The 9th International Institute of Forecasters’ Workshop took place in San Francisco on the 28th and 29th of September of 2012. It was sponsored by the Federal Reserve Bank of San Francisco. The workshop attracted about 65 participants. Glenn Rudebusch, Executive Vice President and Director of Research of the Federal Reserve Bank of San Francisco, welcomed the participants and thanked the IIF and the organizers Gloria González-Rivera (UC-Riverside and IIF), José López (FRBSF), and Óscar Jordá (UCDavis and FRBSF), for bringing an impressive roster of presenters and discussants on such a timely topic. He offered some introductory remarks on the enormous consequences of a global financial crisis as the financial events of the recent past have shown, and on how important it is to develop new techniques and approaches to monitor and predict financial crises. He remarked that solutions must be found within a multidisciplinary and multidimensional research agenda in collaboration with academics, regulators, and practitioners at large.

The Keys to the White House: Another Successful Prediction - Allan Lichtman

In the Summer 2010 edition of Foresight, I predicted Barack Obama’s re-election victory two and a half years later. That prediction was based on The Keys to the White House, a historically based prediction system that I developed in 1981 through collaboration with Volodia Keilis-Borok, a world-renowned authority on the mathematics of prediction models.

Retrospectively, the keys accurately account for the results of every presidential election from 1860 through 1980. Prospectively, with the successful 2012 prediction, the keys have predicted well ahead of time the popular vote outcomes of all eight presidential elections from 1984 through 2012. Only once in the last 120 years has the popular vote and the Electoral College vote diverged – in the contested election of 2000.

The Keys provide election forecasts long before the polls or any other model, because they are based on the theory that elections are decided primarily by the performance of the party holding the White House.

Through 28 years of correct, advance predictions, the Keys demonstrate that it’s governing that counts in presidential elections, as measured not just by the economy but also by other consequential events and episodes of a term such as foreign policy successes and failures, social unrest, scandal, and policy innovation. Nothing that a candidate has said or done during a campaign, when the public discounts everything as political, has changed his prospects at the polls. Debates, advertising, television appearances, news coverage, and campaign strategies — the usual grist for the punditry mills — are nearly irrelevant on Election Day.

Thus, Romney’s defeat had nothing to do with anything he did not or did not do in the campaign. Rather it was determined by the fact that the party holding the White House had governed sufficiently well — not perfectly — to gain four more years in office.

Allan J. Lichtman
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IIF Member News

News from the IIF Office

ISF 2013: Forecasting with Big Data
Seoul, Korea, June 23-26
Visit the ISF 2013 website for all of the latest news, deadline dates and registration information.

IIF online - Blog with us!
The IIF recently launched a major rework of its website at http://forecasters.org. The new website is more usable, mobile accessible and secure. Our blog, in particular, depends on the content we publish, so we encourage all of you to share relevant news with us! Whether it is announcements of, or reports from interesting conferences related to forecasting, interesting new papers, or forecasting in the news – anything that would be of interest to your fellow forecasters is fair game!

IIF - Social Media
We’ve gone social! Join us on Facebook, Twitter and LinkedIn.

Membership Renewals
It’s time to renew your membership for the new year! Feel free to contact me to check your membership status. Or, to renew your membership, visit http://www.forecasters.org/join.html.

Both Jennifer and I welcome and encourage your feedback and suggestions about The Oracle including submissions and ideas for improvement.

Pam Stroud, IIF Business Director
forecasters@forecasters.org

Calendar of Events 2013

4-5 March Analytics with Purpose: The Human Edge of Big Data, San Diego, CA, USA
5-7 June Workshop on Industry & Practices for Forecasting (WIPFOR), Paris, France
23-26 June ISF 2013, Seoul, Korea
25-28 June Applied Stochastic Models and Data Analysis International Conference (ASMDA 2013), Barcelona, Spain

To submit an item for the Calendar of Events, contact forecasters@forecasters.org

SAS News

SAS Company News
SAS has released v12.1 of its forecasting software offerings, SAS/ETS, SAS High-Performance Forecasting, and SAS Forecast Server. SAS Forecast Server now includes an additional user interface for interactive time series exploration and analysis, called SAS Time Series Studio.
The August release also included the new SAS Forecasting for Desktop, designed for smaller scale automatic forecasting for small and mid-sized businesses. This new offering is more fully described in this whitepaper.
SAS is ranked #1 on the World’s Best Multinational Workplaces list from Great Places to Work®.

SAS Personnel News
Snurre Jensen, has authored a new whitepaper “Structured, Large-Scale Statistical Forecasting Using SAS® Forecast Server,” available for free download.


Forecasting Events
SAS exhibited at the IBF Supply Chain Forecasting conference in Amsterdam. Charlie Chase delivered the keynote address on “Sensing Demand Signals, Shaping Future Demand to Create More Accurate Demand Response.”
The final issue of the IJF for 2012 is now out and it includes a fascinating special section on "Election forecasting in neglected democracies", guest edited by Michael Lewis-Beck and Eric Belanger. It contains a discussion of election forecasting in Spain, Belgium, Norway, Japan, Brazil, Turkey, and Lithuania. Each paper (with one useful exception) offers the very first effort at election forecasting for that country.

The remainder of this issue contains four papers on forecast method and system performance -- an important area that deserves greater coverage.

Observant readers will have noticed that online articles are now given issue and page numbers long before they appear in print. This will make it easier to accurately cite articles that are in press. Articles to appear in special issues will continue to be processed in the old way with issue and page numbers allocated at the time they go to print.

I’m sorry to announce that Professor Michael Clements is stepping down as an editor of the International Journal of Forecasting. He has been an editor since 2002, and over those 11 years he has provided outstanding service to the journal, handling hundreds of papers. His broad knowledge of the forecasting world, his deep insight into theoretical and applied aspects of the discipline, and his commitment to high quality research, have been key factors in helping us publish a high-class journal that has grown in reputation over the years Mike has been editor. I will truly miss his wise counsel and editorial leadership, although I’m delighted that Mike is willing to continue as an associate editor of the journal.

It is a pleasure to welcome Professor Dick van Dijk as a new IJF editor. Dick has been an associate editor of the journal since 2005, with particular expertise in the areas of nonlinear time series modelling, business cycle forecasting, empirical finance, volatility forecasting and density forecasts. Dick completed his undergraduate and postgraduate training at the Erasmus University Rotterdam (The Netherlands), where he is now Professor of Financial Econometrics. He is, perhaps, best known for his book *Non-linear time series models in empirical finance* (Franses & van Dijk 2000), written with his PhD supervisor, Philip Hans Franses. Dick has also made several contributions to the journal as an author, including the highly cited Teräsvirta et al. (2005). I was very pleased to have Dick accept my invitation to join the team of editors, and I look forward to working with him in this new capacity.

In 2013, the editors of the IJF are:

- Rob J Hyndman (Editor-in-Chief)
- Graham Elliott
- Paul Goodwin
- Esther Ruiz
- Dick van Dijk

**References**


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In it, you’ll find:
- How to Separate Risk from Uncertainty in Strategic Forecasting
- The Role of S&OP in a Sluggish Economy
- S&OP: Five Steps to Gaining Buy-In
- Forecaster in the Field
- GIS: A Missing Tool for Supply Chain Design
- Fostering Communication That Builds Trust
- Polly and Nate: Election Post-Mortem and Book Review
- Combined Forecasts of the 2012 Election: The PollyVote
- Nate Silver’s *The Signal and the Noise: Why So Many Predictions Fail — But Some Don’t*

If your subscription is due to lapse, you’ll want to know about our **special holiday offer**. Renew either your IIF membership or Foresight subscription and put ORACLE in the “Referred By” field, and you’ll be able to gift a **free membership or subscription to a forecasting colleague**. If you’re not sure of your subscription’s status, or would like some help, please email Pam at pamstroud@forecasters.org and she’ll get you set up!

If you’re on Twitter, come find us! We frequently post interesting content from Foresight, the IIF and beyond on Twitter. Follow @ForesightIIF, and we’ll follow you back to see what you’re up to (and spread the word about that, too).

We wish you a peaceful holiday season and a healthy, prosperous 2013!

Kim Leonard for the Foresight Team

kimleonard@forecasters.org

p.s. If your company or organization would like to increase its exposure by advertising in the journal or on the Foresight website, please contact Stacey Hilliard for details at stacey.hilliard@forecasters.org
Why Did You Become a Forecaster? Devon Kennard Barrow, A Student Profile

What is your current student status? What is your area of study and your particular area of forecasting interest?

Having recently completed my 3rd year of research as a PhD student with the Department of Management Science at Lancaster University, I will on 10th December 2012 be undertaking the viva voce exam for my PhD thesis on active model combination for time series forecasting with artificial neural networks. This work conducted under the supervision of Dr. Sven Crone, has been motivated by the success of forecast combination – combining two or more models, rather than selecting the single best, has consistently led to improvements in accuracy. While traditional forecast combination methods aim to find an optimal weighting given a set of pre-calculated forecasts, active combination methods simultaneously optimise and combine a set of complementary and diverse models generated by actively perturbing, reweighting and resampling training data. We evaluate and extend empirically and theoretically, active model combination methods most prominently Bagging and Boosting for time series forecasting. The contributions of this research work have been presented at major international conferences including ISF 2011 and ISF 2012 where I was awarded a prestigious Travel Grant. The first of several studies has been submitted to the International Journal of Forecasting (ISF), while the second is aimed at the European Journal of Operational Research (EJOR). I have also been accepted as a post-doctoral researcher at Lancaster University attached to the Lancaster Centre for Forecasting where I will begin researching advanced methods in model combination and model selection, in particular the adoption of meta-learning for individual model selection in time series forecasting.

What attracted you to the forecasting field?

The initial interest in forecasting was stirred by my PhD supervisor. Through our discussions it seemed a natural fit, with my general interest in predictive modelling and, a background in business, mathematics and computer science. At the time I had amassed four years of business and consultancy experience as an accountant (ACCA) and IT auditor with PricewaterhouseCoopers. Nevertheless, I was not fully satisfied as I still wasn’t making full use of my formal training in math and/or computers. This is what led to the change in career paths. The decision to pursue research in management science and more specifically the opportunity to pursue a fully funded PhD in forecasting which integrated and drew on my core skills and competencies was an obvious choice. It allowed me the opportunity to solve challenging problems which are potentially of importance to many people.

Other than your studies, are there other projects or organizations in which you are involved?

I have for the last three years been a member of the Lancaster Centre for Forecasting. The centre (www.forecasting-centre.com) which develops applied research with companies to facilitate knowledge-transfer between academia and business is a leader in the field of forecasting research in Europe. It has five full time staff, including Distinguished Professor Robert Fildes, 2 post-docs and 10+ PhDs all in forecasting with core competencies in applied forecasting, demand planning in supply chain and retail, data mining and market modelling. During this time I have had the opportunity to work on several applied research projects and the provision of a number of practitioners training courses, seminars and knowledge exchange collaborations in forecasting. Projects have included electricity load forecasting providing time series analysis and exploration of high frequency electric load data for Dong Energy, a Danish based company, data exploration, analysis and modelling to support the development of a statistical inference framework for neural networks for modelling retail time series for Retail Express a market intelligence company in the UK and development of a novel approach for time series modelling of products with shifting seasonality for Bayer CropScience, a UK provider of innovative crop protection.

Within my soon to commence role as a Post Doctoral Researcher at Lancaster University Management School, I will soon be involved in a number of new research and industry based initiatives. This includes a project I’m currently working on involving predicting container traffic for Hapag-Lloyd AG, Germany, and another one for Virgin Atlantic cargo.

I am also a member of STOR-i (http://www.stor-i.lancs.ac.uk), a pioneering doctoral training centre based at Lancaster University and backed by the Engineering and Physical Sciences Research Council (EPSRC). I have served as a mentor for first year PhD students of STOR-i and participated in several research forums. As a PhD student I am also regularly involved in tutoring on a number of bachelors and master level courses. Furthermore, I continue to be an ACCA affiliate and serving alumni of the Intelligent Computer Tutoring Group at Canterbury University in New Zealand.

You attended the ISF 2011 and 2012. What were your impressions? Was it valuable to you as a student?

ISF has been rewarding both professionally and socially. I was amazed at the warm reception given to young researchers and the open dialogue and feedback received from forecasting legends such as Prof. Everette S. Gardner, Prof. Rob Hyndman, Prof. Francis Diebold and Prof. James Stock. I was particularly awe-struck to have met and briefly discussed ideas with Prof. Jerome Friedman one of the world’s...
Forecasting Forum Honoring Herman Stekler

On November 15 and 16, 2012, a forecasting forum was organized by Fred Joutz (GWU), Prakash Lounani (IMF), Tara Sinclair (GWU) and Natalia Tamirisa (IMF) to honor Herman Stekler on the occasion of his 80th birthday. The conference took place at the IMF headquarters in Washington D.C. Six papers were presented – “Do forecasters believe in Okun’s law?” (Prakash Lounani), “Detecting and quantifying biases in government forecasts of U.S. debt” (Neil Ericsson), “(Anti) Herding and asymmetric loss tests: the case of FX forecasts” (Ulrich Fritsche), “Information rigidities in growth forecasts” (Natalia Tamirisa), “The future of oil: Geology vs. Technology” (Michael Kumhof), and “Common Drifting Volatility in large Bayesian VARs” (Massimiliano Marcellino). Each presentation was followed by comments from two discussants. Other participants in the Forum included Danny Bachman, Olivier Coibion, Jonas Dovern, Christopher Erceg, Ed Gamber, Robert Filides, Kajal Lahiri, Andrew Levin, David Payne, Xuguang Sheng, Tara Sinclair, Herman Stekler, Massimiliano Marcellino, Keith Ord, and Peg Young.

Devon Kennard Barrow, Student Profile, contd.

leading researchers in statistics and data mining. This truly reflects ISF, an event where you meet the leaders and shapers of the forecasting discipline and my first experience in 2011 was all inspiring. The diversity and wealth of research in forecasting and neighbouring disciplines that was presented during this time is unlike any experienced previously, and it is a must for anyone who is serious about forecasting research. Talking with other PhDs students about my research and other interests was rewarding, including the usual gripes about dealing with supervisors and the alone feeling of doing a PhD. This stimulates networking among the PhD community and has led to some lasting friendships and collaborations. Overall ISF has helped me to substantially improve the quality and contribution of my PhD research and to shape my research interests.

What is your anticipated completion date of your studies? And what are your plans for the future?

I submitted the completed PhD thesis on November 12th 2012 with the upcoming viva on the 10th December 2012. On the 1st January 2013 I will begin a new role as a Post Doctoral Researcher at the Department of Management Science, Lancaster University, hopefully kick starting a career in academia. I hope to develop a research agenda which follows on from my PhD continuing my research in active model combination and developing ideas in automatic model selection for time series forecasting.

Tell us about your interests outside of work? Hobbies, family, research

Outside of work, I pursue interests in music and dancing. I have been a player of the Steel pan instrument for over 10 years and continue to be involved in the band back home in St. Lucia whenever possible. I have also enjoyed being a part of college life at Lancaster University serving as an Assistant Dean working to ensure discipline, health and safety, and as a College Advisor mentoring and supporting students of Furness College. I also play football competitively for the Lancaster University Graduate College. Keeping in touch with family all of whom live abroad is very important, and life as a PhD has been rewarding because of the many friendships I’ve nurtured during this time.

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The workshop was opened by Frank Diebold, who delivered the Academic Keynote Address. Frank offered his thoughts on how to think about rare event forecasting. He challenged the audience to think globally about our current knowledge of time series econometrics and exercise this knowledge on the many financial and economic dimensions of the economy. He emphasized the need to borrow insights from other disciplines and in particular network theory, which should be helpful to model systemic risk. Rare event forecasting and evaluation of systemic risk are central questions. Diebold exhorted the profession to confront these questions with a blend of old and new tools. He offered three research directions. First, an event forecast, such as predicting recessions, could be understood as a probability forecast in search of a relevant loss function. Such a loss function must balance the cost of false alarms (false positive) and of missed signals (false negative). The “conditional” evaluation of rare event forecasts is difficult because, by nature, the events are rare. Second, rare events are rarely isolated events. On the contrary, they come as a result of the interaction between the idiosyncratic and the common features of the players in a system, in which connectedness is key. Events that are initially perceived as isolated could quickly become systemic events as the global financial crisis of 2008 showed. Hence, the forecasting problem should be multivariate. Third, the econometric modeling of connectedness is paramount. Diebold discussed classical methods to think about connectedness using the variance decomposition of the prediction-error variance. He then combined this decomposition with a network approach by modeling the dynamics of the degrees of nodes in the network. He presented the time-varying connectedness measure of thirteen U.S. financial institutions, and singled out the results corresponding to the net pairwise directional connectedness of the Lehman bankruptcy on September 17, 2008.

The first session of the day, Session I, focused on “Tail Risk Dependence”. Egon Zakrajšek, from the Board of Governors, presented: “Stress testing U.S. Bank Holding Companies: A Dynamic Panel Quantile Regression Approach.” The paper constructs density forecasts of losses associated with different loan portfolios and trading activities, which were generated from quantile autoregressions. Based on these forecasts, the authors of the paper simulate capital shortfalls during the 2008 financial crisis for several U.S. bank holding companies. They find that shortfalls are significantly higher than those based on a linear model. This paper was discussed by Kay Giesecke, from Stanford University, who suggested implementing ‘Large Deviation Analysis’ to understand the structure of systemic failure and the selection of the most likely paths (stress scenarios) to it.

Simone Manganelli, from the European Central Bank, presented the next paper “VAR for VaR: Measuring Tail Dependence using Multivariate Regression Quantiles”. Simone and his co-authors provide a general methodology to analyze multivariate systems of multi-quantiles. The approach can be thought as a Vector Autoregression for quantiles. They analyze 230 financial institutions around the world and they identify those whose risks are more sensitive to marketwide shocks during times of financial distress. The discussant, Demian Pouzo, from UC-Berkeley, praised this work, emphasizing that this research offers a very general impulse-response function with which to trace the effects on the distribution function of a variable due to shocks on the distribution function of another variable. He suggests using this framework to study financial contagion.

After lunch, which was served at the facilities of the Fed, we attended three sessions. Session II, entitled “Diversification in International and Commodity Markets”, included two papers. Allan Timmermann, from UC-San Diego, presented “Predictive Dynamics in Commodity Markets”. For a range of commodity spot price indexes over the period 1991-2010, the authors explore the out-of-sample predictability at different frequencies. The strongest predictability is found in metals and raw industrials indexes, and the weakest in fats-oils, foods, and textiles. Macroeconomic factors such as inflation, money supply, and industrial production are the strongest sources of predictability mostly during economic recessions. The discussant, Jan Groen, from the New York Fed, offered numerous suggestions on data and methodology. Among them, he pointed out that foreign state variables are also good predictors and they should be included in the analysis. Jan also suggested expanding the evaluation sample, e.g. 1947-2010, because it appears that the predictability found by the authors is driven by the 2008 global recession. Since there is no real-time data for state variables, he recommended that a proper evaluation of the out-of-sample forecast should use unobserved data, which is the only data available at the time of the forecast.

The second paper, “Is the Potential for International Diversification Disappearing?” was presented by Peter Christoffersen, from University of Toronto. Peter and his co-authors presented a dynamic asymmetric copula model to capture the nonlinear dependence and asymmetries in international equity markets. They show that correlation across markets has increased mainly in developed markets and, to a lesser extent, in emerging markets. Consequently, the gains of diversification have been drastically reduced in developed markets, though there are still significant benefits in emerging markets especially in severe market downturns. This paper was discussed by Ross Valkanov, from UC-San Diego. Ross asked why the dependence was trending up. He pointed out that, though larger correlations are coming from first and second moments, jumps are still uncorrelated and conditional skewness does not exhibit co-movements. The pending and important economic question is how to use the finding that dependence has increased to guide investors’ decisions on portfolio allocation.

Session III was originally scheduled as an introduction to networks in the sciences to be delivered by George Sugihara, from Scripps Institute of Oceanography, but due to unforeseen circumstances, George had to cancel. Fortunately, Óscar Jordà was able to fill this slot with a very interesting talk on “When Credit Bites Back. Lessons from Economic History”. Using a panel data set from 1870 to 2008 across 14 advanced countries, Óscar and his co-authors show
that the build-up of excess credit during an expansion is correlated with the severity of the subsequent recession: leveraged economies are more vulnerable to shocks. In the expansion phase of the cycle, excess credit lengthens the expansion by nearly 5 years on average, and increases GDP growth by 0.5 percentage point per year. However, the recovery path during the subsequent recession is much longer (by 2 to 3 extra years) and more painful (with negative and sluggish real GDP growth), relative to recoveries after normal periods of credit creation.

The final session of the day, Session IV, focused on applications of “Networks in Finance”. The first paper “Financial Network Systemic Risk Contributions” was presented by Nikolaus Hautsch, from Humboldt University. Nikolaus and his co-authors propose a measure, called ‘realized systemic risk beta’, which permits monitoring the systemic contribution of companies over time. This measure is defined as the marginal effect of a company’s VaR on the system’s VaR, accounting for cross-dependence among companies and other network effects. The paper was discussed by Galina Hale, from the FRBSF, who praised the paper because the proposed measure is practical and can be computed in real time. The measure seems to be extremely volatile, thus Galina suggested extracting a low-frequency component which would be more useful for forward-looking policy. In addition, she provided interesting suggestions on network topology.

The second paper of the session was presented by Bernd Schwaab, from the European Central Bank, who spoke on “Conditional Probabilities and Contagion Measures for Euro Area Sovereign Risk.” The authors analyze Euro sovereign CDS spreads from 2008 to mid-2011 by proposing a new model, a dynamic multivariate generalized hyperbolic skewed t-density. This model captures skewness and heavy-tails in the price changes of CDS as well as conditional volatilities and correlations. The model produces estimates of the marginal, joint, and conditional probabilities of sovereign default. The paper was discussed by Hanno Lustig, from UC-Los Angeles, who pointed out that the proposed model is not a pricing model because it lacks no-arbitrage restrictions. He argues that this is not a problem for policy makers as the risk-neutral probabilities of default are also informative. He suggested that counterparty risk should be included in the model if the intent is to construct a measure of systemic risk. Given that the correlation of sovereign debt default and banks default is high, the authors may be underestimating the probability of default under the risk-neutral measure.

We adjourned for the day, which was full of thought-provoking presentations and discussions, by going to dinner to the “One Market” restaurant in downtown San Francisco, where all of us enjoyed a taste of beautifully presented California cuisine and wine.

The second day of the workshop was opened by Til Schueermann, who delivered the Policy Keynote Address on “Stress Testing Banks”. Til works for Oliver Wyman consultants, and his address was very timely for two reasons. First, he was physically in the field in the spring of 2012 directing and supervising the stress testing of the Spanish banks. We could not expect better first-hand insights than those provide by Til. Secondly, at the time of his presentation, the Spanish authorities released the needs of capital provisions for Spanish banks, which were the final objective of Til’s presence in Spain. Til pointed out that for stress testing to be successful, there must be first credible bank information and, secondly, upon revelation of the banks’ capital needs, credible ability of sovereigns to fulfill such needs. The objective of stress testing is to convert uncertainty into a risk assessment by mapping a view of the world – macro scenarios – to micro-outcomes – higher losses, lower revenues. Upon the definition of stressful macro scenarios, stress testing is purely an exercise in forecasting, that is, dynamic projections of revenues, income/losses, and their effects on the evolution of the institution’s balance sheet, taking into consideration the required regulatory capital and liquidity ratios. Till illustrated the nuts-and-bolts of the methodology with the Spanish case.

The first session of the day, Session V on “Networks in Science: Lessons for Economists’, brought a very different perspective on systemic risk. Fushing Hsieh, from UC-Davis (Statistics Department) presented “Computing Systemic Risks from Multiple Behavioral Networks: Animals and Banks in the Dawn of a Crisis”. Hsieh spoke about a real crisis in a group of monkeys that developed over a period of couple of years. In this context, a crisis is a social collapse (rare event) of the hierarchy of the group that, from a veterinary point of view, is financially costly and creates serious management problems. Animal behavior models could not offer a satisfactory explanation why the crisis happened, prompting the question on how to extract early warning signals that could help to prevent such a crisis. Behavioral dynamics (in monkeys and banks) are based on multiple networks. Hsieh showed us how to find a critical slow-component which brings total collapse.

The last session of the day and of the workshop, Session VI, focused on “Stress Testing”. Matt Pritsker, from the Federal Reserve Bank of Boston, spoke on “Enhanced Stress Testing. He provided several refinements to the actual practice by arguing that stress scenarios should not only contemplate stressful macroeconomic events, but also banks’ risk exposures in order to choose the best direction of stress factor movements. He reviewed two methodologies, stress-maximization and constrained stress-maximization. He argued in favor of the latter providing a design that makes the full financial system robust to a large set of shocks. The discussant, Mikael Juselius from the Bank of International Settlements, asked how this broader framework could be implemented in practice, and offered several suggestions to clarify the theoretical aspects of the paper.

The second paper of the session, “Improving Early Warning Indicators for Banking Crisis” was presented by Mathias Drehmann, from the Bank of International Settlements. He argued that an ideal warning indicator for banking crisis should be precise, have correct timing, and issue stable signals given an objective function. Mathias and his co-authors evaluate different indicators based on the Re-
EURO AREA BUSINESS CYCLE NETWORK (EABCN)
Submission Deadline: February 25, 2013
Global Spillovers and Economic Cycles, Paris, 30-31 May 2013
Hosted by the Banque de France (BdF)
A Euro Area Business Cycle Network (EABCN) Conference
www.eabcn.org

In an increasingly integrated global economy, assessing the propagation of shocks is becoming of major interest for the international economic cycles analysis. It is indeed challenging to evaluate the impact of certain types of shocks on global business cycles and to disentangle the various transmission channels, such as trade flows, financial linkages or confidence effects. This conference will focus on empirical and theoretical contributions providing an assessment of various spillover effects at a global level and new perspectives on structural analysis, forecasting and economic policy design and assessment. Possible topics include:

- The evaluation of changing trade and financial linkages across countries
- The macroeconomic effects of swings in commodity prices
- The cyclical relationships emerging-advanced countries
- The integration of financial spillovers in global macro and econometric models
- Theoretical and empirical analyses of the transmission of monetary and fiscal policy across countries

Ayhan Kose (IMF), Christopher Otrok (University of Missouri), Fabrizio Perri (Bocconi University and CEPR) and Lucrezia Reichlin (London Business School and CEPR) have already confirmed their participation, and we welcome further relevant submissions. Both theoretical and empirical papers are suited, and applications on the euro area are particularly welcome.

The deadline for replies is 9am GMT on Monday February 25, 2013. Authors who are not CEPR members can email their submission to meets@cepr.org. Authors who are CEPR members can upload their submission on www.cepr.org/yourprofile. There you can indicate whether you will be able to cover your own travel costs, or whether you will require funding from CEPR. Guidelines on how to register online for CEPR Meetings can be found at http://www.cepr.org/meets/emo/Guidelines.htm. Authors of successful submissions and accepted participants will be notified by early April 2013 at the latest.

The event is hosted by the Banque de France, and sponsored by the EABCN in collaboration with the Paris School of Economics and the Pierre Werner Chair Programme of the Robert Schuman Centre for Advanced Studies at the European University Institute. Limited funding is available for travel expenses for academic participants presenting or acting as discussants. Expenses will be reimbursed according to the standard CEPR travel guidelines (http://www.cepr.org/meets/wkcn/misc/CEPR_Travel_Reimbursement_Policy_2008.pdf). Costs will not be covered for central bank participants.

If you have any difficulties registering for this meeting, please contact CEPR’s meetings department, at meets@cepr.org or +44 20 7183 8817.

Organisers:
Philippe Bacchetta (University of Lausanne and CEPR)
Laurent Ferrara (Banque de France)
Jean Imbs (Paris School of Economics and CEPR)
Massimiliano Marcellino (European University Institute, Bocconi University and CEPR)
The Most Influential Articles in Forecasting?


It seemed a simple enough task at the outset: assemble a collection of about 80 key papers in business and economic forecasting, including both path-breaking theoretical contributions and those illustrating the range of practical applications. How to proceed? Let’s use citation counts to make sure we do not overlook any highly cited papers. But then some areas are less popular than others and even the most highly cited paper in, say, judgmental forecasting would not make the top 100 and few applications papers would appear there either. Ask researchers in various areas of forecasting for their favorite list of key papers, as we did, and suggestions emerge that are not in the most-cited list. Expand the list to cover topics including univariate time series models, unit-root testing, judgmental forecasting, multivariate forecast models, measuring forecast errors and selecting methods, combining, probability forecasting, planning and forecasting practice, and applications in the areas of marketing, technology, macroeconomics and finance. By the end of this process the number of articles, and more critically, their total length greatly exceeded the allotted page limit.

The earliest research on forecasting goes back to around 1920s and was based in the core quantitative disciplines of statistics and econometrics. But how relevant were these early articles to current researchers? Articles such as Yule’s [1] made fundamental contributions which are now fully embedded in standard text books. In fact our earliest selections were three articles from the 1960s, Kalman [2] on his filter, Trigg and Leach [3] on their ad hoc model for adaptive smoothing and Bass [4] on diffusion models for new products. It was in the next two decades that the core concepts that constitute ‘forecasting research’ were laid out as reflected in our choices. With the founding of, first, the Journal of Forecasting and then, in 1985, the International Journal of Forecasting, the field rapidly developed its own methodological perspectives. At its heart, forecasting is concerned with evaluating alternative approaches to particular forecasting problems and trying to generalize as to which methods work best under what circumstances – the method of multiple hypotheses (Armstrong [5]). As Armstrong has argued, the forecasting journals have proved reasonably successful in sticking to this as a methodological principle required for publication. Of the articles we’ve selected 20 percent were from these two journals. But even sticking to a reasonably rigid view of forecasting and its related methodologies, we were still left with a large number of articles from which to choose.

Our choice of articles was not unfettered - space became a serious constraint when Sage revealed to us their algorithm for estimating page numbers had some flaws. There were also budget limitations. And yet we needed to stick to our brief of identifying the most influential articles across the forecasting field. Some obvious contenders are exceedingly long. For example, Sims’ [6] highly cited path-breaking article on vector autoregression is 48 pages. It is also found in a number of other collections so it was dropped in favor of the shorter and somewhat later article by Litterman [7]. Other similar judgments were made, sometimes to bring in articles from relatively under-represented sources. However, we felt we had to include the most highly-cited article in forecasting with 5145 citations (Web of Science, 16 August 2012), that on co integration by Engle and Granger [8]. (According to Kim et al. [9] this is the fourth most-cited paper in economics.) And reprinting permissions for some articles were more expensive than for others, breaking our budget constraints. Articles by the editors could be included without paying a fee and are certainly over-represented! Following the selection criterion of high citations we even found some highly cited articles we’d not read – you try it! If you check up on our choices you’ll undoubtedly disagree with some selections, but most if not all of your favorite forecasting authors are surely represented, because that criterion also figured in our final decisions. In the final analysis, though, this is a collection of our own and various colleagues’ favorite papers. The full list can be found by clicking on the link www.lums.lancs.ac.uk/research/centres/Forecasting/Articles/.

Now to the contents: Parts I and II cover the core methodologies of forecasting, statistical time series methods, the newer computer-intensive methods such as neural networks, and econometrics. Part III completes the methodological exposition with key articles on judgmental forecasting and then examines the evaluation of different forecasting methods and how to choose between them, including some of the classic competition studies. Part IV continues the same theme concerning itself with the distribution of forecast errors and their measurement. Macroeconomic forecasting is then considered separately, a vagary of the pages permitted in each volume. Part V includes studies that are specific to particular problem areas including accounting, finance, operations and marketing as well as the link between forecasting and planning.

Our aim in covering such a wide range of areas was to appeal to researchers across a wide range of disciplines, in business and management, organization studies, politics, and psychology but also to stimulate interdisciplinary thinking in the field. Financial applications are perhaps under-represented but other collections have already given wide coverage of this citation-intensive area.

So a final challenge to our readers – use the forecasting discussion list (see http://forecasters.org/) to suggest articles we’ve missed. Or perhaps you could follow in Scott Armstrong’s footsteps in his book, Long-Range Forecasting and identify articles we should have omitted. Please spare the editors embarrassment though!

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- 21-22 November, Cape Town, RSA

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The Program Committee invites the submission of abstracts related to the theory and practice of forecasting.

- 31 January 2013  Proposals for invited sessions and panels devoted to special interests in forecasting
- 16 March 2013  Deadline for abstract submission
- 31 March 2013  Notification of acceptance or rejection of abstracts

For more information on ISF 2013 and to submit an abstract, visit our website http://forecasters.org/isf/index.html

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