk predictive strength than the other variables. The study also finds that the financial risk variables were of more critical importance than the non-financial variables.

Emotional Intelligence of Investors: Role of Investment Decisions and Risk Tolerance

Saloni Raheja

In the present situation, finance is one of the most significant attributes in everybody's life. The investors consistently incline toward the venture roads as indicated by their appropriateness, chance and the arrival in light of the fact that there are distinctive venture roads accessible in the market. Consequently, the present investigation centers around the connection between the investment decisions and emotional intelligence of the investors and the connection between risk tolerance and the emotional intelligence of the investors. The data was gathered from 440 investors who contribute through LSC Securities Ltd. in Punjab by standardised questionnaire. Multiple Regression test was applied to test the noteworthiness of relationship among the factors. It has been found that there was relation among investment decisions, risk tolerance and emotional intelligence.

Brief Article

Emerging Market Economies Under Global Liquidity

S Krishnakumar

In the wake of the global liquidity squeeze which further culminated in the global financial crisis, it was considered important that the indicators relating to global liquidity should be collated and reported to international economic policy centres on a regular basis. The financial stability of the global economy should not be put at risk and there should be methods to plan ahead and take necessary steps taken towards pre-empting the occurrence of such a crisis. Exploring the diverse aspects relating to global liquidity, the Committee on the Governance of Financial System of the Bank for International Settlements submitted its Report in 2011 (Landau Report). Despite the near universal consensus that the exposure of the developing countries to volatile capital flows would work antithetical to the interests of their growth, many of these reports of the BIS /IMF fall short of making a case for capital controls or restrictions. This article discusses the same in the light of the vulnerabilities faced by the emerging market and developing economies during the current phase of global liquidity. It emphasises on the necessity of moving forward from the current conjecture of capital flow measures of the IMF to capital controls.