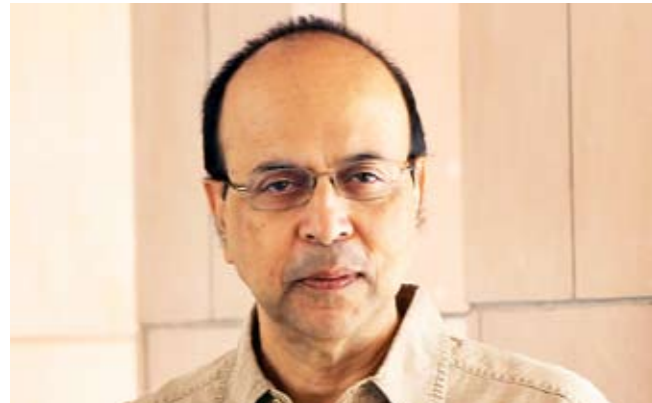




CAF vision

The Centre for Analytical Finance (CAF) at the Indian School of Business (ISB) in Hyderabad, India, will conduct research on issues in emerging markets finance, bring together world leaders in academics, practice and regulation of finance, become the premier finance research centre in the Asia-Pacific region, and achieve global standing in the foreseeable future.

EXECUTIVE DIRECTOR'S MESSAGE



Dear Colleagues,

In our short history since CAF was founded in 2004, we have remained true to the ISB's original vision of a centre of excellence dedicated to studying issues and problems in emerging capital markets. We have also made significant strides. We are doing path-breaking research in a host of important emerging markets topics, including how to improve access to finance for SMEs and whether development of the financial sector in a country reduces economic inequality of the population. CAF research papers are invited for presentation all over the world. They are almost always top downloads in their respective fields at Social Science Research Network (SSRN). Our flagship annual research conference, Summer Research Conference in Finance, is regarded internationally as a premier finance research conference. Our initiative to train the next generation finance researchers has had notable successes. The fresh graduates from various Indian universities that we hire and initiate into research regularly get admission to top-tier PhD programmes in the world following a period of research apprenticeship with us. In the course of our progress, we have formed collaborations and partnerships with scholars based abroad, important think-tanks and special financial institutions, such as the National Stock Exchange (NSE) of India. With time, we are getting more recognition and more visibility across the world for our work. We are now embarking on a new and exciting phase where we are taking the policy implications of our work to the financial services practitioners and regulators for implementation. Our recent initiative to securitize trade credit of SMEs has received enthusiastic reaction from all stakeholders. The initiative is described later in this brochure.

Instead of resting on our records, we are broadening the scope of our activities and making ever more ambitious plans for the future. We plan to strengthen our linkages with financial sector regulators and practitioners and, to that end, organize a series of policy conferences that will include leaders of our three constituencies: academics, industry professionals, and regulators. We also plan to engage with other finance researchers in the Asia – Pacific region, and work toward developing a culture of high quality finance research in the region. I hope that my recent appointment to the Board of Directors of the Asian Finance Association and the Board of Advisors of the Institute of Global Finance at the Australian School of Business will facilitate this mission. We want to form more partnerships and collaborations with the leading think-tanks and finance research centres in the world, and have regular exchanges of ideas, researchers and resources, such as special data. Ultimately, we want to be the worldwide hub of research in emerging capital markets. As the scope of our activities expand, we will undoubtedly encounter many challenges. However, if the past has been any indication, the future will be on our side.

Sincerely,

Sankar De
*Executive Director, Centre for Analytical Finance,
Indian School Business*

Current activities

The core activities of the centre are researching in issues of importance to emerging capital markets, organizing research and policy conferences that bring together leaders in academics, practice, and financial regulation on a single platform, undertaking research-based initiatives that will aid and inform financial practice and policy, and training next generation finance researchers with the help of specially crafted courses and projects. Creation of special datasets necessary to conduct research in emerging capital markets is another important CAF activity.

Future plans

Going forward, we want to expand the scope of our current activities, and take on new impactful emerging markets research projects, and launch new research-based policy initiatives aimed at broadening and deepening

capital markets. Our recent trade credit securitization initiative is a major example of such initiatives. We are also committed to developing our linkages with financial sector regulators and practitioners. More policy conferences are an important step in that direction. We have plans for a series of conferences on financing challenges of the Indian SMEs in association with industry bodies like FICCI and CII. We also hope to work toward developing a culture of high quality finance research in the Asia – Pacific region and, to that end, engage with other finance researchers in the region. Professor De's appointment to the Board of Directors of the Asian Finance Association and Board of Advisors of the Institute of Global Finance at the Australian School of Business will help us in this mission. Finally, we want to solidify the reputation of our annual research conference, Summer Research Conference in Finance, as a leading finance research conference in the world.

CAF is deeply grateful to the following individuals for their advice, help, and support throughout our short history, and to Citi Foundation for generous financial support.



Franklin Allen (Wharton), has helped and supported CAF in many different ways over the years, including participation in CAF conferences and research projects and organising joint conferences between CAF and Financial Institutions Center (FIC) at Wharton. Allen also sits on CAF advisory board.



Bhagwan Chowdhry (UCLA), a founder of CAF along with Rajan, has been a major influence in the development and growth of CAF since its birth through his advice, help, and regular participation in CAF conferences and research activities. He also sits on CAF advisory board.



Ravi Jagannathan's (Kellogg) association with CAF began with organising the first CAF research conference in 2004. He continues to participate in CAF conferences and research, and also sits on CAF advisory board.



Raghuram Rajan (U. Chicago), author of the original concept note for CAF, oversaw the founding of CAF in 2004. He has remained associated with CAF and sits on CAF advisory board.



Financial grants from Citi Foundation have supported most CAF activities in recent years, while monitoring of our performance by Foundation staff has helped us remain focused on our goals and objectives.

RESEARCH



CAF Summer Research Conference 2010 participants

Research at CAF focuses on emerging capital markets. At present, the following research tracks dominate CAF's research agenda. Each track is expected to generate a series of inter-linked studies. In all of them, resident researchers and external scholars based at foreign institutions work together.

Small and medium enterprises (SME) sector: financing and governance challenges

In spite of its important position in the Indian economy, relatively little is known about the financing patterns, constraints and challenges of SME units in India. To obtain reliable data for research, CAF has conducted two surveys of SME units across India. Our findings indicate that the average SME unit in India faces credit rationing in both formal and informal markets.

Research team: Sankar De (ISB) and Manpreet Singh (ISB)

Finance, growth and inequality

There is a large literature on the relation between growth and inequality, and also another large literature on financial development and growth. But there is little on the effects of financial development on economic inequality.

The general finding is that growth increases inequality in the earlier stages of development, and reduces it during later stages. But the process through which growth affects inequality is important for policy purposes. Examining financial development may provide an answer. If financial development aids growth primarily by benefitting incumbents, then inequality will increase. On the other hand, if financial development aids growth by relaxing financial constraints of the poor and small firms, inequality will decrease. Thus, looking at the process of how financial development aids growth will unify the literature on finance, inequality and growth. Identifying the specific channels through which finance affects growth will provide important policy guidelines that have large

macroeconomic implications.

Research team: Sankar De (ISB), Subrata Sarkar (IGIDR), Manpreet Singh (ISB) and Siddharth Vij (ISB)

Behavioral biases in portfolio decisions of different categories of investors

Recently, a growing field of research in finance has been examining stock market activities of various classes of investors with a view to understanding how cognitive biases of various kinds influence their portfolio decisions. Currently, several projects in this area are underway at CAF. The objective of one of the projects is to determine what motivates individual investors to trade. In this research, we use data that the National Stock Exchanges (NSE) of India generously supplied to us.



CAF Winter Research Workshop 2010 participants

Research team: Rahul Chhabra (ISB), Sankar De (ISB), Naveen Gondhi (ISB), Bhimasankaram Pochiraju (ISB) and Subrata Sarkar (IGIDR)

Law, institutions, finance, and corporate growth in emerging markets, with a focus on India and China

The thrust of this research is to examine the legal and business environments, financing channels and governance mechanisms of different types of firms in India, and compare them to those in other countries. The first paper from this research is now among the top ten downloads at Social Science Research Network (SSRN). It has been presented at many international research forums and business schools across the world.

Research team: Franklin Allen (Wharton), Rajesh Chakrabarti (ISB), Sankar De (ISB), Jun Qian (Boston College), and Meijun Qian (National University of Singapore)

Estimating regression models in panel datasets

The object of this research is to improve upon the existing methods of estimation of autocorrelation structure of errors for an individual over time so that the regression coefficient estimates and their standard errors can be estimated more precisely than currently feasible. We also consider more general situations than the existing methods allow, such as when there are two or more random regressors in the presence of some non-random regressors (as is commonly encountered in empirical investigations).

Research team: Mohit Dayal (ISB), Sankar De (ISB) and Bhimasankaram Pochiraju (ISB)

Publications 2010-11

IPOs With and Without Allocation Discretion: Empirical Evidence
Amit Bubna and Nagpurnanand Prabhala, *Journal of Financial Intermediation*

Capital Markets in India

Rajesh Chakrabarti and Sankar De (editors), Sage Publications



Amit Bubna

After The Storm: "Unregulated" Board Effects Of A Corporate Governance Crisis, June, 2011

Rajesh Chakrabarti, Krishnamurthy Subramanian and Naresh Kotrike

Does Sign matter more than Size? An Investigation into the Source of Investor Overconfidence, May, 2011

Rahul Chhabra, Sankar De, Naveen Gondhi and Bhimasankaram Pochiraju



Rajesh Chakrabarti

Financial Development in India – Status and Challenges

Rajesh Chakrabarti, *Financial Development and Regulation: Perspectives from Asian Emerging Markets*, Brookings Institution Press

Working papers 2010-11

Finance, Growth, and Inequality: Channels and Outcomes, June, 2011
Sankar De, Manpreet Singh, Subrata Sarkar and Siddharth Vij

How to account for contemporaneous and time dependence in Panel Data, June, 2011

Mohit Dayal, Sankar De and Bhimasankaram Pochiraju

Income Inequality and Employment Protection Laws: Evidence from OECD countries, June, 2011

Sankar De, Manpreet Singh and Krishnamurthy Subramanian

Credit Rationing in Informal Markets: The Case of Small Firms in India, May, 2011

Sankar De and Manpreet Singh

Infrastructure and FDI: Evidence of District-Level Data in India, March, 2011

Rajesh Chakrabarti, Krishnamurthy Subramanian, Sesha Sairam and Sudershan K

Relational Contracts and Courts, June, 2010

Sankar De and Manpreet Singh

Value of Independent Directors: Evidence from a Natural Experiment, June, 2010

Rajesh Chakrabarti, Krishnamurthy Subramanian and Frederick Tung

Conference/workshop/ invited presentation 2010-11

Sankar De, Panel Discussion on *Increasing Access to Capital to Stimulate Sustainable Economic Growth*, CII-Brookings Conference on US-India Economic and Financial Partnership, coinciding with the bilateral meeting between the US Treasury Secretary and the Indian Finance Minister, Washington DC, June, 2011

Sankar De, Subrata Sarkar, Manpreet Singh and Siddharth Vij, *Finance, Growth, and Inequality: Channels and Outcomes*, conference presentation, Financial Intermediation Research Society (FIRS) conference, Sydney, June 2011



Sankar De



Bhimasankaram Pochiraju



Subrata Sarkar

Sankar De, Discussion of *Information from Relationship Lending: Evidence from Loan Defaults in China*, Asian Alliance Conference, University of New South Wales Sydney, June 2011.

Sankar De, Naveen Gondhi, and Bhimasankaram Pochiraju, *Success/Failure of Past Investments And Current Investment Decisions of Investors*, invited presentation at Citi-FT Global Education Summit, Sydney, December 2010

Sankar De and Manpreet Singh, *Credit Rationing in Informal Markets: The Case of Small Firms in India*, invited presentation at International Growth Centre (London School of Economics and Oxford University) India research conference, Delhi, December 2010

Sankar De, Subrata Sarkar, Manpreet Singh and Siddharth Vij, *Finance, Growth, and Inequality: Channels and Outcomes*, conference presentation, Growth and Development Conference, Indian Statistical Institute Delhi, December 2010

Sankar De and Manpreet Singh, *Credit Rationing in Informal Markets: The Case of Small Firms in India*, conference presentation, Growth and Development Conference, Indian Statistical Institute Delhi, December 2010

Sankar De, Subrata Sarkar, Manpreet Singh and Siddharth Vij, *Finance, Growth, and Inequality: Channels and Outcomes*, CAF Winter Research Workshop, Indian School of Business, December 2010

Sankar De, Naveen Gondhi, and

Bhimasankaram Pochiraju, *Success/Failure of Past Trades and Trading Behavior of Investors*, invited presentation at Asian Finance Conference, Hong Kong, July, 2010

Research-based policy initiatives

We like our research findings to inform and influence business practices and government policies in India and other emerging markets. It is an important priority for CAF. In this context, we are excited about our new research-based policy initiative. The policy recommendations were developed by Sankar De when he was working with the Raghuram Rajan Committee on Indian financial sector reform. The recommendations were accepted by the committee and are included in the committee's report.

We are very optimistic that the initiative, if implemented, will be very beneficial for SMEs in India, generating positive and significant societal impact. Trade credit is a very important source of financing for Indian SMEs, as documented by all existing studies/reports on the subject including several CAF research reports. All trade credit financing is direct transactions between two companies outside the usual intermediated financial system. However, market financing should involve lower transactions as well as lower recurring interest costs than bilateral trade credit financing. Extensive research undertaken at CAF confirms this intuition. How can trade credit financing of SMEs



Prof. De participating in a panel discussion at CII-Brookings Conference in Washington

be brought into the market system? The initiative proposes a strategy to do just that. SMEs often sell on credit to their large customers and then wait for long periods for payment. If the receivables owed to the SMEs by large firms could be securitized, it would result in both deepening and broadening of Indian credit markets. In principle, such receivables are comparable to commercial paper with the high credit ratings of the large firms. The potential benefits include the following:

- The SMEs could reduce their investment in working capital, and thus their need for finance, significantly.
- The ensuing balance sheet clean-up would improve the credit worthiness of a typical SME, qualifying the company for more bank loans as well.
- A new market for securities will come into being, creating new financial sector assets and jobs.

- Growth in the SME and financial services sectors will have strong positive multiplier effects throughout the economy.

Our role in the initiative is to first seek feedback from the relevant constituencies (SME associations, financial institutions, finance ministry, the RBI) on this and, given a broad agreement on the value of the initiative, to persuade the constituencies to initiate the securitization process. We are delighted to report that the initial reaction of all concerned parties, including the SMEs, the banks, and especially the regulators, has been uniformly positive. At a high-level policy conference in Washington DC coinciding with the 2011 bilateral summit on US-India economic and financial cooperation between the Indian Finance Minister and the US Treasury Secretary, Sankar De's presentation on the initiative was enthusiastically received by the audience. Following the conference, the Indian Finance Ministry has

announced a new initiative to provide factoring services to help improve SME financing. It is a major step toward full-fledged securitization. As another encouraging development, the summit has led to the formation of an international working group of specialists with experience of securitization in different countries to take the initiative forward. Sankar De will lead the deliberations of the working group.

CONFERENCES DISTINGUISHED VISITORS

CAF organizes two academic research conferences each year, one in the summer, and the second one in the spring jointly with its partner institutions: Financial Institutions Center (FIC) at the Wharton School, the Swedish Institute for Financial Research (SIFR), and the China Center for Financial Research (CCFR) at Tsinghua University in Beijing. CAF summer research conference is held on the ISB campus in Hyderabad. The joint conference rotates between Beijing, Hyderabad, Philadelphia, and Stockholm. The conferences have evolved into major international research forums and attract submissions from finance researchers around the world. For each conference, the papers are selected by a world-wide committee of experts in the topic of the conference. All past conference papers are available on CAF website www.isb.edu/CAF.

We also organize policy conferences. A CAF policy conference is a special event. For each policy conference, a socially relevant and important business topic is chosen with the conscious aim to bring together, on a single platform, the world leaders among academicians, practitioners and policy-makers who share an interest in the topic. Within the broad topic, the most important issues are identified and a panel of experts discusses and debates each issue.

Conferences 2010-11

Seventh annual Summer Research Conference 2010 in Finance, August 5-8, 2010.

Sheridan Titman (UT-Austin and CAF Academic Fellow 2010) delivered a keynote address at the conference. The topic of his talk was: Market Efficiency and Corporate Investment. The conference agenda included the following topics:

- Capital Raising
- Systemic Risk
- Corporate Governance I: Corporate Boards
- Corporate Governance II: Shareholder's Interests
- Corporate Strategy

Winter Research Workshop, December 18-19, 2010.

CAF organised a Winter Research Workshop during December 18 - 19, 2010. Randall Morck, Jarislowsky Distinguished Professor of Finance and University Professor, University of Alberta, Canada, and an authority on corporate governance, and Kaivan Munshi, a leading researcher in institutional economics, Department of Economics, Brown University, USA, took part in this workshop. The purpose of the workshop was to enable ISB faculty to present their research to leading figures in their research areas. The workshop focused on the following topics:

- Corporate Governance
- Institutional Economics

Distinguished lectures 2010-11

Randall Morck, Jarislowsky Distinguished Professor of Finance and University Professor, University of Alberta, Canada, visited CAF during the Winter Research Workshop in December 2010 and gave a special lecture on the *History of Corporate Governance*.



Randall Morck



Kaivan Munshi

Kaivan Munshi, Professor of Economics at Brown University, visited CAF during the Winter Research Workshop in December 2010 and presented a paper titled *Networks, Commitment and Competence: Caste in Indian Local Politics*.

Sheridan Titman, McAllister Centennial Chair in Financial Services at University of Texas (Austin), gave the keynote speech at the CAF Summer Research Conference 2010. The topic of his talk was: *Market Efficiency and Corporate Investment*.

CAF academic fellow 2011

Every year CAF invites a finance researcher of international standing to visit CAF as the Academic Fellow of the year. The Academic Fellow interacts with the resident faculty in research and delivers the keynote address at our flagship summer research conference.



Franklin Allen



Raghuram Rajan



Ravi Jagannathan



Anjan Thakor



Richard Roll



Michael Brennan



Sheridan Titman

Anjan Thakor, Director of the Ph.D. Program and John E. Simon Professor of Finance, Olin Business School at Washington University in St. Louis, will be the Academic Fellow for 2011. He will be visiting CAF during July 2011.

In the course of a long and distinguished research career, Thakor has made seminal contributions in diverse areas

in finance. His research and teaching interests focus on information economics, corporate finance and banking. He has published research articles in leading economics and finance journals, like *The American Economic Review*, *The Review of Economic Studies*, *The RAND Journal of Economics*, *The Economic Journal*, *The Journal of Finance*, *The Journal of Financial Economics*, *The Journal of Financial Intermediation*, and *The Review of Financial Studies*. He is currently associate editor of *Journal of Banking and Finance* and past-President of the Financial Intermediation Research Society. He is also a research associate of the European Corporate Governance Institute.

CAF academic fellows

Franklin Allen, 2005

Richard Roll, 2006

Raghuram Rajan, 2007

Michael Brennan, 2008

Ravi Jagannathan, 2009

Sheridan Titman, 2010

Anjan Thakor, 2011



Naveen Gondhi



Manpreet Singh



Leena Kinger Hans



Vidya Kamate



Vishal Mangla

Training future researchers

Currently, there is a serious world-wide shortage of well-trained finance researchers. In India, the shortage is even more acute. Conceived as a response to this shortage, training of the next generation of researchers is an important CAF activity. Junior research staff at CAF is recruited from top-tier Indian institutions such as IITs, IIMs, ISIs and Delhi School of Economics. While at CAF, they receive hands-on training in finance research supplemented with specially designed research skill – building courses in statistics, econometrics, and data analysis. They typically stay at CAF for two to three years, with the expectation that they will proceed to a top-tier PhD programme at the end of their research apprenticeship at CAF. Though this initiative is small in size (our intake is two in an average year), its success has been impressively high.

Research

Soon after joining, new CAF researchers are assigned to ongoing research projects which gives them hands-on experience of the research process. They are involved in all aspects of the project. Later, as they grow in confidence, they are also encouraged to initiate and take forward new projects based on their own research ideas.

Conference presentations

CAF researchers are encouraged to present their research papers at top national and international conferences. This gives them the experience of presenting their work in front of a discerning audience, and also allows

them to incorporate constructive feedback into their research. Some recent examples of CAF researchers presenting their work are:

- Siddharth Vij presented a paper at the Financial Intermediation Research Society Conference in Sydney in June 2011
- Manpreet Singh and Siddharth Vij presented a paper each at the 6th Annual Growth and Development Conference at ISI Delhi in December 2010
- Naveen Gondhi's paper was presented at the Asian Finance Association meetings in Hong Kong in July 2010

Career progression

Admission to top-tier PhD programs in Finance is intensely competitive with a large and diverse applicant pool applying for very few seats (4-6 per year at each school). The time spent at CAF allows our researchers to build their research credentials which goes a long way in differentiating them from other applicants. Some examples of CAF Researchers getting admitted to top programs are as follows:

- Naveen Gondhi has been admitted to the Finance PhD program at the Kellogg Graduate School of Management, Northwestern University, USA starting Fall 2011
- Manpreet Singh will be attending the Finance PhD program at the Hong Kong University of Science and Technology starting Fall 2011
- Leena Kinger Hans was admitted to the Accounting PhD program at the London Business School in 2010



CAF Summer Research Conference 2010 participants at work

- Ex-CAF Researchers Vishal Mangla and Vidya Kamate are currently Finance PhD students at Kellogg.

Courses/workshops 2010-11

As and when necessary, CAF offers courses/ workshops to interested resident faculty and research staff at ISB. The courses are aimed at research skill - building of the participants, and focus on subjects that are important across business disciplines. The courses offered during 2010-11 included the following:

- Course on 'Analysis of Panel Data', April – August, 2011, taught by Professor Bhimasankaram Pochiraju (ISB)
- Workshop in Econometrics, July – October, 2010, taught by Professor Bhimasankaram Pochiraju (ISB)

Database creation

Paucity of reliable data is a serious challenge in emerging markets research. It makes datasets creation

an important activity for CAF. In 2010-11, we have put together two special databases that will make new and path-breaking research in several important areas possible.

Database on finance, growth and inequality

It is a database of 182 countries for the period 1950 to 2009. This is the most comprehensive database on finance, inequality and growth, and extends all existing database. Our database combines the information on income and inequality contained in the UNU-WIDER dataset and the Human Development Report published by UNDP; the World Bank database on financial development, and databases on legal, institutional and political variables compiled by different researchers in their respective fields of work. This database has the potential of facilitating research not only in finance, inequality and growth, but in many other subjects like gender equality, poverty, political systems, and government policy.

Database on orders and trades in Indian capital markets

With special data provided by the National Stock Exchange (NSE), this database contains the complete trading records of all stocks that traded on the exchange between January 1, 2005 and June 30, 2006. The most significant characteristic of the dataset is that it comes at the transaction level which identifies both counterparties (buyer and seller) in a transaction, unlike all other existing datasets which have information only on one side (buy or sell). The dataset contains about a billion trading records (about two billion records if one considers buys and sells separately) carried out by over three million distinct investors. It is perhaps the most comprehensive dataset that exist in the world today on trading behaviour, and addresses the problems of representativeness and missing information that plague existing datasets. Until now empirical evidence on the various hypotheses about trading behaviour of different classes of investors has come from analysing the actions of participants in the more developed and sophisticated markets like the USA and Finland. Verification of these findings with evidence obtained from emerging economies can make a significant contribution to our understanding of the investor behaviour across the world.

COLLABORATIONS & ACHIEVEMENTS



Capital Markets in India, book launch

Handbook on capital markets in India

'Capital Markets in India' is an authoritative handbook on Indian capital markets, brought out by CAF in association with Nomura Institute for Capital Markets Research (NICMR) based in Tokyo, Japan. Established in 2004, NICMR is a think-tank under the umbrella of Nomura Holdings. While CAF provided the content, NICMR funded the project. The book was published in English as well as Japanese. The English edition was published in November, 2010, by Sage Publications. Until now, NICMR has partnered only with Brookings Institution, based in Washington DC, for joint publications.

The book fills an important gap. It is a one-source guidebook to the major financial markets in India – equities, bonds, and futures and options – as well as to the industries that service the markets. The book comprises the

different segments of the securities industry (brokerage business, securities analysis, underwriting business, to mention a few), and asset management industry spanning mutual funds, pension funds, hedge funds, venture funds, investor advisory services and others. The regulatory and legal system governing the capital markets is also an important focus area of the book. The target audience for the book is domestic and foreign investors, fund managers, analysts, and others, including researchers and students who have needed a book like this, but could not find one. While being lucid and accessible in its style, Capital Markets in India goes beyond simply stating statistics and history – it provides analysis and insights in every area it covers.

Professor Rajesh Chakrabarti and Professor Sankar De of ISB have jointly edited the book. Besides the two editors, the authors include

leading practitioners (Zia Mody of AZB Partners, Chitra Ramakrishna of the NSE, Dr Bandi Ram Prasad, President of FTKMC and formerly Chief Economist, BSE), regulators

(M S Sahoo, member, SEBI), and academic experts such as Professors Susan Thomas (IGIDR) and J R Verma (IIMA). The then SEBI Chairman, C B Bhav, has kindly contributed the foreword.

Collaborations

We have collaborations of three kinds:

Collaborative research with researchers based at other institutions

The list includes Franklin Allen (Wharton), Bhagwan Chowdhry (UCLA), Ravi Jagannathan (Kellogg), NR Prabhala (U. Maryland), Jun Qian (Boston College), Meijun Qian (NUS), Subrata Sarkar (IGIDR) and Pradeep Yadav (U. Oklahoma).



Naveen Gondhi

Collaborative research and conferences with partner institutions

The annual Emerging Markets Finance (EMF) conference organized jointly by CAF, FIC (Wharton), SIFR (Sweden), and CCFR (Tsinghua University) is a good example of collaboration of this kind. The fourth EMF conference was held in Beijing in July, 2010.

Collaboration with industry

Under our collaboration with National Stock Exchange (NSE), we have received special data on trading in Indian capital markets. A training programme for SEBI staff is in progress.

Achievements/honours 2010-11

Sankar De was invited to participate in a panel discussion on "Increasing Access to Capital to Stimulate Sustainable Economic Growth" as part of the CII-Brookings Conference titled "The U.S.-India Economic and



Manpreet Singh

Financial Partnership" in Washington D.C., June 2011 coinciding with the bilateral meeting between the US Treasury Secretary and the Indian Finance Minister.

Sankar De has been invited to serve on the Advisory Board of Institute of Global Finance housed at Australia's leading business school, the Australian School of Business. The Institute promotes high quality finance and financial regulatory research, and key financial and regulatory policy analysis.

Sankar De has been invited to serve on the Scientific Committee of the World Finance Conference. He is the only board member from an Indian institution in the history of the association. He is the only one from an institution in South Asia to have been invited to serve on the committee.

Naveen Gondhi, CAF Researcher, has been accepted in the Finance PhD



Siddharth Vij

programme at Kellogg, starting in 2011. It is one of the highest-ranked finance PhD programmes in the world. Naveen joined CAF as part of the CAF initiative of training next generation researchers.

Manpreet Singh, CAF researcher, who was recruited under the initiative of training next generation researchers, has recently been admitted to the PhD programme at Hong Kong University of Science and Technology (HKUST). HKUST has one of the top-ranked Finance departments in the world.

Siddharth Vij, CAF Researcher, presented his paper (co-authored with Sankar De, Subrata Sarkar and Manpreet Singh) Finance, Growth, and Inequality: Channels and Outcomes, at the Financial Intermediation Research Society (FIRS) conference in Sydney, a top-tier international conference, in June 2011. Siddharth was one of the youngest presenters at the conference.

PEOPLE & SUPPORTERS



CAF Team: Standing (L-R): Naveen Gondhi, Siddharth Vij, Saptarshi Mukherjee, Rahul Chhabra, Prasanna Tantri, Manpreet Singh, Sitting (L-R): Sankar De, Divya Nair, Bhimasankaram Pochiraju

CAF staff

Sankar De, Executive Director
Bhimasankaram Pochiraju, Advisor
Prasanna Tantri, Associate Director
Divya Nair, Manager
Rahul Chhabra, Researcher
Naveen Gondhi, Researcher
Saptarshi Mukherjee, Researcher
Manpreet Singh, Researcher
Siddharth Vij, Researcher

CAF advisory board



Ajit Rangnekar, Dean, ISB

Members of ISB

Ajit Rangnekar, Dean ISB
 Chairman of CAF Advisory Board
Sankar De, Executive Director,
 CAF, ISB

Other business schools

Franklin Allen, Nippon Life Professor of Finance; Professor of Economics, The Wharton School, University of Pennsylvania; President, American Finance Association, 2000

Bhagwan Chowdhry, Professor of Finance and Faculty Director, Master of Financial Engineering program, Anderson School of Management, UCLA

John Cochrane, AQR Capital Management Distinguished Service Professor of Finance, Booth School of Business, University of Chicago; President, American Finance Association, 2010

Ravi Jagannathan, Chicago Mercantile Exchange/John F. Sandner Professor of Finance and a Co-Director of the Financial Institutions and Markets Research Center, Kellogg School, Northwestern University; President, Western Finance Association (WFA), 2005

Raghuram Rajan, Eric J. Gleacher Distinguished Service Professor of Finance, Booth School of Business,

University of Chicago; President, American Finance Association, 2011

Eduardo Schwartz, California Chair in Real Estate and Land Economics, and Area Chair of Finance, Anderson School of Management, UCLA; President, American Finance Association, 1996

Rangarajan Sundaram, Yamaichi Faculty Fellow and Professor of Finance, Stern School of Business, NYU

Sheridan Titman, McAllister Centennial Chair in Financial Services at University of Texas (Austin), President-elect, American Finance Association, 2012

Pradeep Yadav, W. Ross Johnston Chair and Professor of Finance and Director Division of Finance, Michael F Price College of Business, U. Oklahoma

Think-tanks

Glenn Boyle, Executive Director, New Zealand Institute for the Study of Competition and Regulation (ISCR), New Zealand

Shubhashis Gangopadhyay, Founder Director, India Development Foundation (IDF), India

E. Han Kim, Fred Taylor Professor of Business Administration and Director, Mitsui Life Financial Research Center East Asia Management Development Centre, Ross School of Business, U. Michigan

Per Stromberg, Head of Research, Institute for Financial Research (SIFR) and the SSE Centennial Chair in Finance and Private Equity, Stockholm School of Economics, Sweden

Jiang Wang, Mizuho Financial Group Professor, MIT and Director and Co-Chairman - China Center for Financial Research (CCFR), Tsinghua University

Financial institutions

Pramit Jhaveri, Citi Country Officer (CCO), Citigroup, India

Ravi Narain, Managing Director and CEO, National Stock Exchange, India, and Chairman, National Securities Clearing Corporation Ltd.

Sanjay Nayar, CEO and Country Head, Kohlberg, Kravis and Roberts (KKR), India

Shikha Sharma, Managing Director and CEO, Axis Bank, India

Regulatory bodies

U K Sinha, Chairman, Securities and Exchange Board of India (SEBI)

CAF associates

ISB Faculty

Amit Bubna

Rajesh Chakrabarti

Sudip Gupta

Tarun Jain

Mudit Kapoor

Shamika Ravi

Ramana Sonti

Krishnamurthy Subramanian

Ram Thirumalai

Others

Franklin Allen (Wharton)

Bhagwan Chowdhry (UCLA)

Ravi Jagannathan (Kellogg)

NR Prabhala (U. Maryland)

Jun Qian (Boston College)

Meijun Qian (NUS)

Subrata Sarkar (IGIDR)

Pradeep Yadav (U. Oklahoma)

Partners



Supporters



Citi Foundation



MILESTONES

- 2003** - Concept Meeting for Centre for Analytical Finance (CAF) held in Mumbai. Raghuram Rajan, then Finance Area Leader, represented Indian School of Business (ISB) at the meeting
- Sankar De appointed as Executive Director, CAF in December
- 2004** - CAF organises first summer research conference in finance as well as a policy conference on 'India-China: What can they learn from each other' in August
- Winter research conference in finance takes place in December
- 2005** - Advisory board for CAF, consisting of leaders in academia, industry and regulation inaugurated in August
- Franklin Allen (Wharton) visits as the first CAF Academic Fellow in August
 - Policy conference on microfinance and second summer research conference organised in August
 - Lloyd Blankfein, Chairman and CEO of Goldman Sachs, visits CAF and announces a two-year grant from the Goldman Sachs Foundation in November
- 2006** - First CAF Working paper "Financing Firms in India" presented at international conference on emerging markets organized jointly by the Darden School and the World Bank in March
- CAF policy conference on corporate governance and summer research conference held in August
 - Richard Roll (UCLA) visits as CAF Academic Fellow 2006 in August
 - Conference on market microstructure held in December
- 2007** - The first Emerging Markets Finance (EMF) conference organised jointly by CAF, Financial Institutions Center(FIC) at Wharton School and Swedish Institute for Financial Research (SIFR) takes place at Wharton in April
- CAF summer research conference is restructured and modeled on the Western Finance Association conference including paper selection through open competition and presentations followed by discussions by an assigned discussant in August
 - Raghuram Rajan (U. Chicago) visits as CAF Academic Fellow 2007 in August
 - Citi Foundation announces a three-year grant for CAF
- 2008** - Second EMF Conference takes place in Stockholm in April
- Regulators and leaders of the banking industry attend Indian Banking Conference held in June
 - First CAF working paper presented at the Western Finance Association conference in June
 - Michael Brennan (UCLA) visits as CAF Academic Fellow 2008 during summer research conference in August
 - CAF receives the first of three tranches of the Citi Foundation Grant
 - Vishal Mangla, a CAF Researcher recruited under the training young researchers programme, admitted to Kellogg Finance PhD Program
- 2009** - Third EMF Conference takes place on the ISB Campus in March
- Ravi Jagannathan (Kellogg) visits as CAF Academic Fellow 2009 during summer research conference in August
 - T N Srinivasan (Yale) delivers a special lecture on 'Indian Economic Reforms' in December
 - Manpreet Singh, a CAF Researcher, presents his paper at Financial Intermediation Research Society (FIRS) conference, Prague
 - Vidya Kamate, a CAF researcher, admitted to Kellogg Finance PhD Program
 - Sankar De chairs a session on 'Law, Institutions, and Finance' at the American Finance Association conference in December

“ It has been a long time since I have been to a conference with such quality ”

Franklin Allen (Wharton)
on CAF Summer Research Conference, 2008

“ A truly world class research centre at ISB, Hyderabad, Centre for Analytical Finance (CAF) continues to be a unique initiative, bringing together views of pre-eminent academicians, industry leaders and regulators through conferences, lectures and research papers. ”

Sanjay Nayar,
CEO and Country Head, Kohlberg, Kravis and Roberts (KKR) India

