Universities nationwide include the twin pillars of teaching and research in their missions. As our outgoing Department Chair, Mike Riodan, explains in his letter, teaching and research often create a positive symbiosis for the student experience. But it is worth highlighting a few ways in which research in particular has been of benefit to Columbia Economics.

Basic scientific research serves to advance the base of knowledge from which we draw teaching content, but structuring research projects can be expensive. Often, researchers need access to data or information that is difficult to compile; they sometimes need to travel to create and gather data sets; they may need access to space for experiments; and they need to assemble teams of people to undertake analysis. Funding research projects is competitive in today’s environment. Finding and securing funding for research projects is a skill that all faculty members must therefore learn as part of their professional development.

From the Director of the Program for Economic Research by David Weinstein

Big Data is changing the world. Research conducted recently by the McKinsey Global Institute and McKinsey’s Business Technology Office suggests that the explosive rise of large data sets able to be analyzed by complementary increases in computing power (the phenomenon to which “Big Data” refers) will go so far as to become “a key basis of competition, underpinning new waves of productivity growth, innovation, and consumer surplus.”

That means that apart from merely leading to better information, Big Data has implications for transforming the real economy. The McKinsey report estimates, for example, that if the U.S. health care system were to use big data creatively to make gains in efficiency and quality, the sector could generate more than $300 billion in excess value every year.
Economics is a big department at Columbia. In 2011, nearly 20% of the graduates awarded degrees from Columbia College, and nearly 15% from the School of General Studies, had an Economics major, joint major, or concentration. While the Core Curriculum no doubt is a defining experience for Columbia undergraduates in their freshman and sophomore years, Economics also serves as such for many Columbia undergraduates in their junior and senior years.

The size of the undergraduate Economics curriculum is reflected in the size of the Economics faculty and graduate program. By the completion of the Economics Initiative, the faculty will grow to forty full-time-equivalent members, and entering Ph.D. classes will number around two dozen. In hiring faculty members and recruiting graduate students, the goal of the department is not just to keep the numbers up. To be sure, the department must offer enough courses to avoid literally stuffing students into classrooms, and must offer enough variety to make an Economics major or concentration interesting for our diverse undergraduates. But just being the right size is not good enough.

To provide our undergraduate majors and concentrators the best possible educational experience, the department must compete with other top ten economics departments to attract the best possible faculty and graduate students. These competitions are intense. Spring is the season for hiring new junior faculty, and the department has been engaged deeply in recruiting several outstanding faculty members working in diverse fields of economics. Such hires pump new intellectual blood into the department. Our recruitment targets already have demonstrated both an outstanding talent for research in their dissertation work and a keen ability to explain clearly their research ideas in interviews and “job talks”. We expect our new faculty to become equally excellent teachers, as they bring cutting edge research ideas into the classroom with passion and clarity.

The competition for top graduate students is similarly intense. Spring also is the season for recruiting new students for admission to our Ph.D. program. The quality and success of our Ph.D. program are critical not just for advancing our department’s research mission and reputation for excellence, but also for the quality of the undergraduate program. Our graduate students are the teaching assistants for our undergraduate lecture courses, and also assist advising our undergraduate majors and concentrators. Our Ph.D. students, while pursuing their dissertation research, also bring intellectual energy and new ideas to the classroom. Many graduate student teaching assistants start out as inexperienced instructors, but

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News from the Undergraduate Program

Benjamin Mills, GS ’12, is the inaugural winner of the General Studies Dean’s Prize, and is a co-recipient of this year’s departmental Romine Prize for best senior thesis.

Marisa Rama, CC ’12, is also a co-recipient of the Romine Prize for best work in a senior seminar.

Alex Frouman, CC ’12, is a 2012 recipient of the Marshall Scholarship. Following graduation, Alex will be attending Oxford University for an MPhil in Economics.

Felipe Goncalves, CC’12, is this year’s winner of the Parker Prize, awarded annually to students planning on attending graduate school in economics. Felipe will be attending Princeton for a PhD in economics.
Dmitry Sergeyev and Neil Mehrotra will be participating in the Federal Reserve Bank Internship this summer. Dmitry will be in New York and Neil will be in Washington, DC. The internship is intended to aid students in furthering their dissertation research and provide valuable feedback from research economists currently at the Fed.

Joan Monras is this year’s co-recipient of the Wueller Prize, awarded annually for the best paper by a third year student. In this paper, Joan analyzes how much it matters if all immigrants in a given host country come from the same country of origin or come from multiple countries. He shows that if it is the case that different countries produce some goods that are specific to them (for example cultural goods) it makes an important difference. Various channels could potentially explain why this is the case. For instance if immigrants settle in a certain place and start producing the goods they produced at their home country then the presence of immigrants from a certain origin determines whether certain products are available or not. This story is plausible for non-tradable goods, not so much for tradables. A different one, the one studied in the paper, is whether there is some sort of preference externalities that may also make tradable products available only when immigrants settle in a given place. In particular, the paper shows that if immigrants have biased preferences to their home country products, they push the demand for these products out in the host local market. Under certain situations, like heterogeneous firms, this allows the not-so-productive firms to also enter the local host market. Since under usual distributions, the mass of not-so-productive firms relative to the very productive firms is larger, then this outward shift in the demand implies more products become available. The paper also provides suggestive evidence of this by showing that metropolitan areas that are more diverse are also the ones that have more products available and are those where people consume a wider range of products, using data on tradable grocery products.

Hyuncheol Kim, with Professor Cristian Pop-Eleches, received a grant from the Korea International Cooperation Agency (KOICA) for projects entitled: “The Impact of Nutrition and Health Interventions on Children’s Health and Socio-economic Outcomes” and “Complementarities and Externalities of HIV/AIDS Prevention Strategies in Malawi: HIV/AIDS Education, Male Circumcision, and Cash Transfers”.

Carlos Montes-Galdon, a third-year PhD student, was recently awarded the 2012 Presidential Award for Outstanding Teach-
Support Columbia Economics

Your tax-deductible donation can directly provide crucial support for students and faculty through the Economics Department’s Program for Economic Research.

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You may also write to us at:
Program for Economic Research, Department of Economics, Columbia University, 1022 International Affairs Building, 420 W. 118th Street, New York, NY 10027

From the Director of the Program for Economic Research

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development, and it certainly helps to have people who can teach or support faculty in sharpening these skills!

Since the creation of the Program for Economic Research in 2004, Columbia has been able to provide a critical resource for our faculty, especially junior faculty. Our success thus far in improving our department and its research profile has had an outsized impact on generating much-needed resources for the University. Sponsors research budgets fund places for some of our top graduate students, alleviating pressures on the Graduate School of Arts and Sciences; students benefit from the close mentorship and apprenticeship that comes with working on a major research project with a faculty investigator. They provide funds for faculty to expand opportunities for talented undergraduates with the skill sets to work on exploratory research. And indirect costs (or “overhead”) generated by sponsored research budgets help Columbia to pay for critical infrastructure needs, such as computing, that support this work.

This year, I’m proud to note that the Program passed the $8 million mark in total research funding awarded to Columbia, a figure that represents 270% growth since I became Executive Director three years ago. Over half that amount has been spent to date on direct support for faculty and students working on specific sponsored projects, and we continue to responsibly steward new proposals and project funds. Though this is a clear marker of success thus far, most importantly it speaks volumes about how the world sees investing in the hive of talent being nurtured at Columbia Economics.

It is therefore with some sadness, that I have to announce that I will be stepping down as PER’s Executive Director in order to become the next Chair of the Economics Department. Fortunately, Mike Woodford has graciously agreed to take over for me as the next Executive Director, so I feel confident knowing that I will leave PER in capable hands. I continue to look forward to working with Mike over the next few years and serving the Department in my new role.

David E. Weinstein is the Executive Director of the Program for Economic Research and the Carl S. Shoup Professor of the Japanese Economy.

News from the Graduate Program

Continued from page 3

ing by Graduate Students. This prestigious award is granted annually to only three students across the University, and recognizes the significant contribution that Carlos has made to the Department and to the University.
NBER Working Papers

STEVEN J. DAVIS, TILL M. VON WACHTER
"Recessions and the Cost of Job Loss"
NBER Working Paper No. 17638

DOUGLAS ALMOND, JANET CURRIE, MARIESA HERRMANN
"From Infant to Mother: Early Disease Environment and Future Maternal Health"
NBER Working Paper No. 17676

WOLFRAM SCHLENKER, W. REED WALKER
"Airports, Air Pollution, and Contemporaneous Health"
NBER Working Paper No. 17684

DOUGLAS ALMOND, BHASKAR MAZUMDER, REYN VAN EWIKJ
"Fasting During Pregnancy and Children’s Academic Performance"
NBER Working Paper No. 17713

MAYA ROSSIN-SLATER, CHRISTOPHER J. RUHM, JANE WALDFOGEL
"The Effects of California’s Paid Family Leave Program on Mothers’ Leave-Taking and Subsequent Labor Market Outcomes"
NBER Working Paper No. 17715

SHUAIZHANG FENG, MICHAEL OPPENHEIMER, WOLFRAM SCHLENKER
"Climate Change, Crop Yields, and Internal Migration in the United States"
NBER Working Paper No. 17734

JOHANNES F. SCHMIEDER, TILL M. VON WACHTER, STEFAN BENDER
"The Effects of Extended Unemployment Insurance over the Business Cycle: Evidence from Regression Discontinuity Estimates Over Twenty Years"
NBER Working Paper No. 17813

JOHANNES F. SCHMIEDER, TILL M. VON WACHTER, STEFAN BENDER
"The Long-Term Effects of Unemployment Insurance Extensions on Employment"
NBER Working Paper No. 17814

FRANCESCO CASELLI, THOMAS E. CUNNINGHAM, MASSIMO MORELLI, INÉS MORENO DE BARREDA
"Signalling, Incumbency Advantage, and Optimal Reelection Thresholds"
NBER Working Paper No. 17833

STEPHANIE SCHMITT-GROHÉ, MARTÍN URIBE
"Prudential Policy for Peggers"
NBER Working Paper No. 18031

Perspectives: Columbia Economics
Spring 2012 | Volume 6/Issue 1
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Jonathan Vogel, assistant professor in the department, was recently named a 2012 Alfred P. Sloan Research Fellow. The Sloan Research Fellowship is intended to stimulate fundamental research by early career scholars, and support scholars with potential to contribute richly to their field.
Slavery was central to US economic history and political development and arguably has had persistent effects on the distribution of economic activity across the Americas. Many theories of institutional development maintain that slavery as a system of property rights was incompatible with economic development, but the general equilibrium effect of slavery on sectoral economic development has not been investigated empirically. Within economics, an older body of research documenting the efficiency of slavery in agriculture was a crowning achievement for neoclassical economic history. The quantitative argument that slavery was efficient is embodied in Fogel and Engerman’s (1974) *Time on the Cross*, which transformed economic history and remains a classic on course syllabi today. However, this analysis does not seriously examine the local political economy of the property rights that supported slavery. Neither does it document the impact of slavery on the development of manufacturing or the urban sector.

The proposed research will cut across the debate over the efficiency of slavery by developing new data and methods to document the local political economy of economic processes.

First, the research will construct two new measures of slavery as a set of property rights in people whose enforcement varied across time and space. The first measure will capture the property rights protections provided to slave owners by local courts. The second measure will capture the local risks of slave escape. To construct these measures of property rights, we will exploit previously untapped source data and new computational tools. To document to property rights protections provided by local courts, we will computationally analyze large legal databases of historic court decisions concerning the security of slave property, such as Westlaw and Lexis-Nexis Academic. We will use computational language analysis of the text of thousands of court opinions to score the local judiciaries as relatively sympathetic or hostile to protecting the property rights of slaveowners. To document to risk of slave escape, we will exploit primary source data on the locations of Underground Railroad operators, newspaper advertisements for runaway slaves, and historic maps of escape routes to construct county-level measures of threats to the security of slaveowner property. We will combine these data with an analysis of travel and transport costs to document the county-level threat of slave escape.

Our proposed measures will capture variation in what is unique about slave societies: the state-sanctioned, regulated, and enforced ownership of human beings. By contrast, virtually all previous research has used the enslaved fraction of total population as a measure of the intensity of slavery. As traditionally measured in this way, it is difficult to disentangle the impact of slavery from other factors such as race or local agricultural conditions. Our measures will provide a new and superior way to document the institutional impact of slavery on development.

Second, to document the institutional impact of slavery the research will integrate our measures of slave property rights with spatial equilibrium estimates of productivity at the local level. The spatial equilibrium productivity estimates will be calculated using historical prices and a methodology first proposed by Roback (1982). Spatial equilibrium methodologies are often used to estimate local manufacturing productivity in contemporary applications, but have not been exploited to estimate otherwise unobservable agricultural productivity differences in the rich county-level historical data we will examine.

Third, the research will use individual firm- and farm-level data to document the sources of the county-level productivity patterns. In particular, we will examine patterns of agglomeration to investigate the general equilibrium relationship between the security of slave owners’ property rights and agricultural and manufacturing productivity. Our conjecture is that slavery mattered as an institution, not just through the presence of slaves. Thus we hypothesize that it is where slave property rights were insecure that land values were lower, manufacturing wages were higher, and long-run economic development was more successful. To test these hypotheses, the research will exploit historical census and price data to document clusters of industrial activity and their relationship to productivity at the county and city level.
A central issue in the study of economics and politics is whether, how, and/or which political systems lead to the implementation of efficient policies. Elections in representative democracies feature dispersed information across a variety of actors. While social scientists now have a fairly well-developed understanding of how elections aggregate voters’ information, there has been much less attention to the at-least-equally important issue of whether politicians’ or parties’ information gets disseminated and aggregated efficiently. The first project in this proposal lays out a simple but novel model of electoral competition between office-motivated candidates with private information. The results will suggest a substantial rethinking of common intuitions regarding how much information can be credibly transmitted by politicians and, moreover, how efficiently such information is aggregated. In particular, the project will show that politicians’ incentives may be to overreact to their private information rather than to pander to the electorate’s prior beliefs, and that there is a sense in which pandering would in fact be good for voters’ welfare. A number of insights regarding the limits to information aggregation will be developed.

The second project in this proposal suggests a new approach to studying strategic information transmission through “cheap talk.” The key idea is that conventions of natural language can be formally captured by imposing a weak restriction on the space of available strategies. While the restriction by itself does nothing to affect the essence of the strategic possibilities, it mitigates one source of multiplicity in cheap-talk games that concerns permutations of language. Given the formal restriction capturing conventions, the second step is to apply iterative admissibility, i.e. to iteratively delete weakly dominated strategies. The approach will be shown to provide sharp and robust predictions. A goal of the project is to investigate applications of the approach to broader classes of games.

The projects described here should have broad impacts on our theoretical and practical understanding of information transmission and aggregation. One project will produce new insights about the information aggregation properties of electoral mechanisms. By studying how elections aggregate the information possessed by politicians, the project will complement our understanding how elections aggregate voters’ information. The second project presents a new approach to studying strategic communication in cheap-talk games. It will provide a new foundation for why cheap-talk communication is effective despite pervasive coordination problems. The ideas developed in this context can potentially be applied to many other strategic situations.
Recent Faculty Articles

JUSHAN BAI AND KUNPENG LI
“Statistical Analysis of Factor Models of High Dimension”

JUSHAN BAI, HAIQIANG CHEN, AND TERENCE TAI-LEUNG CHONG
“Theory and Applications of TAR Model with Two Threshold Variables”
Econometric Reviews, Volume 31, Issue 2, 2012

PATRICK BOLTON, XAVIER FREIXHAS, AND JOEL SHAPIRO
“The Credit Ratings Game”
The Journal of Finance, Vol. 67, Issue 1, February 2012

PIERRE-ANDRÉ CHIAPPORI, OLIVIER DONNI, AND IVANA KOMUNJER
“Learning From a Piece of Pie”

GRACIELA CHICHILNISKY
“Economic Theory and the Global Environment”

RICHARD CLARIDA
“Get Real: Interpreting Nominal Exchange Rate Fluctuations”
International Journal of Central Banking, Vol. 8, Supplement 1, January 2012

DONALD R. DAVIS AND MARY AMITI
“Trade, Firms, and Wages: Theory and Evidence”
Review of Economic Studies, Vol. 79, No. 1, April 2012

PRAJIT K. DUTTA AND ROY RADNER
“Capital Growth in a Global Warming Model: Will China and India Sign a Climate Treaty?”

KATHERINE HO, JUSTIN HO, AND JULIE HOLLAND MORTIMER
“The Use of Full-Line Forcing Contracts in the Video Rental Industry”
American Economic Review, Vol. 102, No. 2, April 2012

CRISTIAN POP-ELECHES, HARSHA THIRMURTHY, JAMES P. HABYARIMANA, MARKUS GOLDSTEIN, AND JOSHUA GRAFF ZIVIN
“Behavior Responses of Patients in AIDS Treatment Programs: Sexual Behavior in Kenya”
Several researchers in the Economics Department at Columbia are actively involved in the pursuit of a new foundation for the understanding of economic behavior. Known by the term “neuroeconomics,” it is one that utilizes studies of the brain through the work of neuroscientists and experimental psychologists to inform researchers’ understanding of decision-making and applies those insights to test economic models.

The recently created Mind, Brain and Behavior Initiative (MBBI) at Columbia, seeded with the support of a $250 million gift from the late Dawn Greene and the Jerome L. Greene Foundation, will serve as the hub of this type of research activity, one which exploits the gains that can be made from taking highly interdisciplinary approaches to research on human behavior. The Initiative is centered around the work done by the Department of Neuroscience, but brings together researchers in a wide range of fields. The Initiative will be located in the Greene Building, currently under construction and scheduled to open in 2015.

Yet in this vein research efforts have already begun in the Economics Department at Columbia. The work underway takes as its point of departure the approach of behavioral economics, which employs direct experiments with individuals to test whether economic assumptions hold true under close scrutiny. The research will continue to expand in scope in the future, by making use of neurological and physiological tests to answer questions that have eluded systematic study using traditional behavioral experiments thus far. While still a highly controversial field, the approach of neuroeconomics has the potential to upend conventional economic modeling assumptions and revolutionize the field in years to come.

Examsining the Models

All economic modeling necessarily relies on assumptions of agents’ behavior in order to simplify a vast array of variables down to a level manageable enough for analysis. Yet these assumptions are often taken as “true enough for all practical purposes,” despite the fact that they have not been tested fully. Behavioral economists have used the principles of experimental design pioneered by psychologists to test specific economic assumptions, and they have shown how agents regularly act in a manner that is not fully rational, as the standard models would presume. Neuroeconomics—the field at the heart of the work done by economists at Columbia’s MBBI—takes this approach a step further, by incorporating findings from research conducted by neurologists, as well as incorporating neurological and psychological tests, directly into economists’ research design.

“Neuroeconomics is based on one recognition that there is evidence of biases and limitation in the rationality with which agents make decisions,” notes Professor Alessandra Casella, who has been at the forefront of the MBBI within the Economics Department. “What neuroscientists bring is a way of anchoring these assumptions in actual studies of the brain.” Casella went on to explain how in an experiment on trust, for example, one might use neurological data, or physiological data such as heart rate, skin conductivity or pupil dilation, to detect lying in individual subjects.

In fact, the project in which she is involved is studying just that. Casella, Professor Navin Kartik and graduate student Sébastien Turban are using traditional experimental methods to examine trust in agents to see how it relates to economic decision making. Yet Casella anticipates the possibility of a “neuro component” in the future, as the MBBI becomes more fully established and the research endeavor gains momentum.
Making Connections: Neuroeconomics at the MBBI

Continued from page 9

Another exciting line of inquiry is being conducted by Michael Woodford. His work is currently focused on developing macroeconomic models incorporating “bounded rationality”—that is, ways in which limits to the capabilities of the brain affect decision making. The topic carries a great deal of import, with potentially significant implications on the understanding of the events leading up to the recent financial crisis. While Woodford has currently been presenting only his models of bounded rationality, his next step in research will be to work in collaboration with neuroscientists to directly test his model.

Overall, the direction that neuroeconomics will take at Columbia in the future is unknown. When asked whether the findings in the field had the potential to “trickle up” into the models used by working economists in other fields of economics, Casella said, “It’s too early to tell. It is clear that we have all become more open to considering deviations from the standard fully rational model,” referring to the impact of behavioral economics research on the field in recent years.

“With neuroeconomics, there may be even deeper questions, whether we can really ask of the brain the questions that are interesting to us. Are we going too micro at the end? Even if I learn exactly how the brain works, do I need to know that? Or do I just need to see what the choices are at the end. I don’t know the answer.”

Yet her caution stands merely as a sign of the highly incipient stage of a potentially very promising field of inquiry, as the groundwork has barely begun. “Obviously the hope is that something really fundamental might be learned,” Casella said. “But it’s a high-risk endeavor. All endeavors are, though, when you are trying to establish a new foundation.”

Columbia Economics Takes on Big Data

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year. The gains extend to possibilities for governments—the same report estimates that the governments of Europe could save more than €100 billion ($149 million) annually in costs saved through efficiency by using Big Data.

These gains will extend to nearly all parts of the private sector as companies rush to exploit insights gained from this vast new resource and put them to use in identifying consumer patterns, productivity gains, and a range of other potential benefits. An independent study conducted by the Centre for Economics and Business Research estimated a £216 billion gain from Big Data in the UK alone from 2012–2017, an amount that is equivalent to a 2.3 percent share of the forecasted cumulative GDP of the UK over the same time period.

In expanding on the overall import of this exploding new resource, the McKinsey report goes on to describe Big Data as “an important factor of production, alongside labor and capital,” a claim whose magnitude only underscores the scope of the revolution now underway. And a separate report by the World Economic Forum, titled “Big Data, Big Impact: New Possibilities for populations that had been previously misunderstood, and has the potential to revolutionize policy approaches to assist these low-income populations. Needless to say, no field of economic activity will go un- continued on page 11
touched—not the least of which is the field of economic research itself.

**Columbia’s Computing Initiative**

Anticipating the rising prominence of Big Data in the field of economics, the Economics Department at Columbia launched the new High Performance Computing Cluster, named “Hotfoot.” The computing cluster was established, in collaboration with the Program for Economic Research, the Department of Astronomy and Astrophysics, the Department of Statistics and other groups at Columbia, as an interdisciplinary effort expand Columbia’s capacity to perform high-level computing in the social sciences.

The cluster consists of 62 executive servers that provide 616 cores for performing data-intensive tasks using statistical software packages and programming languages such as Matlab, R, Java and C++. The system also includes a 51 terabyte array of working storage, shared by the departments and used by researchers to store data sets and computation results temporarily while the research is ongoing. This resource has already dramatically improved Columbia faculty and students’ ability to parse massive amounts of data, and will continue to do so in the future. It is made available to professors working on research projects, as well as graduate students and research assistants working alongside them.

One exciting project at Columbia that is taking the challenge of Big Data head on is Professor David Weinstein’s project “Internet Prices and Price Indexes.” Professor Weinstein’s work has received support and a large data set from Google, with the project aiming at three exciting and important objectives. First, the project will look at the degree of segmentation between international online markets. Second, it will look at the degree of competition between online merchants. Third and most significantly, it will calculate a daily price index for online sales, based on the vast amount of price and click-through data available on Google Product Search.

This last line of research, Weinstein explains, signals a dramatic change from prior economic data resources, because it will now be possible to measure inflation on a daily basis rather than using the current monthly approach on which economists have to rely for their research. The project will also give insights into price differences between online retailers and those in brick-and-mortar stores, to determine whether there are systematic differences between pricing behavior in the two groups, or whether online prices can in fact be taken as a reliable estimator for offline prices.

Lastly, the project’s work on international markets will use Google price data to determine how international cost shocks are transmitted across countries, a phenomenon that is crucial to understanding how exchange rate movements affect prices and propagate international macroeconomic shocks. These lines of inquiry will rely heavily on the Hotfoot computing power to perform computations on a level that would have been unthinkable merely a decade ago. The project, made possible by Google’s deep data resources, signals the kind of work that is likely to become commonplace in the field in the future. “Economics has become ‘big science,’” Weinstein remarked, “in the sense that we are now one of the biggest users of computer resources in the University.”

Professor Weinstein’s project serves as an excellent example of the kinds of advances that can be made through use of massive amounts of data and the Hotfoot computing cluster at Columbia Economics. Such approaches will allow for a vast array of new questions to be asked and answered, with a level of sophistication, detail and precision never before seen in the history of economic research.
The Program for Economic Research in conjunction with the World Leaders Forum presented a lecture on October 20, 2011 by Daniel Tarullo, Governor of the Federal Reserve, entitled “Unemployment, the Labor Market, and the Economy.” Tarullo attributed the nation’s unemployment crisis to both a shortfall in aggregate demand and structural problems such as the polarization toward high-wage and low-wage jobs. While solutions to this acute employment crisis will not arrive quickly, he asserted that the body has a responsibility to act in times of economic crisis. Lee C. Bollinger, President of Columbia University and a member of the New York Federal Reserve’s Board of Directors, introduced Governor Tarullo and moderated audience discussion.
Multilateralism in Trade and Risk: Should and Can We Rescue the Doha Round?

A large body of evidence indicates that conditions in-utero and health at birth are predictive of individuals’ long-run outcomes, pointing to the potential value in programs aimed at pregnant women and new mothers. This paper uses a novel identification strategy and data set to provide causal estimates of the effects of geographic access to the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the major US program aimed at improving the well-being of low-income pregnant and post-partum women, infants, and children under age 5. I utilize data on sibling births over 2005-2009 and administrative records on the locations and dates of openings and closings of WIC clinics over the same time period. The empirical approach uses within-zip-code variation in WIC clinic presence together with maternal fixed effects, and accounts for the potential endogeneity of mobility, gestational-age bias, and measurement error in gestation. The results show that geographic access to WIC clinics increases the likelihood of WIC food benefit take-up, and decreases the likelihood of gaining too little weight during pregnancy. I also provide some evidence that other aspects of the WIC program, such as health screenings and referrals to other services may have effects on women’s behaviors during pregnancy. Finally, I show that access to WIC increases average birth weight and the likelihood of breastfeeding at the time of hospital discharge. The effects are strongest for mothers with a high school education or less, who are most likely eligible for WIC services.

Using copulas to model the stochastic dependence of values, this paper establishes new general conditions on the profitability of product bundling. A multiproduct monopolist generally achieves higher profit from mixed bundling than from separate selling if consumer values for two products are negatively dependent, independent, or have limited positive dependence. With more than two goods, the same conditions are sufficient for an optimal monopoly selling scheme to include a bundle of at least two products. The profitability of monopoly bundling also extends to situations where a multiproduct firm competes with a single-product rival.

We consider a set of minimal identification conditions for dynamic factor models. These conditions have economic interpretations, and require fewer number of restrictions than when putting in a static-factor form. Under these restrictions, a standard structural vector autoregression (SVAR) with or without measurement errors can be embedded into a dynamic factor model. More generally, we also consider overidentification restrictions to achieve efficiency. General linear restrictions, either in the form of known factor loadings or cross-equation restrictions, are considered. We further consider serially correlated idiosyncratic errors with heterogeneous coefficients. A numerically stable Bayesian algorithm for the dynamic factor model with general parameter restrictions is constructed for estimation and inference. A square-root form of Kalman filter is shown to improve robustness and accuracy when sampling the latent factors. Confidence intervals (bands) for the parameters of interest such as impulse responses are readily computed. Similar identification conditions are also exploited for multi-level factor models, and they allow us to study the spill-over effects of the shocks arising from one group to another.
When India embraced systematic economic reforms in 1991 and began opening its economy to both domestic and foreign competition, critics argued that they had contributed little to the acceleration of economic growth. Their argument had rested on the claim that growth in the 1990s was no faster than in the 1980s. This claim was quickly refuted on the grounds that when properly evaluated, growth had indeed accelerated in the 1990s and more importantly, while reforms had been made systematic in 1991, they had actually begun much earlier in the late 1970s. Subsequently, the reforms of the late 1990s and early 2000s have led to a jump in the growth rate from six percent in the 1990s to eight to nine percent beginning in 2003. The reforms have also led to a major structural change in the economy: the trade to GDP ratio has tripled since 1991, there has been a gigantic expansion of foreign investment in India, and sectors such as telecommunications, airlines, and automobiles have expanded at rates much higher than at any time in the past. This dramatic turnaround has led critics to shift ground. They now argue that opening the economy to trade has hurt the poor; that rapid growth is leaving socially disadvantaged groups behind; and that reforms have led to increased inequality. The essays in this volume take these challenges head on. They use large-scale sample surveys and other data to systematically address each of the arguments.

Why has the economic growth performance of Sub-Saharan Africa been disappointing on balance over the past 50 years? More importantly, what can be done to reverse that trend and to sustain and improve upon the accelerated growth experienced in recent years?

What are the possibilities and policies for Africa to reduce poverty and achieve sustained, rapid economic growth? What are the lessons of success in both Africa and elsewhere? Could some of the policies that proved so successful in East Asia help reverse the deindustrialization of Africa in the past three decades and be the basis of its structural transformation?

These were the questions posed to a diverse group of experts on development convened by the Initiative for Policy Dialogue (IPD). This volume reflects the highlights of their deliberations. It broadens the policy debate, expands the policy options, and proposes alternative development strategies. This book captures the lively, and sometimes contentious, debate, and provides a note of optimism for the future. Though success is not assured, this volume argues that there is good reason to believe that policies based on lessons of successes, notably in East Asia, can be adapted successfully in African contexts.

JAGDISH BHAGWATI AND ARVIND PANAGARIYA
India’s Reforms: How They Produced Inclusive Growth (Oxford University Press, April 2012)

PADMA DESAI
Breaking Out: An Indian Woman’s American Journey (Penguin Books India, April 2012)

AKBAR NOMAN, KWESI BOTCHWEY, HOWARD STEIN AND JOSEPH E. STIGLITZ
Good Growth and Governance in Africa: Rethinking Development Strategies (The Initiative for Policy Dialogue) (Oxford University Press, March 2012)
In 2011, the International Monetary Fund invited prominent economists and economic policy makers to consider the brave new world of the post-crisis global economy. The result is a book that captures the state of macroeconomic thinking at a transformational moment.

The crisis and the weak recovery that has followed raise fundamental questions concerning macroeconomics and economic policy. For instance, to what extent are financial markets efficient and self-correcting? How crucial is low and stable inflation for growth and the real stability of the economy? How strong is the case for open capital markets? Too often, the standard models provided insufficient guidance on how to respond to the unprecedented situations created by the crisis. As a result, policy makers have been forced to improvise. What to do when interest rates reach the zero floor? How best to provide liquidity to segmented financial institutions and markets? How much to use fiscal policy starting from high levels of debt?

These top economists discuss future directions for monetary policy, fiscal policy, financial regulation, capital account management, growth strategies, and the international monetary system, and the economic models that should underpin thinking about critical policy choices. Among the new realities they consider are the swing of the pendulum toward regulation; the need for new theoretical approaches, incorporating advances in agency theory, behavioral economics, and understanding of credit markets and finance based on theories of imperfect information; and the importance for macroeconomic policy to target not just inflation but also output and financial stability.

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Faculty Books: Spring 2012
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OLIVIER J. BLANCHARD, DAVID ROMER, MICHAEL SPENCE AND JOSEPH E. STIGLITZ

In the Wake of the Crisis: Leading Economists Reassess Economic Policy
(The MIT Press, February 2012)

Program for Economic Research Events Calendar — Spring 2012

JANUARY 6

Columbia University Reception
Allied Social Sciences Association, Chicago
Co-sponsored by the Columbia Business School

FEBRUARY 8

Monsieur Deficit, or How the French Invented Financial Politics, 1780–1840
Jacob Soll, 2011 MacArthur Fellow, Rutgers University
Co-sponsored by the Maison Francaise and the Department of History

MARCH 22

IGC Trade Program Conference
Co-sponsored by the International Growth Centre

APRIL 10

The Fifth Annual Kenneth J. Arrow Lecture—Moral Hazard in Health Insurance: Developments since Arrow (1963)

Amy Finkelstein, MIT
With Discussants:
Jonathan Gruber, MIT
Kenneth J. Arrow, Stanford University
Joseph E. Stiglitz, Columbia University
Co-sponsored by the Committee on Global Thought, Columbia University Press and the School of International and Public Affairs