Fall 2017

Information, Coordination, and Market Design

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Short Presentation

The course has two parts. The first part focuses on the theory of contracts and mechanism design: It introduces students to the basic ideas in static and dynamic mechanism design and then shows how to apply them to a variety of problems, including the design of platforms and matching algorithms. The second part focuses on coordination under dispersed information with applications to bank runs, currency attacks, and the adoption of technologies in markets with network externalities. It introduces students to the key ideas in global games and then shows how to apply them to the design of information structures in coordination settings.

Schedule

1) Thursday 09/11/17 h 10:00-11:30
2) Tuesday 14/11/17 h 10:00-11:30
3) Thursday 16/11/17 h 10:00-11:30
4) Tuesday 21/11/17 h 10:00-11:30
5) Thursday 23/11/17 h 10:00-11:30
6) Tuesday 28/11/17 h 10:00-11:30
7) Thursday 30/11/17 h 10:00-11:30
8) Tuesday 05/12/17 h 10:00-11:30
9) Tuesday 12/12/17 h 10:00-11:30
10) Thursday 14/12/17 h 10:00-11:30
11) Tuesday 19/12/17 h 10:00-11:30
12) Thursday 21/12/17 h 10:00-11:30

All sessions will take place in the seminar room 5-E4-SR04 (Eco Dept - Roentgen 5th floor)

Reading List

The references below are way more exhaustive than what will be covered in class. They are meant to provide students with useful information about related research topics.

PART 1: MECHANISM DESIGN

1.0: General references for the theory of contracts and mechanism design

Bolton P. and M. Dewatripont, *Contract Theory*, Cambridge, MA: MIT Press, 2005 (B&D).

Laffont, J.-J., and D. Martimort (2002), *The Theory of Incentives: the Principal-Agent Model,* Princeton University Press. (L&M)

Laffont, J.-J. and J. Tirole (1993), *A Theory of Incentives in Procurement and Regulatio*n. Cambridge: MIT Press. (L&T)

Mas-Collel, A., M. Whinston, and J. Green (1995), *Microeconomic Theory*, Oxford University Press.

Salanie, B. (1997), *The Economics of Contracts: A Primer*, MIT Press.

Borges, T. (2014), *An Introduction to the Theory of Mechanism Design,* Oxford University Press

Gerhkov, A. and B. Moldovanu (2015), *Dynamic Allocation and Pricing*, MIT Press

1.1 Static mechanism design (single agent)

Pavan: Lecture Notes

B&D, Chapter 2

L&M, Chapters 2+3

L&T, Chapter 1

Baron, D., and R. Myerson (1982), "Regulating a Monopolist with Unknown Costs," *Econometrica,* 50:911-930.

Clarke, F. (1989), "Methods of Dynamic and Nonsmooth Optimization," Society for Industrial and Applied Mathematics, Philadelphia, PA.

Ely, J. (2001), "Revenue Equivalence Without Differentiability Assumptions," Mimeo, Northwestern University.

Garcia, D. (2005), "Monotonicity in Direct Revelation Mechanisms," *Economics Letters*, 88(1), 21.26.

Guesnerie, R. and J.-J. Laffont (1984), "A Complete Solution to a Class of Principal-Agent Problems with an Application to the Control of a Self-Managed Firm," *Journal of Public Economics,* 25, 329-369.

Laffont, J.-J., and J. Tirole (1986), "Using Cost Observations to Regulate Firms," *Journal of Political Economy*, 94:614-41.

Maskin, E., and J. Riley (1984), "Monopoly with Incomplete Information," *Rand Journal of Economics*, 15:171-96.

Milgrom, P., and I. Segal (2002), "Envelope Theorems for Arbitrary Choice Sets," *Econometrica,* 70(2), 583.601.

Strausz, R. (2003), "Deterministic Mechanisms and the Revelation Principle," *Economic Letters* 79, 333-337.

Strausz, R. (2006), "Deterministic versus Stochastic Mechanisms in Principal-Agent Models," *Journal of Economic Theory*, 127(1), 306.314.

Topkis, D. M. (1998), "Supermodularity and Complementarity," Princeton University Press.

1.2. Dynamic mechanism Design

Pavan: Lecture Notes

B&D, Chapter 9

L&T, Chapters 9 and 10.

Akan, M. B. Ata and J. Dana (2014). "Incoming Demand with Private Uncertainty," mimeo, Northeastern University

Akan, M. B. Ata and J. Danna, (2014). "Revenue Management with Sequential Screening," mimeo, Northeastern University.

Athey, S., and I. Segal (2013), "An Efficient Dynamic Mechanism," *Econometrica*, 81, 2463-2485.

Athey, S., and I. Segal (2007), "Designing Efficient Mechanisms for Dynamic Bilateral Trading Games" *American Economic Review Papers and Proceedings*, 2007

Baron, D. and D. Besanko, (1984), "Regulation and Information in a Continuing Relationship," *Information Economics and Policy*, 1 447-470.

Baron, D. and D. Besanko, (1987), "Commitment and fairness in a dynamic regulatory relationship," *Review of Economic Studies,* 54, 413-436.

Battaglini, M. (2005), "Long-Term Contracting with Markovian Consumers," *American Economic Review*, Vol. 95, n.3, 637-658.

Battaglini, M. (2007), "Optimality and Renegotiation in Dynamic Contracting," *Games and Economic Behavior,* 60(2), 213-246.

Battaglini, M. and S. Coate (2008), "Pareto Efficient Income Taxation with Stochastic Abilities," *Journal of Public Economics*, 92(3-4), 844-868.

Battaglini, M. and R. Lamba (2013), "Optimal Dynamic Contracts," mimeo Princeton University.

Bergemann, D., and J. Välimäki (2010), "The Dynamic Pivot Mechanism," *Econometrica*, 78(2), 771-789.

Bergemann, D., and P. Strack (2014), "Dynamic Revenue Maximization: A Continuous Time Approach," mimeo, Yale University.

Bergemann, D. and A. Wambach (2014), "Sequential Information Disclosure in Auctions," mimeo, Yale University.

Bester, H. and R. Strausz, (2001), "Imperfect Commitment and the Revelation Principle: The Single Agent Case", *Econometrica*, 69(4), 1077-1098.

Bognar, K., T. Borgers, and M. Meyer-ter Vehn (2008), "Dynamic Mechanism Design with Costly Participation," mimeo, University of Michigan and UCLA.

Boleslavsky, R. and M. Said (2013). "Progressive Screening: Long-term Contracting with a Privately Known Stochastic Process," *Review of Economic Studies*, 80, 1-34.

Board, S. (2008), "Durable-goods monopoly with varying demand," *Review of Economic Studies*, 75(2) 391-413.

Board and Skrzypacz (2015) "Revenue Management with Forward-looking Buyers," mimeo Stanford University. *Journal of Political Economy*, forthcoming.

Boleslavsky R. and M. Said (2013), "Progressive Screening: Long-Term Contracting with a Privately Known Stochastic Process," *Review of Economic Studies* 80, 1–34

Chassang, S. (2013) "Calibrated Incentive Contracts," *Econometrica*. 81, 1935-1971.

Courty, P. and H. Li, (2000), "Sequential Screening," *Review of Economic Studies*, 67, 697-717.

Deb, R. and M. Said (2013), "Dynamic Screening with Limited Commitment," mimeo WUSL.

Dewatripont, M. (1989), "Renegotiation and Information Revelation over Time: The Case of Optimal Labor Contracts," *Quarterly Journal of Economic*s, 104: 589-619.

Dewatripont, M. and Maskin, E. (1990), "Contract Renegotiation in Models of Asymmetric Information," *European Economic Review,* 34(2-3): 311-321.

Dewatripont, M. and Maskin, E. (1995), "Credit and Efficiency in Centralized and Decentralized Economies," *Review of Economic Studies* 62(4), 541-555.

Doepke, M., and R. Townsend, "Dynamic Mechanism Design with Hidden Income and Hidden Actions," (2006), *Journal of Economic Theory*, 126(1), 235-285.

Ely, J., Hinnosaar, T. and D. Garrett (2014) "Overbooking" forthcoming in *American Economic Journal: Microeconomics.*

Eso, P. and B. Szentes, (2007), "Optimal Information Disclosure in Auctions and the Handicap Auction," *Review of Economic Studies*, 74(3), 705-731.

Eso, P. and B. Szentes, (2013) "Dynamic Contracting with Adverse Selection: An Irrelevance Result," mimeo LSE.

Farinha Luz, Vitor (2014). "Dynamic Competitive Insurance," mimeo. European University Institute.

Farhi, Emmanuel and Ivan Werning (2013). "Insurance and Taxation over the Life Cycle," *Review of Economic Studies*, 80, 596-635.

Fershtman, D. and A. Pavan (2016). "Matching Auctions," mimeo Northwestern University.

Fershtman, D. and A. Pavan (2017). "Pandora Auctions: Dynamic Matching with Unknown Preferences," *American Economic Review Papers and Proceedings.*

Freixas, X., R. Guesnerie, and J. Tirole (1985), “Planning under Incomplete Information and the Ratchet Effect,” *Review of Economic Studies,* 52:173-92.

Garrett, D. (2014). “Incoming Demand with Private Uncertainty,” mimeo. TSE

Garrett, D. and A. Pavan (2015), “Dynamic Managerial Compensation: A Variational Approach,” *Journal of Economic Theory.*

Garrett, D. and A. Pavan (2012), “Managerial Turnout in a Changing World,” *Journal of Political Economy*, 120-5, 979-925.

Garrett, D., A. Pavan, J. Toikka (2017), “Robust Predictions of Dynamic Optimal Contracts” mimeo NU

Gershkov, A. and B. Moldovanu, (2009), "Dynamic revenue maximization with heterogenous objects: A mechanism design approach," *American Economic Journal: Microeconomics*, 1(2): 168-198.

Gershkov, A., and B. Moldovanu (2008): Efficient Sequential Assignment with Incomplete Information,” mimeo, University of Bonn. *Games and Economic Behavior*, 68, 144-154.

Gershkov, A. and M. Perry, (2012), “Dynamic contracts with moral hazard and adverse selection”. *Review of Economic Studies*, 79 (1), pp. 268-306.

Golov, M., M. Troshkin and A. Tsyvinski (2011). “Optimal Dynamic Taxes” Mimeo, Yale.

Guo, Y. and J. Horner (2016), “Dynamic Mechanisms without Money,” mimeo, NU and Yale

Halac, M., N. Kartik, and Q. Liu (2014). “Optimal Contracts for Experimentation,” mimeo Columbia University.

Hart, O. and J. Tirole (1988), “Contract Renegotiation and Coasian Dynamics,” *Review of Economic Studie*s, 55: 509-540.

Jullien, B., 2000, “Participation Constraints in Adverse Selection Models,” *Journal of Economic Theory*, 93, No. 1, 1-47.

Kapicka, M. (2013), “Efficient Allocations in Dynamic Private Information Economies with Persistent Shocks: A First Order Approach,” *Review of Economic Studies*, 80, 1027-1054.

Kakade, S., Lobel, I. and H. Nazerzadeh, (2013), "Optimal Dynamic Mechanism Design and the Virtual Pivot Mechanism," *Operations Research*, 61, 837-854.

Kraehmer D. and R. Strautz, (2015) “Ex-Post Information Rents and Disclosure in Sequential Screening” mimeo, University of Bonn.

Kraehmer D. and E. Kovac (2016) “Optimal Sequential Delegation,” mimeo, Bonn University

Kruse, T. and P. Strack (2015), “Optimal Stopping with Private Information,” *Journal of Economic Theory*.

Kwon, (2014). “Dynamic Moral Hazard with Persistent States,” mimeo, UCL.

Laffont, J.-J. and J. Tirole (1988), "The Dynamics of Incentive Contracts," *Econometric*a, 56(5): 1153-1175.

Laffont, J.-J. and J. Tirole (1990), "Adverse Selection and Renegotiation in Procurement," *Review of Economic Studies*, 57: 597-625.

Li, Anqi (2013) "Selling Storable Goods to a Dynamic Population of Buyers: A Dynamic Mechanism Design Approach," mimeo, University of Pennsylvania.

Li, H. and X. Shi, (2013) "Discriminatory Information Disclosure" mimeo UBC.

Liu, H. (2013) "Efficient Dynamic Mechanisms in Interdependent Valuation Environment," mimeo University of Rochester.

Maestri, L. (2016) "Dynamic Contracting with Adverse Selection and Renegotiation," mimeo, TSE.

Makris, M. and A. Pavan (2017). "Taxation under Learning-by-Doing" mimeo. Northwestern University

Makris, M. and A. Pavan (2017). "Incentives for Endogenous Types," mimeo. Northwestern University.

Miao, J. and Y. Zhang. (2014). "A Duality Approach to Continuous-Time Contracting Problems with Limited Commitment" JET, forthcoming

Pavan, A. (2007), "Long-term Contracting in a Changing World," mimeo, Northwestern University.

Pavan, A. (2017), "Dynamic Mechanism Design: Robustness and Endogenous Types" in *Advances in Economics and Econometrics, 11Th World Congress of Econometric Society.*

Pavan, A., I. Segal, and J. Toikka (2014). "Dynamic Mechanism Design: A Myersonian Approach" *Econometrica*. 82, 601-653.

Penta, A. (2014) "Robust Dynamic Mechanism Design," JET forthcoming

Rahman, D. (2010) "Dynamic Implementation," mimeo. University of Minnesota.

Tchistyi, A. (2006), "Security Design with Correlated Hidden Cash Flows: The Optimality of Performance Pricing," Mimeo, NYU Stern.

Thomas, J. and Worrall, T. (1990), "Income Fluctuation and Asymmetric Information: An example of a Repeated Principal-Agent Problem," *Journal of Economic Theory*, 51, 367-390.

Townsend, R. (1982), "Optimal Multiperiod Contracts and the Gain from Enduring Relationships under Private Information," *Journal of Political Economy* 90, 1166-86.

Sadzik, T. and E. Stachetti (2014). "Agency Models with Frequent Actions," mimeo NYU and UCLA.

Sannikov, Yuliy (2014). "Moral Hazard and Long Run Incentives," mimeo, Princeton.

Skreta, V. (2014) "Optimal Auction Design Under No Commitment," *Journal of Economic Theory,* forthcoming.

Strack, P. (2015). "Optimal Stopping with Private Information," *Journal of Economic Theory*.

Skrzypacz A. and J. Toikka (2015), "Mechanisms for Repeated Trade," *American Economic Journal: Microeconomics*.

Stantcheva, S. (2013). "Optimal Taxation and Human Capital Policies over the Life Cycle," mimeo. MIT

Strulovici, B. (2014). "Contract Renegotiation and Coasian Dynamics," mimeo. Northwestern University

Strulovici, B. and M. Szydlowski (2015). "On the Smoothness of Value Functions and the Existence of Optimal Strategies," *Journal of Economic Theory*.

Weng, X. (2014). "Dynamic Pricing in the Presence of Individual Learning," mimeo Guanghua School of Management.

Williams, N. (2011), "Persistent Private Information," *Econometrica*, 79, 1233-1275.

Zhang, Y. (2006), "Dynamic Contracting with Persistent Shocks" *Journal of Economic Theory*, 144, 635-675.

Zhang, H. (2008) "Solving an Infinite-Horizon Adverse Selection Model Through Finite Policy Graphs," *Mathematics of Operations Research*, 60, 850-864.

1.3: Bilateral contracting in multilateral settings

Pavan: Lecture Notes

B&D, Section 13.3 and 13.4.

1.3.1: Simultaneous common agency

Pavan: Lecture Notes

Bernheim, B. D. and M. Whinston (1985), "Common Marketing Agency as a Device for Facilitating Collusion," *RAND Journal of Economics* (16), pp. 269-81.

Bernheim, B. D. and M. Whinston (1986), "Menu Auctions, Resource Allocation, and Economic Influence," *Quarterly Journal of Economics* (101), pp. 1-31.

Bernheim, B. D. and M. Whinston (1986), "Common Agency," *Econometric*a, 54(4): 923-42.

Bernheim, B. D. and M. Whinston, (1998) "Exclusive Dealing," *Journal of Political Economy* (106), 64-103.

Chiesa, G. and V. Denicolo', (2009) "Trading with a Common Agent under complete Information: A Characterization of Nash Equilibria," *Journal of Economic Theory* (144), 296-311.

Dixit, A., G. Grossman and E. Helpman (1997), "Common agency and coordination: General theory and application to government policymaking," *Journal of Political Economy*, 105(4), August, 752-769.

Grossman, G. and E. Helpman (1994), "Protection for Sale", *American Economic Review*, (84) pp. 833-850

Kahn, C. and D. Mookherjee, (1998) "Competition and incentives with nonexclusive contracts," *Rand Journal of Economics*, 29, pp. 443-465.

Martimort, D. (1992), "Multi-Principaux avec Sélection Adverse," *Annales d'Economie et de Statistique*, 28:1-38.

Martimort, D. (1996), "Exclusive Dealing, Common Agency, and Multiprincipals Incentive Theory," *Rand Journal of Economics*, 27:1-31.

Martimort, D. and V. Dequiedt (2008), "Mechanism Design with Bilateral Contracting," mimeo Toulouse School of Economics.

Martimort, D. and L. Stole (2009), "Selecting Equilibria in Common Agency Games," *Journal of Economic Theory*, vol. 144, n. 2, 604-634.

Martimort, D. and L. Stole (2009), "*Market Participation under Delegated and Intrinsic Common Agency Games*," mimeo Toulouse School of Economics

1.3.2: Competing mechanisms

Pavan: Lecture Notes

Jackson, M. and S. Wilke (2005), "Endogenous Games and Mechanisms: Side Payments Among Players," *Review of Economic Studies* **72:** 543-66.

Martimort, D. and L. Stole, (2002), "Revelation and Taxation Principles under Common Agency," *Econometrica.*

Martimort, D. and L. Stole, (2001), "Common Agency Equilibria with Discrete Mechanisms and Discrete Types," mimeo University of Chicago GSB.

Pavan, A. and G. Calzolari (2010), "Truthful Revelation Mechanisms for Simultaneous Common Agency Games," *American Economic Journal: Microeconomics.*

Peters, M. (2001), "Common Agency and the Revelation Principle," *Econometrica,* 69, 1349-1372.

Peters, M. (2004), "Negotiations versus take-it-or-leave-it in common agency," *Journal of Economic Theory.*

Peters, M. (2004), "Pure Strategy and No-externalities with Multiple Agents," *Economic Theory* 23, 183-194

Peters, M. (2014), "Reciprocal Contracting," forthcoming, JET.

1.3.4: Sequential and dynamic common agency

Bergemann, D. and J. Valimaki (2003), "Dynamic Common Agency," *Journal of Economic Theory* **111:** 23-48.

Pavan and Calzolari (2009): "Sequential Contracting with Multiple Principals," *Journal of Economic Theory,* 144(2), 503-531.

Calzolari, G. and A. Pavan, (2006), "On the Optimality of Privacy in Sequential Contracting," *Journal of Economic Theory*, Volume 130-1.

Calzolari, G. and A. Pavan, (2006), "Monopoly with Resale," *Rand Journal of Economics*, Volume 37-2.

Calzolari, G. and A. Pavan, (2007), "On the Use of Menus in Sequential Common Agency," *Games and Economic Behavior*, Vol. 64(1), 329-334

Prat A. and A. Rustichini, (1998), "Sequential Common Agency", mimeo LSE.

1.3.5: Extensions: Offer Games and Multiple Agents

Bikhchandani, S. and J.W. Mamer, "Competitive Equilibrium in an Exchange Economy with Indivisibilities," *Journal of Economic Theory* 74, 385-413.

Caillaud, B., B. Jullien and P. Picard (1995) "Competing Vertical Structures: Precommitment and Renegotiation," *Econometrica*, 63, pp. 621-646.

Martimort, D. and L. Stole, (2005), "Contractual Externalities and Common Agency Equilibria," *B.E. Press Advances in Theoretical Economics*.

Prat A. and A. Rustichini, (2003), "Games Played Through Agents", *Econometrica*, **71:** 989-1026.

Segal, I. (1999), "Contracting with Externalities," *Quarterly Journal of Economic*s, 114(2): 337-88.

Segal, I. and M. Whinston (2003), "Robust Predictions for Bilateral Contracting with Externalities," *Econometrica*, **71:** 757-791.

PART 2: COORDINATION UNDER INCOMPLETE INFORMATION

2.0: Coordination and higher order uncertainty

Baliga, Sandeep and Stephen Morris: "*Coordination, Spillovers and Cheap-Talk,*" Journal of Economic Theory (2002), 105(2), 450-468.

Binmore, Ken and Larry Samuelson: "*Coordinated Action in the Electronic Mail Game*," Games and Economic Behavior (2001), 35, 6-30.

Kajii, Atsushi and Stephen Morris: "*Common p-Belief: the General Case,*" Games and Economic Behavior (1997), 18, 73-82.

Kajii, Atsushi and Stephen Morris: "*The Robustness of Equilibria to Incomplete Information,*" Econometrica (1997), 65, 1283-1309.

Kajii, Atsushi and Stephen Morris: "*Refinements and Higher Order Beliefs: A Unified Survey*," Center for Mathematical Studies in Economics and Management Science Discussion Paper #1197, Northwestern University.

Myatt, David, Hyun Song Shin and Chris Wallace: "*The Assessment: Games and Coordination*," Oxford Review of Economic Policy (2002), 18(4), 1-20

Monderer Dov and Dov Samet: "*Approximating Common Knowledge with Common Beliefs*," Games and Economic Behavior (1989), 1, 170-190.

Monderer Dov and Dov Samet: "*Proximity of Incomplete Information in Games with Common Beliefs,*" (1996), Mathematics of Operations Research 21, 707-725.

Monderer Dov and L. Shapley: "*Potential Games*," Games and Economic Behavior (1996), 14, 124-143.

Morris Stephen: "*Faulty Communication: Some Variations on the Electronic Mail Game*," Advances in Theoretical Economics, Berkeley Electronic Press (2001), 1(1), 1-24.

Morris Stephen, Rafael Rob and Hyun Song Shin: "*p-Dominance and Belief Potential*," Econometrica (1995), 63, 145-157.

Morris Stephen: "*Coordination, Communication and Common Knowledge: A Retrospective on the Electronic Game*," Oxford Review of Economic Policy (2002) 18(4), 433-44.

Morris Stephen and Hyun Song Shin: "*Approximate Common Knowledge and Co-ordination: Recent Lessons from Game Theory*," Journal of Logic, Language and Information (1997), 6, 171-190.

Morris Stephen, Andrew Postlewaite and Hyun Song Shin: "*Depth of Knowledge and the Effect of Higher Order Uncertainty*," Economic Theory (1995), 6, 453-467.

Rubinstein Ariel: "*The Electronic Mail Game: Strategic Behavior under Almost Common Knowledge*," American Economic Review (1989), 79, 385-391.

Shin Hyun Song and Tim Williamson: "*How Much Common Belief is Necessary for a Convention*?" Games and Economic Behavior (1996), 13, 252-268.

Jakub Steiner and Jozsef Sakovics (2012) "*Who Matters in Coordination Problems*," *American Economic Review*, 102, 3439-3461. 82

Takashi, Ui, "Bayesian Potentials and Information Structures: Team Decision Problems Revisited," (2004) w.p. Yokohama national University.

Yildiz, Muhamet, and Jonathan Weinstein: "*A Structure Theorem for Rationalizability with Applications to Robust Predictions of Refinements*," (2007), Econometrica, 75, 365-400.

2.1: <u>Equilibrium selection in static games</u>

Atkeson, Andrew: "Discussion of Morris and Shin," (2000), NBER Macroeconomics Annual.

Carlsson Hans, and Eric van Damme: "*Global Games and Equilibrium Selection*," Econometrica (1993), 61, 989-1018.

Carlsson Hans, and Eric van Damme: "*Equilibrium Selection in Stag Hunt Games*," in Frontiers of GameTheory (K. Binmore, A. Kirman and A. Tani, Eds.), (1993), Cambridge, MA: MIT Press

Carlsson Hans and Mattias Ganslandt: "*Noisy Equilibrium Selection in Coordination Games*," Economics Letters (1998), 60, 23-34.

Frankel, David, Stephen Morris, and Ady Pauzner: "*Equilibrium Selection in Global Games with Strategic Complementarities*," Journal of Economic Theory (2003), 108, 1-44.

Harrison, Rodrigo: *Equilibrium Selection in Global Games with Strategic Substitutes*," (2006) w.p. Universita' Catolica de Chile.

Hellwig, Christian: "*Public Information, Private Information and the Multiplicity of Equilibria in Coordination Games*," Journal of Economic Theory, (2002), 107, 191-222.

Milgrom Paul and John Roberts: "*Rationalizability, Learning, and Equilibrium in Games with Strategic Complementarities*," Econometrica (1990) 58, 1255-1277.

Morris Stephen and Hyun Song Shin: "*Unique Equilibrium in a Model of Self-Fulfilling Currency Attacks*," American Economic Review, (1998), 88 587-97.

Morris Stephen and Hyun Song Shin: "*Rethinking Multiple Equilibria in Macroeconomics*," (2000), NBER Macroeconomic Annual.

Morris, Stephen and Hyun Song Shin: "*Global Games - Theory and Applications*," (2003), in M. Dewatripont, L. Hansen, and S. Turnovsky, eds., Advances in Economics and Econometrics (8th World Congress of the Econometric Society), Cambridge, UK: Cambridge University Press.

Morris Stephen and Hyun Song Shin: "*Common Belief Foundations of Global Games*," (2007), w.p. Princeton University.

Youngse Kim: "*Equilibrium Selection in N-Person Coordination Games*," Games and Economic Behavior (1996), 15, 203-227.

2.2: <u>Global games with endogenous information</u>

Angeletos George-Marios, Christian Hellwig, and Alessandro Pavan: "*Signaling in a Global Game: Coordination and Policy Traps*," (2006), Journal of Political Economy, Vol. 114, No. 3.

Angeletos George-Marios and Alessandro Pavan: "*Selection-free Predictions in Global Game with Endogenous Information and Multiple Equilibria*" (2013), Theoretical Economics, 883-938.

Angeletos George-Marios, and Ivan Werning: "*Crises and Prices: Information Aggregation, Multiplicity, and Volatility*," (2006), American Economic Review, Vol. 96, No. 5.

Corsetti, Giancarlo, Amil Dasgupta, Stephen Morris, and Hyun Song Shin: "*Does One Soros Make a Difference? The Role of a Large Trader in Currency Crises*," Review of Economic Studies, (2003) 71, 87-114

Edmond, Chris: "*Information Manipulation, Coordination and Regime Change*," (2005), working paper, NYU Stern.

Gaballo, Gaetano (2012) "*Private Uncertainty and Multiplicity*," mimeo, Banque De France

Hellwig, Christian, Mukherji Arijit, and Aleh Tsyvinski: "*Self-fulfilling Currency Crises: The Role of Interest Rates*," (2006), American Economic Review, Vol. 96, No. 5.

Inostroza, N. and A. Pavan, (2017) "Persuasion in Global Games with Application to Stress Testing." mimeo, Northwestern University.

Morris Stephen and Hyun Song Shin: "*Endogenous Public Signals and Coordination*," (2006), w.p. Princeton University.

Ming Yang, "*Coordination with Flexible Information Acquisition*," forthcoming, JET.

2.3: Dynamic coordination games

Abreu Dilip and Markus Brunnermeier: "*Bubbles and Crashes*," Econometrica, (2003), 71, 173-204.

Angeletos George-Marios, Christian Hellwig, and Alessandro Pavan: "*Dynamic Global Games of Regime Change: Multiplicity, Learning and Timing of Attacks*," Econometrica, Vol. 75(3), May 2007, 711-756.

Burdzy, K. David Frankel and Ady Pauzner: "*Fast Equilibrium Selection by Rational Players Living in a Changing World*" Econometrica (2002).

Chassang, S. (2010) "Fear of Miscoordination and the Robustness of Cooperation in Dynamic Global Games with Exit," *Econometrica*, 78, 973-1006.

Dasgupta, Amil: "*Coordination and Delay in Global Games*," (2007), Journal of Economic Theory, 134, 195-225.

Frankel, David, and Ady Pauzner: "*Resolving Indeterminacy in Dynamic Settings: The Role of Shocks*," Quarterly Journal of Economics (2000), 115, 283-304.

Giannitsarou, Chryssi, and Flavio Toxvaerd: "*Recursive Global Games*," (2006) working paper, Cambridge University.

Guimaraes, Bernardo (2006). "Dynamics of Currency Crises with Asset Market Frictions," *Journal of International Economics*, 68, 141-158.

Heidhues, Paul, and Nicolas Melissas: "*Equilibria in a Dynamic Global Game: The Role of Cohort Effects*" (2003), working paper, WZB Berlin and University of Leicester.

Levin, Jonathan: "*A Note on Global Games with Overlapping Generations*," (2001), working paper, Stanford University.

Mathevet, L. and J. Steiner, "Tractable Dynamic Global Games and Applications," Journal of Economic Theory (2013) 148, 2583-2619.

Matsui, A. and Kiminori Matsuyama: "*An Approach to Equilibrium Selection*," Journal of Economic Theory (1995), 65, 415-464.

Morris, Stephen and Hyun Song Shin: "*A Theory of the Onset of Currency Attacks*," (1999) in Agenor, Vines and Weber, eds., Asian Financial Crisis: Causes, Contagion and Consequences, Cambridge, UK: Cambridge University Press.

Morris Stephen: "*Co-ordination and Timing*," CARESS Working Paper #95-05, University of Pennsylvania.

Xue, Jun: "*Endogenous Timing and Efficiency in Coordination Games with Incomplete Information*" (2003) working paper, Penn State University.

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