

a₹tha

A NEWSLETTER OF THE FINANCE LAB

November 2017, Volume 4, Issue 2



CONFERENCE REPORT

India Research Conference 2017*

The second IIM Calcutta-NYU Stern India Research Conference was held on 27 October 2017 at New York University (NYU) Stern Business School. The conference is supported by the Financial Research and Trading Laboratory, IIM Calcutta and the Centre for Global Economy and Business, NYU Stern. The primary aim of the conference is to showcase issues that bother Indian financial markets and policies. The conference brings together leading academic and industry experts for an in-depth discussion of India's financial markets and implications for the global economy. This year's conference discussed six research papers, held one panel discussion and organised a keynote by Viral Acharya, Deputy Governor, Reserve Bank of India. Presentation of each paper was followed by discussions.

The papers presented in the Conference broadly deliberated upon three major issues- (a) the state of high frequency capital market in India, (b) implications of large experiment on financial inclusion, called PMJDY (Pradhan Mantri Jan Dhan Yojna), and (c) impact of loan waiver programme. There was one more issue discussed- measuring systemic risk using network theory.

The first set of papers discussed issues in high frequency equity and derivatives market in India. The paper ('Informativeness of Orders in Electronic Limit Order Book Markets: A Revealed Preference Framework'¹²) noted that though the existence and behaviour of 'informed traders' plays an important role in finance literature, the empirical identification of informed traders has been challenging to say the least. The paper discusses a new measure of trader informativeness in the context of electronic limit order book trading. The proposed informativeness measure is semi-parametric in nature and tries to impose minimal assumptions on the underlying distribution of private information and the traders' order submission or trading behaviour. The paper goes on to use the measure to test various hypotheses related to trader choice limit, market and hidden orders in normal, turbulent and informative sensitive periods. The second paper ('Algorithmic Trading and Minimum Trading Unit Restriction'¹³) observed that algorithmic traders use their advantage of speed to execute a large number of small-sized trades in a very short time. In the presence of minimum trading unit (MTU) restriction, they are forced to trade at the smallest possible sizes - often restricted by the MTU. Using a dataset of single stock futures market obtained from National Stock Exchange (NSE) of India, the paper shows that MTU restriction acts as a binding constraint for traders while optimizing trade sizes. The paper also inspects the impact of a market-wide upward

*Report prepared by Mr. Anirban Banerjee, doctoral student, IIM Calcutta

¹² Sudip Gupta [Gabelli School of Business, Fordham University], Vikas Raman [University of Warwick] and Pradeep Yadav [Price College of Business, Oklahoma University]

¹³ Anirban Banerjee [Indian Institute of Management (IIMC), Calcutta] and Ashok Banerjee [Indian Institute of Management (IIMC), Calcutta]

revision in minimum contract size on trading behaviour in the Indian market during 2015. The paper shows that algo traders continue to trade at the minimum possible sizes, but the difference in trade sizes between algo and non-algo trades reduce due to the revision. Overall traded volume seems to be largely unaffected by the contract size revision.

The second set of papers were themed as ‘Banking India’s Unbanked’. Both the papers were focused on the single largest financial inclusion initiative undertaken in India under the ‘Pradhan Mantri Jan Dhan Yojna’ (PMJDY). The initiative had provided banking access to 260 million unbanked Individuals. The first paper under this section (‘Bank Accounts for the Unbanked: Evidence from a Big Bank Experiment’¹⁴) examines the behaviour of the newly opened bank accounts under the PMJDY scheme. The paper finds significant transactions in these accounts over time and convergence to the levels in non-PMJDY accounts of similar vintage, although the newly banked are poor, unfamiliar with banking and have no financial literacy. The paper, therefore, suggests the unbanked have latent demand for formal banking systems. The second paper (‘Banking the Unbanked: What do 255 Million New Bank Accounts Reveal about Financial Access’¹⁵) reports that 77% of the newly opened bank accounts under the scheme maintain positive balance. Although initial account usage is quite infrequent, the paper reports that it gradually converges to those of similar households who had prior access to banking products. The paper also finds increase in lending and defaults in new loans in regions more exposed to the program. The two papers use different dataset which differ in cross-section as well as duration of data availability but surprisingly report similar results.

The third set of papers was on systemic risk of banks and loan waiver programme. The paper (‘On the Interconnectedness of Financial Institutions’ Emerging Market Experience’¹⁶) noted that 2008 financial crisis possibly highlighted the absence of metrics for measuring systemic risks. There also seems to be very little academic interest in financial systems different than the US, especially in the emerging markets. The paper attempts to undertake a large scale empirical examination of systemic risk among major financial institutions in many emerging markets, starting with India. The paper uses network models for measuring, managing and regulating systemic risks in emerging markets and also utilize them to provide insights to the Indian experience. The paper develops a single and easily tractable measure of systemic risk for the financial sector. The beauty of the measure is that it can be disaggregated to identify contribution of individual banks in the overall risk of the sector. The final paper (‘Borrower Distress and Debt Relief: Evidence from a Natural Experiment’¹⁷) studies the

¹⁴ Yakshup Chopra [Indian School of Business (ISB), Hyderabad], Nagpurnanand Prabhala [Robert H. Smith School of Business, University of Maryland] and Prasanna L. Tantri [Indian School of Business (ISB), Hyderabad]

¹⁵ Sumit Agarwal [Georgetown University], Shashwat Alok [Indian School of Business (ISB), Hyderabad], Pulak Ghosh [Indian Institute of Management (IIMB), Bangalore], Soumya Ghosh [State Bank of India], Tomasz Piskorski [Columbia Business School] and Amit Seru [Stanford University]

¹⁶ Sanjiv Das [Santa Clara University], Madhu Kalimipalli [Wilfrid Laurier University] and Subh Nayak [Wilfrid Laurier University]

¹⁷ Saptarshi Mukherjee [Stern School of Business, NYU], Krishnamurthy Subramanian [Indian School of Business (ISB), Hyderabad] and Prasanna Tantri [Indian School of Business (ISB), Hyderabad]

causal effects of debt relief on loan performance of distressed and non-distressed borrowers. The paper utilizes \$14.4 billion debt waiver programme in India during 2008. The paper compares loan waiver beneficiaries with similar non-beneficiaries using a regression discontinuity design. The results suggest that loan performance of non-distressed beneficiaries declined by a least 23.2% while that of distressed beneficiaries improved by at least 23.4%. The paper concluded that targeting debt relief to distressed borrowers can improve its efficacy.

The panel discussion (‘Assessing India’s Social and Environmental Landscape: Opportunities and Challenges’¹⁸) deliberated at length about the socio-political environment of India and the need for stronger USA-India ties for development. The moderator¹⁹ mentioned that the agenda of Indian government seemed to be growth at great speed at one hand and eradication of corruption on the other. Panel members, with experience of international politics and defense strategies, highlighted the challenges that India face in achieving its stated objectives. Members mentioned that there is need for greater deliberations of policies before implementation.

The highlight of the conference was the keynote by Prof. Viral V. Acharya, Deputy Governor of the RBI on ‘Global Spillovers: Managing Capital Flows and Reserves’ where he talked about complimentary relationship between a country’s forex reserve and short-term debt and the importance of these two items together on the health of the balance sheet of a country. Capital controls need to account for the possibility of regulatory arbitrage between foreign investment flows in domestic market and external borrowing market. The Deputy Governor warned that building foreign exchange reserve without putting any control on short-term (private) external borrowing will not provide any cushion to the central bank in case of crisis. Therefore, he argues, one should always look at net foreign currency reserve (total reserves minus short-term external borrowing) as a percentage of GDP as a measure of macro liquidity.

¹⁸ Manpreet Singh Anand [Deputy Assistant Administrator, USAID], Irfan Nooruddin [Georgetown University] and Soundarya Chidambaram [Bucknell University]

¹⁹ Michael Posner [Stern School of Business, NYU]