Organizational Economics of Health Care

Spring, 2022

Instructor: Steve Schwab, PhD, MBA, MHA Meetings: Mondays 6pm-8pm via Zoom

Office Hours: By Appointment stephen schwab@baylor.edu

Zoom Link

Overview

As Oliver Williamson noted, much of neo-classical economics generalizes the firm as a 'black box' that converts inputs into outputs. While this can be a useful simplification, it conceals an enormous amount of complexity and heterogeneity. As most activity in the modern economy takes place within, or is at least facilitated by organizations, it is important to develop a deeper understanding of these actors. This is particularly relevant in health care where there is a highly differentiated division of labor, decisions are often made under uncertainty, and the boundaries of the firm are often opaque.

The goal of this course is to develop an understanding of the key dynamics within and between health care organizations and the policy and managerial implications of these insights. Note the gaps in the literature where you as a researcher can add to our understanding.

Building on multiple disciplines including neoclassical economics, personnel economics, organization theory, and sociology, we will cover a variety of papers that make both theoretical and empirical contributions to the literature. We will discuss the particular papers and explore the broader "conversations" in the field of which these works are a part.

Readings

There are four required readings for each class session. You are expected to have read them carefully before class. In order to prime these discussions, I will select **at random** a student to lead off our consideration of each paper. For theory papers, we will focus on the model's key intuition. Students should be prepared to discuss the model's foundation (e.g. moral hazard, transaction costs etc.) and whether you believe its key assumptions are reasonable, specifically in a health care context. Our discussions will also include how the model's insights could be empirically tested. As this is an applied course, we **will not** do a deep dive into the mathematics of the model. For empirical papers, consider the (quasi)-experiment the authors leveraged and how this allows us to learn something new about the world. Be prepared to discuss the identification strategy and whether you

believe the findings are credible. For both types of papers, we will discuss the managerial and policy implications of the findings. Finally, we will discuss the gaps in the literature and how you as a researcher can extend our knowledge.

The recommended readings are other papers that we will cover as time permits. You may want to read (or at least skim) these papers at some point, but not necessarily before the class session.

Student Presentations

Each student will select 2 papers from the recommended papers on the syllabus to present to the class. You will be responsible for presenting a brief summary of the paper (roughly 15-20 minutes) to the class. You will then answer questions from the group and give your assessment of its value to the literature, key incites and their managerial or policy implications, and improvements or future work that you would recommend. Students will select the papers prior to the second course session. Choices are subject to approval.

Research Proposal and Presentation

Over the course of the semester, each student will work to develop a research proposal. This should include all of the elements of a paper (introduction, literature review, model/framework, data and methodology) except the analysis section. Students are not required to have access to data but should have a plausible plan for how they could gain access or collect data to complete the project. Each student will present their work during the last session of the class. Students should discuss their topic in class prior to writing the proposal, but no later than the 8th class session.

Grading

Contribution to Class Discussions	35%
Paper Presentations	20%
Research Proposal	35%
Final Research Presentation	10%

Materials

The readings for the course are available on Canvas. The readings for each class session have an internal logical flow and are best read in the sequence suggested in the syllabus. We will only make light use of slides., but those we do use will be posted *after* each session.

Part 1 – The Theory of the Firm

1. Introduction to Organizational Economics

Required

Coase, R. H. (1937). The nature of the firm. *economica*, 4(16), 386-405.

Hart, O. (1989). Economist's Perspective on the Theory of the Firm, An. *Colum. L. Rev.*, 89, 1757.

Gibbons, R. (2013). Cyert and March (1963) at fifty: A perspective from organizational economics. prepared for NBER Working Group in Organizational Economics

Rebitzer, J. B., & Votruba, M. E. (2011). *Organizational economics and physician practices* (No. w17535). National Bureau of Economic Research.

Recommended

Arrow, K. J. (2003). Uncertainty and the welfare economics of medical care (American economic review, 1963) (pp. 1-34). Duke University Press

Gibbons, R. (2005). Four formal (izable) theories of the firm?. *Journal of Economic Behavior & Organization*, 58(2), 200-245

2. The Boundaries of the Firm – Part 1

Required

Williamson, O. E. (1979). Transaction-cost economics: the governance of contractual relations. *The journal of Law and Economics*, 22(2), 233-261

Grossman, S. J., & Hart, O. D. (1986). The costs and benefits of ownership: A theory of vertical and lateral integration. *Journal of political economy*, 94(4), 691-719

David, G., Rawley, E., & Polsky, D. (2013). Integration and task allocation: Evidence from patient care. *Journal of economics & management strategy*, 22(3), 617-639.

Gaynor, M., Sacarny, A., Sadun, R., Syverson, C., & Venkatesh, S. (2021). *The anatomy of a hospital system merger: The patient did not respond well to treatment* (No. w29449). National Bureau of Economic Research.

Recommended

Craig, S. V., Grennan, M., & Swanson, A. (2021). Mergers and marginal costs: New evidence on hospital buyer power. *The RAND Journal of Economics*, 52(1), 151-178

Duggan, M. G. (2000). Hospital ownership and public medical spending. *The Quarterly Journal of Economics*, 115(4), 1343-1373

3. The Boundaries of the Firm – Part 2

Required

Ménard, C. (2013). Hybrid modes of organization. the Handbook of organisational economics, 1066-1105.

Frandsen, B., Powell, M., & Rebitzer, J. B. (2019). Sticking points: Common-agency problems and contracting in the US healthcare system. *The RAND Journal of Economics*, 50(2), 251-285

Cooper, Z., Scott Morton, F., & Shekita, N. (2020). Surprise! Out-of-network billing for emergency care in the United States. *Journal of Political Economy*, 128(9), 3626-3677

Agha, L., Ericson, K. M., & Zhao, X. (2020). *The Impact of Organizational Boundaries on Healthcare Coordination and Utilization* (No. w28179). National Bureau of Economic Research.

Recommended

Grennan, M., Myers, K., Swanson, A., & Chatterji, A. (2021). No free lunch? welfare analysis of firms selling through expert intermediaries. *Welfare Analysis of Firms Selling Through Expert Intermediaries (March 20, 2021)*

Chan, D. C., & Dickstein, M. J. (2019). Industry input in policy making: Evidence from Medicare. *The Quarterly Journal of Economics*, 134(3), 1299-1342

4. Division of Labor

Required 1 4 1

Becker, G. S., & Murphy, K. M. (1992). The division of labor, coordination costs, and knowledge. *The Quarterly Journal of Economics*, 107(4), 1137-1160

Garicano, L. (2000). Hierarchies and the Organization of Knowledge in Production. *Journal of political economy*, 108(5), 874-904

Meltzer, D. O., & Chung, J. W. (2010). Coordination, switching costs and the Division of Labor in general medicine: an economic explanation for the Emergence of Hospitalists in the United States (No. w16040). National Bureau of Economic Research

Agha, L., B. Frandsen, and J. B. Rebitzer (2019). Fragmented division of labor and healthcare costs: Evidence from moves across regions. *Journal of Public Economics* 169, 144–1

Recommended

Weber, R. A. (2006). Managing growth to achieve efficient coordination in large groups. *American Economic Review*, 96(1), 114-126

Clark, J. R., & Huckman, R. S. (2012). Broadening focus: Spillovers, complementarities, and specialization in the hospital industry. *Management Science*, 58(4), 708-722

5. Aggregation and Returns to Knowledge

Required

Hayek, F. A. (1945). The use of knowledge in society. *The American economic review*, 35(4), 519-530.

Jensen, M. C., & Heckling, W. H. (1995). Specific and general knowledge, and organizational structure. *Journal of applied corporate finance*, 8(2), 4-18

Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic management journal*, 17(S2), 109-122.

David, G., & Brachet, T. (2011). On the determinants of organizational forgetting. *American Economic Journal: Microeconomics*, 3(3), 100-123

Recommended

Arrow, K. J. (1973). *Information and economic behavior*. HARVARD UNIV CAMBRIDGE MA

Schwab, S. D. The Value of Specific Information: Evidence from Disruptions to the Patient-Physician Relationship.

Part 2: Internal Processes

6. The Problem of Goals

Required

Cyert, R. and March J. (1963). Chapter 3, "Organizational goals". A Behavioral Theory of the Firm. Prentice-Hall, Englewood New Jersey

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360

Akerlof, G. A., & Kranton, R. E. (2005). Identity and the Economics of Organizations. *Journal of Economic perspectives*, 19(1), 9-32

Kolstad, J. T. (2013). Information and quality when motivation is intrinsic: Evidence from surgeon report cards. *American Economic Review*, 103(7), 2875-2910

Recommended

Milgrom, P. and J. Roberts (1988). "An economic approach to influence activities in organizations". *American Journal of Sociology*, Vol. 94: S154-S179

Frandsen, B., & Rebitzer, J. B. (2015). Structuring incentives within accountable care organizations. *The Journal of Law, Economics, and Organization*, 31(suppl 1), i77-i103

7. Social Relations

Required

Encinosa III, W. E., Gaynor, M., & Rebitzer, J. B. (2007). The sociology of groups and the economics of incentives: Theory and evidence on compensation systems. *Journal of Economic Behavior & Organization*, 62(2), 187-214

Besley, T., & Ghatak, M. (2018). Prosocial motivation and incentives. *Annual Review of Economics*, 10, 411-438

Chan, D. C. (2016). Teamwork and moral hazard: evidence from the emergency department. *Journal of Political Economy*, 124(3), 734-770.

Navathe, A., & David, G. (2009). The formation of peer reputation among physicians and its effect on technology adoption. *Journal of Human Capital*, 3(4), 289-322.

Recommended

Alsan, M., Garrick, O., & Graziani, G. (2019). Does diversity matter for health? Experimental evidence from Oakland. *American Economic Review*, 109(12), 4071-4111

Mas, A., & Moretti, E. (2009). Peers at work. American Economic Review, 99(1), 112-45

8. Authority and Decision-Making

Required

Gibbons, R. (2003). Team theory, garbage cans and real organizations: some history and prospects of economic research on decision-making in organizations. *Industrial and corporate change*, 12(4), 753-787

Wernerfelt, B. (2007). Delegation, committees, and managers. *Journal of Economics & Management Strategy*, 16(1), 35-51.

Chan, D. C. (2021). Influence and information in team decisions: evidence from medical residency. *American Economic Journal: Economic Policy*, 13(1), 106-37.

Marino, A. M., Matsusaka, J. G., & Zábojník, J. (2010). Disobedience and authority. *The Journal of Law, Economics, & Organization*, 26(3), 427-459

Recommended

Aghion, P., & Tirole, J. (1997). Formal and real authority in organizations. *Journal of political economy*, 105(1), 1-29

Currie, J., & MacLeod, W. B. (2017). Diagnosing expertise: Human capital, decision making, and performance among physicians. *Journal of labor economics*, 35(1), 1-43

9. Management

Required

Bloom, N., Lemos, R., Sadun, R., Scur, D., & Van Reenen, J. (2014). JEEA-FBBVA Lecture 2013: The new empirical economics of management. *Journal of the European Economic Association*, 12(4), 835-876

Gibbons, R., & Henderson, R. (2011). Relational contracts and organizational capabilities. *Organization science*, 23(5), 1350-1364

Bolton, P., Brunnermeier, M. K., & Veldkamp, L. (2013). Leadership, coordination, and corporate culture. *Review of Economic Studies*, 80(2), 512-537

La Forgia, A. (2021). The Impact of Management on Clinical Performance: Evidence from Physician Practice Management Companies

Recommended

Weber, R., Camerer, C., Rottenstreich, Y., & Knez, M. (2001). The illusion of leadership: Misattribution of cause in coordination games. *Organization science*, 12(5), 582-598

Bloom, N., Propper, C., Seiler, S., & Van Reenen, J. (2015). The impact of competition on management quality: evidence from public hospitals. *The Review of Economic Studies*, 82(2), 457-489

Part 3 – Determinants of Productivity

10. Views of Production – Part 1

Required

Syverson, C. (2011). What determines productivity?. *Journal of Economic literature*, 49(2), 326-65

Chandra, A., Finkelstein, A., Sacarny, A., & Syverson, C. (2016). Health care exceptionalism? Performance and allocation in the US health care sector. *American Economic Review*, 106(8), 2110-44

Skinner, J., & Staiger, D. (2015). Technology diffusion and productivity growth in health care. *Review of Economics and Statistics*, *97*(5), 951-964

Bloom, N., Jones, C. I., Van Reenen, J., & Webb, M. (2020). Are ideas getting harder to find?. *American Economic Review*, 110(4), 1104-44

Recommended

Cutler, D. M., McClellan, M., Newhouse, J. P., & Remler, D. (1998). Are medical prices declining? Evidence from heart attack treatments. *The Quarterly Journal of Economics*, 113(4), 991-1024

Myers, K., & Pauly, M. (2019). Endogenous productivity of demand-induced R&D: evidence from pharmaceuticals. *The RAND Journal of Economics*, 50(3), 591-614

11. Views of Production – Part 2

Required

Manski, C. F. (2018). Reasonable patient care under uncertainty. *Health Economics*, 27(10), 1397-1421

Chan Jr, D. C., Gentzkow, M., & Yu, C. (2019). Selection with variation in diagnostic skill: Evidence from radiologists (No. w26467). National Bureau of Economic Research

Bartel, A. P., Beaulieu, N. D., Phibbs, C. S., & Stone, P. W. (2014). Human capital and productivity in a team environment: evidence from the healthcare sector. *American Economic Journal: Applied Economics*, 6(2), 231-59

Chen, Y. (2021). Team-specific human capital and team performance: Evidence from doctors. *American Economic Review*, 111(12), 3923-62

Recommended

Chandra, A., & Staiger, D. O. (2007). Productivity spillovers in health care: evidence from the treatment of heart attacks. *Journal of political Economy*, 115(1), 103-140

Molitor, D. (2018). The evolution of physician practice styles: evidence from cardiologist migration. *American Economic Journal: Economic Policy*, 10(1), 326-56

12. Learning and Adaptation

Required

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative science quarterly*, 128-152

Edmondson, A. C., Bohmer, R. M., & Pisano, G. P. (2001). Disrupted routines: Team learning and new technology implementation in hospitals. *Administrative science quarterly*, 46(4), 685-716

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization science*, *2*(1), 71-87

Currie, J. M., & MacLeod, W. B. (2020). Understanding doctor decision making: The case of depression treatment. *Econometrica*, 88(3), 847-878

Recommended

Dessein, W., & Santos, T. (2006). Adaptive organizations. *Journal of political Economy*, 114(5), 956-995

Kapoor, R., & Klueter, T. (2015). Decoding the adaptability–rigidity puzzle: Evidence from pharmaceutical incumbents' pursuit of gene therapy and monoclonal antibodies. *Academy of Management Journal*, *58*(4), 1180-1207

13. Innovation

Required

Weisbrod, B. A. (1991). The health care quadrilemma: an essay on technological change, insurance, quality of care, and cost containment. *Journal of economic literature*, 29(2), 523-552

Myers, K. (2020). The elasticity of science. *American Economic Journal: Applied Economics*, 12(4), 103-34

Sauermann, H., & Cohen, W. M. (2010). What makes them tick? Employee motives and firm innovation. *Management science*, 56(12), 2134-2153

Ederer, F., & Manso, G. (2013). Is pay for performance detrimental to innovation?. *Management Science*, 59(7), 1496-1513

Recommended

Teece, D. J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research policy*, 15(6), 285-305

Dranove, D., Garthwaite, C., Heard, C., & Wu, B. (2021). *The Economics of Medical Procedure Innovation* (No. w29438). National Bureau of Economic Research

14. Student Presentations

Baylor University General Policies and Resources

Academic Integrity

Plagiarism or any form of cheating involves a breach of student-teacher trust. This means that any work submitted under your name is expected to be your own, neither composed by anyone else as a whole or in part, nor handed over to another person for complete or partial revision. Be sure to document all ideas that are not your own. Instances of plagiarism or any other act of academic dishonesty will be reported to the Honor Council and may result in failure of the course. Not understanding plagiarism is not an excuse. As a Baylor student, I expect you to be intimately familiar with the Honor Code at: http://www.baylor.edu/honorcode/

Academic Success

I believe every student who has been admitted to Baylor can be successful and I want to partner with you to help you thrive academically. Be sure to take advantage of the many resources available for academic success, including coming to see me during my office hours. Students who regularly utilize the great resources in the Paul L. Foster Success Center (http://www.baylor.edu/successcenter/) are among my most successful students. If your academic performance in this class is substandard, I will submit an Academic Progress Report to the Success Center so that the team of coordinated care professionals can ensure that you get the help you need.

Attendance

During this unprecedented time of a global pandemic, class attendance must be approached differently from the way it would in a standard semester. If you are sick or have any symptoms (even if they are slight) that might relate to COVID-19, please stay home to protect yourself, your classmates, and your professors. As your instructor, I will expect that you work with me to enable you to receive any necessary course content (including classroom lectures) and complete any assignments, quizzes, or exams that you may miss due to being sick or having COVID-19-related symptoms. I also expect you to notify me prior to class if you will be missing for COVID-19 or any other health-related reason. If you are well, have no symptoms, and are not required to remain at home for any COVID-19 or other health-related reason, you should attend class and abide by all of the University's health protocols. Attendance during this time may take many forms due to the various course formats being offered this spring. Be sure to pay careful attention to the additional details below that describe how attendance and class participation will be incorporated into my course.

Importantly, Baylor's Health Services department on the Waco campus no longer provides notes to "excuse" students from missed classes. Please do not ask Health Services for such documentation.

COVID Precautions

Throughout the pandemic, Baylor's commitment has been to the health and safety of our family. Since the spring of 2020, the University has chosen to take actions that align with the most up-to-date health recommendations. Guidelines for the Spring 2021 semester include:

- Everyone is required to wear a mask in classrooms and labs.
- Everyone who is unvaccinated is required to be tested twice weekly throughout the semester. For more information about Baylor's testing program, please visit Baylor's COVID site at www.baylor.edu/coronavirus. To confirm your exemption from this testing, upload your vaccination record to www.baylor.edu/vaccine.
- Vaccinations are available for students at the Baylor Health Center. Please call 254-710-1010 to make an appointment or https://www.baylor.edu/healthservices/.
- The symptoms for the Delta variant look very similar to the original COVID symptoms but include headaches, sinus congestion, sore throats, and a runny nose. If you feel sick, please contact the Baylor Health Center to be tested as soon as possible, at 254-710-1010 or https://www.baylor.edu/healthservices/.
- Please have a plan in place in case you get sick with COVID or are asked to isolate or quarantine. Baylor will provide limited assistance, but it is in your best interest to have your own plan in place.

We all want to return to a normal semester with more in-person events and traditions; vaccinations and face masks help the entire Baylor community to stay healthy.

First Generation College Students

Baylor University defines a first-generation college student as a student whose parents did not complete a four-year college degree. The First in Line program at Baylor is a support office on campus for first-generation college students to utilize if they have any questions or concerns. Please contact First in Line at firstinline@baylor.edu, call 254-710-6854, or visit www.baylor.edu/firstinline to learn more about the services available.

Military Student Advisory

Veterans and active duty military personnel are welcomed and encouraged to communicate, in advance if possible, any special circumstances (e.g., upcoming deployment, drill requirements, disability accommodations). You are also encouraged to visit the VETS Program Office with any questions at (254) 710-7264.

Office of Equity and Title IX

Civil Rights Policy and Sexual and Interpersonal Misconduct Policy

Baylor University does not tolerate unlawful harassment or discrimination on the basis of sex, gender, race, color, disability, national origin, ancestry, age (over 40), citizenship, genetic information or the refusal to submit to a genetic test, past, current, or prospective service in the uniformed services, or any other characteristic protected under applicable federal, Texas, or local law (collectively referred to as Protected Characteristics).

If you or someone you know would like help related to an experience involving:

- 1. Sexual or gender-based harassment, sexual assault, sexual exploitation, stalking, intimate partner violence, or retaliation for reporting one of these types of prohibited conduct, please visit www.baylor.edu/titleix, or contact us at (254) 710-8454, or TitleIX Coordinator@baylor.edu.
- 2. Harassment (excluding those issues listed in #1) or adverse action based on Protected Characteristics, please visit www.baylor.edu/civilrights, or contact us at (254) 710-7100 or Civil Rights@baylor.edu.

The Office of Equity and Title IX understands the sensitive nature of these situations and can provide information about available on- and off-campus resources, such as counseling and psychological services, medical treatment, academic support, university housing, advocacy services, and other forms of assistance that may be available. Staff members at the office can also explain your rights and procedural options. You will not be required to share your experience. If you or someone you know feels unsafe or may be in imminent danger, please call the Baylor Police Department (254-710-2222) or Waco Police Department (9-1-1) immediately.

Except for Confidential Resources, all University Employees are designated Responsible Employees and thereby mandatory reporters of potential sexual and interpersonal misconduct violations. Confidential Resources who do not have to report include those working in the Counseling Center, Health Center and the University Chaplain, Dr. Burt Burleson.

Students Needing Accommodations

Any student who needs academic accommodations related to a documented disability should inform me immediately at the beginning of the semester. You are required to obtain appropriate documentation and information regarding accommodations from the Office of Access and Learning Accommodation (OALA). Contact Information: (254) 710-3605 - Paul L. Foster Success Center, 1st floor on the East Wing of Sid Richardson or email OALA@baylor.edu.

Health Resources for Students

Baylor University is strongly committed to addressing the mental health and wellness needs of students by providing access to on-campus healthcare resources.

Crises and Emergencies:

BUCC Crisis Line: (254) 710-2467 (Business Hours/Non-Business Hours/Weekends)

Baylor Police Department: (254)710-222 **MHMR Crisis Center:** (254)867-6550

MHMR 24-Hour Emergency/Crisis Number: (254)752-3451

When home during academic breaks, when the counseling center is closed, please call your

local resources. Some national numbers for support during a crisis:

National Hope Network Hotline: 1-800-SUICIDE (1-800-784-2433)

National Suicide Prevention Lifeline: 1-800-273-TALK (1-800-273-8255)

General Guidance for struggling students: Baylor University CARE Team Services

Located on the second floor of the Student Life Center, suite 207.

<u>The Department of CARE Team Services</u> is a team of case managers who work with students who are struggling with mental health issues, financial struggles, and anything else affecting a student's ability to be successful in the classrrom.

Contact Information: (254) 710-2100; CareTeam@baylor.edu.

Students' Basic Needs (food & housing)

Food insecurity is defined as "a lack of consistent access to enough food for you to live an active, healthy life." At Baylor, we want all students to have access to food resources that will support their holistic well-being and success. If you or someone you know experiences food insecurity at any time, you can find information on campus and community food resources by visiting <u>The Store</u>. You can also contact Store staff at 254-710-4931. For additional basic needs assistance, please reach out to <u>CASE</u> or the <u>Care Team</u>.

<u>Physical Health and Wellness, Psychiatric Evaluations, Pharmacy</u>: Baylor Health Services Department

<u>Baylor Health Services</u> includes Primary Care, Psychiatry, Physical Therapy and Pharmacy and is staffed with fully certified and licensed physicians and nurse practitioners, as well as nurses and administrative staff. Appointments may be made by calling our main number or by logging into the health portal located on our website.

Contact Information: (254) 710-1010; Health Services@baylor.edu.

Baylor University Counseling Center

<u>The Counseling Center</u> seeks to foster wholeness for every student through caring relationships, cultural humility and integrated mental health services.

Located on the second floor of the Student Life Center.

For an appointment, go to our <u>website</u> to schedule an Initial Assessment or call (254) 710-2467.

Substance and Behavioral Addiction: Beauchamp Addiction & Recovery Center (BARC)

<u>The Beauchamp Addiction Recovery Center</u> aims to support students in recovery from substance and behavioral addictions through an all-encompassing level of support approach that includes one-on-one mentorship, support groups, and social events open to all Baylor students.

Located in the East Village Residential Community (bottom floor of Teal Residential College).

Contact Information: (254)-710-7092; BARC@baylor.edu

Spiritual Life: Baylor University Office of Spiritual Life

The Office of Spiritual Life offers programs, persons, and resources to nurture theological depth, spiritual wholeness, and missional living.

Located on the corner of 5th and Speight Street in the BoBo Spiritual Life Center.

Contact Information: (254) 710-3517; Spiritual Life@baylor.edu