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Professor Wojciech Kopczuk

Tenure for Professor Wojciech Kopczuk

Professor Wojciech Kopczuk, a noted scholar of public finance, was awarded tenure at Columbia in the fall semester of 2007. From the beginning of his career as a doctoral candidate, he has studied empirical implications of estate taxation and their consequences for the role that this type of taxation should play. Over time, this line of research led him into topics that are of interest to economists outside of public finance: bequest motives and evolution of inequality. His research, which has been recognized with a Sloan Research Fellowship and federal funding from the National Science Foundation and the Social Security Administration, has relied on a variety of techniques, including purely theoretical work, micro-econometric approaches of both “reduced-form” and

“structural” kind as well as descriptive analysis using historical micro-data.

Taxation of estates and inheritances is one of the most controversial issues in tax policy. While this type of taxation is viewed by some as an integral part of a system that guarantees equality of opportunities, others describe it as a “death tax” and argue that it is both inherently unfair to levy tax at

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Undergraduates Win Rhodes, Marshall, Soros, and NSF Awards



Jason Bello



George Olive



Maxim Pinkovskiy

Three senior undergraduates majoring in Economics have won the prestigious Rhodes Scholarships, Marshall Scholarship, Soros Fellowship, and NSF Graduate Research Fellowship this academic year.

Jason Bello, who has majored in Political Science and Economics with a minor in Linguistics, will study comparative government at Oxford as a Rhodes Scholar. An active member of student political organizations, Bello also garnered notice as the host of “The Careless Cook” on CTV. He has been an ISERP Undergraduate Fellow at Columbia and pursued research with Robert Shapiro of the Political Science Department.

George Olive, who was profiled in the Fall 2007 Economics newsletter as the president of the Columbia Economic Forum, accepted the Rhodes Scholarship and also won a Marshall Scholarship, which he declined. An Economics and Earth and Environmental Sciences major, he will pursue further study in economics at Oxford. He has been a co-author of a paper published in Geology and

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Che Wins Cho Award



Professor Yeon-Koo Che has been selected as the inaugural winner of the Cho Rakkyo Award, presented to the economist whose academic contribution to the development of economics in Korea is most highly significant.

New Davis Chair Awarded



Professor Don Davis was honored with the Kathryn and Shelby Cullom Davis Professorship of Economics and International Affairs in December of 2007. An expert in international trade and in economic geography, he has served as a past department chair and is currently a Co-Director of the Program for Economic Research.

[HTTP://WWW.COLUMBIA.EDU/CU/ECONOMICS](http://www.columbia.edu/cu/economics)

Kopczuk, *continued from page 1*

death and that it is particularly costly to do so, highlighting its adverse effect on wealth accumulation, discrimination against savers, negative consequences for survival of small businesses, and multitude of avoidance opportunities. Estate taxation is related to a number of important economic topics. It is a form of tax on capital; it is heavily progressive, with U.S. federal tax rates currently approaching 50% and exceeding 70% in the past; it is closely tied to the propagation of inequality and the impact of redistribution; and it affects intergenerational mobility of wealth. Its impact and its cost depend on the presence and the nature of a bequest motive. How individuals plan for leaving an estate depends also on their acceptance and attitudes toward their own death, thereby providing a natural place for looking for examples of the importance of psychological considerations. The U.S. estate tax is nominally a tax on individuals, but its incidence depends on family structure and interrelationships. The tax has been dubbed a “voluntary tax,” highlighting that tax avoidance and administration issues are very important.

Given controversy surrounding the role, desirability and structure of this type of taxation, Kopczuk’s interest in this topic was normative — understanding what is theoretically appropriate role of this tax. In his dissertation, he analyzed the estate tax in the optimal taxation framework. This initial work has led him to recognize and appreciate two gaps in knowledge that pose problems for theory at this stage and that motivated much of his subsequent work. First, little is known about empirical implications of the estate tax. This is partly due to data problems (not much information is available about the wealthy) and partly due to econometric problems caused by a need to measure responses that may be occurring slowly over time, uncertainty of death and, *ex post*, a single tax regime applying to a given person. Second, any theoretical investigation has to take a stand on the nature of bequest motivations of taxpayers. However, even though the literature on bequest motives is vast, it is largely inconclusive. Kopczuk views it as an important shortcoming of the current state of knowledge that goes well beyond the narrow context of estate taxation: understanding economics of intergenerational links is crucial for understanding saving decisions and hence for a wide range of policy issues.

Recent literature on income inequality has shown the dramatic changes that occurred at the very top of the income distribution over the course of last century. It has pointed out that most of the changes in income inequality were driven by the very high incomes. This literature is a fact-finding mission: it attempts to construct long-term measures of inequality in order to understand how inequality has changed in the past, how it is changing over the course of economic development and what events and phenomena may have contributed to its evolution. Most of this work is based on annual data and hence may provide misleading picture of lifetime inequality that is arguably more relevant for thinking about welfare. Kopczuk

addresses this shortcoming by focusing on wealth and longer-term measures of income inequality and mobility. The U.S. federal estate tax was introduced in 1916. It has always applied to a relatively small group of the wealthiest decedents; applying at the peak of its coverage in the 1970s applying to over seven percent of adult deaths, and at its minimum coverage to less than a half of one percent. Its long history and its focus on the top of the distribution make estate tax data a natural source for studying long-term changes in wealth concentration.

One of the major problems in studying the concentration of top incomes, however, is difficulty in obtaining suitable data. A popular explanation for part of the growth in income concentration has to do with increased mobility: if incomes became more volatile, inequality measured annually may have increased without the corresponding growth in permanent income inequality. Shedding a light on this issue requires observing individuals over time, and given that almost all of the growth in income concentration is due to the top 1% (with big differences even between the bottom and the top of this group as well), it requires either over-sampling of the wealthy or huge datasets. Other controversial questions involve industries and firms responsible for the growth of concentration (eg. the relative role of IT, finance, sports, and entertainment), its geographic concentration, age, cohort, gender and racial components. Data that allows to precisely address these issues is not available outside of government; with co-author Emmanuel Saez of UC-Berkeley, Kopczuk convinced the Social Security Administration to provide access to appropriate longitudinal data and is now working on these research questions armed with a 1% sample of the U.S. population since 1957 and a smaller, .1%, sample of the U.S. population for 1937-1956.

A conceptually different strand of his research is devoted to studying implications of tax complexity, avoidance and administration. The main underlying motivation of this work is the observation that actual tax policies cannot be simply described by tax rate schedules and enumeration of commodities subject to taxation. The legal environment, complexity of the tax code, tax enforcement, tax avoidance opportunities and their cost, taxpayers’ attitudes, and many other factors play a role. More complexity in social programs or tax code may be a consequence of trying to precisely target benefits or taxes. In practice, however, complexity is likely to have adverse implications by making it more difficult for individuals to comply and take full advantage of the law. Kopczuk’s work on tax preparation industry suggests that this trade-off may be endogenous if there is a market associated with the particular tax or program. Understanding such trade-offs and modeling how policy makers should exploit markets to provide social benefits is a continuing topic in his agenda.

For more information and links to Professor Kopczuk’s papers and publications, visit <http://www.columbia.edu/~wk2110/papers.html>.

Letter from the Chair



As the academic year rushes towards its conclusion, there are once again many milestones to celebrate. Wojciech Kopczuk, whose work is featured in this newsletter, is the most recent addition to the tenured faculty. Needless to say, we are always delighted when we can recognize the outstanding accomplishments of one of our Assistant or Associate Professors by granting him or her tenure. In addition to his stellar research accomplishments, Wojciech has a secret life as a “geek” and has been the brains behind the establishment of the Program for Economic Research’s research computing cluster, an essential for department research. We look forward to many years of fruitful collaboration with Wojciech.

Our former chair, Don Davis, has also been recognized by becoming our most recent chaired Professor. He is now the Kathryn and Shelby Cullom Davis Professor of Economics and International Affairs. (And no, there is no relation!) A chair is an honor bestowed on a faculty member by other chair holders in the department in recognition of exceptional accomplishments. We are delighted to have been able to honor Don’s accomplishments in this way.

Stefania Albanesi (whose work is also profiled in this newsletter) has been honored with a prestigious Hoover Fellowship. And it has just been announced that Yeon-Koo Che is to be the initial recipient of the Cho Rakkyo Award, the largest academic prize in Korea, in April.

Our students continue to bring glory to the department. This year, three of our undergraduates achieved exceptional recognition. George Olive and Jason Bello joined the ranks of the newest Rhodes scholars, while Maxim Pinkovsky won both a Soros Fellowship and an NSF Graduate Research Fellowship. We are tremendously proud of them.

The year has been a busy one on other fronts as we continue building the department. At present, Jonathan Vogel, an International Trade expert, has been lured away from UCLA and will be arriving in the fall, and a new PhD in Macroeconomics, Jaromir Nosal, has also accepted our offer. We have additional offers pending at the junior and senior level, which we hope will bear fruit. However, one measure of the competitive market for economists is that less than 1/3 of offers at any of the top schools are accepted. Still, we continue to work hard to recruit and retain the best for Columbia Economics.

Sincerely,
Janet Currie

Recent Faculty Publications

“Son-biased sex ratios in the 2000 United States Census” by Douglas Almond and Lena Edlund *PNAS*, March 31, 2008

“The Dynamic Behavior of the Real Exchange Rate in Sticky Price Models”, by Jón Steinsson, *American Economic Review*, March 2008

“The Case for Forecast Targeting as a Monetary Policy Strategy”, by Michael Woodford, *Journal of Economic Perspectives*, Fall 2007

“Bequest and Tax Planning: Evidence from Estate Tax Returns”, by Wojciech Kopczuk, *Quarterly Journal of Economics*, November 2007

“Semi-Nonparametric IV Estimation of Shape-Invariant Engel Curves”, by Richard Blundell, Xiaohong Chen, and Dennis Kristensen, *Econometrica*, November 2007

Recent Working Papers

“What Do Trade Negotiators Negotiate About? Empirical Evidence from the World Trade Organization” by Kyle Bagwell and Robert W. Staiger *NBER #12727* (ITI)

“Linear-Quadratic Approximation of Optimal Policy Problems” by Pierpaolo Benigno and Michael Woodford *NBER #12672* (EFG, ME)

Conditional Cash Transfers in Education Design Features, Peer and Sibling Effects Evidence from a Randomized Experiment in Colombia by Felipe Barrera-Osorio, Marianne Bertrand, Leigh L. Linden, Francisco Perez-Calle *NBER #13890* (CH, ED, LS)

Visitors at the Program for Economic Research

Every week, researchers and scholars visit the Columbia Economics Department under the auspices of the Program for Economic Research (PER). Interactions in seminars advance the body of knowledge and encourage collaboration between economists at Columbia and throughout the world.

Fall 2007

Marcelo Moreira (Harvard) 10 – 14 September

Matt Jackson (Stanford) 1 – 5 October

James Powell (UC Berkeley) 8 – 19 October

Michael Jansson (UC Berkeley) 15 – 19 October

Paul Milgrom (Stanford) 22 – 26 October

Francois Maniquet (Uni. cath de Louvain) 7 – 10 November

Michele Tertilt (Stanford) 26 – 31 November

Jean Marc Robin (Paris-I) 3 – 7 December

Faculty Profile: Stefania Albanesi



Since joining the Columbia faculty in 2005, Professor Stefania Albanesi, a macroeconomist and public finance expert, has pursued two major lines of research supported by the National Science Foundation. One of her interests has been to investigate the involvement of women in the marketplace.

“There are three important facts about women and the labor market,” she says. “First, there has been a dramatic rise in the labor force participation of married women, especially those with young children. Second, there is a substantial and persistent gender earnings gap a good fraction of which remains unexplained by observable characteristics, such as age, industry and occupation. Third, despite their rising rates of educational attainment, women are still underrepresented in top jobs and gender earnings differentials are greatest for executive positions.” She and her co-author Claudia Olivetti of Boston University have been studying these facts supported by NSF Award No. SES-0551511, “Understanding the Gender Gap in Earnings: Household Production, Market Production and Labor Contracts”.

In “Gender Roles and Technological Progress” (Columbia Economics Discussion Paper No. 0607-12), she outlines how advances in medical knowledge and obstetric practices reduced the time cost associated with women's maternal role. The introduction of infant formula also reduced women's comparative advantage in infant care, by providing an effective breast milk substitute. These developments enabled married women to increase their participation in the labor force, thus providing the incentive to invest in market skills, potentially narrowing gender earnings differentials. The reduction in the time cost of pregnancy and childbirth can account for the fourfold increase in the labor force participation of married women with children between 1920 and 1960.

In the paper “Home Production, Market Production and the Gender Wage Gap: Incentives and Expectations,” she concentrates on the link between women's lower earnings and their greater home responsibilities. Building on the premise that incentive problems in the labor market play a key role, she derives novel predictions that are supported in the data. For example, gender earning differentials are higher for married workers in occupations in which it is harder to monitor worker's effort, the difference in the male and female fraction of incentive pay is inversely related to the female/male

earnings ratio, and the husband/wife difference in hours devoted to home activities is negatively correlated to both their earnings differentials and the difference in the fraction of incentive pay.

The paper “Gender and Dynamic agency: Theory and Evidence on the Compensation of Female Top Executives” provides a model for assessing the reasons for the disparity in the income of top women executives as compared to men. The 30% gender gap in income is mostly driven by women's higher fraction in salary and a lower fraction in bonuses, stock options and stock grants. Based on survey and experimental evidence of cultural impediments to greater parity in the income between men and women, such as a lack of mentoring and role models, exclusion from networks and gender based stereotyping, it confronts two alternative hypotheses. The first one offers lower impact on firm profitability for effort put in by female executives as a possible explanation. The second posits that women's costs of effort in executive positive positions in greater than for men. They show that only the second hypothesis is consistent on the pattern of gender differences in the structure of compensation.

A second line of research has concerned the optimal taxation of labor and capital income - a classic problem in macroeconomics and public finance. Most of the literature adopts what is known as the Ramsey approach, which specifies an exogenous set of fiscal instruments among which the government chooses with the goal of maximizing social welfare. The crucial assumption is that lump sum taxes are not part of this set, an exclusion justified by appealing to incentive or administrative constraints that are not explicitly modeled. One key result is that, at least in the long run, it is optimal not to tax capital income.

Professor Albanesi studies how to optimally set taxes on capital and labor income in several papers, adopting an approach that seeks to endogenize the nature of the fiscal instruments available to the government. The premise of her work is that certain individual characteristics, such as idiosyncratic labor productivity or work effort are not publicly observed. This generates a trade-off between insurance and incentives and limits the government's set of fiscal instruments. In the paper “Optimal Dynamic Taxation with Private Information,” joint with co-author Christopher Sleet, she shows that the optimal tax system generates a wedge between the aggregate rate of return on saving and the intertemporal marginal rate of substitution that provides a foundation for the taxation of capital income, contrary to the predictions of Ramsey models. In “Optimal Taxation of Entrepreneurial Capital with Private Information,” she shows that moral hazard in entrepreneurial effort implies that the optimal capital income tax system provides insurance against idiosyncratic capital risk while it discourages holdings of alternative assets, such as risk-free bonds, by entrepreneurs. She also shows that if entrepreneurs sell equity to outside investors, the corresponding returns must be taxed both at the level of the entrepreneurs as well as

when they accrue to investors, leading to double taxation of capital.

In the paper, “Intertemporal Distortions in the Second Best,” joint with Roc Armenter, she explores the fundamental differences between economies in which some form of capital income taxation is optimal in the long run, such as those with private information, and the ones in which the optimal capital income tax is zero. They show that the government’s ability to shift other distortions, such as labor income taxes, intertemporally underlies the optimality of capital income taxes. The paper reviews various well known models optimal capital income taxation and revisits their properties in light of this result. She is currently exploring the properties of optimal taxes in economies with occupational choice. In addition, she is investigating the link between the process for family decision making and optimal taxes in economies where agents belong to households.

For more information and links to Professor Albanesi’s papers and publications, visit <http://www.columbia.edu/~sa2310/research.htm>.

Undergraduates, continued from page 1

sustainable energy projects for the governments of the Dominican Republic and Papua New Guinea. After Oxford, he plans to pursue a career bringing green energy and infrastructure to developing countries.

“I’ve been so fortunate to attend this incredible institution to study these exact fields,” said Olive. “I won this scholarship because there were several professors who were willing to take a chance on me, true educators who are truly invested in their undergraduates.”

Maxim Pinkovskiy is the recipient of a Paul and Daisy Soros Fellowship for New Americans as well as an NSF Graduate Research Fellowship, which he intends to use for doctoral study in economics. An accomplished essayist, Pinkovskiy distinguished himself early by advancing through the graduate curriculum in the Economics Department since his second year at Columbia.

Graduate Student Awards

Wueller Prize for Best 3rd Year Proposal



Raicho Bojilov, “Risk-Sharing Regimes”

The project considers the development of a framework for the analysis of risk-sharing arrangements under arbitrary deviations. There is a finite number of identical, infinitely lived, and risk-averse individuals. The income process is publicly observed, i.i.d. over time and across individuals. Individuals can participate in self-enforcing risk-sharing arrangements, such that in no state of the world any subgroup of the population finds it profitable to form an alternative risk-sharing arrangement. The text proposes a solution concept, specifying how at any history the population organizes to share risk, a definition of stability and proves existence.

There were four runner-up awards: Lumi Stevens, Evan Borkum, Simone Cerreia Vioglio, and Carlos Perez.

Wueller Prizes for Best 4th Year Thesis Proposal (2)



Yoichi Sugita, “Matching, Quality Upgrading, and Trade in Intermediate Goods between Heterogeneous Exporters and Importers”

This project develops a general equilibrium model of trade in vertically differentiated intermediate goods between heterogeneous exporters and importers. A new mechanism of gains from trade arises from the interaction of the heterogeneity of exporters, importers, and product quality. Trade improves the matching of firms in a production process and the quality of final goods. Under free trade, as matching patterns converge across countries, the quality gap among intermediate goods disappears and the quality of final goods improves. Countries’ specialization further improves the quality.



Johannes Schmieder, “Wages and the Establishment Lifecycle”

Using a uniquely linked employer-employee panel dataset that follows workers and establishments over time, estimates of the age-wage relationship reveal wages in newly founded establishments are 14% higher than wages in older establishments. The effect of establishment age on wages remains strongly negative after controlling for a wealth of detailed establishment and worker characteristics. Contrary to the theory that the wage difference is driven by longer contracts and therefore higher deferred compensation in older establishments, there is no evidence that wage growth in young firms is significantly slower.

PER-Sponsored Faculty and Student Research

The Program for Economic Research (PER) provides seed grants and financial support to faculty and students to advance their research and publish papers. PER sponsored the following research projects in part over the past year.

The Impact of a Fertilizer Program for HIV/AIDS-afflicted Farming Households in Kenya

– Shubha Chakravarty

Food insecurity is increasingly recognized as an important barrier to the effective treatment of HIV/AIDS in sub-Saharan Africa. Patients who are undernourished respond less well to Antiretroviral Therapy (ART), and the side effects of AIDS and ART include loss of appetite, nausea, and weight loss. Interventions to counteract the widespread food insecurity in the region are urgently needed.

Our collaborators at the Academic Model for the Prevention and Treatment of HIV/AIDS (AMPATH) in Western Kenya have provided short-term food assistance to underprivileged patients and their families in addition to ART since 2002. However, this food assistance does not address the underlying causes of the food and economic insecurity of the patients and their households, most of whom are subsistence maize farmers. To assist these households in intensifying their agriculture, we propose to provide inorganic fertilizer free of charge to randomly selected households during the 2007 planting season. As the fertilizer use should increase the yields of households, we would expect their economic and social welfare to improve, ultimately improving their health status and response to ART as well. The proposed study will quantify these impacts, by using detailed socioeconomic surveys that measure consumption and expenditures, child schooling and labor, income and labor supply, and farming practices, as well as thorough patient medical records, including CD4 count, BMI, and adherence to ART. By evaluating the health and socioeconomic impact of fertilizer provision, we can assess the value of such interventions in the context of HIV/AIDS throughout sub-Saharan Africa.

Confidence Regions for Set Identified Parameters

– Edward Vytlačil, Cecila Machado

This research examines a new method for constructing confidence regions on set-identified parameters. In traditional econometrics, parameters are point identified. In other words, if we consider the thought experiment of having an infinite number of observations so that there was no sampling variability and we

thus knew the exact population distribution of all observed variables, we could infer the exact value of the parameter. In contrast, there has been recent interest in set-identified parameters, parameters that can only be identified to lie in a particular set even abstracting from sampling variability. This problem arises, for example, when studying censored or truncated data; in treatment effect models in labor economics; and in industrial organization problems when estimating discrete games.

Bounded Inequality with Private Information: The Role of Unobservable Investment

– Heriberto Tapia

This research project explores the optimal wealth distribution of the economy in a context in which the planner cannot observe the actual level of (marginal) utility faced by the agents. Therefore transfers to the agent depend on the agent's report (truthful or not). The benchmark case in the literature, states that in this context, the resulting optimal policy is one in which agents affected by negative shocks receive more transfers from the planner, but at the cost of less consumption in the future, in order to induce truthful reporting of their unobservable utility. This scheme, has a strong implication for the income distribution, known as the immiseration result: inequality grows without bound.

Our main hypothesis is that if we also consider that agents can invest a non observable amount of resources and there exists uncertainty about the future result of the agents' investment, the optimal long run wealth distribution is bounded, breaking the immiseration result. The underlying mechanism is that if the level of wealth is too low, the planner is unable to induce enough investment (which is socially productive). An interesting feature of this line of research is its normative implications. Indeed, in principle, these models predict an effort-led convergence in wealth, in contrast with some purely redistributive schemes derived from other models of convergence in distribution.

Telephone Service and Labor Market Outcomes of Rural Households in China

– Yinghua He

The telephone is an almost indispensable tool for communication in developed countries. But in many developing countries, it is still a luxury good. Costs of communication will be tremendously reduced with telephone service. The objective of this project is to investigate the effects of telephone service on the labor market outcomes of rural households in China. By this, two possible contributions will be made: first, a better understanding of the importance of information in rural labor market; and second, policy implications about how the government should provide the telephone service in order to promote rural development.

Using a household panel data set from rural China, the research will answer the following two questions: 1) What is the effect of telephone service on total household income and income from

various sources? 2) What are the channels that telephone service affects rural households? The major sources of income for a rural household in China include earnings as a farmer, wages from non-agricultural employment, and earnings from non-agricultural self-employment. This project tries to identify the effect of telephone service on income from each source on both the extensive margin and intensive margin. In other word, we will look at how rural household allocate its total labor among occupations and what are the wages from each occupations.

Another two important contributors to rural development, migration and entrepreneurship, will also be investigated. We will define entrepreneurial activities as the cases in which household starts non-agricultural business, or introduces some new agricultural products. Again, the effects of telephone service on extensive margin and intensive margin will be both assessed.

Recent Discussion Papers

The department sponsors a discussion paper series for faculty, co-authors, and visitors. Download the full text of these papers at <http://www.columbia.edu/cu/economics/>.

Does Exporting Lead to Productivity Spillovers in Horizontal or Vertical Industries? Evidence from Indonesia, 0708-01

– Prasanna Guru Sethupathy

This paper investigates the presence of productivity spillovers due to exporting. In particular, it examines whether productivity gains from exporting spill over upstream (to suppliers), downstream (to customers) or horizontally (to competitors). Using plant-level data on Indonesian manufacturing sectors, we find productivity gains to downstream firms of approximately 2.5-3.5% during the period 1990-1996. We do not find the presence of spillovers upstream or horizontally.

Peaceable Kingdoms and War Zones: Pre-emption, Ballistics and Murder in Newark, 0708-02

– Brendan O’Flaherty and Rajiv Sethi

Between 2000 and 2006 the murder rate in Newark doubled while the national rate remained essentially constant. Newark now has eight times as many murders per capita than the nation as a whole. Furthermore, the increase in murders came about through an

increase in lethality: total gun discharges rose much more slowly than the likelihood of death per shooting. In order to explain these trends we develop a theoretical model of murder in which preemptive killing and weapon choice play a central role. Strategic complementarity amplifies changes in fundamentals, so areas with high murder rates (war zones) respond much more strongly to changes in fundamentals than those with low murder rates (peaceable kingdoms). In Newark, the changes in fundamentals that set off the spiral were a collapsing arrest rate (and probably a falling conviction rate), a reduction in prisoners, and a shrinking police force.

How to Divide the Possession of a Football?, 0708-03

– Che, Yeon-Koo and Terry Hendershott

In an National Football League overtime, a coin is tossed to determine which team will receive the kick off. In the sudden death format starting on offense has a significantly higher chance of winning. We examine two proposals to improve the ex post fairness: auctions and divide-and-choose. We find the auction to provide a better outcome than the divide-and-choose rule in general when the teams have asymmetric assessments about how the overtime game may unfold. The result has broad implications for resource division when individuals do not have complete information about the objects being divided.

Strategic Militarization, Deterrence and Wars, 0708-04

– Jackson, Matthew O. and Massimo Morelli

We study countries choosing armament levels and then whether or not to go to war. We show that if the costs of war are not overly high or low, then all equilibria must involve .dove,..hawk,..and .deterrent.strategies and the probability of war is positive (but less than one) in any given period. Wars are between countries with differing armament levels and the frequency of wars is tempered by the presence of armament levels that are expressly chosen for their deterrent properties. As the probability of winning a war becomes more reactive to increased armament, the frequency of wars decreases. Finally, as it becomes increasingly possible to negotiate a credible settlement, the probability of peace increases, but the variance of armament levels increases and war becomes increasingly likely when negotiation is not available. This matches observed patterns in the data over time.

Optimal Collusion-Proof Auctions, 0708-05

– Che, Yeon-Koo and Jinwoo Kim

We study an optimal collusion-proof auction in an environment where subsets of bidders may collude not just on their bids but also on their participation. Despite their ability to collude on participation, informational asymmetry facing the potential colluders can be exploited significantly to weaken their collusive power. The second-best auction – i.e., the optimal auction in a collusion-free environment – can be made collusion-proof, if at least one bidder is not collusive, or there are multiple bidding cartels, or the second-best outcome involves a nontrivial probability of the object not being sold. In case the second-best outcome is not weak collusion-proof implementable, we characterize an optimal collusion-proof auction. This auction involves nontrivial exclusion of collusive bidders – i.e., the object is not sold to any collusive bidder with positive probability.

Incumbents' Interests and Gender Quotas, 0708-06

– Frechette, Guillaume R., Francois Maniquet and Massimo Morelli

The adoption of mandatory gender quotas in party lists has been a subject of discussion in many countries. Since any reform obviously requires the approval of a (sometimes qualified) majority of incumbent legislators' votes, keeping an eye on incumbents' interests and incentives in different systems seems a natural thing to do if we want to understand different prospects for reforms in different countries. Such differences in the cost-benefit analysis of incumbents may well depend on the electoral system. We argue that if male candidates have a higher probability of being elected when running against a female candidate than when running against a male of similar characteristics (male advantage), then single member district majority rule and closed list proportional representation are opposite extremes in terms of incentives for incumbents to pass parity laws. We validate the above argument using a formal model of constitutional design as well as an empirical analysis of the legislative elections in France, since France offers a natural experiment for both electoral systems. Given the male advantage, increasing the number of female new candidates made the incumbents' probability of reelection higher and thus male incumbent members of the Assembly have actually benefited from the parity law. We also show that parity may have Assembly composition effects and policy effects that vary with the electoral system.

Witness Intimidation, 0708-07

– O'Flaherty, Brendan and Rajiv Sethi

Witness intimidation is a fundamental threat to the rule of law. It also involves significant strategic complexity and two-sided uncertainty: a criminal cannot know whether his threat will effectively deter a witness from testifying, and a witness cannot know whether the threat will in fact be carried out. We model this interaction and explore the manner in which equilibrium rates of intimidation, testimony, and conviction respond to changes in prosecutorial effectiveness, police-community relations, and witness protection programs. An increase in prosecutorial effectiveness raises the incentives for criminals to threaten witnesses but also makes these threats less credible. Sometimes the rise in threats will be large enough to drive down the rate of conviction, with the paradoxical outcome that better prosecutors may convict fewer criminals. Direct attempts to reduce witness tampering may also prove counterproductive. When the harm faced by a witness itself depends on whether or not the criminal is convicted, communities can be trapped in equilibria with collective silence: no witness testifies because none expects others to testify.

Intertemporal Distortions in the Second Best, 0708-08

– Albanesi, Stefania and Roc Armenter

We consider a very general class of public finance problems that encompasses Ramsey models of optimal taxation as well as economies with limited commitment, private information, and political economy frictions. We identify a sufficient condition to rule out permanent intertemporal distortions at the optimum: If there exists an admissible allocation that converges to the first best steady state, then all intertemporal distortions are temporary in the second best. We analyze a series of applications to illustrate the significance of this result.

Opinions as Incentives, 0708-09

– Che, Yeon-Koo and Navin Kartik

We study a model where a decision maker (DM) must select an adviser to advise her about an unknown state of the world. There is a pool of available advisers who all have the same underlying preferences as the DM; they differ, however, in their prior beliefs about the state, which we interpret as differences of opinion. We derive a tradeoff faced by the DM: an adviser with a greater difference of opinion has greater incentives to acquire information, but reveals less of any information she acquires, via strategic disclosure. Nevertheless, it is optimal to choose an adviser with at

least some difference of opinion. The analysis reveals two novel incentives for an agent to acquire information: a “persuasion” motive and a motive to “avoid prejudice.” Delegation is costly for the DM because it eliminates both of these incentives. We also study the relationship between difference of opinion and difference of preference.

Central Bank Communication and Expectations Stabilization, 0708-10

– Eusepi, Stefano and Bruce Preston

The value of communication in monetary policy is analyzed in a model in which expectations need not be consistent with central bank policy - and, therefore, “unanchored” - because agents face difficult forecasting problems. When the central bank implements optimal policy without communication, the Taylor principle is not sufficient for macroeconomic stability: expectations are unanchored and self-fulfilling expectations are possible. To mitigate this instability, three communication strategies are contemplated to ensure consistency between private forecasts and monetary policy strategy: i) communicating the precise details of the monetary policy - that is, the variables and coefficients; ii) communicating only the variables on which monetary policy decisions are conditioned; and iii) communicating the inflation target. The first two strategies restore the Taylor principle as a sufficient condition for anchoring expectations. In contrast, in economies with persistent shocks, communicating the inflation target fails to protect against expectations driven fluctuations. These results underscore the importance of communicating the systematic component of monetary policy strategy: announcing an inflation target is not enough to stabilize expectations - one must also announce how this target will be achieved..

Forecast Targeting as a Monetary Policy Strategy: Policy Rules in Practice, 0708-11

– Michael Woodford

Forecast targeting is an innovation in central banking that represents an important step toward more rule-based policymaking, even if it is not an attempt to follow a policy rule of any of the types that have received primary attention in the theoretical literature on optimal monetary policy. This paper discusses the extent to which forecast targeting can be considered an example of a policy rule, and the conditions under which it would represent a desirable rule, with a view to suggesting improvements in the approaches currently used by forecast-targeting central banks. Particular attention is given to the

intertemporal consistency of forecast-targeting procedures, the assumptions about future policy that should be used in constructing the forecasts used in such procedures, the horizon with which the target criterion should be concerned, the relevance of forecasts other than the inflation forecast, and the degree of robustness of a desirable target criterion for monetary policy to changing circumstances.

Product Quality at the Plant Level: Plant Size, Exports, Output Prices and Input Prices in Colombia, 0708-12

– Maurice Kugler and Eric A. Verhoogen

This paper uses uniquely rich and representative data on the unit values of “outputs” (products) and inputs of Colombian manufacturing plants to draw inferences about the extent of quality differentiation at the plant level. We extend the Melitz (2003) framework to include heterogeneity of inputs and a complementarity between plant productivity and input quality in producing output quality and we show that the resulting model carries distinctive implications for two simple reduced-form correlations – between output prices and plant size and between input prices and plant size – and for how those correlations vary across sectors. We then document three plant level facts: (1) output prices are positively correlated with plant size within industries, on average; (2) input prices are positively correlated with plant size within industries, on average; and (3) both correlations are more positive in industries with more scope for quality differentiation, as measured by the advertising and R&D intensity of U.S. firms. The correlations between export status and input and output prices are similar to those for plant size. These facts are consistent with our model of quality differentiation of both outputs and inputs, and difficult to reconcile with models that assume homogeneity or symmetry of either set of goods. Beyond recommending an amendment of the Melitz (2003) model, the results highlight shortcomings of standard methods of productivity estimation, generalize and provide an explanation for the well-known employer size-wage effect, and suggest new channels through which liberalization of trade in output markets may affect input markets and vice-versa.

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Graduate Conferences



Tamer Kapan presented his research at the Gender and Labor Market Policies Workshop organized by the Federal Employment Agency in Nuremberg, Germany on December 7-8, 2007.



Johannes Schmieder will present his research, “Wages and the Establishment Lifecycle”, at the (PAA) Population Association of America’s 2008 Annual Meeting in New Orleans in April. He will also present this research at the Comparative Analysis of Enterprise Data (CAED) conference in Budapest in May.



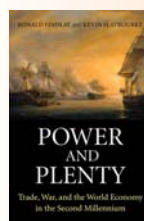
Joshua Goodman will present his research, “Do Skill or Credit Constraints Prevent College Enrollment?”, which examines data on the college intentions and test scores of all 2003 and 2004 Massachusetts high school graduates to answer questions about gaps in college enrollment, at the Population Association of America’s 2008 Annual Meeting.

Josh will also give a presentation on May 9th at the Society of Labor Economists’ 2008 Annual Meeting, which is being hosted at Columbia. He will present his paper “Who Merits Financial Aid? Massachusetts’ Adams Scholarship” (Columbia University Department of Economics Discussion Paper # 0607-13).



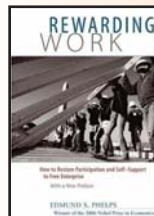
At the PAA 2008 Annual Meeting, **Cecilia Machado** will present her research paper, “Statistical Discrimination and Fertility: Revisiting Gender Differences in the Labor Market”, which examines gender differences in labor market outcomes that arise when motherhood intentions are introduced in a model of statistical discrimination as the leading source of productivity uncertainty.

Recent Faculty Books



Power and Plenty: Trade, War, and the World Economy in the Second Millennium, by Ronald Findlay (Princeton University Press, November 2007)

International trade has shaped the modern world, yet until now no single book has been available for both economists and general readers that traces the history of the international economy from its earliest beginnings to the present day. Power and Plenty fills this gap, providing the first full account of world trade and development over the course of the last millennium.



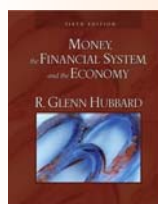
Rewarding Work: How to Restore Participation and Self-Support to Free Enterprise, With a New Preface, by Edmund Phelps (Harvard University Press, October 2007)

Since the 1970s a gulf has opened between the pay of low-paid workers and the pay of the middle class. No longer able to earn a decent wage in respectable work, many have left the labor force, and the job attachment of those remaining has weakened. For Edmund Phelps, this is a failure of political economy whose widespread effects are undermining the free-enterprise system. His solution is a graduated schedule of tax subsidies to enterprises for every low-wage worker they employ. As firms hire more of these workers, the labor market would tighten, driving up their pay levels as well as their employment.



In Defense of Globalization: With a New Afterword, by Jagdish Bhagwati (Oxford University Press, September, 2007)

In the passionate debate that currently rages over globalization, critics have been heard blaming it for a host of ills afflicting poorer nations, everything from child labor to environmental degradation and cultural homogenization. Now Jagdish Bhagwati, the internationally renowned economist, takes on the critics, revealing that globalization, when properly governed, is in fact the most powerful force for social good in the world today.



Money, the Financial System, and the Economy, by R. Glenn Hubbard (Addison Wesley, July, 2007)

Hubbard demonstrates how we use economic tools to understand financial markets and institutions. In doing so, he helps students learn to interpret current events, predict future developments, and make better economic decisions.

In Pictures: Department Events

On November 5, three faculty members of the Department discussed the legacy of Milton Friedman ('46 PhD) at the River Club for alumni of GSAS. And on March 11, the Program for Economic Research co-sponsored a public lecture given by Edward Glaeser of Harvard University entitled "Urban Colossus: Why is New York America's Largest City?"



The panelists were introduced by John Allison ('78 MPhil).



Janet Currie (l) and Michael Woodford (r)



Pierre-André Chiappori



Panelists (from left to right): W. Bentley MacLeod, Ester Fuchs, Edward Glaeser and Christopher Mayer



Edward Glaeser, a NYC native and Professor in the Department of Economics at Harvard University, gave a lecture on "The Urban Colossus".



The lecture and panel was attended by several students and Columbia faculty as well as members of the public.



Christopher Mayer of Columbia Business School

Continued on next page



Professors Wojciech Kopczuk and Janet Currie at the Department Holiday Party in December.



Graduate students Chin-Han Chiang, Can Tan, Yinghua He



Arunima Sinha, Fang He, Evan Borkum and Christine Pal



3rd Year Guilherme Martins with 1st Years Todd Kumler and Bryant Kim



1st Years Uliana Loginova and Dmitriy Sergeev



1st Years Patrick Asuming, Baafra Abeberese, Ran Huo, and Christine Marie Liao



1st Years Lesley Turner and Sarena Goodman

News from the Economics Department

Economics at Columbia, the newsletter for the Economics Department, is now in its second issue. Our audience includes members of the Columbia community as well as alumni, friends, and fellow economists elsewhere.

Economics at Columbia appears once per semester. Submissions from faculty, students and alumni are welcome; news or other items, including photographs or brief descriptions of current research, should be sent via email to econ-news@columbia.edu.

To read back issues of the newsletter, visit http://www.columbia.edu/cu/economics/about/s2_4.html.

We welcome your feedback.

[HTTP://WWW.COLUMBIA.EDU/CU/ECONOMICS](http://www.columbia.edu/cu/economics)



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