



## STANFORD UNIVERSITY

### **The Modern Firm in Theory and Practice (Econ 149)** **Winter Quarter 2017, Professor Nick Bloom**

This course aims to integrate economic analysis with closely related studies of business practices. Compared to most economics courses, it makes unusually high use of cases to develop ideas and illustrate applications. Compared to most business school courses, it makes unusually rigorous use of economics research, particularly careful empirical studies.

#### **COURSE REQUIREMENTS**

***The basis for grading will be 67% on a final exam and 33% on class participation.*** The class will be run in an MBA style, with extensive class participation. To help with this you will be expected to complete all the assigned readings. During the class we will ask you to make substantial contributions to the analysis. Students will be both invited to participate and also cold-called, so will need to cover all readings before the class. Most classes will require reading a short text. We will guide the class discussion, provide a framework and ask probing questions, but it is your job to contribute constructively to the discussion with the purpose of drawing useful lessons from each session. This course involves a joint process of discovery between you and your fellow students. For it to be successful, you must be prepared by having done the reading and considered the questions posed in the assignment. The instructor will encourage you to contribute regularly and succinctly to the discussion (as noted including cold calling students on the readings). You will be encouraged to disagree constructively with your fellow students and the instructor, and to master the course framework.

The final exam will be from 8:30am to 11:30am on Tuesday March 21<sup>st</sup>

***Because your contribution to the class is essential, your attendance at every class is expected.*** As an MBA style course this is focused on class time (rather than lots of outside class work). So if attending class is difficult then this course is not a good fit. We realize that personal issues necessitating an absence can occasionally intervene, so if you find it unavoidable to miss a class, please notify us ahead of time. If you miss a class due to illness or some emergency, and cannot give notice beforehand, please let us know as soon as possible. Unexplained and unexcused absences will negatively affect your grade. Whether an absence is excused is solely at our discretion. If you are absent under any circumstances it is your responsibility to obtain whatever materials were handed out at the session. We will take class participation to use as part of the course grading.

***Common syllabus.*** Like all undergraduate courses in economics, this course is subject to the common syllabus: <http://economics.stanford.edu/undergraduate/economics-common-syllabus>.

**Required Readings.** The required readings include a course reader. All other readings will be put onto coursework.

**CLASS LOCATION AND TIMING:**

All classes run Monday and Wednesday from 9:30am-11:20am, Economics Room 351. We will start punctually, and students that are late will be penalized on class participation grading.

**CLASS CO-TEACHER:**

The course will have 3 classes taught by Renata Lemos (March 1<sup>st</sup> to March 8<sup>th</sup> inclusive). Renata is an economist at the World Bank working on education and management, and taught the course last year when she was visiting Stanford.

**CLASS TEACHING ASSISTANT:**

The class TA will be Emanuele Colonnelli: [emacol@stanford.edu](mailto:emacol@stanford.edu). Emanuele is a PhD candidate in Economics, whose primary line of research investigates whether and to what extent corruption, and politics more generally, represent frictions to entrepreneurship and the growth of firms in developing countries. His main research projects are in Brazil, Ghana, and Uganda.

**ORGANIZATION OF THE COURSE**

The course will focus on productivity and management practices as a framework for understanding the modern firm. To do this, it will review the results from a large management practices project involving Accenture, Harvard Business School, the London School of Economics and McKinsey. McKinsey have developed a basic management practice evaluation tool – detailing about 20 key practices – which has been used to evaluate about 20,000 organizations in manufacturing, retail, healthcare and education across the US, Europe, Asia, Africa, Australasia and South America. These results provide a global insight into the basic management practices around monitoring, targets and talent management that firms adopt around the world, their link to performance, and the reasons for differences in these across countries. This will be supplemented with the results from recent research with Accenture and the World Bank in India on change management interventions in a developing country context.

The course will require that students become familiar with both economics and management research. Students will learn the scoring grid so that they can easily perform an initial overview of the human resource management practices of any organization they eventually work in or consult for. For example, this would be ideal for an initial evaluation of the management practices in a private equity target company or a preliminary evaluation of a potential client by a consulting firm. Interested students can look at some of the academic, business and media focused output from the research on: <http://www.worldmanagementsurvey.com>, including over 50 articles in the New York Times, Economist, Wall Street Journal, Business Week, Newsweek, Washington Post and the Financial Times.

## INDIVIDUAL CLASS SCHEDULE (DRAFT):

### Monday 9<sup>th</sup> January Productivity, firms and plants:

Main reading (to be discussed in class):

- “What determines productivity”, Chad Syverson, (2011), *Journal of Economic Literature*

Other readings (potential exam questions, no need to read before class):

- “Misallocation and Manufacturing TFP in China and India”, Chiang-Tai Hsieh and Pete Klenow, (2009), *Quarterly Journal of Economics*, 1403-1448.
- “Reallocation, firm turnover, and efficiency: selection on productivity or profitability”, Lucia Foster, John Haltiwanger and Chad Syverson (2008), *American Economic Review*.
- “Private Equity, Jobs and Productivity”, Steve Davis, John Haltiwanger, Kyle Handley, Ron Jarmin, Josh Lerner and Javier Miranda, forthcoming *American Economic Review*

Recent research has shown the incredible spread of productivity across countries, industries, firms and establishments. Even in the US some plants in the same industry are producing twice as much output as other plants. The obvious question is why, and recent research has begun to highlight the importance of management practices. In this session we will review this literature and start to discuss differences in productivity across firms. You should read the Syverson paper, which we will discuss in class and draw from in the exams.

Prepare to discuss the following class questions:

1. How would you define productivity (be prepared to explain the different definitions)
2. Why do we care about improving productivity?
3. What factors determine differences in firm productivity?
4. What is the evidence for each of these factors, and how could you test which is the most important?
5. Think of one new product or practice that has improved total factor productivity, and be prepared to discuss this in class

### Wednesday January 11: Management Practices

Main reading (to be discussed in class):

- “Measuring and Explaining Management Practices across Firms and Countries”, Bloom, Nicholas, and John Van Reenen (2007), *Quarterly Journal of Economics*

Other readings (potential exam questions, no need to read before class):

- “Does management really work”, November 2012 *Harvard Business Review*
- “The new empirical economics of management”, 2014, Nicholas Bloom, Renata Lemos, Raffaella Sadun, Daniela Scur and John Van Reenen. *Journal of the European Economic Association*

Today we will focus more on management practices and their link to productivity. While this literature has a long history in economics, only recently has more rigorous work on management started to appear. Prepare to discuss questions including:

1. What are the strengths and weaknesses of the management scoring approach?
2. What types of management practices are omitted?
3. Is the link between management and productivity causal?
4. Think of an example where better management practices have directly improve productivity

### **Monday January 16: Martin Luther King Day: No class**

### **Wednesday January 18: Incentives management practices**

Main reading (to be discussed in class):

- The Lincoln Electric Company, HBS case study 9-376-028
- Management scoring grid 18 questions – use this score one firm or organization you know, and bring those scores to class read for discussion

The third section of the management scoring grid focused on incentive management practices, which is a subset of Human Resource management practices. This class will focus on this and how firms pay, promote, hire and fire their employees.

To prepare for this class take one firm you know well and score it on each of the 18 dimensions of the Bloom and Van Reenen (2007, QJE) scoring grid. Bring those scores to the next three classes as we will use individuals scoring as the basis of class discussion. In the first part of this class we will discuss incentives management and the scores you gave your firms on these dimensions (the last third of the grid).

In the second part of the lecture we will discuss the Lincoln Electric Company. Read the case and prepare to answer the following questions:

1. What types of performance incentives does Lincoln Electric provide, and how have these helped to drive performance?
2. Could Lincoln's system be replicated in other industries and other countries?
3. Do you think Lincoln electric's incentive systems would work outside the US? Prepare to discuss their success/failure in another country you know.
4. What are the downsides of Lincoln Electric's performance incentives? Try to relate this to experiences you have had with strong performance incentives.
5. Which of the several parts of Lincoln's structure – its ownership, management style, piece rates, bonuses, permanent employment, high levels of inventory, high rate of innovation, flexible work rules, lack of a union, and hiring only at limited "entry-level" positions – are independent, and which are better regarded as mutually supporting?

### **Monday January 23: Monitoring management practices**

Main readings:

- Danaher Corporation, HBS case Study
- Management scoring grid 18 questions – score one firm or organization you know.

The original McKinsey management scoring grid broke management practices down into three sections, and we will focus on the first block of monitoring management practices. This covers the way firms collect, process and act on data in their organizations. As before we will have a class discussion using the scores from the management scoring grid you prepared for the last class.

In the second part of class we will cover the Danaher Case Study. Read the case study carefully and prepare to discuss the following questions:

1. Why has Danaher been successful as a multi-business conglomerate over the past two decades? What do you see as the core attributes of its corporate strategy that have allowed it to sustain superior performance during this period?
2. Are there any salient tradeoffs that the DBS system creates for the organization?
3. How easy is it for other companies to mimic or emulate what Danaher does? Why?
4. How far can Danaher's advantage travel? What types of businesses are best suited to leveraging DBS? And what types of businesses are not well suited to this model?
5. What do you consider to be the biggest challenges that Danaher is likely to confront during the next 10-15 years? What can Larry Culp do to prepare for these challenges?

### **Wednesday January 25: Scientific Management and Experiments**

Main readings:

- HBS Case 5-313-018 Ctrip: Scientifically managing travel services

Other readings

- “Does working from home work? Evidence from a Chinese field experiment” (2014) Bloom, Liang, Roberts and Ying, forthcoming Quarterly Journal of Economics.

We will investigate Scientific management – a name for data driven management practices – and how firms practice this with the help of experiments. We will discuss the Ctrip case in class and draw from the research paper as well (which could be covered in the exam). Prepare to discuss the following questions in class:

- 1) What are the key elements of Ctrip's Scientific approach to management?
- 2) What is the role played by experimentation?
- 3) Will judgment based management ever outperform scientific management (if ever)? In what circumstance is that more or less likely to be true?
- 4) What makes Scientific management so hard in practice?

### **Monday January 30: Developing Country Management Practices**

Main Readings:

- Gokaldas Exports Stanford Business School Case Study, SM-213(A)  
<http://www.stanford.edu/~nbloom/GEX.pdf>

Other readings:

- “Does management matter: evidence from India” Nicholas Bloom, Benn Eifert, Aprajit Mahajan, David McKenzie and John Roberts, (2012), *Quarterly Journal of Economics*

This class will focus on management practices in developing countries. These appear to be typically worse than those in developed countries. We will run a class discussion around the Gokaldas case. Prepare to discuss the following questions around the case study:

1. Do you think management practices in developing countries are usually worse than those in developed countries?
2. What are the challenges they face – for Gokaldas did they face any challenges unique to a developing country?
3. What factors may lead to differences in management practices between firms in developing and developed countries?

### **Wednesday February 1: Culture and Globalization:**

Main Readings:

- Lincoln Electric Venturing Abroad case
- Cemex case: Global Competition in a Local Business (Stanford GSB Case IB-17)

This class will use two cases on globalization and culture. In the first half we will discuss the Lincoln electric case. Prepare to discuss the following issues/questions in class.

1. What made Lincoln's system so unusual in the US context?
2. What problems did Lincoln face in trying to take its system to other countries?
3. Was Lincoln's system a good model for other US manufacturing companies to follow?

In the second part we will discuss the Cemex case, which focuses on a classic David – vs - Goliath business case where a firm from a developing country through the sheer focus on world-class management practices came from being a local cement firm to a global superpower in the industry. Prepare to answer the following questions:

- 1) Why are global companies emerging in the cement business? What is the advantage of being global in this business?
- 2) How does the theory of the firm help us understand the Cemex case? How does this case call the theory into question?
- 3) After gaining scale in Mexico, Cemex enters Spain. Why did many doubt Cemex's ability to add value to the Spanish acquisitions? What did Cemex find out about itself in this process?
- 4) What do you make of Cemex's acquisitions?

### **Monday February 6<sup>th</sup>: Field experiments**

Main Reading:

- ID Insight HBS case study (N9-814-103)

Other readings

- “Does working from home work? Evidence from a Chinese field experiment” (2014) Bloom, Liang, Roberts and Ying, forthcoming Quarterly Journal of Economics.
- “Does management matter: evidence from India” Nicholas Bloom, Benn Eifert, Aprajit Mahajan, David McKenzie and John Roberts, (2012), *Quarterly Journal of Economics*

This class will discuss a case-study on running randomized control trials – experiments – and discuss the pros and cons for this as a management strategy in organizations. We will draw on the prior readings of RCT experiments in Quarterly Journal of Economics articles covering Ctrip and the India Management experiment.

### **Wednesday 8<sup>th</sup>: Class Mid-Term Break**

#### **Monday February 13: Private Equity**

Main reading

- “Private Equity, Jobs and Productivity”, Steve Davis, John Haltiwanger, Kyle Handley, Ron Jarmin, Josh Lerner and Javier Miranda, *American Economic Review* (2014) available here [www.stanford.edu/~nbloom/AER\\_PE.pdf](http://www.stanford.edu/~nbloom/AER_PE.pdf)
- See also [http://en.wikipedia.org/wiki/Private\\_equity\\_fund](http://en.wikipedia.org/wiki/Private_equity_fund)

In the first half we will talk about one way to improve management practices – private equity firms. Be prepared to answer the following questions:

1. *What is a private equity firm – explain the two types of partners and what they do*
2. *How might a private equity firm make money? How might a private equity firm improve management and productivity?*
3. *What types of firms should private equity firms typically target?*
4. *Who might be opposed to private equity firms?*

In the second half John-Paul Ho from Crimson Investment will talk about Private Equity in the US and internationally <http://www.crimsoninvestment.com/>

#### **Wednesday February 15: Lean Plug Game, Group A**

We will play the Lean Plug Game which is useful for demonstrating concepts around layout, push/pull system, one-piece flow, Kanban, training and work balance. Because the game is aimed at 12 people max we will split the class into two groups and have only one group come in for each day (hence the other group gets a reading break). Attendance in this class is assessed (like all classes) – if you have any conflicts advise me in advance so we can make sure you can make your date.

### **Monday February 20: Presidents Day: No class**

#### **Wednesday February 22: Selection and Incentive effects:**

**Main Readings:**

- Lazear (2000)
- Performance pay at Safelite Glass A: 9-800-291
- RKO Warner case: 9-190-067

In the first half of class Sarah Bloom Raskin ([https://en.wikipedia.org/wiki/Sarah\\_Bloom\\_Raskin](https://en.wikipedia.org/wiki/Sarah_Bloom_Raskin)) will talk about management in the Government – particularly the US Treasury.

In the second half of class we will discuss the Safelite case which focused on selection effects. Prepare to discuss the following questions:

1. Why was the productivity of Safelite installers so low?
2. Does the proposed PPP plan address the problems raised in the case? Does it introduce new problems?
3. What are the pros and cons from going from wage rates to piece rates? In terms of impacts consider turnover, recruitment, productivity and product quality.
4. Are Safelite installers good candidates for piece-rate pay?
5. Should there be a guaranteed wage?

In addition we will also discuss the RKO Warner case in class.

1. What is your analysis of the incentive compensation plan at RKO?
2. What should Berns do about the plan? Abolish it? Leave it alone? Redesign it?
3. Why is the store plan based on revenues instead of profits?

### **Monday February 27: Lean Plug Game, Group B**

See above – the second group for the lean plug game.

### **Wednesday March 1: Power and decentralization**

Main readings:

- Alibaba Group, HBS case study 9-710-436 (in course reader)

Other readings

- “The organization of firms across countries”, (2012), Nick Bloom, Raffaella Sadun and John Van Reenen, *Quarterly Journal of Economics*

This class will focus on where power resides in firms. That is who gets to make decisions over things like hiring, investment, products and marketing. Is it the CEO, or the business unit manager?

In the first part of the class the Provost will talk about management practices in Stanford (both in reference to management in general but also the theme of decentralization – as you will see Stanford is a very decentralized institution).

In the second part of the class we will discuss the Alibaba case, which highlights the trade-offs CEOs have to make in various organizational decisions in fast growing companies. Prepare to discuss the following questions from the case-study:

1. Is the current degree of competition among the business units appropriate? Do you think that Jack Ma should encourage more cooperation? If so, how?
2. As Alibaba develops new businesses, how should the firm incorporate them into the organizational structure? What are the benefits and costs of having new businesses report directly to Jack Ma?



3. What should Jack Ma and his C-Suite be concerned about? Should Jack Ma centralize more functions at the corporate level? If so, which ones? Should Jack Ma create a Chief Operating Office position?
4. Where should the new business initiatives (mobile platforms and financing small businesses) reside organizationally? At corporate or within the individual business units?

### **Monday March 6: Management Practices in Education (Renata Lemos)**

Main readings:

- The New Yorker, Steven Brill, "The Rubber Room", Aug 31, 2009

Other readings:

- Injecting Charter School Best Practices into Traditional Public Schools: Evidence From Field Experiments", Fryer, R.G. (2014), Quarterly Journal of Economics, 129(3): 1355-1407
- Does Management Matter in Schools?", Bloom, N., Lemos, R., Sadun, R., Van Reenen, J. (2015), The Economic Journal, 125(584): 647-674
- Herding cats? Management and University Performance", McCormack, J., Propper, C., Smith, S.L. (2014), The Economic Journal, 124(578):534-564

Basic techniques of modern management that have become standard in leading organisations in other parts of the economy are now becoming widespread in the public sector. In education, these practices include rigorous collection of data on lessons, systematic feedback and supporting staff that struggle while rewarding and promoting good teachers. In this class we will focus on management practices in education. Prepare to discuss the following points:

1. How do you think management practices in New York schools will impact pupil performance?
2. How would you change the practices in the New York school district?
3. Can you provide examples from your own experiences of management practices in schools in other countries?

### **Wednesday March 8: Management Practices in Healthcare (Renata Lemos)**

Main readings:

- Virginia Mason Medical Centre, HBS Case Study 9-606-044

Other readings:

- The Impact of Competition on Management Quality: Evidence from Public Hospitals. Bloom, N., Propper, C., Seiler, S., and Van Reenen, J. (2015), Review of Economic Studies, 82(2):457-489

Analogous to the previous class, in this class we will investigate management practices in healthcare. We will go over the Virginia Mason case study, discussing how management concepts applied in manufacturing can be translatable into the healthcare setting and investigating the link between management practices and patient outcomes. Prepare to discuss the following points:

1. What is Gary Kaplan trying to achieve at Virginia Mason?

2. How does the Toyota Production System fit into his strategy?
3. What is your view of the "people are not cars" debate?
4. Is Kaplan's approach transferable to other U.S. hospitals?

### **Monday March 13: Family Ownership and Management (Renata Lemos)**

Main readings:

- "Inside the Family Firm: The Role of Families in Succession Decisions and Performance", Bennesen, M., Nielsen K.M., Perez-Gonzalez, F., Wolfenzon, D. (2007), The Quarterly Journal of Economics, 122(2): 647-691

Other readings:

- "All in the family? CEO succession and firm organization", Lemos, R. and Scur, D. (2016), CSAE Working Paper WPS/2016-29.

Family firms are the most prevalent type of firm in the world and account for a large proportion of the economic activity and employment, especially in developing countries. In this class, we discuss the relationship between family control and firm organization and performance around the world. Prepare to discuss the following points:"

1. Why should we care about how family firms are run?
2. What are the benefits of family ownership?
3. What are the drawbacks of family ownership?
4. Do you think family ownership leads to better or worse outcomes? Why?

### **Wednesday March 15: Revision Session** (run by Emanuele)