Measuring Management

Management Models

Data Description

Empirics
MOTIVATION

• How to collect internationally comparable data on management & organization?
• We live in a golden age of data thanks to IT advances & liberalization
TYPES OF DATA

• Administrative Data
  – Business Registers
  – Surveys of Firms/plants (US Economic Census, ASM)

• Big Data ("found")
  – Web scraping
  – Company Accounts (From Compustat to BVD ORBIS)

• Surveys
  – Access to above is limited
  – Harder to measure economic concepts
    • Technology (patents)
    • Management & organization
TWO APPROACHES TO MEASURING FIRM MANAGEMENT

• Closed Survey Questions
  – Classical Approach to obtain data
  – “Tick-box” approach

• Open Survey Questions
  – Closer to case study method because of the difficulty of getting accurate responses
  – Interviewer classifies answers based on open ended interview
  – Respondent doesn’t know they are being scored
We analyze the Census Bureau's survey of management practices in over 30,000 manufacturing plants.

Benchmark Your Firm

Well managed firms are profitable, innovative and growing.

Featured Publications

Harvard Business Review - does management really work?
Are organizations more likely to succeed if they adopt good management practices?

Research report for Management in America
More structured management practices are tightly linked to better performance.

Census Press release for Management in America
The U.S. Census Bureau released findings from the Management and Organizational Practices Survey.

© Management in America | Login
More results and data available here

The WMS generates data and reports that help managers and policy makers understand the drivers of better management practice.

Benchmark your manufacturing firm, hospital, school, or retail outlet against others in your country, industry or size class.

Featured publications

- Why do management practices differ across firms and countries?
- Management Practice and Productivity: Why They Matter
- Management in Healthcare: Why good practice really matters
UNDERLYING CONCEPT OF MANAGEMENT

SIMILAR

• Key dimensions:
  – Monitoring (lean, collection, continuous improvement)
  – Targets (stretch, time length, mixed, etc.)
  – People (pay, promotions, retention and hiring)

• We focus on aspects of firm that increase efficiency of delivering current set of goods & services

• Operational, not strategy or leadership
The Management and Organizational Practices survey asked about three basic types of management practices.

Car factory
| 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) & Appendix D

[http://worldmanagementsurvey.org/](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 |

**Note:** All 18 questions and over 50 examples in Bloom & Van Reenen (2007) & http://worldmanagementsurvey.org/
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
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, Bank of England, RBI, etc.
   • Run by 100 MBA types (loud, assertive & business experience)
Moments: TFP is increasing in management

Management is an average of all 18 questions (set to sd=1). TFP residuals of sales on capital, labor, skills controls plus a full set of SIC-3 industry, country and year dummies controls. N=8314
Management practices are associated with significantly better performance.
LINK BETWEEN PRODUCTIVITY & MANAGEMENT HOLDS TRUE ACROSS DIFFERENT COUNTRIES

Labour productivity* in different countries:

- U.S.
- U.K.
- FR
- DE
- SE
- PL
- CN
- JP
- IT
- PT
- GR

** Firms are grouped in 0.5 increments of assessed management score.
EDUCATION FOR NON-MANAGERS AND MANAGERS APPEAR LINKED TO BETTER MANAGEMENT

Sample of 8,032 manufacturing and 647 retail firms.

<table>
<thead>
<tr>
<th>Percentage of employees with a college degree (%)</th>
<th>Non-managers</th>
<th>Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 1 to 10 11 to 25 26 to 50 50+</td>
<td>2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3</td>
<td>2.5 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3</td>
</tr>
</tbody>
</table>

Sample of 8,032 manufacturing and 647 retail firms.
This survey was called the Management and Organizational Practices survey (MOPS)

It was delivered to 47,534 manufacturing plants in 2011 (asking about 2010)

This was quick and easy to fill out - and mandatory - so 78% of plants responded, covering 5.6m employees (>50% of US manufacturing employment)
The Management and Organizational Practices survey asks about performance monitoring e.g.

During 2005 and 2010, how frequently were the key performance indicators reviewed by non-managers at this establishment? *Mark all that apply*

Non-managers are all employees at the establishment who are not managers as defined in 3.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yearly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly or more frequently</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Management and Organizational Practices survey asks about performance monitoring.
Fact 4: Much of this spread in management practices is across establishment **within** firms.
Data includes 2013 survey wave as of Jan 2014
Average management scores across countries are strongly correlated with GDP per capita.

Data includes 2013 survey wave as of 9/20/2013. Africa data not yet included in the paper.
Preliminary conclusions

Management:
- Variation in management across plants **between & within** firms
- Management appears to be a major driver of TFP
- Skills, regulation, competition & FDI appear drive management

Census
- Very open to cooperating with academics on new surveys