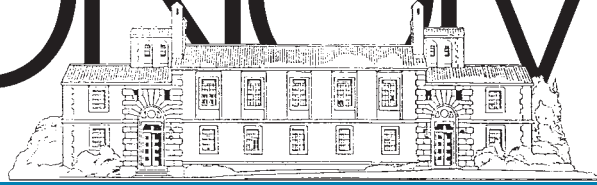


ECONOMICS



DEPARTMENT NEWSLETTER • UNIVERSITY OF COLORADO AT BOULDER • FALL 2005

A Report from the Chair

Keith Maskus

Dear Alumni and Friends,

Once again I send greetings from Boulder, where the summer went by rapidly and the weather remains fabulous. One morning in July I gave a talk to a group of incoming freshmen about “how economists do research” as part of their orientation at the university. I wish I could say they were all interested in the intricacies of profit-maximization, price-setting, and regression analysis, but they were certainly good sports about it, rather like friendly people resigned to what would happen at the dentist’s office. It reminded me that we faculty members encounter eager new faces each fall and hope to help them mature intellectually and emotionally over the next four years. It’s a pretty good job when you think about it, even better than what dentists get to do.

Speaking of the fall, I am happy to report that the CU football recruiting scandal has died out and people here are actually looking forward to the season. The team might even be pretty good, I am told. The great thing is that the focus again is on competition, not allegations of wrongdoing. It’s great because I am, to put it mildly, tired of reporting to you about the university’s problems that are outside of the economics department. You might wonder, for example, about the Ward Churchill affair. In case you haven’t heard, Professor Churchill is a colleague in another department who is given to making sharply controversial remarks in public about U.S. foreign policy. I think the consensus in the economics department is to regard him as somewhere between an unfortunate distraction and a misguided idiot. However, he is the university’s problem and we just want to get on with our work.

And so we have, in a big way. Despite ongoing budget problems at the university, the department had a terrific record of success in academic year 2004–05. In this report I will high-



Keith Maskus

light the record of accomplishment, which is complemented by the Faculty Notes section in the margins of the newsletter. And I will make a strong appeal to you to consider providing some financial support for the department in the next few months. As economists say about lunches, “There is no free Report from the Chair.”

Faculty News and Appointments

I am pleased to report that Assistant Professor Anna Rubinchik-Pessach has successfully completed her midterm comprehensive review. Anna is a specialist in microeconomic theory and public economics, and has been doing fascinating work on the political economy of federalism, the gains from contract enforcement, and additional topics.

continued on page 2

FACULTY NOTES

Charles de Bartolome published “Who’s in Charge of the Central City? The Conflict between Efficiency and Equity in the Design of a Metropolitan Area” in the *Journal of Urban Economics*. He also presented at the Canadian Public Economics Group Conference in June 2005.



Nicholas Flores became a principal investigator at the Nation Center for Earth-surface Dynamics (NCED). NCED is a National Science Foundation Science and Technology Center located at the University of Minnesota in Minneapolis. NCED’s principal investigators are from Johns Hopkins University, Massachusetts Institute of Technology, Princeton University, University of California Berkeley, University of Colorado, University of Illinois, and University of Minnesota.

He also joined the advisory board for the City of Aspen’s Climate Change Impact Assessment. The Aspen Global Change Institute is conducting the Climate Change Impact Assessment as part of the City of Aspen’s Canary Initiative, a resolution passed in March to address the potential risks of global warming.

continued on page 2

Philip Graves had two papers come out in 2004, has one coming out in September 2005, and another forthcoming in 2006. He also wrote a book review in 2005 for the *Journal of Economic Literature*. Phil has begun a book titled *Environmental Economics for Environmentalists: How to Play Within the "Rules of the Game" and Win!* He has three publishers, based on a preliminary table of contents, waiting to see sample chapters that are nearly complete. Since the last Faculty Notes, Phil has presented The Gosnell Lecture at the Rochester Institute of Technology ("Proper Valuation of Public Goods: Policy Implications," September 22, 2004). In addition, he presented "Resource Misallocation from Goods Misvaluation: When Psychological Underpinnings of Demand Matter," "Linking Regional Science and Urban Economics: Long Run Interactions Among Preferences for Amenities and Public Goods," and "Over-Development of Rural Areas Due to Non-Optimal Urban Public Good Provision," at the 51st Annual North American Meetings of the Regional Science Association International, Renaissance Seattle, Seattle, Washington, November 11-13, 2004.



Frank Hsiao has published the following papers: "The Chaotic Attractor of Foreign Direct Investment—Why China? A Panel Data Analysis" (with Mei-Chu Hsiao), *Journal of Asian Economics*, Fall 2004; "Korea and Taiwanese Productivity Performance: Comparisons at Matched Manufacturing Levels" (with Changsuh Park), *Journal of Productivity Analysis*, Spring 2005. His paper, "Colonialism, Learning and Convergence: A Comparison of India and

continued on page 3

From the Chair, *continued from page 1*

The department saw two successful tenure cases in the last year. Assistant Professors Martin Boileau and Murat Iyigun were both granted tenure and promoted to associate professor. Martin is a specialist in international finance and the international transmission of real business cycles. He has published a series of important articles on these subjects, offering new and insightful explanations for the propagation of business cycles. These articles appear in such outstanding journals as *Journal of Monetary Economics*, *International Economic Review*, and *Journal of International Economics*. His models prominently feature the role of asymmetric information between economic agents in explaining macroeconomic fluctuations.

Murat is also a macroeconomist, though recently he has specialized in economic development and the economics of the family. He has published recent articles in such journals as *International Economic Review*, *Economic Journal*, *Journal of International Economics*, *Journal of Development Economics*, and *European Economic Review*. He has written extensively on the growth impacts of decisions people make to accumulate human capital through education and training, while analysis of technological change is also important in his work. We are delighted that both Martin and Murat were promoted and will serve as the backbone of the department's offerings in macroeconomics, international finance, and economic growth for years to come.

Finally, Associate Professor Yongmin Chen was successfully promoted to full professor. Yongmin is a specialist in microeconomic theory and industrial organization, with particular interests in strategic behavior and pricing. He has published in outstanding outlets such as *RAND Journal of Economics*, *International Economic Review*, and *Journal of Industrial Economics*. Yongmin explains some of this work in an accompanying article in this newsletter.

In addition to these positive decisions, the department had an extraordinarily successful year in recruiting new faculty members. At the assistant professor level, we were able to recruit Jennifer Lamping, a microeconomic theorist who just completed her PhD at Columbia University. Jennifer wrote an intricate and interesting theoretical dissertation on the nature of decisions made in auctions, analyzing certain remarkable features of price signals made available to auction participants. Jennifer will teach graduate and undergraduate economic theory in our department.

We also undertook a joint search with the Institute of Behavioral Science (IBS), resulting in the hiring of Tania Barham, who

recently successfully defended her PhD dissertation at the University of California, Berkeley. Tania is a health economist, which is an area of need that we had been hoping to fill for some time. Tania's dissertation analyzed the effects of Mexico's Progres program on infant mortality. Progres is a welfare program in rural Mexico that was implemented in the late 1990s and provides monetary support, health care, and health education to poor mothers. Tania discovered that the program has had a large impact on reducing infant mortality. She will teach microeconomics, statistics, health economics, and economic development in our department.

The department was also extremely fortunate to hire two prominent economists from the University of Texas. First, Carol Shiue, who will be a tenured associate professor, is a specialist in economic development and Chinese economic history. She has written seminal papers on the extent of market integration and the role of disaster relief in 18th-century China. She has worked recently on the role of market integration in economic development, with comparative analyses of imperial China and Europe before the industrial revolution. These papers are prompting reconsideration within the economic history profession of what really caused European economic growth and Chinese stagnation. Her papers appear in *American Economic Review*, *Journal of Economic History*, and elsewhere. Carol discusses her work in a companion piece in this newsletter. She will teach economic history and economic development in our department.

Second, Wolfgang Keller, who also will be a tenured associate professor, is a leading authority on international trade, technological innovation, and the diffusion of new information across borders. He has published papers in *American Economic Review*, *Journal of Political Economy*, *Journal of Development Economics*, and other outstanding journals. He is also a research associate at the National Bureau of Economic Research. Wolfgang will teach economic theory, international trade, and economic growth.

Together, these economists will do much to push the research and teaching programs here beyond what we have achieved to date. The fact that the department was able to hire four outstanding scholars in the face of significant budgetary difficulties at the university was almost miraculous. I am grateful to my colleagues for their hard work in the recruiting process and to the Dean of Arts and Sciences for supporting our requests.

Unfortunately, I must also report the resignation of Associate Professor Tom Rutherford, who moved to Ann Arbor, Michigan for family-related reasons. Tom will continue to be affiliated with our department in certain teaching and research activities. We look forward to working with him for some time to come.

Teaching Notes

Undergraduate students at the university continue to make the Department of Economics their academic home, in large numbers. We currently have nearly 1,000 declared majors and another 250 minors in economics. Our graduation ceremony in May was again very large, with over 150 graduating seniors and about 1,000 family members and friends in attendance. In academic year 2003–04 the number of undergraduate students in economics courses exceeded 9,500. We still teach the greatest number of student credit hours on campus.

It is a challenge teaching so many students, but we strive to ensure quality instruction in the classroom. Despite these large enrollments, overall student evaluations of economics classes have improved. One reason is that we are fortunate to have many outstanding visiting instructors who do a good job in the classroom. Another is that our graduate teaching assistants are committed to the teaching mission of the department. Ultimately, however, the high marks reflect a real dedication on the part of our faculty to provide rigorous and engaging course experiences for undergraduate students. Surveys of senior economics majors indicate considerable satisfaction with their learning experience.

We also maintain an outstanding honors program, which now enrolls over 20 students per year. These students are well-trained, curious, and smart. We expect our honors students to undertake an entirely new piece of analysis, combining basic economic theory with original data sets and reaching conclusions to interesting questions. The quality of these theses is truly outstanding. Another opportunity for broader study is our large and successful internship program, in which students complete an internship with a local or national enterprise and, under faculty supervision, write a research paper about the experience.

At the graduate level, interest in our doctoral program remains high. The number of outstanding applicants has risen rapidly over the last three years. This semester we expect to enroll around 15 to 18 new students, which is

a reasonable number for us. As you know, our students come from the United States and from countries all over the world.

One reason for this interest is our continued strong record in placing our doctoral students into satisfying careers. The new economists who completed training since the last newsletter have taken jobs at George Washington University, the Thailand Development Research Institute, California State University at Long Beach, Allegheny College, University of Denver, and KPMG, a major consulting firm. We will have a large group of students entering the professional market this coming year and we expect them to be similarly placed.

An excellent new feature of our graduate training is that we now provide training in English, accent reduction, and classroom pragmatics for our foreign graduate students who wish to be supported as teaching assistants and graduate instructors. Despite their commitment to solid teaching, occasionally there are difficulties in communication arising from differences in language, accents, and culture, especially when the TAs and freshman students are in a classroom together for the first time. The new program should do much to alleviate the concerns of undergraduate students on this score and help train our doctoral students for academic careers.

Staff News

The department was delighted to welcome Georgiana Esquibel back to our staff for a few months earlier this year. Former graduate students will recall Georgiana as our graduate secretary for many years. And we were sorry to see Grace Norman leave us at the end of July, 2005. Grace, who was a patient and generous member of our community for many years, retired in order to spend more time with her new grandson. We wish her all the best.

A Special Request

It has been the tradition in past newsletters not to make particular pleas for financial support from alumni and friends, hoping that simply listing the mailing address for donations would be sufficient to encourage you to think of us. With this newsletter, however, I must begin the process of soliciting your advice and support more personally. I do this because we have developed a special need over the last few years that must be addressed with a departmental fundraising campaign.

continued on page 5

Taiwan,” appeared as the leading paper in the *Journal of the Asia Pacific Economy* (with Mei-Chu Hsiao), May 2005. His previous paper, “Miracle Growth in the Twentieth Century—International Comparisons of East Asian Development” (with Mei-Chu Hsiao), originally published in *World Development*, 2003, has been translated in Japanese and published in *Kaetsu University Research Review*, Tokyo, Japan, December 2004. Several papers are still in the pipeline.

In January 2005, Frank served as a discussant at a session of the Association of Indian Economic Studies (AIES) at the 2005 Allied Social Science Associations (ASSA) Annual Meeting in Philadelphia, Pennsylvania. He was an invited speaker at the Taiwanese History and Culture Symposium, San Diego, California, in February, and at the Midwest Conference of the Intercollegiate Taiwanese American Students Association (ITASA), Northwestern University, Evanston, Illinois, in April. He presented a paper on “Taiwan and China: Special State-to-State Economic Relations and Taiwan’s FTA Policy” (with Mei-Chu Hsiao) at a conference hosted by the Department of Economics, the City College of the City University of New York, New York, in May, and also served as a chair at the International Symposium on the U.S.-Taiwan Free Trade Agreement: Challenges and Prospects, Washington, D.C., in May.

continued page 4

FACULTY NOTES (cont.)

Keith Maskus edited, along with Professor Jerome Reichman of Duke University Law School, a book titled *International Public Goods and the Transfer of Technology under a Globalized Intellectual Property Regime*, Cambridge University Press, 2005. His recent publications include: "Quantifying the Impact of Services Liberalization in a Developing Country" (with Denise Konan) World Bank Policy Research Paper 3193, *Journal of Development Economics*, 2006, forthcoming; "Transfer of Technology to Developing Countries: Unilateral and Multilateral Policy Options" (with Bernard M. Hoekman and Kamal Saggi), World Bank Policy Research Paper 3332, *World Development*, Vol. 33, No. 10, October 2005, forthcoming; "Using the International Trading System to Foster Technology Transfer for Economic Development," *Michigan State University Law Review*, Vol. 2005, No. 1, Spring, 219–242; "Vertical Pricing and Parallel Imports" (with **Yongmin Chen**), *Journal of International Trade and Economic Development*, Vol. 14, No. 1, March 2005, 1–18; "The Price Impact of Parallel Imports in Pharmaceuticals: Evidence from the European Union" (with Mattias Ganslandt), *Journal of Health Economics*, Vol. 23, No. 5, September 2004, 1035–1057.

During the past year, Keith presented papers at several conferences: Chinese Economists Society, Conference on "Sustainable Economic Growth in China," Chongqing, June 2005; CREI, World Bank, and Universitat Pompeu Fabra, Conference on "R&D and Innovation in the Development Process," Barcelona, June 2005; Keio University and Yokohama National University, Conference on "East Asian Economic Linkages: Trade, Innovation, and Growth," Yokohama, Japan, December 2004.

continued on page 5

Explaining Economic Growth: A Comparative Approach from the Viewpoint of Economic History

Carol H. Shiue

My interest in comparative economic history, and the economic history of China in particular, is motivated by the desire to fill in gaps in our knowledge of economics of the past, as well as a recognition that answers to historical questions can improve our understanding of the way economies work more generally. The study of economic history has always interested me because it allows us as economists to test theories of economic behavior in other times and places besides our own, and to ask if these general theories hold true when applied to other times and places as well, and if not, why not. Here, I give a very brief and selected introduction to some of these ideas, and the reasons why I find them important and interesting. The reader may find more details in the journal titles and working papers mentioned below.

Perhaps the biggest unanswered question in the economic history of human society is why, after millennia of virtually zero economic growth per capita, a handful of countries located in Northwest Europe were able to escape that pattern sometime in the mid-18th century. Why did the Industrial Revolution happen when it did, where it did? The answer to this question seems vitally important because it may hold clues to what conditions are necessary if poorer countries today are to become richer, and how even richer economies can continue to advance. Some of the most persuasive answers that have emerged from economists suggest that the Industrial Revolution is the outcome of the evolution of European institutional forms—yet this is a conclusion that has for the most part been primarily informed by the history of European economies. Interestingly, when we consider the situation in non-European economies, what many researchers have found is that some of the key causal factors attributed to the European economic story of growth may not be as unique as we once thought, or at very least would require some sort of deep revision to their former interpretation.

For example, it has been often proposed that the Chinese emperor and the officials below him were extortionist, effectively choking off any possibility of economic growth through arbitrarily high taxation and intervention in the workings of the economy. Under such

circumstances, it is not difficult to understand why China did not develop. This belief, however, may have more to do with vaguely defined notions of "good institutions" of governance, than with knowledge we could gain from a direct quantitative comparison of the performance of past economies or the examination of the Chinese state and the economy. Quantitative comparisons, for example, of Chinese tax rates and total government revenue show that they were rather low relative to those in Europe. And contrary to the picture of an arbitrary and extortionist state, there is evidence, drawn from court documents and private contracts, suggesting that Chinese magistrates arbitrated in accordance with agreements in signed contracts. In my research—one article published in the *Journal of Economic History* (March 2004 issue) and another in the *Journal of Interdisciplinary History* (Summer 2005 issue)—I use a wide variety of secondary and primary sources to expand on these ideas and discuss debates centered on the commitment of the bureaucracy and the effectiveness of the state toward famine prevention; and I consider ways in which the inconsistencies in intergovernmental policy incentives inherent to the very structure of the Chinese state determined its effectiveness in carrying out stated goals.

To give another example, it is usually supposed that unfettered free markets and market-supporting institutions encourage economic growth, and that the scope of markets was relatively free in the advanced areas of Europe far earlier. In contrast, the presence and the nature of markets in the case of China have been much more disputed. China's economy has variously been described as stagnant, with limited scope of exchange outside the informal sector, or dynamic, with a significant amount of trade even over long distances. Yet stagnation and dynamism are relative terms. Thus, which one of these two widely differing interpretations is correct must be assessed in a global comparative sense, and with comparable data. Certainly, a more efficient economic system should be more productive. It is also likely that large increases in incentives to invest occurred only after the onset of the Industrial Revolution, when the returns were much higher. To address some of these questions, I have, in a sequence of articles, studied the extent of trade in China, and in Europe, with

some articles focusing on the regions separately, while other articles look at the regions comparatively.

In an article in the *American Economic Review* (December 2002 issue), I use data I collected from 18th-century archival records on prices to measure the extent of market integration. Acquiring the data, however, turned out to be a most exciting part of the project since this gave me the rare opportunity to visit Beijing for some months to read the handwritten letters and documents of high-ranking Qing period (1644–1911) officials. What the accumulated numerical data collected over many decades by many officials revealed was that the overall level of market integration was higher than historians and economists previously thought, and that intertemporal mechanisms, such as the storage of grain from one year to the next, are an important substitute for trade.

In a separate article in the *European Review of Economic History* (August 2005 issue), I considered the European context. Over the first half of the 19th century, a Prussian customs union known as the Zollverein gradually unified a scattered confederation of states under an internal free trade agreement (much as today's North American Free Trade Association—NAFTA—does for North America). As the policymakers effectively dismantled economic borders at a well-specified point in time, this provides an interesting “natural experiment” that can be used to help shed light on the impact of borders in the 19th century. Moreover, comparisons of historical and contemporary border effects helps to provide a better understanding of the impact of political boundaries and trade costs over time on economic integration.

Finally, considering the Chinese and European economies in a single article, I have written a paper jointly with Wolfgang Keller that was published as CEPR Working Paper # 4420 (June 2004) and NBER Working Paper # 10778 (September 2004). This paper compares the actual performance of markets in Europe and China, two regions of the world that were relatively advanced in the preindustrial period, but would start to industrialize some 150 years apart. The analysis covers economies that accounted for about two-fifths of the world's population in the mid-18th century, and it considers some three centuries of data. My findings there suggest that relative levels of market function in China and Europe were similar prior to the Industrial Revolution, and that higher efficiency in Europe was seen only in the 19th century when industrialization was already underway. Rather than being a key condition for subsequent growth, gains in efficiency appeared simultaneously with the turning

point of modern growth. Market efficiency could well be a necessary, but not sufficient, condition for growth. These results are important and exciting because they give us new clues as to where (and where not) to look for the fundamental causes of economic growth. This research is now funded by a grant from the National Science Foundation for the years 2005–2008.

From the Chair, *continued from page 3*

The campaign itself is explained later in this newsletter. In a nutshell, however, the costs of recruiting top-quality faculty have risen very rapidly in the last few years. The university has been as supportive as possible in terms of salaries. However, CU is unable to help with the costs of interviewing prospective faculty members and offering financial packages at the hiring stage, including startup funds for summer research support and computers. Similar expenses are incurred for retaining excellent faculty who may be recruited by other universities. For example, in the last academic year the department had to compete with offers from top universities for two senior scholars on our faculty. It is clear to me that these costs are going to mount higher in the future.

For this reason, we will be undertaking a campaign in the next few academic years to establish a Faculty Enhancement Fund. We hope to raise at least \$750,000 for the fund, which will put the department on a sustainable basis for meeting the costs of competing for excellent faculty. Contributions from existing faculty and members of our advisory board have established a good start for this campaign, but we definitely need the help of our friends and alumni. Please take the time to fill out the donation form provided in the newsletter and submit your contribution in the envelope provided. Please mark the contribution for “Economics Faculty Enhancement Fund” to be sure it is allocated correctly. Of course, if you wish to contribute to the department for other purposes, we would greatly appreciate that as well. The Enhancement Fund, however, is our top priority for the coming year.

Thank you,
Keith Maskus, Chair

FACULTY NOTES *(cont.)*

Robert McNown recently published the following: “A Time Series Model of Fertility and Female Labour Supply in the UK,” *Applied Economics*, Volume 37, Number 5, March 2005, 521–532 (with Cristóbal Ridao-Cano); “The Effect of Child Benefit Policies on Fertility and Female Labor Force Participation in Canada,” *Review of Economics of the Household*, Volume 2, number 3, September 2004, 237–254 (with Cristóbal Ridao-Cano). Cristóbal Ridao-Cano, a 2002 PhD Graduate, currently works as an economist for the World Bank.

Mushfiq Mobarak recently published the following: “Democracy, Volatility and Development,” *The Review of Economics and Statistics* 87 (2), May 2005; “The Impact of Urban Spatial Structure on Travel Demand in the United States,” *The Review of Economics and Statistics* 87 (3), August 2005 (with A. Bento, M. Cropper, and K. Vinha).

During the past year he received several awards: the Junior Faculty Development Award, University of Colorado at Boulder, 2005, for research on “Are There Negative Spillovers from Decentralization? Declining Water Quality in Brazil”; the Dean's Fund for Excellence Grant Award, University of Colorado, 2004 for research on “The Political Economy of Electricity Distribution”; the Center for Advancement in Research and Teaching in the Social Sciences Grant Award, 2004–05 for research on “Do Multi-National Corporations Seek Out Politically Connected Firms? Evidence on Local Partner Search by MNCs in Indonesia.”

Mushfiq also presented at seminars in the Economics Departments at Columbia University, University of Illinois, and the University of Colorado at Denver in addition to the Trade Workshop at the National Bureau of Economic Research.

continued on page 6

Anna Rubinchik-Pessach has presented her work “Does It Take a Tyrant to Implement a Good Reform?” (jointly with Ruqu Wang) at the Macroeconomics and Political Economy workshop at Tel-Aviv University (December 2004), the Canadian Economic Theory Meetings in Vancouver (March 2005) and at the 16th International Conference on Game Theory in Stonybrook (July 2005). She also presented the paper “Demand for Contract Enforcement and Gains from Trade” (jointly with Roberto M. Samaniego) at the Public Economic Theory Meetings in Marseille (June 2005) and a paper titled “Composition of Public Spending and the Architecture of the Cabinet” at the Stanford Institute for Theoretical Economics (August 2005).

2006: Celebrating 50 Years of the Economics Department

We recently discovered that 2006 will be the 50th anniversary of the founding of the “modern” economics department at CU-Boulder. This is an event worth celebrating, and we will elaborate on that later in this story. But first, we thought readers may enjoy learning the history of the department, which we have extracted from the university’s archives. We are grateful to Alex Garcia, a student in the history department, for undertaking this research.

The first signs of economics being offered at the CU-Boulder in fact came in the late 1870s, when such courses as Economic Geology and Political Economy were required on the road to earning a University Science degree. By the early 1880s, a new course titled School Economy was available for students to take. Prior to that point there were no faculty listed as teaching economics. However, this changed in 1884, when James W. Bell became the first faculty member to be listed as a professor of political economy and history.

However, the first indication of an independent college or department of economics was not until 1906, when the College of Commerce was established. The College of Commerce was contained within the larger College of Liberal Arts. At this time the title “instructor of economics” was used to refer to faculty in our discipline. By 1939, economics had become a departmental subheading under the broader Department of Economics, Sociology, Political Science, and Anthropology—all housed in the Hellems building.

These four sub-disciplines were named separate components of the university’s Social Sciences Department in the early 1950s. Economics remained under the Social Science heading until 1956, at which time all four of these categories became autonomous departments and were catalogued independently in departmental listings.

From its creation in 1956 through the 1958–59 academic year, the economics department remained in Hellems. After that the department was moved to the chemistry building, where it remained for nearly a decade. Following the 1965–66 academic year the department changed locations again, this time to the Hellems Annex, which is the present-day Education Building. Economics resided in the annex for four years until the

1970–71 school year, when it moved into the Economics Building, where it remains today. Former students may recall that the Economics Building was the original University Memorial Center. It later became the School of Business before coming to house the Department of Economics. We are grateful to reside in this beautiful and graceful structure.

Alumni will remember many of the prominent scholars and colorful characters who have graced our department since 1956. Allow us to mention just a few of these figures. **Carl McGuire** taught international economics for decades and was department chair during much of our growth in the 1960s. **Reuben Zubrow** will long be remembered for his dynamic and rigorous teaching of generations of young economists. **Larry Senesh** established the economics of education as a major field of inquiry, which was sustained by **Irving Morrisett**. **Kenneth Boulding** was a major figure in the profession, combining rigorous economic theory with a sense of social justice.

Wyn Owen founded the Economics Institute and taught development economics for many years. **Chuck Howe** established a long-standing tradition of excellence in resource and environmental economics in our department. **Ragaei El-Mallakh** founded the International



This Klauder-style building, seen here in the early '90s, has been home to the Department of Economics since 1971.

Center for Energy and Economic Development, which continues to hold the world's premier annual international energy conference. **Jack Powelson** wrote penetrating and insightful volumes on the meaning and sources of economic development. **Larry Singell** provided outstanding contributions in the classroom and became dean of CU's business school.

This tradition continues today. **Mike Greenwood** is the leading economic analyst of North American labor migration patterns. **James Markusen** is the world's top trade theorist specializing in the analysis of multinational corporations. **Carol Shiue** is making fundamental contributions to our understanding of Chinese economic history, and **Ann Carlos** is the leading figure in the analysis of early modern financial markets.

Supporting Innovation in Haiti

My experience in Peace Corps was not unlike those of other volunteers. There were good days and bad. Some were met with success and others with failure. Haiti, my country of service, has had a long-volatile history. Once the wealthiest colony in the New World, it now ranks among the world's poorest. In fact, it is the poorest in our hemisphere, while located only 700 miles from the coast of Florida.

Immense environmental degradation has left much of the countryside barren of trees, leaving them highly susceptible to mudslides and other natural disasters. Last fall, tropical storm Jeanne caused massive flooding that killed thousands and left hundreds of thousands more without homes.

The coup d'état that ousted President Jean Bertrand Aristide in February 2004 brought violence to my town. In the town center, government buildings were burned, road blocks of burning tires were set, and gun fights between rebels and the Haitian National Police became commonplace. The U.S. Department of State, which ultimately oversees security and the Peace Corps, began to evacuate Haiti as violence spread, but it was the night that someone was shot in my backyard that I decided I had better evacuate to the Dominican Republic.

During the following weeks and months, I felt an acute desire to continue to help Haiti. By this time I had relocated to Washington, D.C. and taken a job working for a member of Congress. Although my office was heavily involved in Haitian and Caribbean affairs, I still wanted to do more. My three best friends in D.C., as it turned out, were also Peace

With this history it is not surprising that the department boasts a great many prominent former graduate students, who have moved on to careers of achievement in academia, business, and government around the world. Their many contributions while studying here and later in life have helped us move forward.

For these reasons the department intends to stage a celebration of its 50th anniversary in 2006. You will be receiving additional mailings about the plans for this celebration in the coming months and we also encourage you to check our website (www.colorado.edu/Economics) for updates. We hope you will be able to join us as we recognize this tradition of achievement and excellence.

Corps volunteers who had served in Haiti. We quickly discovered that we all longed to continue to help Haiti, and soon formed a group to stage fundraisers for initiatives in health and disaster relief.

Through contacts in the International Red Cross and other health organizations, we began to throw fundraisers. We raised thousands of dollars for a measles vaccination campaign, to build a hospital, and for flood relief. As an informal group, however, we faced many limitations.

In January of this year, through the help of friends, family, and other former Peace Corps volunteers, we organized formally to create Haiti Innovation, Inc., a nonprofit volunteer organization to help Haiti. Our unique experiences as volunteers, as well as our careers in Washington, D.C., provided us access to parties interested in international development. Through the use of our web site, we connect thousands of potential donors to developmentally appropriate projects that need help in order to sustain themselves and grow.

While Haiti continues to fall further into privatization, loans from the international community will scarcely remedy its problems. It will only be through sustained work in educating and empowering the people of Haiti that lasting success will be achieved.

As one last sell, please visit us at www.haitiinnovation.org.

Robert Miller
Economics (BA '02)

ALUMNI NOTES

Christopher Allick (BA '76) is a managing partner and founder (2000) of Instream Partners LLC, a technology investment bank. He lives in San Francisco with his wife and four children.



Paul B. Baum, Jr. (BA '52) taught high school in Yuma County (Wray, Kirk), Colorado from 1952 to 1954; then at Chino High School, California, and Los Angeles County Court schools (teacher and principal). He retired in 1992 and did substitute teaching until May 2003.



Lisa Brown (MA '81; PhD '86) is the Majority Leader of the Washington State Senate. She has also served as the Chair of the Senate Energy, Technology, and Telecommunications Committee, the Senate Ways and Means Committee, and the Economic and Revenue Forecast Council. She taught in the Economics Department at Eastern Washington University for many years (with colleague Doug Orr, also a CU graduate) and ran successfully for State Representative (as a Democrat) in 1992. Lisa says her economics training has been a great foundation for a career in politics! She also teaches part-time at Gonzaga University. Lisa has a 13-year-old son, and enjoys backpacking and bicycling.



Brian Burnett (BA '85) received his MS in Finance at CU-Denver in 1993. He is the vice chancellor for administration and finance at CU-Colorado Springs. He was named Marshall Memorial Fellow by the German Marshall Fund of the United States (2000)—young leaders in U.S. transatlantic ties. Brian is married to CU-Boulder business graduate Marilyn Graese Burnett and is the father of Derrick (12) and Victoria (9). He is in the PhD program at GSPA at UCDHSC.

Kyle Heckman (BA '01; and BS Business Administration) is currently employed as a Portfolio Management Analyst, Bank of America,

continued on page 10

Department of Economics 2004–05 Seminar Series

08/27/04

James Markusen, University of Colorado at Boulder
“Learning on the Quick and Cheap: Gains from Trade Through Imported Expertise”

09/02/04

Edward Balistreri, Colorado School of Mines
“Structural Estimation and the Border Puzzle”

9/24/04

Maggie Xiaoyang Chen, University of Colorado at Boulder
“Regionalism in Standards: Good or Bad for Trade?”

10/07/04

E. Young Song, Sogang University
“Further Observations on the Simple Gravity Equations”

10/15/04

Romain Wacziarg, Stanford Graduate School of Business
“On the Effects of Trade Liberalization”

10/22/04

Michael Riordan, Columbia University
“Price and Product Variety in the Spokes Model”

10/26/04

Todd Stinebrickner, University of Western Ontario
“Credit Constraints and College Attrition”

10/28/04

Mario Crucini, Vanderbilt University
“Persistence in Law-of-One-Price Deviations: Evidence from Micro-Data”

10/29/04

Asim Khwaja, JFK School of Government
Harvard University
“Do Lenders Favor Politically Connected Firms? Rent-seeking in an Emerging Financial Market”

11/08/04

Wolfgang Keller, University of Texas at Austin
“Multinational Enterprises, International Trade, and Productivity Growth: Firm-level Evidence from the United States”

11/09/04

Carol H. Shiue, University of Texas at Austin
“Markets in China and Europe on the Eve of the Industrial Revolution”

11/12/04

Gary Libecap, University of Arizona
“Chinatown: Transaction Costs in Water Rights Exchanges—The Owens Valley Transfer to Los Angeles”

11/18/04

Petra Moser, Massachusetts Institute of Technology
“What Do Inventors Patent?”

12/03/04

Jose Canals-Cerda, University of Colorado at Boulder
“eBay 9/11”

01/19/05

Matilde Bombardini, Massachusetts Institute of Technology
“Firm Heterogeneity and Lobby Participation”

01/21/05

Oksana Loginova, Duke University
“Competing for Customers’ Attention: Advertising When Customers Have Imperfect Memory”

01/24/05

Andrea Moro, University of Minnesota
“The Performance of the Pivotal-Voted Model in Small-Scale Elections: Evidence from Texas Liquor Referenda”

01/26/05

Jennifer Lamping, Columbia University
“Ignorance Is Bliss: Matching in Auctions with an Uninformed Seller”

01/27/05

Grant Miller, Harvard University
“Contraception as Development? New Evidence from Family Planning in Colombia”

01/31/05

Alex Gershkov, Hebrew University
“Optimal Voting Scheme with Costly Information Acquisition”

02/01/05

Kasey Buckles, Boston University
“Stopping the Biological Clock: Fertility Therapies and the Career-Family Tradeoff”

02/03/05

Tania Barham, University of California-Berkeley
“Providing a Healthier Start to Life: The Impact of Conditional Cash Transfers on Infant Mortality”

02/24/05

Alan Dye, Barnard College, Columbia University
“The Institutional Determinants of the Smoot-Hawley Tariff”

02/25/05

Marc Melitz, Harvard University
“Trading Partners and Trading Volumes”

Department of Economics

2004–2005 Awards

03/04/05

Julie H Mortimer, Harvard University
“Price Discrimination and Copyright Law: Evidence from the
Introduction of DVDs”

03/11/05

Lena Edlund, Columbia University
“Household Structure and Child Outcomes: Nuclear vs.
Extended Families—Evidence from Bangladesh”

03/17/05

Eric Verhoogen, Columbia University
“Trade, Quality Upgrading, and Wage Inequality in the
Mexican Manufacturing Sector: Theory and Evidence from
an Exchange-Rate Shock”

03/28/05

Timur Kuran, University of Southern California
“Why the Islamic Middle East Did Not Generate an
Indigenous Corporate Law”

04/01/05

Maurizio Mazzocco, University of Wisconsin
“Individual Rather Than Household Euler Equations:
Identification and Estimation of Individual Preferences Using
Household Data”

04/08/05

Stephen Ross, University of Connecticut
“Mortgage Lending in Chicago and Los Angeles: A Paired
Testing Study of the Pre-Application Process”

04/15/05

Craig Burnside, Duke University
“Government Finance in the Wake of Currency Crises”

04/18/05

David Card, University of California at Berkeley
“Racial Segregation and the Black-White Test Score Gap”

04/22/05

Robin Boadway, Queen’s University
“Entrepreneurship and Asymmetric Information in
Input Markets”

04/29/05

Michael Greenwood, University of Colorado at Boulder
“The Sex Composition of U.S. Immigration from Europe,
1820–1929: A Panel Data Study”

Stanford Calderwood Faculty Teaching Award
Murat Iyigun

Stanford Calderwood Student Teaching Award
Xiaoyang Chen

Graduate Award for Public Policy Research
Aric Shafran

Reuben A. Zubrow Fellowship in Economics
Nikolay Dobrinov and Mei Yuan

James C. Campbell Graduate Fellowship
Shuichiro Nishioka and Denni Purbasari

Morris E. Garnsey Fellowship
Kiyoshi Yonemoto and Katherine Sauer

**Leslie Whittington Memorial Prize for
Excellence in Economics**
Stephen Billings

Leslie Whittington Endowed Fellowship in Economics
Megan Harrod

Yordon Prize in Microeconomics
Hesham Al-Ogeel

Best Published Faculty Paper in Public Policy
Yongmin Chen
“Trade Liberalization and Strategic Outsourcing,”
Journal of International Economics 63, 2004.

Val B. and Helen W. Fischer Scholarship
Economics Christina Davis
Sociology Steven Doubilet
Political Science Catharine Lurie
Anthropology Theresa Kruse

Jacob Van Ek Scholars Award
Adam McCloskey

Distinguished Colorado Graduate in the Social Sciences
Reed Morgan

Global Corporate and Investment Banking, San Francisco. He has enjoyed many interesting assignments with the bank over the past three years: airlines, mining, forest products, and real estate companies, both domestically in San Francisco and internationally in London.

▼
Louis Irwin (MA '89) is currently employed as Regulatory Analyst, Office of Ratepayer Advocates at the California State Public Utility Commission. He provided key testimony in the historic \$100-million settlement on behalf of California utility customers against San Diego Gas & Electric, 2002. Testimony was regarding the utilities imprudent electricity procurement practices.

▼
Teresa Luther (BA '02) received her MA in Economics from George Washington University in December 2004 and is currently employed as a Financial Economist at the U.S. Treasury, Washington, D.C.

▼
Wendy Max (PhD '83) is professor and co-director, Institute for Health and Aging, at the University of California, San Francisco. She has an active research program in health economics including studying the impact of tobacco use and cancer on health care expenditure. Wendy lives in Palo Alto with her husband Robert Siegel (PhD in MCDB, CU-Boulder, 1984; MD, Stanford, 1990), a professor at Stanford, and their three sons (10, 15, and 18).

Christopher T. Meyer (BA '89) received his MBA at the University of New Haven in 1995 and an MS in Logistics from the Naval Postgraduate School in Monterey, California in 2000. He served as Logistics Officer Fleet Hospital Three, 1st FSSG, 1st Marine Expeditionary Force, Kuwait and Iraq from January to June 2003. In July 2003, he was employed as Operations Research Analyst, Economic and Manpower Analysis Division, Office of

Faculty Grants

Lee Alston is the Principal Investigator on a National Science Foundation Grant entitled "Land Differentiation, Land Conflict and the Decline of Agricultural Tenancy in Brazil" (with Bernardo Mueller). The amount under negotiation will be in the \$235,000 to \$475,000 range.

Jose Canals-Cerda has received two grants for the 2004–2005 academic year: A spring 2005 grant from the Center to Advance Research and Teaching in the Social Sciences, University of Colorado, in the amount of \$1000; and a summer 2005 research grant from the Net Institute at the Stern School of Business, New York University, in the amount of \$4,500.

Ann M. Carlos is the Co-principal Investigator with several colleagues: Professor Larry Neal, University of Illinois, Champaign-Urbana, National Science Foundation, "How the First Emerging Market Re-emerged after Financial Collapse, 2002–2006; Professor Frank Lewis, Queen's University, Ontario, Canada, Social Science and Humanities Research Council of Canada, "Per Capita Incomes and Population in the Canadian Sub-Arctic in the Eighteenth Century," 2004–2007; Professor Price Fishback, University of Arizona, National Science Foundation Grant, "Cliometrics Conference," 2006–2008.

Nicholas Flores is the Principal Investigator for the following four grants: "Economic and Multicriteria Analysis of River Restoration Decisions," National Science Foundation, 2005–2007 (\$123,750); "The Evaluation of Preferences for Land Management Options," U.S. Forest Service, 2004–2007 (\$30,000); "Collaborative Research: Neighborhood Choice, Environmental Justice, and Policy Analysis," National Science Foundation, 2003–2006 (\$206,967); "Institutions and Incentives for Mitigating Wildfire Risks," U.S. Forest Service, 2003–2005 (\$119,500).

Mushfiq Mobarak is the Principal Investigator for the following grants: National Science Foundation (NSF), "Human and Social Dynamics" Competition, \$450,000 grant, 2005–2008, **Murat Iyigun**, Co-principal Investigator, for research on "Socio-economic and Biological Trade-offs of Consanguinity in an Arranged Marriage Market: Evidence from Bangladesh" (with A. Bittles, M. Iyigun, N. Khan); National Bureau of Economic Research (NBER), "Innovation Policy and the Economy" \$20,000 grant, 2005–2006, **Keith Maskus**, Co-principal Investigator, for research on "The Impact of Immigration

Policy and Foreign Graduate Students on Innovation in the U.S.: Evidence from Enrollment Shocks" (with **Keith Maskus** and **Eric Stuen**).

Carol Shiue is the Principal Investigator for the National Institutes of Health, 2002–2006 Grant, \$149,750, "Intergenerational and Interfamily Economic Links." She is the Co-principal Investigator with **Wolfgang Keller** for the National Science Foundation, 2005–2008 grant, \$266,182, "What Explains Modern Economic Growth? New Evidence from a Comparison of China and Europe in the 18th Century." Additionally she is the Co-principal Investigator for the Metanexus Institute, 2005–2007 grant, \$500,000, "Project on Religion and Economic Change," (with Robert D. Woodberry, Mark D. Regnerus, Joseph E. Potter, Virginia Garrard-Burnett, and Daniel Powers).

Randall Walsh has the following current grants: Lincoln Institute for Land Policy, 2005–2006, "Conservation Voted: What is the American electorate revealing?," \$90,000, with resources for the future; National Science Foundation, 2003–2006, "Collaborative Research: Neighborhood Choice, Environmental Justice, and Policy Analysis," \$206,967, with **Nicholas Flores**.

Randy also has a pending grant from NSF—Human and Social Dynamics, 2006–2008, "Collaborative Research: Household and Community Response to Wildfire Risk: Social and Landscape Dynamics," \$243,444, with **Nicholas Flores**.

This fall Randy plans to submit a grant proposal to the National Institute for Health/National Institute for Childhood Development—R03, 2006–2007, "Distributional Impacts of Neighborhood Change," \$50,000 plus overhead expenses, with **Terra McKinnish**.

Graduate Student Placement

After earning their PhD degrees, these students have obtained employment at the following institutions:

Kenichi Imai, 2000, visiting lecturer, University of California at San Diego
Robin Koenigsberg, 2000, senior associate, Charles River Associates, Boston
Miles Light, 2000, senior associate, National Economic Research Associates, Boston
Rebecca Neumann, 2000, assistant professor, University of Wisconsin at Milwaukee
Sameer Rajbhandary, 2000, analyst, Centers for Disease Control, Atlanta, Georgia
Mary Evans, 2001, assistant professor, University of Tennessee
Jonathan Hill, 2001, assistant professor, Florida International University, Miami, Florida
Cathryn Marsh, 2001, senior associate, American Economics Group
Michael Nicholson, 2001, economist, Bureau of Economics, Federal Trade Commission
Phillip Gayle, 2002, assistant professor, Kansas State University
Sergey Paltsev, 2002, post-doctoral research, Massachusetts Institute of Technology
Cristobal Rida-Cano, 2002, Young Professional Program, World Bank
Julio Videras, 2002, assistant professor, Hamilton College, Clinton, NY
Sylvia Allegreto, 2003, policy analyst, Economic Policy Institute, Washington, D.C.
Galina An, 2003, assistant professor, Kenyon College, Ohio
Jared Carbone, 2003, post-doctoral research, North Carolina State University
Valeriy Gauzshtein, 2003, assistant professor, KIMEP, Kazakhstan
Changying Li, 2003, assistant professor, Nankai University, China
Changshuh Park, 2003, policy analyst, Korea Energy Economics Institute
Phillip Prosseda, 2003, vice commander and dean, United States Air Force
Thitima Puttitanun, 2003, assistant professor, San Diego State University, California
Seungwon Seo, 2003, policy analyst, Korea Ministry of Trade and Industry
Collin Starkweather, 2003, senior economist, Lexecon, Chicago, Illinois
Jennifer Thacher, 2003, assistant professor, University of New Mexico
Eina Wong, 2003, strategic analyst, Sun Microsystems
Luky Alfirman, 2004, policy analyst, Ministry of Finance, Indonesia
Rebecca Brown, 2004, assistant professor, California State University, Long Beach
Ji Guo, 2004, assistant professor, People's University, Beijing, China
Ming He, 2004, assistant professor, Zhejiang University, China
Yin He, 2004, assistant professor, Center for Economics Research, Beijing University, China
Derek Kellenberg, 2004, assistant professor, Georgia Tech, Atlanta, Georgia
Jirawat Panpiemras, 2004, policy analyst, Thailand Development Research Institute
Greetha Rajaram, 2004, assistant professor, Washington College, Maryland
Aaron Strong, 2004, post-doctoral research, University of Calgary, Canada
Kazuhiko Yokota, 2004, economist, International Center for Study of East Asian Development, Kitakyushu, Japan
Juventino Ulyses Balderas, 2005, assistant professor, Sam Houston State University, Texas
Xiaoyang Maggie Chen, 2005, assistant professor, George Washington University, Washington, D.C.
Kyoo Hong Cho, 2005, policy analyst, Ministry of Planning and Budget, Korea
Devon Lynch, 2005, instructor, Institute of Public Policy, University of Denver, Colorado
Stephanie Martin, 2005, assistant professor, Allegheny College, Meadville, Pennsylvania

ALUMNI NOTES *(cont.)*

the Secretary of Defense at the Pentagon. Chris has recently been selected for promotion to Lieutenant Commander.



Christopher Opdyke (BA '99) was recently promoted to vice president at Mortgage Design Group, Denver. He is the proud father of a beautiful son and an avid Colorado skier!



Phillip Prosseda (PhD '04) was appointed the vice commander and dean of the United States Air Force Academy Preparatory School in Colorado Springs, July 2004. As the dean, he oversees the operation and curriculum of three departments—English, math, and science. As the vice commander, he assists the commander in overseeing the military training and athletic departments.



Chief Justice Luis D. Rovira (BA '48; LLB '50), Colorado (retired), is currently employed as arbiter and mediator at Judicial Arbiter Group, Denver. He received the University of Colorado Alumni Recognition Award, 1963; University of Colorado Distinguished Services Award, 1987; and the University of Colorado Law School Knous Award, 1993. He was the president of the Associated Students, University of Colorado, 1947–48; president of the University of Colorado Denver Alumni Association, 1961–62; and a member of the Independent Investigative Commission appointed by the Board of Regents, 2004.

Philip Staehelin (BA '91) was recently elected for a two year term to the board of directors of the American Chamber of Commerce (AmCham) in the Czech Republic. He is currently employed as the head of the Office of the Managing Director for T-Mobile Czech Republic.

FACULTY OUTREACH

Lee Alston

Through the Foundation for Teaching Economics, Professor Alston gives regular weeklong seminars to high school teachers on economic history to inform instruction in U.S. high schools.

Through the Coase Institute, Professor Alston also lectures to students and young assistant professors from developing countries, providing them with tools to analyze important policy issues in their home countries.

Tania Barham

In her previous role as a World Bank consultant, Professor Barham advised the government of Yemen in the design of a project to improve the health and education of poor children. She is presently studying vaccination rates in Nicaragua for the World Bank's human development department. California's Department of Health Services used Professor Barham's work on managed care and birth outcomes in their policy review of managed care.

Ann Carlos

Through the Foundation for Teaching Economics, Professor Carlos gives regular weeklong seminars to high school teachers on economic forces in American history. Over the past 10 years, these seminars have provided high school teachers with information about cutting edge research in economics that they can pass on to their students. Seminars have been held in New Orleans, New York, Chicago, Hawaii, San Antonio, and San Francisco.

Yongmin Chen

Professor Chen was invited to present his work to the antitrust division of the U.S. Department of Justice. He has also been invited by the Swedish government to speak about oligopoly price discrimination at the Swedish Competition Authority.

Nicholas Flores

Professor Flores advises public agencies on stream restoration projects through the National Center for Earth-Surface Dynamics. He also serves on the advisory board for the City of Aspen's Climate Change Impact Assessment. Additionally, Professor Flores has worked with

continued on page 14

The Economics of Vertical Merger and Exclusive Contracts

Professor Yongmin Chen

An important issue in economics and antitrust policy is how vertical merger, or vertical integration, affects competition. Vertical merger refers to a situation in which an upstream supplier, such as an electronics company, merges with a downstream firm, such as a retail chain. In such circumstances the electronics firm may require that the retail outlets sell its products exclusively. The traditional foreclosure theory viewed vertical merger as harming competition by denying competitors access to either a supplier or a buyer. The foreclosure theory has received strong criticism from authors commonly associated with the Chicago School. The Chicago School view of antitrust emphasizes that the efficiencies generated by vertical integration are likely to result in lower prices to final consumers. A more recent strategic approach to the subject, which I have explored in my research, has shown how vertical integration might have the opposite purpose and effect.

The use of exclusive contracts by customers and suppliers in intermediate product markets is equally controversial. American courts and antitrust agencies have found many cases of exclusive dealings to illegally foreclose competition. The Chicago School disputes this finding, arguing instead that exclusive contracts are presumptively efficient, because it is usually unprofitable to foreclose competition via exclusive contracts. More recently, industrial organization economists have studied alternative models in which exclusive contracts can have the effects of foreclosing more profitable potential entrants.

The existing economics literature on vertical integration and exclusive contracts yields important insights on the competitive effects of these practices when they arise in isolation. However, available studies generally ignore the incentives for, and effects of, these practices when undertaken in combination. In a joint paper I wrote with Professor Michael Riordan of Columbia University, we uncover an unnoticed connection between exclusive contracts and vertical integration. This connection is motivated by the observation that in some intermediate product markets vertical integration and exclusive contracts exist simultaneously. For instance, in *Standard Oil Co. v. U.S.* (1949), Standard Oil sold about the same amount of gasoline through its own service stations as through independent retailers with which it had exclusive dealing contracts. In *U.S. v. Microsoft* (2000), Microsoft, which had vertically integrated into the internet services

business, signed license agreements with competing online service providers, requiring them to promote and distribute Microsoft's Internet Explorer to the exclusion of competing browsers.

The theory we develop in this research shows that this institutional feature is potentially important in understanding the incentives and effects of vertical mergers and exclusive contracts. More specifically, employing a game-theoretical model, we demonstrate that a vertically integrated upstream firm has the ability and incentive to use exclusive contracts to exclude equally efficient upstream competitors and control downstream prices. Neither exclusive dealing nor vertical integration alone has this anticompetitive effect.

We have presented this research at many institutions, including the Antitrust Division of the U.S. Department of Justice and over a dozen universities. One of the major difficulties in vertical merger analysis and antitrust enforcement is the lack of workable indicators of harmful vertical mergers. Our research has clearly identified circumstances where increased antitrust scrutiny would be warranted.

This research is closely related to my broader interest in the issue of competition and vertical organization. A basic premise of my research in this area has been that the vertical organization of firms affects, and is in turn affected by, their strategic decisions regarding horizontal competition. Horizontal competition refers simply to different firms selling similar products, as would be the case with competing electronics companies. As some of my recent work has shown, this approach offers interesting insights on various business practices, such as why manufacturers use resale price maintenance and other forms of vertical contractual restraints, why companies vertically disintegrate (as with AT&T's divestiture of its equipment division), and why firms choose international outsourcing. Research in this area has also led to other interesting economic questions, one being how to model oligopoly competition among firms that are located in different areas. Working again with Michael Riordan, I have recently developed a new spatial model of differentiated oligopoly with geographically separated competition. We call this "spokes model," and use it to analyze vertically related markets as well as to address some of the core economic questions that arise when firms engage in product differentiation.

Department of Economics 2004 Graduates

PhD

Luky Alfirman
Rebecca W. Brown

Ji Guo
Ming He

Yin He
Derek Kellenberg

Geetha Rajaram
Aaron M. Strong

Kazuhiko Yokota

Master of Arts

Yiting An
Woong Tae Chung
Nikolay V. Dobrinov

Gina M. Hilton
Trung Nam Hoang
Erik B. Johnson

Orathai Kidhen
David C. Kingsley
Shuichiro Nishioka

Jason A. Pearcy
Kenneth Strzepek
Eric T. Stuen

Joshua S. Wimpey
Xia Yuan

BA/MA

Evan W. Galbraith

Bachelor of Arts

Oreste Abbamonte
Joshua Ackley
Michael Agcaoil
Thamer Al-Humayyd
Zakaria Aldweik
Eric Alger
Robert Allen III
Larry Almanzar
David Anderson
Muchamad Arifiandi
Ryan Aucone
Alexandria Bagaria
Sarah Bang
Karl Barton
Ryan Baumgartner
Byron Beard
Adam Beck
Victor Beckman
Brent Berc
magna cum laude
Travis Berge
summa cum laude
John Bernard
summa cum laude
with distinction
Michael Best
Rachel Black-Maier
Travis Bomgardner
Louis Boyarsky
Lisako Bridgewater
Cory Bringle
Matthew Brougham
Aaron Brouker
Jenna W. Browning
William Burcher
James Burfisher
John Burkhart
Jennifer Burnham
summa cum laude
with distinction
Matthew Butz
Keith Cackowsky
summa cum laude
with distinction
Claudia Camacho
Ryan Cannizzaro
Aaron Carew
Timothy Carlin
Michael Carmosino
Peter Cella
Andrew Cerri
Pao Ge Cha
Truong Nhut Chau

Chung Hyun Cho
Adrian Clark
with distinction
John Clarke
Michael Colhoun
Jonathan Conklin
Ryan Cox
Rodney Crawford
Nicholas Currott
Kathryn Daugherty
Eric Davis
Brigitte De Pagter
Charles Dietrich
Chan Doh
Zachary Dougherty
Donald Douglas
Ryan Dow
Nicholas Downey
Cliff Duester
Ryan Duncan
Mallory Eaton
Michael Eryan
Beth Evans
with distinction
Brittney Foley
Robert Fonner
Christopher Frey
Genevieve Fulton
Joshua Futterman
Sarai Galaviz
Jameson Garfield
Narciso Garibay
Jessica Geran
Heather Gettman
Ethan Gifford
Joseph Giordani
David Giwosky
Jed Gladieux
Julia Goodwin
Lyndsey Gordon
John Graham
Tiffanie Gray
with distinction
Adam Griffith
with distinction
Stephen Gunde
Heather Guttersohn
magna cum laude
Laurel Harbridge
summa cum laude
with distinction
Duran Harris

Isaac Hartsell
with distinction
Jeffrey Hendrick
William Herter
Hannah Hippely
Noah Hirsch
magna cum laude
Eric Holmes
Kevin Hueth
John Jarmul
Phillippe Jacques
Jeremy Jaffe
Jeremy Jenkins
Lindsay Johnson
Jake Jones
Rebecca Jones
Justin Kaplan
Emily Kaser
with distinction
Judson Kauffman
Benjamin Kennedy
Joanne Tae Hee Kim
John Knellinger
Jason Komolmis
Jamie Kopf
Laura Kretke
Brianna Krieger-Maddalena
Wirahadi Kusuma
Susan Lande
Christopher Lannon
Ryan Lawton
Michael Lee
Tonya Leek
Michael Lippner Jr.
Matthew Loparco
Mark Lumsden
Kendall Lux
Laura Lynch
Jeffrey Malin
Anjali Mamnani
Reuben Mann
Scott Mathias
Mary McCann
Ian McCulley
magna cum laude
Amanda McGaw
Branden McGee
Lindsey McKay
Robert McQueen
Christopher Medina
Christopher Messerich
John Meyer

Jonathon Miller
Kelly Miller
Vandna Mittal
Daniel Morales
Iolani Morikami
David Mysel
Brian James Neal
Melissa Nelson
Yarrow Neubert
Andrew Neumann
Aaron Newman
Colleen Ng
Sze Wai Ng
Juliet Nguyen
Brian Nicholson
Michael Numedahl
Joseph O'Neill
Jennifer O'Riordan
Jesse Odle
Breigha Pachak
Joseph Pacheco
Wendy Pagel
James D. Parks III
Amy Pasquariello
Akash Dayalji Patel
Joseph Peters
George Pinyerd III
Garrett Polizzi
Mitchell Ponstein
Evan Porto
Christopher Ramos
magna cum laude
Filho Razuk
Anne Reinhart
summa cum laude
with distinction
Jeff Reynolds
David Robinson
Conrad Roesch
Kenneth Rogers
Peter Roper
Michael Rosen
Bradley Rothhammer
Chad Ruport
Caitlin Ryan
Timothy Sack
Morgan Sall
summa cum laude
Chad Salvatore
summa cum laude
with distinction
James Sande

Russell Sawicki
Louis Schmohl
Jed Schuetze
Tara Schutz
Christopher Scott
Sarah Severin
Kaleb Sieh
Michael Simpson
Matthew Sloomaker
Benjamin Snyder
with distinction
Drew Soderborg
summa cum laude
with distinction
Karim Souki
Kara Southwell
Ashley Stiles
Christopher Stock
Mark Stockwell
with distinction
Bryan Stornetta
Brian Striff
Andrew Swinbank
Mirza Tabakovic
Hilary Thompson
Jonathan Tilton
Matthew Todaro
David Trace
magna cum laude
Dante Treglio
Andrew Trombley
David Urban
Daniel Vedra
magna cum laude
Eric Venable
Christopher Voigts
Carolyn Wagner
Patrick Wallace
Jesse Warburg
Ryan Ward
Noah Wasserman
Joseph Weaver
Lacey Webb
Elmer Westra
Tares Wheelwright
Geoffrey Whittaker
Burke Wiedel
Samuel Wilder
Wantsz Cynthia Yung
Nicholas Yurk
Justin Zaharris
Yashar Zendehtel

Faculty Outreach *(cont.)*

the USDA Forest Service's Rocky Mountain Research Station on public land management issues.

Phillip Graves

Through the Foundation for Teaching Economics and the Foundation for American Communications, Professor Graves has lectured on market economies in numerous places around the world (e.g., Prague, Budapest, Hanoi, and Bratislava) with a particular interest in influencing the appreciation of market economies in Eastern and Central Europe.

Michael Greenwood

As a widely recognized expert on migration, Professor Greenwood was asked to serve on the U.S. Commission for Immigration Reform. During his three years of service on the commission, he co-directed a study estimating the economic and social impacts of Mexican migration.

Frank Hsiao

Professor Hsiao has lectured on East Asian Economic Development in Korea, Japan, China, Hong Kong, and Taiwan. He currently serves as a consultant for the Chinese University Development Project II for the World Bank.

Jim Markusen

Professor Markusen frequently travels to Europe to present short courses on modern international trade policy and on general equilibrium modeling. An example of a recent venue is the Ministry of Trade and Industry in Copenhagen, Denmark. Professor Markusen previously served on the Royal Commission on the Economic Union and Development Prospects for Canada, which laid the foundations for the U.S.–Canada free-trade agreement. He also served as an advisor to Mexico's Ministry of Trade for the NAFTA negotiations. Professor Markusen is frequently invited to speak to local groups and participate in local forums on globalization and trade policy.

Keith Maskus

International organizations and foreign governments frequently draw on Professor Maskus's expertise on intel-

The Faculty Enhancement Fund

Recent news articles discuss the fierce competition among research universities for top talent in economics. This year our department and the university made an extraordinary effort to hire four outstanding young economists and to retain two top senior scholars. To succeed, however, we had to offer competitive salaries, support for summer research, and significant startup packages. Our dean is committed to offering competitive salaries. However, our department is required to provide most of the funding for summer support and startup packages. It is critical that we continue to make these contributions if we are to sustain excellence. For example, despite the rigorous content of our courses, economics is highly popular—with nearly 1,200 undergraduate majors and minors—and we teach far more student credit hours per faculty member than any other department at CU. We must recruit top faculty to meet these growing demands with a high-quality program.

Recognizing this problem, faculty members are stepping forward to meet this challenge with their own monetary support and, in consultation with the department's advisory board, are creating a donor-sponsored fund designed to help us remain competitive in recruiting and retaining top faculty. The Faculty Enhancement Fund will provide sustainable financing for support packages, which tip the scales toward a successful search or retention—a key factor in a time of ongoing budgetary stress at CU. To achieve true sustainability, we need to establish a fund of \$750,000.

We ask for your support in establishing and growing this fund, which is our top fund-raising priority. And, thanks to generous donors, the department has up to \$150,000 in matching funds to get the Faculty Enhancement Fund off to a great start. Our department makes significant local, national, and global contributions through training, research, and outreach. Your support for the fund can make the difference in successful recruitment and retention for years to come. We urge you to contribute by sending a check (payable to the CU Foundation) or by visiting the CU Foundation secure website and donating by credit card. Be sure to indicate that your contribution is for the Faculty Enhancement Fund.

If you would like to learn more about this opportunity or to learn about other giving opportunities, please write, e-mail, or call us. Thank you for your continued support of the economics department and the University of Colorado.



University of Colorado at Boulder
College of Arts & Sciences
Department of Economics

Enclosed is my gift of:

___ \$1,000 ___ \$500 ___ \$250 ___ \$100 ___ \$50 other _____

Please use my gift for: Department of Economics Faculty Enhancement Fund (0122954)
 Department of Economics (0121028)

Name _____ My corporate matching gift form is enclosed

Address _____ I would like to make my gift by credit card:

_____ VISA MasterCard AmEx Discover

City _____ State _____ Zip _____

Phone _____ Card number _____ Exp date _____

E-mail _____ Print name as it appears on card _____

Signature _____

This is a new address.

Make checks payable to: CU Foundation and mail to:

Keith Maskus, Economics Chair, 256 UCB, University of Colorado, Boulder, CO 80309-0256
or to: CU Foundation, 1305 University Avenue, Boulder, CO 80302

Save time! Make your donation online at www.cufund.org. Click "Give Online," then follow the links to CU-Boulder, Colleges & Schools, Arts & Sciences, and Economics.

686

Thank You!

Department Receives Gift to Commemorate Wyn Owen and the Economics Institute

The Department of Economics was recently named the recipient of a sizeable endowment from the board of directors of the Economics Institute. As many readers will recall, the Economics Institute provided training in English, economics, business, statistics, and mathematics for thousands of international graduate students and business executives from 1958 to 2001. The EI was founded and directed for many years by Professor Wyn Owen, an emeritus member of our department. Under his leadership, it became the premier institution in the world for providing essential training for international students completing graduate degrees in the United States in economics or business.

Unfortunately, changes in the international business climate in recent years reduced the demand for the EI's services and it closed its doors in late 2001.

The board of directors and the Department of Economics have decided to work together to endow a lasting legacy in honor of Wyn Owen and the Economics Institute. It is certainly appropriate to do so. Wyn is a visionary who was the first to see the importance of such training, and the EI established a global reputation for first-rate preparatory education. Moreover, thousands of EI alumni recall their time in Boulder with fondness and respect. It is a legacy well worth recognizing and perpetuating.

With the gift, the Department of Economics will establish three new academic initiatives. First, each year we will select one or two outstanding students from a developing country who has applied for admission to the doctoral program. We will provide them with a fellowship that will supplement any financial aid offered by the department. The students selected will be designated "Wyn Owen

Graduate Fellows" and would retain this designation throughout their graduate careers. In this way we will continue Wyn's tradition of training graduate students from poor countries in economics.

Second, we will annually select and invite three highly visible scholars, policymakers, or business entrepreneurs who are active in economic development to spend one week in residence at the economics department or business school at CU-Boulder. These "Wyn Owen Visiting Scholars" would give a research seminar in the department (if appropriate), speak in relevant undergraduate classes, and also be available to visit interested local groups in Denver and Boulder. In this program we will concentrate on inviting EI alumni who have achieved positions of prominence in government, academia, and business.

Third, the department will periodically host a conference on economic development and development policy. The conferences will involve young scholars, including graduate students, presenting their research papers. Each conference will have a thematic framework, such as "Development and Labor Markets," "Development under Globalization Pressures," or "Development and Agricultural Policies."

We are grateful to the board of directors of the EI for making this opportunity possible and look forward to working with them to establish the legacy. If readers wish to make contributions to this fund, please send them to the department chair using the address found on page 14 of this newsletter. Mark the contributions for "Economics Institute Endowment."

Faculty Outreach *(cont.)*

lectual property rights and economic development. He has provided policy advice to the governments of Egypt, Indonesia, China, Vietnam, and Lebanon, among others. He has recently written reports for the World Health Organization, the World Intellectual Property Organization, the International Task Force on Global Public Goods, and the United Nations Conference on Trade and Development.

Terra McKinnish

Due to her expertise on poverty issues, Professor McKinnish was asked to serve on the board of the local food bank and recently completed her term. She was the volunteer coordinator of the local Hunger in America Survey, in which a team of food bank staff and volunteers conducted interviews with food pantry and soup kitchen clients. These interviews were combined with those conducted by other food banks across the country into a national report on hunger in America.

Robert McNown

Professor McNown has served as an expert witness on the effects of waste site proximity on residential property values. He has served as a visiting professor at several institutions abroad, including the University of Sydney (2003), Peoples' University in Beijing, China (1989), and Tribhuvan University in Kathmandu, Nepal (1979-1981), this last position as a Fulbright lecturer.

Edward Morey

Professor Morey serves as an advisor to NOAA on Natural Resource Damage Assessments. He has also helped assess the damages from the pollution injuries at a number of large Superfund sites. This work has contributed to cleaning up contaminated rivers in Montana, the Bay of Green Bay, and, he hopes in the future, the Hudson River.

Barry Poulson

Professor Poulson serves on the Colorado Commission on Taxation and was recently appointed to a state commission to evaluate the state's retirement plan. He has been extremely active in economics education in the state of

continued on back page

Faculty Outreach *(cont.)*

Colorado. He consults with the Colorado Council on Economic Education and is Director of the Center for Economic Education in Boulder. He has taught seminars on economic education to Colorado's public school teachers for more than 30 years and has partnered with State Treasurer Mike Coffman to discuss state-related economic issues with Colorado teachers.

Scott Savage

Professor Savage was curriculum development advisor to NetTel@Africa—a consortium of southern African countries developing knowledge in information and telecommunications policy and regulation. He recently traveled to Botswana and Tanzania to advise academics, engineers, and policy makers on recent developments in regulatory policy and education.

Donald M. Waldman

Working with the EPA and the U.S. Weather Service, Professor Waldman uses his expertise in statistical modeling to measure the value of environmental quality and better weather forecasts. He has volunteered his time doing survey research for the Boulder chapter of the Association for Community Living, an organization dedicated to providing services that promote dignified community living for people with developmental disabilities.

Randall Walsh

Professor Walsh has been invited by the Lincoln Institute for Land Policy in Boston to discuss open space policy with town planners. He has also advised local planners in North Carolina.

Jeffrey Zax

Professor Zax has been tapped by the Colorado Department of Transportation to analyze crash and citation statistics for the state, for the purpose of advising the state on its traffic safety programs. Professor Zax has previously advised Colorado's Departments of Human Services and Labor and the Attorney General's Office. He is a regular contributor to state discussions on economics issues, writing three op-ed pieces for the *Denver Post* in the past two years.

Let Us Hear from You

Please use the form below to send us news about yourself or update your address. Mail to: Newsletter, Department of Economics, University of Colorado at Boulder, 256 UCB, Boulder, CO 80309-0256 or send an e-mail to keith.maskus@colorado.edu or annmarie.ladd@colorado.edu. Telephone 303-735-5500.

Name _____

Address _____

CU degree(s) and date(s) _____

Major professor _____

Degree(s) from other school(s) and date(s) _____

Present position, employer, location _____

Awards, honors, fellowships _____

Other information, alumni news _____

Colorado

University of Colorado at Boulder

Department of Economics
256 UCB
Boulder, CO 80309-0256

Nonprofit Org.
U.S. Postage
PAID
Boulder, CO
Permit No. 257

The University of Colorado is an equal opportunity/
nondiscrimination institution.