

Spring 2014
DUKE UNIVERSITY
Department of Economics

Economics 605: ADVANCED MICROECONOMIC THEORY

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| Professors: | Charles Becker | Felix Zhiyu Feng |
| Telephone: | 919-660-1885 | 919-660-1856 |
| Email: | cbecker@econ.duke.edu | zf4@duke.edu |
| Office: | 312 Social Sciences | |
| Office Hours: | | |
| Class: | Monday and Wednesday 4:40 – 5:55 | LSRC B101 |
| TA & presentation sessions | Wednesday 6:30-7:30 | Social Sciences 113 |
| | Thursday 6:15 – 7:05 | Social Sciences 113 |
| Teaching Assistants: | | |
| Tatiana Zaytseva | tz29@duke.edu | |

Class website: https://sites.duke.edu/econ206_01_s2011/

1. **Course description.** This course provides an overview of major theoretical contributions using microeconomic theory along with an introduction to dynamic optimization. The course is intended to give participants a sense of different fields in microeconomics – labor, health, industrial organization, international trade, economic development, urban economics, and more. In the process, students will gain an appreciation of modeling approaches.
2. **Prerequisites.** Econ 601 or equivalent. Working knowledge of multivariate calculus is necessary; some matrix algebra and a cursory overview of the first chapters of a differential equations text will be needed as well. Students are assumed to be familiar with Varian's *Microeconomic Analysis* (Ed. 3) or a comparable text like Jehle & Reny: you should own a copy for reference purposes.
3. **Texts and readings.** There are no texts. Readings will be posted on Sakai. Instead, the course consists of a vast number of required readings, which each student is expected to cover thoroughly, with an eye to content, theory, model, and econometric technique. There are many papers by Nobel Laureates on the reading list.

During the course of the term the list will evolve. It is not possible to cover more than one reading per class period, and so some of the papers will be cut, depending on student interest and what we deem essential and feasible.

4. **Honor code and course policies.** Failure to acknowledge assistance on an assignment, or to cite a source of information used in an assignment, or to represent the work of others as your own, constitutes a violation of the University's honor code. Any violations may result in failure of the assignment or the course, or expulsion from the University. Any exam missed for a non-legitimate reason will be accorded the grade of 0. Any exam missed for a legitimate reason will be made up with an oral exam as soon as it can be scheduled by EcoTeach. Late work will

be penalized by 1/3 grade point per day late (excluding Sundays). Presentation notes must be posted on Sakai at least 24 hours prior to the class at which the presentation will take place.

5. **Grading, assignments, presentations, and attendance.** The grades will be determined as weighted averages of exams and presentations:

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|---|-----|
| Class participation | 8% |
| In-class presentations and supporting notes (3 to 4 per team) | 32% |
| Midterm examination | 24% |
| Final examination or original theory paper | 36% |

Students also may choose whether to write an original theory paper or to take the final exam. A decision on this choice must be reported to the faculty by Monday March 31. **In order to receive capstone credit for this course you must write a theory paper.**

6. **Presentations and class conduct.**

To enhance the efficiency of class presentations, each team (3 people) of presenters is expected to prepare a handout for distribution to the entire class. The handout should contain pertinent aspects of the formal presentation to avoid having to write out lots of equations in class. Even if you are not a presenter, you are expected to have read the article in detail before class. The presenters will (a) provide detailed mathematical derivations and (b) make critical analytical comments as well as simply presenting the paper; other students should be prepared to discuss the article. At times, the professors will provide brief background lectures on related literature. The intention is to provoke discussion, and for the presenter to discuss new techniques, modeling approaches, data sets, and findings, as well as to discuss shortcomings.

The exact design of the course will depend on final enrolment. We are projecting a class of 10 to 12 groups. This means that there will be approximately: 4 lectures by faculty and TAs, 1 exam class, at least 2 review sessions, 1 homework session, 1 post midterm session, and 33 presentations for a total of 42 meetings. We have 26 regular class sessions and (since there will be none during the first week) 24 presentation/TA sessions. Students are expected to attend the 4 lectures, the exam, and 25 presentations. We will keep track of attendance and, while exams will have some options, we expect you to attend at least 75% of peer presentations.

This year we will be taking advantage of differing interests by the instructor, and will have a finance track (sections XVII-XXII) in the second half for those interested. Thus, a primary determinant of team composition will be finance/non finance.

Note also that a large share of the papers on the reading list already have presentations posted online. Each team is expected to present:

- One “difficult” (we’ll define these) paper that has not previously been presented;
- One “easy” paper that has not already been presented, **or** a re-presentation of a more difficult paper for which notes already exist;

- One or two elective papers

In addition to student presentations, your instructors will provide mini-presentations of papers we regard as key that are not covered by students, and also will provide background on related papers when appropriate.

Readings (yellow highlight denotes a paper we would very much like to cover – notes are already available on the class website in almost all cases – though since there are 25 that are highlighted, the instructors will present some briefly).

I. DYNAMICS AND GETTING STARTED (AND OTHER INTERESTING PAPERS...)

[1] Michael Intriligator. 1971. *Mathematical Optimization & Economic Theory*. Prentice-Hall, Chs. 11-13.

[Becker]

Fryer, Roland, and Steven Levitt, 2013, “Hatred and profits: under the hood of the Ku Klux Klan,” *Quarterly Journal of Economics*.

Hall, Robert E., 1988, “Intertemporal substitution in consumption,” *Journal of Political Economy* **96**(2): 339-357.

Leijonhufvud, Axel, 1973, “Life among the econ,” *Western Economic Journal* **11**(3): 327-337.

Lopez-Perez, Raul, and Eli Spiegelman, 2012, “Do economists lie more?” Universidad Autonoma de Madrid, Departamento de Analisis Economico, working paper 4/2012.

Radford, R.A., 1945, “Economic organization of a POW camp,” *Economica* **12**(48): 189-201.

Schultze Charles L. and Daniel H. Newlon, 2011, *Ten Years and beyond: Economists Answer NSF's Call for Long-Term Research Agendas*. Arlington, VA: National Science Foundation.

Siegfried, John, 1970, “A first lesson in econometrics,” *Journal of Political Economy* **78**(6) 1378-1379.

Stratton, I.M. and A. Neil, 2004, “How to ensure your paper is rejected by the statistical reviewer,” *Diabetic Medicine* **22**: 371-373.

Thomson, William, 1999, “The young person’s guide to writing economic theory,” *Journal of Economic Literature* **37**(1): 157-183.

II. RISK & UNCERTAINTY

[2] Rothschild, Michael and Joseph Stiglitz. 1976. “Equilibrium in competitive insurance markets: An essay on the economics of imperfect information,” *Quarterly Journal of Economics* **90**(4): 629-649. Wed Jan 9 [Becker]

[3] Stiglitz, Joseph and Andrew Weiss, 1981, “Credit rationing in markets with imperfect information,” *American Economic Review* **71**(3): 393-410.

Farhi, Emmanuel and Jean Tirole, 2012, “Collective moral hazard, maturity mismatch, and systemic bailouts,” *American Economic Review* **102**(1): 60-93.

Philippon, Thomas and Vasiliki Skreta, 2012, “Optimal interventions in markets with adverse selection,” *American Economic Review* **102**(1): 1-28.

Tirole, Jean, 2012, “Overcoming adverse selection: how public intervention can restore market functioning,” *American Economic Review* **102**(1): 29-59.

III. HEALTH

[4] Grossman, Michael, 1972, “On the concept of health capital and the demand for health,” *Journal of Political Economy* **82**: 233-255.

[5] Becker, G. S. and K. Murphy. 1988. “A theory of rational addiction.” *Journal of Political Economy* **96**, 675-700.

[6] Ma, Albert Ching-to and Thomas McGuire, 1997, “Optimal health insurance and provider payment,” *American Economic Review* **87**(4): 685-704.

[7] Erlich, Isaac and Hiroyuki Chuma, 1990, “A model of the demand for longevity and the value of life

extension” *Journal of Political Economy* **98**(4): 761-782.

- [8] Rosen, Sherwin, 1988, “The value of changes in life expectancy,” *Journal of Risk & Uncertainty* **1**: 285-304.
- Munz, Philip *et al.*, 2009. Ch. 4 (generalized model of infectious disease) in Tchuente, JM and C. Chiyaka, Eds. *Infectious Modeling Research Progress*, Nova Science.

IV. ECONOMICS OF THE HOUSEHOLD & LABOR MARKETS

- [9] Becker, Gary, 1973, “A theory of marriage: part I,” *Journal of Political Economy* **81**(4): 813-846 [10] Becker, Gary, 1974, “A theory of marriage: part II,” *Journal of Political Economy* **82**(2): S11-S26.
- [11] Becker, Gary, 1968, “Crime and punishment: an economic approach,” *Journal of Political Economy* **76**: 169-217.
- [12] Becker, Gary, and H. Greg Lewis, 1973, “On the interaction between the quality and quantity of children,” *Journal of Political Economy* **81**: S279-S288.
- [13] Spence, Michael, 1973, “Job market signaling,” *Quarterly Journal of Economics* **87**(3): 355-374.
- [14] Akerlof, George and Rachel E. Kranton, 2000, “Economics and identity,” *Quarterly Journal of Economics* **115**(3): 715-753.
- [15] Mortensen, Dale and Tara Vishwanath, 1994, “Personal contacts and earnings: It is who you know,” *Labour Economics* **1**: 187-201.
- [16] Diamond, Peter and Botond Köszegi, 2003, “Quasi-hyperbolic discounting and retirement,” *Journal of Public Economics* **87**: 1839-1872.
- [17] Streufert, Peter, “The effect of underclass social isolation on schooling choice,” 2000, *Journal of Public Economic Theory* **2**(4): 461-482.
- Immorlica, Nicole, Rachel Kranton, and Greg Stoddard, “Striving for Status,” unpublished ms., 2012.
- Maccheroni, Fabio, and Massimo Marinacci, 2012, “Social decision theory: choosing within and between groups,” *Review of Economic Studies* **79**: 1591-1636.
- Maestri, Lucas, 2012, “Bonus payments vs. efficiency wages in the repeated principal agent model with subjective evaluations,” *American Economic Journal: Microeconomics* **4**(3): 34-56.
- Mell, Andrew, 2011, “Are ‘gangstas’ peacocks? The handicap principle and illicit markets,” Oxford, UK: University of Oxford Department of Economics discussion paper.
- Mookherjee, Dilip, Silvia Prina, and Debraj Ray, “A theory of occupational choice with endogenous fertility,” *American Economic Journal: Microeconomics* **4**(4): 1-34.

V. ECONOMIC DEVELOPMENT

- [18] Stiglitz, Joseph, 1974, “Alternative theories of wage determination and unemployment in LDCs: the labor turnover model,” *Quarterly Journal of Economics* **81**: 194-227.
- [19] Ake Blomqvist. 1978. “Urban job creation and unemployment in LDCs: Todaro vs. Harris and Todaro.” *Journal of Development Economics* **5**(1): 3-18.
- [20] Avinash Dixit. 1969 “Marketable surplus and dual development.” *Journal of Economic Theory* **1**: 203-219.
- [21] Kalemli-Ozcan, Sebnem, Harl Ryder, and David Weil, 2000, “Mortality decline, human capital investment, and economic growth,” *Journal of Development Economics* **62**(1): 1-23.
- [22] Banerjee, Abhijit and Sendhil Mullainathan, 2010, “The shape of temptation: implications for the economic lives of the poor,” Cambridge, MA: *NBER working paper 15973*.
- [23] Basu, Karna, 2011, “Hyperbolic discounting and the sustainability of rotational savings arrangements,” *American Economic Journal – Microeconomics* **3**(4): 143-171.
- Ahlin, Christian and Robert Townsend, 2007, “Using repayment data to test across models of joint liability lending,” *Economic Journal* **117**(517): F11-F51.
- Bardhan, Pranab, 1979 (June). “Wages and unemployment in a poor, agrarian economy.” *Journal of Political Economy* **87**(3): 479-500.
- Stiglitz, Joseph, 1969. “Rural-urban migration, surplus labour, and the relationship between urban and rural wages,” *Eastern Africa Economic Review* **1**: 1-27.
- Bardhan, Pranab, Dilip Mookherjee, and Masatoshi Tsumagari, 2013, “Middlemen margins and

globalization,” *American Economic Journal – Microeconomics* 5(4): 81-119.

Wang, Xiao Yu, 2013, “Endogenous insurance and informal relationships,” unpublished manuscript, Durham, NC: Duke University Department of Economics.

VI. FIRMS, INFORMATION, GOODS, & MECHANISM DESIGN

[24] Stiglitz, Joseph and Avinash Dixit, 1977, “Monopolistic competition and optimum product diversity,” *American Economic Review* 67: 297-308.

[25] Akerlof, George, 1970, “The market for ‘lemons’: quality uncertainty and the market mechanism,” *Quarterly Journal of Economics* 84(3): 488-500.

[26] Panzar, John C. and Robert D. Willig, 1977, “Free entry and the sustainability of natural monopoly,” *Bell Journal of Economics* 8(1): 1-22.

[27] Holmstrom, Bengt and Paul Milgrom, 1991, “Multitask principal-agent analyses: incentive contracts, asset ownership, and job design,” *Journal of Law, Economics & Organization* 7(special issue): 24-52.

[28] Milgrom, Paul and Robert Weber, 1982, “A theory of auctions and competitive bidding,” *Econometrica* 50(5): 1089-1122.

[29] Milgrom, Paul and John Roberts, 1990, “The economics of modern manufacturing: technology, strategy, and organization,” *American Economic Review* 80(3): 511-528

[30] Alchian, Armen and Harold Demsetz, 1972, “Production, information costs, and economic organization,” *American Economic Review* 62(5): 777-795.

[31] Abdulkadiroglu, Atila and Tayfun Sonmez, 2003, “School choice: a mechanism design approach,” *American Economic Review* 93(1): 729-747.

[32] Prat, Andrea, 2005, “The wrong kind of transparency,” *American Economic Review* 95(3): 862-877.

[33] Stigler, George, 1961, “The economics of information,” *Journal of Political Economy* 69(3): 213-225.

[34] Baron, David and Roger Myerson, 1982, “Regulating a monopolist with unknown costs,” *Econometrica* 50(4): 911-930.

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[36] Diamond, Peter, 1967, “The role of a stock market in a general equilibrium model with technological uncertainty,” *American Economic Review* 57(4): 759-776.

Ambrus, Atila, Eduardo Azevedo, and Yuchiro Kamada, “Hierarchical cheap talk,” *Theoretical Economics*, 2013.

Athey, Susan, and Armin Schmutzler, 1995, “Product and process flexibility in an innovative environment,” *Rand Journal of Economics* 26(4): 557-574.

Baumol, William J., 1990, “Entrepreneurship: productive, unproductive, and destructive,” *Journal of Political Economy* 98(5): 893-921.

Baumol, William J. and Robert D. Willig, 1981, “Fixed costs, sunk costs, entry barriers, and sustainability of monopoly,” *Quarterly Journal of Economics* 96(3): 405-431.

Lewis, Tracy and Huseyin Yildirim, 2002, “Managing dynamic competition,” *American Economic Review* 92(4): 779-797.

McAdams, David, 2011, “Performance and turnover in a stochastic partnership,” *American Economic Journal – Microeconomics* 3(4): 107-142.

Mirman, Leonard, Larry Samuelson, and Amparo Urbano, 1993, “Monopoly experimentation,” *International Economic Review* 34(3): 549-563.

Radner, Roy, 1968, “Competitive equilibrium under uncertainty,” *Econometrica* 36(1): 31-58.

Rubinstein, Ariel and Asher Wolinsky, 1985, “Equilibrium in a market with sequential bargaining,” *Econometrica* 53(5): 1133-1150.

Taylor, Curtis, 1999, “Time-on-the-market as a sign of quality,” *Review of Economic Studies* 66(3): 555-578.

Benabou, Roland, 2013, “Groupthink: collective delusions in organizations and markets,” *Review of Economic Studies* 80(2): 429-462.

VII. BARGAINING THEORY

- [38] Kalai, E. and Smorodinsky, M., 1975, "Other solutions to Nash's bargaining problem," *Econometrica* **43**, 513-518.
- [40] Binmore K., Rubinstein A. and A. Wolinsky, 1986, "The Nash bargaining solution in economic modeling," *Rand Journal of Economics*, 17:2, 176-188.
- [41] Baron, D. and Ferejohn J., 1989, "Bargaining in legislatures," *American Political Science Review*, 83:4, 1181-1206.
- [42] Kıbrıs Ö and Tapkı İ.G., 2010, "Bargaining with nonanonymous disagreement: Decomposable Rules," *Games & Economic Behavior*, **68**(1), 233-241.
- [43] Choo, Eugene and Aloysius Siow, 2006, "Who marries whom and why," *Journal of Political Economy* **114**: 172-201.
- Abdulkadiroğlu, Atila, and Kyle Bagwell, 2013, "Trust, reciprocity, and favors in cooperative relationships," *American Economic Journal – Microeconomics* **5**(2): 213-259.
- Ambrus, Atila, Eric Chaney, and Igor Salitskiy, forthcoming, "Pirates of the Mediterranean: an empirical investigation of bargaining with transaction costs," *Theoretical Economics*.
- Athey, Susan, 2001, "Single crossing properties and the existence of pure strategy equilibria in games of incomplete information," *Econometrica* **69**(4): 861-889.
- Green, Edward and Robert Porter, 1984, "Noncooperative collusion under imperfect price information," *Econometrica* **52**(1): 87-100.
- Halac, Marina, 2012, "Relational contracts and the value of relationships," *American Economic Review*, **102**(2): 750-779.
- Kreps, David, Paul Milgrom, John Roberts, and Robert Wilson, 1982, "Rational cooperation in the finitely repeated prisoner's dilemma," *Journal of Economic Theory* **27**(2): 245-252.
- Levhari, David and Leonard Mirman, 1980, "The great fish war: an example using a dynamic Cournot-Nash solution," *Bell Journal of Economics* **11**(1): 322-334.
- Von Thadden, Ernst-Ludwig, and Xiaojian Zhao, 2012, "Incentives for unaware agents," *Review of Economic Studies* **79**:1151-1174.

VIII. SINGLE PEAKED PREFERENCES

- [44] Moulin, H., 1980, "On strategy-proofness and single peakedness," *Public Choice*, **35**(4): 437-455.
- [45] Sprumont, Y., 1990, "The division problem with single peaked preferences: a characterization of the uniform allocation rule," *Econometrica* **59**(2): 509-519.
- [46] Kıbrıs Ö. and Küçükönel S., 2009, "Uniform trade rules for uncleared markets", *Social Choice and Welfare*, **32**(1), 101-121.

Spring break March 10, 12, 13

Mid-term exam March 17 (may be moved to March 5)

IX. MANIPULATION OF ALLOCATION RULES

- [47] Hurwicz, L., 1972, "On informationally decentralized systems", in *Decision and Organization* (McGuire and Radner, Eds.), pp.297-336, North-Holland, Amsterdam.
- [48] Zhou, L., 1991, "Inefficiency of strategy-proof allocation mechanisms in pure exchange economies," *Social Choice and Welfare*, **8**:247-257.
- [49] Maniquet, F., Sprumont, Y., 1999, "Efficient strategy-proof allocation functions in linear production economies," *Economic Theory* **14**: 583--595.
- [50] Serizawa, S., 1999, "Strategy-proof and symmetric social choice functions for public good economies," *Econometrica* **67**: 121--145.
- [51] Kıbrıs Ö. and Tapkı İ.G., 2011, "Production economies with single peaked preferences: Pareto optimal and strategy proof rules," mimeo.
- Taylor, Curtis, 1995, "Digging for golden carrots: an analysis of research tournaments," *American Economic*

Review **85**(4): 872-890.

Taylor, Curtis, and Huseyin Yildirim, 2010, "Subjective performance and the value of blind evaluation," *Review of Economic Studies* **78**: 762-794.

X. MATCHING

- [52] Gale D. and Shapley L., 1962, "College Admissions and the Stability of Marriage", *American Mathematical Monthly* **69**: 9-15.
- [52a] Wang, Xiao Yu, 2013, "Interdependent utility and truth-telling in two-side matching," unpublished manuscript, Durham, NC: Duke University Department of Economics.
- [53] Shapley L. and Shubik M., 1972, "The assignment game I: the core," *International Journal of Game Theory* **1**: 111-130.
- [54] Shapley, L. and H. Scarf, 1974, "On cores and indivisibility." *Journal of Mathematical Economics* **1**: 23-28.
- [55] Hylland, A. and R. Zeckhauser, 1979, "The efficient allocation of individuals to positions," *Journal of Political Economy* **87**: 293-314.
- [56] Kelso, A. S. and Crawford, V. P., 1982, "Job matchings, coalition formation, and gross substitutes," *Econometrica* **50**: 1483-1504.
- [57] Abdulkadiroğlu A. and T. Sönmez, 1998, "Random serial dictatorship and the core from random endowments in house allocation problems," *Econometrica* **66**: 689-701.
- [58] Hatfield J.W. and Milgrom P., 2005, "Matching with contracts," *American Economic Review* **95**: 913-935.
- [59] Sönmez T. and Switzer T., 2013, "Matching with branch-of-choice contracts at the United States Military Academy," *Econometrica*.
- [60] Sönmez T., 2013, "Bidding for army career specialties: improving the ROTC branching mechanism," *Journal of Political Economy*.

Roth, Alvin, Tayfun Sonmez, and M. Utku Unver, 2004, "Kidney exchange," *Quarterly Journal of Economics*, **119**(2): 457-488. <http://kuznets.fas.harvard.edu/~aroth/alroth.html>

XI. PROPERTY RIGHTS & CORRUPTION

- [61] Li, David D., 1996, "A theory of ambiguous property rights in transition economies: The case of the Chinese non-state sector." *Journal of Comparative Economics* **23**(1): 1-19.
- [62] Bac, Mehmet, 1996, "Corruption and supervision costs in hierarchies," *Journal of Comparative Economics*, **22**(2): 99-118.
- [63] Besley, Timothy and Andrea Prat, 2006, "Handcuffs for the grabbing hand? Media capture and government accountability," *American Economic Review* **96**(3): 720-736.
- [64] Schliefer, Andrei and Robert Vishny, 1994, "Politicians and firms," *Quarterly Journal of Economics* **109**(4): 995-1025.

XII. URBAN & SPATIAL ECONOMICS

- [65] Mills, Edwin S., 1967, "An aggregative model of resource allocation in a metropolitan area," *American Economic Review* **57**(2): 197-210.
- [66] Henderson, J. Vernon, 1974, "The sizes and types of cities," *American Economic Review* **64**(4): 640-656.
- [67] Solow, Robert and William Vickrey, 1971, "Land use in a long narrow city," *Journal of Economic Theory* **3**(4): 430-447.
- [68] Brueckner, Jan, Jacques-Francois Thisse, and Yves Zenou, 1999, "Why is central Paris rich and downtown Detroit poor? An amenity-based theory," *European Economic Review* **43**(1): 91-107.
- [69] Courant, Paul, 1978, "Racial prejudice in a search model of the urban housing market," *Journal of Urban Economics* **5**(3): 329-345.
- [70] Black, Duncan, and Vernon Henderson, 1999, "A theory of urban growth," *Journal of Political Economy* **107**(2): 252-284.
- [71] Epple, Dennis, Brett Gordon, and Holger Sieg, 2010, "Drs. Muth and Mills meet Dr. Tiebout,"

Journal of Regional Science 50(1): 381-400.

Bond, Philip and Kathleen Hagerty, 2010, "Predicting crime waves," *American Economic Journal – Microeconomics* 2(3): 138-159.

Burke, Jeremy, Curtis Taylor, and Liad Wagman, 2012, "Information acquisition in competitive markets: an application to the US mortgage market," *American Economic Journal: Microeconomics* 4(4): 65-106.

Calabrese, Stephen, Dennis Epple, and Richard Romano, 2012, "Inefficiencies from metropolitan political and fiscal decentralization: failures of Tiebout competition," *Review of Economic Studies* 79: 1081-1111.

Head, Allen and Huw Lloyd-Ellis, 2012, "Housing liquidity, mobility, and the labour market," *Review of Economic Studies* 79(4): 1559-1590.

Helsley, Robert and William Strange, 1999, "Gated communities and the economic geography of crime," *Journal of Urban Economics* 46(1): 80-105.

Rennhoff, Adam, and Mark Owens, 2012, "Competition and the strategic choices of churches," *American Economic Journal: Microeconomics* 4(3): 152-170.

XIII. INTERNATIONAL ECONOMICS

[72] Findlay, Ronald, 1978, "Relative backwardness, direct foreign investment, and the transfer of technology," *Quarterly Journal of Economics* 92(1): 1-16.

[73] Stolper, Wolfgang and Paul Samuelson, 1941, "Protection and real wages," *Review of Economic Studies* 9(1): 58-73.

[74] Azariadis, Costas and Christopher Pissarides, 2007, "Unemployment dynamics with international capital mobility," *European Economic Review* 51: 27-48.

[75] Grossman, Gene and Elhanan Helpman, 1994, "Protection for sale," *American Economic Review* 84(4): 833-850.

XIV. NATURAL RESOURCE & ENVIRONMENTAL ECONOMICS

[76] Pindyck, Robert S., 1978, "The optimal exploration and production of nonrenewable resources," *Journal of Political Economy* 85(5).

[77] Kamien, Morton, and Nancy Schwartz, 1978, "Optimal exhaustible resource depletion with endogenous technical change," *Review of Economic Studies* 45(1): 179-196

[78] Weitzman, Martin, 1974, "Prices vs. quantities," *Review of Economic Studies* 41(4): 477-491.

[79] Solow, Robert, 1974, "Intergenerational equity and exhaustible resources," *Review of Economic Studies* 41(symposium on the economics of exhaustible resources): 29-45.

Harstad, Bard, 2012: "Climate contracts: a game of emissions, investments, negotiations, and renegotiations," *Review of Economic Studies* 79: 1527-1557.

XV. POLITICAL ECONOMY & PUBLIC ECONOMICS

[80] Alesina, Alberto and Enrico Spolaore, 1997, "The number and size of nations," *Quarterly Journal of Economics* 112(4): 1027-1056.

[81] Acemoglu, Daron, and James Robinson, 2000, "Why did the West extend the franchise? Democracy, inequality, and growth in historical perspective," *Quarterly Journal of Economics* 115(4): 1167-1199.

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Acemoglu, Daron, 1996, "A microfoundation for social increasing returns in human capital accumulation,"

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- Andreoni, James, and Tymofiy Mylovanov, 2012, "Diverging opinions," *American Economic Journal: Microeconomics* **4**(1): 209-232.
- Benabou, Roland, 2013, "Groupthink: collective delusions in organizations and markets," *Review of Economic Studies*.
- Epstein, David, Bahar Leventoglu, and Sharyn O'Halloran, "Minorities and democratization," *Economics & Politics* **24**(3), 2012.
- Kuran, Timur, 1989, "Sparks and prairie fires: a theory of unanticipated political revolution," *Public Choice* **61**(1): 41-74.
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- Leventoglu, Bahar, forthcoming, "Social mobility, middle class and political transitions," *Journal of Conflict Resolution*.
- Nechyba, Thomas, 1997, "Existence of equilibrium and stratification in local and hierarchical Tiebout economies with property taxes and voting," *Economic Theory* **10**(2): 277-304.
- Nechyba, Thomas, 1997, "Local property and state income taxes: the role of interjurisdictional competition and collusion," **105**(2).
- Niskanen, William, 1968, "The peculiar economics of bureaucracy," *American Economic Review* **58**(2): 293-305.
- Padro i Miquel, Gerard, and Pierre Yared, 2012, "The political economy of indirect control," *Quarterly Journal of Economics* **127**: 947-1015.
- Rohner, Dominic, Mathias Thoenig, and Fabrizio Zilibotti, 2013, "War signals," *Review of Economic Studies* **80**(3): 1114-1147.
- Taylor, Curtis and Huseyin Yildirim, 2010, "Public information and electoral bias," *Games & Economic Behavior* **68**: 353-375.
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XVI. BEHAVIORAL AND NEURO-ECONOMICS

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XXII. BEST THEORY PAPERS ON THE FINANCE JOB MARKET (financetheory.org)

2013

First Prize: Contracting Timely Delivery with Hard to Verify Quality by **Felipe Varas** (Stanford, joining Duke)

Second Prize: Uncertainty Shocks and Balance Sheet Recessions by **Sebastian Di Tella** (MIT, joining Stanford)

2012

First Prize: Optimality of Securitized Debt with Endogenous and Flexible Information Acquisition by **Ming Yang** (Princeton, joining Duke)

Second Prize: Financial Intermediation, International Risk Sharing, and Reserve Currencies by **Matteo Maggiori** (Berkeley, joining NYU)

2011

First Prize: Asymmetric Information in Financial Markets: Anything Goes by **Bradyn Breon-Drish** (Berkeley, joining Stanford)

Second Prize: Sticky Incentives and Dynamic Agency: Optimal Contracting with Perks and Shirking by **John Zhu** (Berkeley, joining Wharton)

Final exam Wednesday April 30 7:00 – 10:00 pm