Syllabus: MGMT 900 Economic Foundations of Management

Fall 2016

Professor Daniel Levinthal
3209 Steinberg-Dietrich Hall

Office Hours: By Appointment
levinthal@wharton.upenn.edu

Overview

This course examines some of the central questions in management with economic approaches as a starting point, but with an eye to links to behavioral perspectives on these same questions. Economics concerns itself with goal directed behavior of individuals interacting in a competitive context. We adopt that general orientation but recognize that goal directed action need not take the form of maximizing behavior, particularly for organizations comprised of individuals with possibly divergent interests and distinct sub-goals. Further, we treat competitive processes as playing out over meaningful periods of calendar time and, in general, not equilibrating instantaneously. A central property of firms, as with any organization, is the interdependent nature of activity within them. Thus, understanding firms as "systems" is quite important, a perspective which has important implications for understanding processes of organizational adaptation.

The substantive focus is on the firm as a productive entity. Among the sorts of questions we explore are the following: What underlies a firm's capabilities? How does individual knowledge aggregate to form collective capabilities? What do these perspectives on firms say about the scope of a firm's activities, both horizontally (diversification) and vertically (buy-supply relationships)? We also explore what our understanding of firms says about market dynamics and industry evolution, particularly in the context of technological change.

Assignments

For 10 of the 13 class sessions, you are to prepare a brief (roughly three page) Puzzle & Gaps (P&G) note. This note should convey some provocative reflections on your part on the readings. These reflections may take many forms. They make be organized around some degree of puzzlement at the argument that the author(s) are making. They may reflect on contrasts in the arguments of the various authors. The write-up, might identify gaps in the existing literature and, in turn, research opportunities that these gaps present. Alternatively, the note could focus on application and examine ways in which the conceptual material may provide insight into some important phenomena. Alternatively, it might be useful to consider how important empirical phenomena point to gaps and weaknesses in the theoretical ideas. These notes should not merely, or primarily, restate the arguments of the various authors. In writing these notes, you should assume that your audience (me and your fellow students) have read the articles associated with that class session with some care and would not be interested in regurgitation of these ideas, but would be stimulated by a fresh and provocative take on them. Furthermore, your note may draw from a subset of the readings; however, it should be anchored in at least one of the articles.

For 3 other class sessions, you can submit two questions prompted by the readings that might serve as the basis for class discussion. These may be questions of interpretation of the work itself, a question of how a paper links to other work, or how the work might link with some business issue or organizational phenomena.

Whether you submit a reaction paper or questions, they are due by **8 am the day of class**. Place an electronic copy on the course Canvass web site. **No reaction papers or questions will be accepted subsequent to the associated class session.**

In class, we will discuss the particular papers and explore the broader "conversations" in the field of which these papers are a part. At various junctures in these discussions, I will select a student **at random** to serve as a catalyst to our conversation.

The course grade will be based on a 50% weight on your P&G papers, 50% class discussion.

Materials

The readings for the course are available on the course Canvas site: https://canvas.upenn.edu/courses/1328008 . The readings for each class session have an internal logical flow and are **best read in the sequence suggested in the syllabus**.

1. **Theories of Choice** (8/31)

Allison, G. (1971). *Essence of Decision.* Little Brown and Company, pp 28-35.

Kreps, D. (1988). *Notes on the Theory of Choice*. Boulder, CO: Westview publishing. Pp 43-46.

Simon, H. (1955). "A behavioral model of rational choice". *Quarterly Journal of Economics*, 69: 99-118.

Kahneman, D. and A. Tversky (1979). "An analysis of decision under risk". *Econometrica*, 47: 263-291.

Levinthal, D. (2011). "What is not a behavioral strategy --- What's the alternative?" *Strategic Management Journal*, 32: 1517-1523.

Parkes, D. and M. Wellman (2015). "Economic reasoning and artificial intelligence". *Science*, 349: 267-272.

2. **Problem of Goals** (9/7)

Gibbons, R. and J. Roberts (2013). "Economic theories of incentives in organizations" in Gibbons and Roberts *Handbook of Organizational Economics.* Princeton University Press, Pp. 56-68.

Meyer, M., P. Milgrom, and J. Roberts (1992). "Organizational prospects, influence costs, and ownership changes". *Journal of Economics, Management & Strategy,* 1: 9-35.

Pendergast, C. (1993). "The role of promotion in inducing specific human capital acquisition". *Quarterly Journal of Economics,* 108: 523-534.

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

Axelrod, R. and M. Cohen (1999). Chapter 4 "Selection". Pp 117-145. *Harnessing Complexity*. New York, NY: Free Press.

3. **Financial Markets and Firm Strategy** (9/14)

Jensen, M. (1986). "Agency costs of free cash flow, corporate finance, and takeovers". *American Economic Review*, 76 (2): 323-329.

Aghion, P., J. Van Reenen, and L. Zingales (2013). "Innovation and institutional ownership". *American Economic Review*, 103(1): 277-304.

Aghion, P. and J. Stein (2008). "Growth versus margins: Destabilizing consequences of giving the stock market what it wants". *Journal of Finance,* 63 (3): 1025.

Zajac, E. and J. Westphal (2004). "The social construction of market value: Institutionalization and learning perspectives on stock market reactions". *American Sociological Review,* 69: 433-458.

Benner, M. and T. Zenger (2016). "The lemons problem for strategy". *Strategy Science,* 1(2): 71-89.

4. **Views of Production** (9/21)

Winter, S. (2013). "Toward a Neo-Schumpeterian theory of the firm". *Industrial and Corporate Change,* 15(1): 125-141.

Syverson, C. (2011). "What determines productivity?" *Journal of Economic Literature,* 49(2): 326-365.

Nelson, R. and S. Winter (1982). "Organizational capabilities and behavior". *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.

Diericks, I. and K. Cool (1989). "Asset stock accumulation and sustainability of competitive advantage". *Management Science,* 35: 1504-1511.

Helfat, C. and S. Winter (2011). "Untangling dynamic and operational capabilities: Strategy for the (n)ever changing world". *Strategic Management Journal,* 32: 1243-1250.

5. **Resources and Rents** (9/28)

Barney, J. (1991). "Firm resources and sustained competitive advantage". *Journal of Management,* 17: 99-120.

Peteraf, M. (1993). "The cornerstones of competitive advantage: A resource-based view". *Strategic Management Journal,* 14: 179-191.

Brandenburger, A.M., H.W. Stuart (1996). "Value-based business strategy". *Journal of Economics & Management Strategy* 5(1) 5–24

Adner, R. and P. Zemsky (2006). "A demand-based perspective on sustainable competitive advantage". *Strategic Management Journal*, 27: 215-239.

Jacobides, M., S. Winter and S. Kassberger (2012). "The dynamics of wealth, profit, and sustainable advantage". *Strategic Management Journal*, 33(10).

6. **Aggregation of Knowledge** (10/5)

Hayek, F. (1945). "The use of knowledge in society". *American Economic Review*, 35: 519-530.

Stiglitz, J. (2000). "Contribution of the economics of information to Twentieth Century economics". *Quarterly Journal of Economics*, 115(4): 1444-1478.

Cohen, W. and D. Levinthal (1990). "Absorptive capacity: A new perspective on learning and innovation". *Administrative Science Quarterly*, 35: 128-152.

Grant, R. (1996). "Toward a knowledge-based theory of the firm". *Strategic Management Journal*, 17: 109-122.

Garicano, L. and Y. Wu (2012). "Knowledge, communication, and organizational capabilities". *Organization Science*, 23: 1382-1397.

10/12 Yom Kippur: No Class

7. **Firms as Interdependent Systems** (10/19)

Simon, H. (1962). "The architecture of complexity". *Proceedings of the American Philosophical Society*, 106: 467-482.

Levinthal, D. (1997). "Adaptation on rugged landscapes". *Management Science*, 43: 934-950.

Milgrom, P. and J. Roberts (1995). "Complementarities and fit: Strategy, structure, and organizational change". *Journal of Accounting and Economics*, 19: 179-208.

Porter, M. (1996). "What is strategy?" *Harvard Business Review*, Nov.-Dec. 3-20.

Henderson, R. and K. Clark (1990). "Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms". *Administrative Science Quarterly,* 35: 9-30.

8. **Organizations as Evolvable Systems** (10/26)

March, J. (1991). "Exploration and exploitation in organizational learning". *Organization Science,* 2: 71-87.

Burgelman, R. (1991). "Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research". *Organization Science*, 2: 239-262

Levinthal, D. and A. Marino (2015). "Three facets of organizational adaptation: Selection, variety, and plasticity". *Organization Science*, 26(3): 743-755.

Adner, R. and D. Levinthal (2004). "What is *not* a real option: Considering boundaries for the application of real options to business strategy". *Academy of Management Review,* 29: 74-85.

Manso, G. (2011). "Motivating innovation". *Journal of Finance,* 66(5): 1823-1860.

9. Capital Allocation within the Firm (11/2)

Chandler, A. (1991). "The function of the HQ unit in a multi-business firm". *Strategic Management Journal*, 12: 31-50.

Stein, J. (1997). Internal capital markets and the competition for corporate resources. *Journal of Finance,* 52(1): 111-133.

Stein, J., and D. Scharfstein (2000). "The dark side of internal capital markets: Divisional rent-seeking and inefficient investment," *Journal of Finance,* LV (6): 2537-2564.

Qian, Y. and C. Xu (1998). "Innovation and bureaucracy under soft and hard budget constraints". *Review of Economic Studies,* 65(1): 151-64.

Ewens, M., R. Nanda, and M. Rhodes-Kropf (2015). "Costs of experimentation and the evolution of venture capital". Harvard Business School Working Paper.

10. **Economics of the Diversified Firm** (11/9)

Montgomery, C. (1994). "Corporate diversification". *Journal of Economic Perspectives*, 8 (3): 163-78.

Penrose, E. (1959). Chapter VII "The economics of diversification" in *The Theory of the Growth of the Firm.* White Plains, NY: M. E. Sharpe.

Levinthal, D. and B. Wu (2010). "Opportunity costs and non-scale free capabilities: Profit maximization, corporate scope, and profit margins". *Strategic Management Journal*, 31: 780-801.

Helfat, C. and K. Eisenhardt (2004). "Inter-temporal economies of scope, organizational modularity, and the dynamics of diversification". *Strategic Management Journal*, 25: 1217-1232.

Rawley, E. (2010). "Diversification, coordination costs, and organizational rigidity: Evidence from microdata". *Strategic Management Journal*, 31(8): 873-891.

11. **Questions of Markets and Hierarchies** (11/16)

Coase, R. (1937). "The nature of the firm". *Economica*, 4(16): 386-405.

Williamson, O. (1985). Chp 2 "Contractural man" and Chp 3 "The governance of contractual relations". *The Economic Institutions of Capitalism.* New York: Free Press.

Grossman, S. and O. Hart (1986). "The costs and benefits of ownership: A theory of vertical and lateral integration". *Journal of Political Economy*, 94: 691-719.

Bradach, J. and R. Eccles (1989). "Price, authority, and trust: From ideal types to practical forms". *Annual Review of Sociology*, 15: 97-118.

Bidwell, M. (2012). "Politics and firm boundaries: How organizational structure, group interest, and resources affect outsourcing". *Organization Science*, 23(6): 1622-1642.

12. **Linking Firm and Industry Dynamics** (11/30)

Porter, M. (1981). "The contributions of industrial organization to strategic management". *Academy of Management Review*, 6(4): 609-620.

Sutton, J. (1991). Chapter 1 “An introductory overview” *Sunk Costs and Market Structure*. Cambridge, MA: MIT Press.

Klepper, S. (2002). “Firm survival and the evolution of oligopoly”. *Rand Journal of Economics,* 33(1): 37-61.

Bhaskarabhatla, A. and S. Klepper, (2014). “Latent submarket dynamics and industry evolution: Lessons from the U.S. laser industry”. *Industrial and Corporate Change,* 23(6): 1381-1415.

Adner, R., F. Aliseda, and P. Zemksy (2016). “Specialists versus generalist positioning: Demand heterogeneity, technological scalability, and endogenous market segmentation”. *Strategy Science.*

13. Technological Change (12/7)

Lipsey, R., K. Carlaw, and C. Bekar (2005). Chapter 4 “Technology and technological change” in *Economic Transformations: General Purpose Technologies and Long-Term Economic Growth.* Oxford University Press.

Christensen, C. and J. Bower (1996). “Customer power, strategic investment, and the failure of leading firms”. *Strategic Management Journal,* 17: 197-218.

Teece, D. (1986). “Profiting from technological innovation: Implications for integration, collaboration, licensing, and public policy”. *Research Policy,* 15: 285-306.

Klepper, S. (2001). “Employee startups in high-tech industries”. *Industrial and Corporate Change,* 10(3): 639-674.

Arora, A. and A. Gamberdella (2010). “Ideas for rent: an overview of markets for technology”. *Industrial and Corporate Change,* 19: 775-803.