MANAGEMENT PRACTICES, OWNERSHIP & COMPETITION

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MANAGEMENT PRACTICES, OWNERSHIP & COMPETITION
MOTIVATION

• Evidence of huge variation in profits & productivity across firms & nations
  – In narrow industry (e.g. US concrete) top 10% of plants four times as productive as bottom 10%

• How much of these are due to differences in management?

• What can policy makers (& business people) do to improve?

• Implications for Sweden (doing well, but room for improvement)
REASONS FOR BIG PRODUCTIVITY SPREAD

• “Trad” economist: variation due to “hard technologies”
  – R&D, patents, diffusion (e.g. Information & Communication Technologies)
REASONS FOR BIG PRODUCTIVITY SPREAD

• “Trad” economist: variation due to “hard technologies”
  – R&D, patents, diffusion like ICT (Information & Communication Technologies)

• These hard technologies matter a lot, but:
  – After controlling for technology, still mostly unexplained
  – Productivity effects of technologies like ICT depend on firm management/organization (e.g. Bloom Sadun & Van Reenen, 2012, AER on Sweden & 6 EU countries)

• Heterogeneity of management practices
  – Business case studies
  – Econometric tradition
  – Measurement hard
SUMMARY

• Develop a way of measuring some core management practices across industries & 20 countries
  – Huge differences in management quality across countries & firms
  – Productivity differences closely related to management
  – Management accounts for up to ½ of between country productivity differences

• Systematic drivers of management differences
  – Competition, public ownership, skills, regulation
  – Important implications for Swedish business leaders & policy makers
Measuring Management

Modelling Management

Management & performance

Explaining Management
1) Developing management questions
   - Scorecard for 18 monitoring (e.g. lean), targets & people (e.g. pay, promotions, retention and hiring). ≈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 LSE, with same training and country rotation

3) Getting firms to participate in the interview
   - Introduced as “Lean-manufacturing” interview, no financials
   - Official Endorsement: Bundesbank, Sveriges Riksbank, etc.
   - Run >100 MBA types (loud, assertive & business experience)
| 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 |

**Note:** All 18 questions and over 50 examples in Bloom & Van Reenen (2007) http://worldmanagementsurvey.org/
| Score | (1) People are promoted primarily upon the basis of tenure, irrespective of performance (ability & effort) | (3) People are promoted primarily upon the basis of performance | (5) We actively identify, develop and promote our top performers |

INCENTIVES - e.g. “HOW DOES THE PROMOTION SYSTEM WORK?”
Plant locations from World Management Survey (~8,000 firms, 3 major waves: 2004, 2006, 2009; 20 countries)

Medium sized manufacturing firms (50-5,000 workers, median≈250)

Now extended to Hospitals, Retail, Schools, Universities, etc.

2013: extending to African countries & more Latin America
“It is on account of the wide range [of ability] among the employers of labor that we have the phenomenon in every community and in every trade some employers realizing no profits at all, while others are making fair profits; others, again, large profits; others, still, colossal profits.”

Francis Walker (QJE, April 1887)

Walker ran the 1870 and 1880 US Census
“I am very nearly in agreement with General Walker’s Theory of profits….the earnings of management of a manufacturer represents the value of the addition which his work makes to the total produce of capital and industry....”
"There can be no one best way of organizing a business.

Conformity with the ‘rules’ of management did not result in success or non-conformity in commercial failure. Of the 20 firms assessed as ‘above average’ in success only 9 had an organizational pattern of the orthodox kind”

Joan Woodward (Management and Technology, 1958)

From a detailed survey of 200 UK manufacturing firms
ECONOMIC PERSPECTIVES ON MANAGEMENT

• Management as Design
  Contingency: No better or worse management: different optimal “styles” (Organizational Econ; Woodward)

• Management as a Technology (MAT)
  – Management the key driver of firm’s productivity
  – Bloom, Sadun & Van Reenen (2013): analytical & simulation models gives 3 results found in data:
    • Performance increasing in management
    • Competition improves management
    • Management & firm size correlation (“reallocation”) weaker in more distorted economies

• We show positive evidence for both perspectives, but MAT more important in our data
[Male manager speaking to an Australian female interviewer]

*Production Manager:* “Your accent is really cute and I love the way you talk. Do you fancy meeting up near the factory?”

*Interviewer* “Sorry, but I’m washing my hair every night for the next month….”
Production Manager: “Are you a Brahmin?’

Interviewer “Yes, why do you ask?”

Production manager “And are you married?”

Interviewer “No?”

Production manager “Excellent, excellent, my son is looking for a bride and I think you could be perfect. I must contact your parents to discuss this”
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Explaining Management
MANAGEMENT PRACTICE SCORES ACROSS COUNTRIES

Note: Unweighted averages taken across all firms within each country; 9,995 obs
HUGE VARIATION IN MANAGEMENT SCORES ACROSS FIRMS WITHIN COUNTRIES

Note: Bars are the histogram of the actual density. Scores from 9,995 management interviews across 20 countries.
LINK BETWEEN PRODUCTIVITY & MANAGEMENT HOLDS TRUE ACROSS DIFFERENT COUNTRIES

** Firms are grouped in 0.5 increments of assessed management score
BUT DOES MANAGEMENT CAUSE BETTER PERFORMANCE? RANDOMIZED CONTROL TRIALS: BLOOM ET AL (2013)

- Experiment on plants in Indian textile firms outside Mumbai

- Randomized treatment plants get heavy management consulting, control plants get very light consulting (just enough to get data)

- Collected weekly performance data on all plants from 2008 to 2010

- Improved management practices led to large & significant improvements in:
  - **Productivity**: One standard deviation increase in management caused 10% higher (TF) productivity
  - **Profitability**: around $325k p.a. compared to ~$200k market cost of consultancy
MANY PARTS OF THE FACTORIES ARE DIRTY AND UNSAFE
THE FACTORIES ARE ALSO DISORGANIZED

- Instrument not removed after use, blocking hallway.
- Oil leaking from the machine.
- Cotton lying on the floor.
- Instrument blocking the hallway.
Worker involved in “5S” initiative on the shop floor, marking out the area around the model machine

Snag tagging to identify the abnormalities on & around the machines, such as redundant materials, broken equipment, or accident areas. The operator and the maintenance team is responsible for removing these abnormalities.
PRODUCTIVITY IMPROVEMENTS IN RCT EXPERIMENT ON ADOPTION OF MANAGEMENT PRACTICES

Source: Bloom, Eifert, Mahajan, McKenzie & Roberts (2013)
ACCOUNTING FOR THE CROSS COUNTRY DIFFERENCES IN MANAGEMENT & PRODUCTIVITY (US BENCHMARK)

Difference in national Management scores
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Within Firm: Difference in unweighted averages across firms

Between firm creative destruction: How does better management translate into higher market shares

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How does better management translate into higher market shares

Within Firm:
Difference in unweighted averages across firms

Difference in national Management scores

~2/3

~1/3 due to between effect
ACCOUNTING FOR THE CROSS COUNTRY DIFFERENCES IN MANAGEMENT & PRODUCTIVITY (US BENCHMARK)

Difference in national Productivity levels

Difference in national Management scores

Within Firm: Difference in unweighted averages across firms

Between firm creative destruction: How does better management translate into higher market shares

Other factors

Up to 50%

~2/3

~1/3 due to between effect
Notes: Total weighted mean management deficit with the US is the number on top of bar. This is decomposed into (i) reallocation effect (OP, blue bar) and (ii) unweighted average management scores (sd=1, red bar). Domestic firms, scores corrected for sampling bias.

Similar ranking to Bartelsman, Haltiwanger & Scarpetta (2013, AER) sub-sample.
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Explaining Management
Why does management vary so much?

- Competition
- Family firms
- Multinationals
- Education
- Labor market regulation
- Information
COMPETITION IMPROVES MANAGEMENT

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?”
COMPETITION EFFECT IS CAUSAL

• Competition helps improve management through:
  – Creative destruction (between firm selection)
  – Managerial effort (within firm)

• Use “natural experiments” to generate exogenous increases in competition. Examples:
  – Trade liberalization following China accession to WTO & subsequent phase out of MFA quotas in textiles & apparel industries Bloom, Draca & Van Reenen (2013)
  – Hospital competition in England under Blair reforms (Bloom, Propper, Seiler & Van Reenen, 2013)
ON AVERAGE FAMILY-RUN FIRMS & GOVERNMENT OWNED ORGANIZATIONS HAVE POOR MANAGEMENT

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.
MULTINATIONALS APPEAR TO ACHIEVE GOOD MANAGEMENT PRACTICES WHEREVER THEY LOCATE

Sample of 7,262 manufacturing and 661 retail firms, of which 5,441 are purely domestic and 2,482 are foreign multinationals. Domestic multinationals are excluded – that is the domestic subsidiaries of multinational firms (like a Toyota subsidiary in Japan).
EDUCATION FOR NON-MANAGERS AND MANAGERS APPEAR LINKED TO BETTER MANAGEMENT

Sample of 8,032 manufacturing and 647 retail firms.
LABOR MARKET REGULATION NEGATIVELY CORRELATED WITH PEOPLE MANAGEMENT

Note: Averaged across all manufacturing firms within each country (9,079 observations). We did not include other sectors as we do not have the same international coverage. Incentives management is defined as management practices around hiring, firing, pay, and promotions. The index is from the Doing Business database: [http://www.doingbusiness.org/ExploreTopics/EmployingWorkers/](http://www.doingbusiness.org/ExploreTopics/EmployingWorkers/).
We asked:

“Excluding yourself, how well managed would you say your firm is on a scale of 1 to 10, where 1 is worst practice, 5 is average and 10 is best practice”

We also asked them to give themselves scores on operations and people management separately
SELF-SCORES ARE UNCORRELATED WITH PRODUCTIVITY

* Insignificant 0.03 correlation with labor productivity, cf. management score has a 0.295
CONCLUSIONS: POLICY IMPLICATIONS

• For business people (an optimistic story)
  – Many basic things can be done to improve performance
  – Even in difficult environments, there are excellent firms (e.g. multinational evidence)
  – Family firms need to think about succession planning

• For Policy makers
  – Enhance competition
  – Reduce tax distortion (e.g. towards family & small firms)
  – Human capital improvements
  – Spreading information on best practice
CONCLUSIONS: SWEDISH SITUATION

• Sweden successful
  – Very high in management rankings
  – Strong international sector (multinationals)
  – Competitive product & labor markets
  – High skills

• Room for improvement
  – Most of US-Sweden gap due to slower reallocation
  – Public sector productivity
  – Domestic firms, family firms, etc.
  – Some slippage in education results (youth & immigrant issues)
MY FAVOURITE QUOTES:

The difficulties of defining ownership in Europe

*Production Manager:* “We’re owned by the Mafia”

*Interviewer:* “I think that’s the “Other” category…….although I guess I could put you down as an “*Italian multinational*” ?”

Americans on geography

*Interviewer:* “How many production sites do you have abroad?*

*Manager in Indiana, US:* “Well…we have one in Texas…”
FURTHER READING

- **Website with all reports & methods**
  - [http://worldmanagementsurvey.org/](http://worldmanagementsurvey.org/)


- **Summary**

- **Management as a Technology**
ADDITIONAL CONTROLS FOR “NOISE”

INTERVIEWEE CONTROLS

• Gender, seniority, tenure in post, tenure in firm, countries worked in, foreign, worked in US, plant location, reliability score

INTERVIEWER CONTROLS

• Set of interviewer dummies, cumulative interviews run, prior firm contacts

TIME CONTROLS

• Day of the week, time of day (interviewer), time of the day (interviewee), duration of interview, days from project start
FUNDAMENTAL CAUSES OF MANAGEMENT VARIATIONS

• Jan Rifkind’s (HBS) 4 ‘shuns
  – **Perception** (I don’t know I’m bad)
  – **Persuasion** (I don’t know how to change)
  – **Motivation** (I don’t want to change – competition, family firms, etc.)
  – **Organization** (I can’t get everyone else to change)