Management Practices in Europe, the US and Emerging Markets
Nick Bloom (Stanford Economics and GSB)
John Van Reenen (LSE and Stanford GSB)
Lecture 1: Management and firm Performance
COURSE OUTLINE

• Can management improve the world?
• How can we measure management?
  – Monitoring/operations [Case: Danaher]
  – People/incentives [Case: Lincoln Electric]
  – Targets
• Management in emerging economies [Case: Gokaldas]
• Decentralization of power [Case: Alibaba]
• Management in hospitals & schools [Case: Virginia Mason]
• Themes:
  – What causes better management?
  – Impact of management on performance?
Why care about management and productivity?

Measuring management
Productivity

- Gross Domestic Production (GDP) per capita – basically Income per person – is a key indicator of economic wellbeing

- GDP per capita increases by growth of inputs (e.g. more capital or labor) or higher Total Factor Productivity (TFP)

\[
\text{GDP} = \text{Inputs} + \text{Total Factor Productivity (TFP)}
\]

  e.g. Labor, capital

- Analogously at firm level “value added” like GDP
Productivity “Facts”

• **Macro**: Productivity varies a lot across countries & time
  – Robert Solow: TFP growth at least as important as growth of inputs in explaining economic growth
  – Cross country GDP/capita differences largely due to TFP differences
  – OECD catch-up with US since WW2, but slowdown since crisis began in 2008
Large Income & TFP Differences between countries

Source: Jones and Romer (2012). US=1

Nick Bloom and John Van Reenen, Management Practices, 2013
Factors increasing productivity

• Proximate factors:
  – “Hard” technology (e.g. Research & Development)
  – Skills (e.g. Expansion of college education)
  – **Management** (a technology & a skill?)

• Some deeper factors “driving” the above
  – Competition
  – Globalization
  – Regulations & government policies
  – Legal
  – Culture
Productivity Differences across firms within countries is huge

- US Census data on population of plants
  - Plant at 90\textsuperscript{th} percentile has labor productivity 4x plant at the 10\textsuperscript{th} percentile (Syverson, 2004), TFP 2x

- Not just mismeasured prices: we see these differences in detailed industries where we measure plant prices (e.g. boxes, bread, block ice, concrete, plywood, etc.)

- These firm-level productivity differences could account for large part of cross country differences.....
How Aggregate Total Factor Productivity (TFP) increases

• **Within Firms (Traditional view)**
  – The same firms become more productive (e.g. new technology spreads quickly to all firms, like Internet)

• **Between Firms (“creative destruction”)**
  – Low TFP firms exit and resources are reallocated to high TFP firms
    • High TFP firms expand (e.g. more jobs) & low TFP firms contract (e.g. less jobs)
    • Exit/entry
What about management?

• Case studies of management:
  – Toyota and British Leyland

• Obviously management matters but
  – how to generalize?
  – how much does it matter?
  – what causes the differences?
Why care about management and productivity?

Measuring management
The Survey Methodology

1) Developing management questions
   • Scorecard for 18 monitoring, targets and incentives practices
   • ≈45 minute phone interview of manufacturing plant managers

2) Obtaining unbiased comparable responses ("Double-blind")
   • Interviewers do not know the company’s performance
   • Managers are not informed (in advance) they are scored
   • Run from London, with same training and country rotation

3) Getting firms to participate in the interview
   • Introduced as “Lean-manufacturing” interview, no financials
   • Official Endorsement: Bundesbank, PBC, CII & RBI, etc.
   • Run by 100+ MBAs (credible with business experience)
Example (monitoring) question (4): “how is performance tracked?”

| Score | (1): Measures tracked do not indicate directly if overall business objectives are being met. Certain processes aren’t tracked at all | (3): Most key performance indicators are tracked formally. Tracking is overseen by senior management | (5): Performance is continuously tracked and communicated, both formally and informally, to all staff using a range of visual management tools |
Examples of performance metrics – Toyota
THE LINK BETWEEN PRODUCTIVITY AND MANAGEMENT HOLDS TRUE ACROSS DIFFERENT COUNTRIES

Labour productivity

- U.S.
- U.K.

Labour productivity

- CN
- JP

Labour productivity

- FR
- DE
- SE
- PL

Labour productivity

- IT
- PT
- GR

* Log scale (sales per worker)
** Firms are grouped in 0.5 increments of assessed management score
Management practices and performance

Productivity log(sales/employee) vs. Management score
BETTER PERFORMANCE IS CORRELATED WITH BETTER MANAGEMENT

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Productivity</th>
<th>Profits (ROCE)</th>
<th>5yr Sales growth</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimation</td>
<td>OLS</td>
<td>OLS</td>
<td>OLS</td>
<td>Probit</td>
</tr>
<tr>
<td>Firm sample</td>
<td>All</td>
<td>All</td>
<td>Quoted</td>
<td>All</td>
</tr>
<tr>
<td>Management</td>
<td>23.3***</td>
<td>1.952***</td>
<td>6.738***</td>
<td>-26.2**</td>
</tr>
<tr>
<td>Firms</td>
<td>2,927</td>
<td>2,927</td>
<td>2,927</td>
<td>3,161</td>
</tr>
</tbody>
</table>

Notes: OLS Regressions includes controls for country, industry, year, firm-size, firm-age, skills etc.

Is this causal?
Management practices across countries

Average Country Management Score

**Distinct groups**
Management practices across firms (US and India)

**US**, manufacturing, mean=3.33 (N=695)

**India**, manufacturing, mean=2.69 (N=620)

Firm level management score, manufacturing firms 100 to 5000 employees
Some firms seemed to be too truthful

Who rules the home in Ireland

*Interviewer:* “Would you mind if I asked how much your bonus is as a manager?”

*Manager:* “I don't even tell my wife how much my bonus is!”

*Interviewer:* “Frankly, that’s probably the right decision...”

Staff retention the American way

*Manager:* “I spend most of my time walking around cuddling and encouraging people - my staff tell me that I give great hugs”

The trusted Secretary

*French secretary:* “You want to talk to the plant manager? There are legal proceedings against him, so hurry up!!”
Measuring management

Danaher

Monitoring management practices

Drivers of good management
Q1 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?

- Operations

- Corporate strategy
How easy or difficult is it for other companies to mimic or emulate what Danaher does? Why?
Are there any salient trade-offs that the DBS system creates for the organization?
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 the organization for these challenges?
Wrap up

1) Large variation in monitoring practices – best organizations monitor extensively and feed into continuous improvement systems

2) Variation common across all industries we have looked at – manufacturing, retail, schools, hospitals, clinics and charities

3) So potential for improvement is extensive, especially in smaller organizations, in less competitive areas & in developing countries
My favourite quotes

The bizarre

*Interviewer:* “[long silence]…….hello, hello….are you still there….hello”

*Production Manager:* “…….I’m sorry, I just got distracted by a submarine surfacing in front of my window”

The unbelievable

*[Male manager speaking to a female interviewer]*

*Production Manager:* “I would like you to call me “Daddy” when we talk”

*[End of interview…]*
Back Up
In long-run most countries have enjoyed catch up Growth with the GDP/head leader (US) but not all

Source: Maddison (2008) Data is smoothed by decade
Distribution of plant TFP differences: US-Indian productivity gap related to US having far fewer low productivity plants

Source: Hsieh and Klenow (2008); mean=1

Nick Bloom and John Van Reenen, Management Practices, 2013
These two effects are well known to cricket fans ("batting average" effect)

Within batsman (each batsman improves)

Between batsman (more time for your best batsman)
Some Empirical Evidence on reallocation

• Need large-scale database of many firms/plants
• Reallocation appears to be an important factor:
  – About half of aggregate TFP growth in a 5 year period in a typical industry due to reallocation
  – Following trade liberalizations about half of productivity gains due to shrinking/exit of less productive plants
  – For certain sectors like retail trade, almost all of labor productivity growth is due to exit/entry of stores
• Caveat:
  – Reallocation is not immediate (e.g. trade dislocation). So many oppose trade as these are losers as well as winners
Setting up your clicker

• Press “GO”

• Then slowly press “0” and then “5” (channel is “05”)

• Then slowly press “GO” again

• A green light should appear signaling the clicker worked
(3) Process problem documentation

(1): No, process improvements are made when problems occur.

(3): Improvements are made in one week workshops involving all staff, to improve performance in their area of the plant.

(5): Exposing problems in a structured way is integral to individuals’ responsibilities and resolution occurs as a part of normal business processes rather than by extraordinary effort/teams.
Measuring management

Danaher

Monitoring management practices

Drivers of good management
Monitoring/Performance management

Run through 5 dimensions on monitoring management (questions 1 to 6)

The concept is around the collection and use of information.

While the data we have shown is for manufacturing, these questions have been used in retail, hospitals, schools, healthcare clinics, tax collection agencies, nursing homes and law firms.
### (3) Process problem documentation

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<thead>
<tr>
<th>Score</th>
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Nick Bloom and John Van Reenen, Management Practices, 2013
The survey scores to question (3), process problem documentation – all countries, manufacturing

All countries, manufacturing firms (100 to 5000 employees), 9840 observations
The survey scores to question (3), process problem documentation – **US, manufacturing**

Average 3.42

US, manufacturing firms (100 to 5000 employees), 1298 observations
The survey scores to question (3), process problem documentation – **India, manufacturing**

Average 2.64

India, manufacturing firms (100 to 5000 employees), 1137 observations
The survey scores to question (3), process problem documentation – US, Canada and UK, retail

All countries, retail firms (100 to 5000 employees)
661 observations
The survey scores to question (3), process problem documentation – developed countries, hospitals

Hospitals, Canada, France, Germany, Italy, Sweden, UK, US, 1183 observations
(4) Performance tracking

| Score | Measures tracked do not indicate directly if overall business objectives are being met. Tracking is an ad-hoc process (certain processes aren’t tracked at all) | Most key performance indicators are tracked formally. Tracking is overseen by senior management. | Performance is continuously tracked and communicated, both formally and informally, to all staff using a range of visual management tools. |
Examples of performance metrics - Heathrow
Examples of performance metrics – Toyota
(4) Performance tracking

(1): Measures tracked do not indicate directly if overall business objectives are being met. Tracking is an ad-hoc process (certain processes aren’t tracked at all)

(3): Most key performance indicators are tracked formally. Tracking is overseen by senior management.

(5): Performance is continuously tracked and communicated, both formally and informally, to all staff using a range of visual management tools.
Performance tracking (4): all countries, manufacturing

All countries, manufacturing firms (100 to 5000 employees), 9838 observations

Average 3.36
<table>
<thead>
<tr>
<th>Score</th>
<th>(1): Performance is reviewed infrequently or in an unmeaningful way e.g. only success or failure is noted.</th>
<th>(3): Performance is reviewed periodically with successes and failures identified. Results are communicated to senior management. No clear follow-up plan is adopted.</th>
<th>(5): Performance is continually reviewed, based on indicators tracked. All aspects are followed up ensure continuous improvement. Results are communicated to all staff</th>
</tr>
</thead>
</table>

*(5) Performance review*
(5) Performance review

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Performance is reviewed infrequently or in an un-meaningful way e.g. only success or failure is noted.</td>
</tr>
<tr>
<td>3</td>
<td>Performance is reviewed periodically with successes and failures identified. Results are communicated to senior management. No clear follow-up plan is adopted.</td>
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<td>5</td>
<td>Performance is continually reviewed, based on indicators tracked. All aspects are followed up ensure continuous improvement. Results are communicated to all staff</td>
</tr>
</tbody>
</table>

Nick Bloom and John Van Reenen, Management Practices, 2013
Performance review (5): all countries, manufacturing

All countries, manufacturing firms (100 to 5000 employees), 9827 observations
Score (1): The right data or information for a constructive discussion is often not present or conversations overly focus on data that is not meaningful. Clear agenda is not known and purpose is not stated explicitly.

(3): Review conversations are held with the appropriate data and information present. Objectives of meetings are clear to all participating and a clear agenda is present. Conversations do not, as a matter of course, drive to the root causes of the problems.

(5): Regular review/performance conversations focus on problem solving and addressing root causes. Purpose, agenda and follow-up steps are clear to all. Meetings are an opportunity for constructive feedback and coaching.
(6) Performance dialogue

(1): The right data or information for a constructive discussion is often not present or conversations overly focus on data that is not meaningful. Clear agenda is not known and purpose is not stated explicitly.

(3): Review conversations are held with the appropriate data and information present. Objectives of meetings are clear to all participating and a clear agenda is present. Conversations do not, as a matter of course, drive to the root causes of the problems.

(5): Regular review/performance conversations focus on problem solving and addressing root causes. Purpose, agenda and follow-up steps are clear to all. Meetings are an opportunity for constructive feedback and coaching.
Performance dialogue (6): all countries, manufacturing

All countries, manufacturing firms (100 to 5000 employees), 9794 observations
| Score | (1): Other than JIT delivery from suppliers few modern manufacturing techniques have been introduced, (or have been introduced in an ad-hoc manner) | (3): Some aspects of modern manufacturing techniques have been introduced, through informal/isolated change programs | (5): All major aspects of modern manufacturing have been introduced (Just-in-time, autonomation, flexible manpower, support systems, attitudes and behaviour) in a formal way |

(1) Modern manufacturing, introduction
Modern manufacturing (1): all countries, manufacturing

All countries, manufacturing firms (100 to 5000 employees), 9830 observations
Marking out a factory floor
Why Lean is not always good….

The £7 million guide to a tidy desk, London Times, January 5, 2007

Red tape has given way to black marker tape for thousands of bemused civil servants as part of a £7 million paperclip revolution aimed at ensuring that they keep the tools of their trade in the right place. Office workers have been given the tape to mark out where they should put their pens and pencils, their computer keyboards and to indicate where to place their phones.

National Insurance staff have been chosen as guinea-pigs for the latest phase of the “Lean” programme brought in by the logistics consultants Unipart. The programme prohibits workers from keeping personal items on their desks.
Measuring management

Danaher

Monitoring management practices

Drivers of good management
Various ways that competition may influence management

- **Selection** – badly run firms more likely to exit
- **Effort** – forces badly run firms to try harder to survive

We find competition is strongly linked with better management through a mixture of selection & effort
Sample of 9469 manufacturing and 661 retail firms (private sector panel) and 1183 hospitals and 780 schools (public sector panel). Reported competitors defined from the response to the question “How many competitors does your [organization] face?”
FAMILY FIRMS AND MODELS OF MANAGEMENT PRACTICES

Impact of family firms depends on involvement

- **Ownership** but not management probably positive
  - Concentrated ownership so better monitoring
- **Management** probably negative
  - Smaller pool to select CEO from
  - Possible “Carnegie” effect on future CEO’s
  - Less career incentive for non-family managers
FAMILY FIRMS TYPICALLY HAVE THE WORST MANAGEMENT

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>Management Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispersed Shareholders</td>
<td>3.2</td>
</tr>
<tr>
<td>Private Equity</td>
<td>3.1</td>
</tr>
<tr>
<td>Family owned, non-family CEO</td>
<td>3.0</td>
</tr>
<tr>
<td>Managers</td>
<td>2.9</td>
</tr>
<tr>
<td>Private Individuals</td>
<td>2.8</td>
</tr>
<tr>
<td>Government</td>
<td>2.7</td>
</tr>
<tr>
<td>Family owned, family CEO</td>
<td>2.6</td>
</tr>
<tr>
<td>Founder owned, founder CEO</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Management scores after controlling for country, industry and number of employees. Data from 9085 manufacturers and 658 retailers. “Founder owned, founder CEO” firms are those still owned and managed by their founders. “Family firms” are those owned by descendants of the founder. “Dispersed shareholder” firms are those with no shareholder with more than 25% of equity, such as widely held public firms.
EDUCATION FOR NON-MANAGERS AND MANAGERS APPEAR LINKED TO BETTER MANAGEMENT

Sample of 8,032 manufacturing and 647 retail firms.

Nick Bloom and John Van Reenen, Management Practices, 2013

Percentage of employees with a college degree (%)
SUMMARY OF SOME DETERMINANTS OF MANAGEMENT (& PRODUCTIVITY)

- Product market competition
- Meritocratic CEO selection
- Human Capital
- Others
  - public sector
  - Multinationals
  - private equity
  - Labor market regulations
- Note Danaher selecting industries where there is “low hanging fruit” to improve management