HOW GOOD IS CHINESE & INDIAN MANAGEMENT?
NEW EVIDENCE FROM ASIA, EUROPE AND THE US

June 2008

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MOTIVATION
Large persistent productivity spread across firms and countries
- UK productivity gap with the US going back 100 years
- China and India 10% to 20% of US GDP per capita

Could this be in part because of differences in management?

Historically there has been no international management data

New project measuring and explaining management practices across firms and countries

OUTLINE
1. “Measuring” management practices
2. Evaluating the reliability of this measure
3. Describing management across firms & countries
4. Accounting for management across firms & countries

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 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, PBC, CII & RBI, etc.
   - Run by 51 MBAs types (loud, assertive & business experience)
## Monitoring - i.e. “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 |

## Incentives - i.e. “How does the promotion system work?”

| Score | (1): People are promoted primarily upon the basis of tenure | (3): People are promoted upon the basis of performance | (5): We actively identify, develop and promote our top performers |

Note: All 18 dimensions and over 50 examples in Bloom & VanReenen (2006).

## Management Survey Sample

- Interviewed about 5000 firms across Asia, Europe & the US
- Obtained 44% coverage rate from sampling frame (with response rates uncorrelated with performance measures)

Medium sized manufacturing firms:
- Medium sized (100 - 5,000 employees, median ≈ 250) because firm practices more homogeneous
- Manufacturing as easier to measure productivity (currently piloting in Schools, Hospitals, Retail and Law Firms)

1. “Measuring” management practices
2. Evaluating the reliability of this measure
   a) Internal/External validation
   b) Measurement error/bias
3. Describing management across firms & countries
4. Accounting for management across firms & countries
INTERVAL VALIDATION OF THE SCORING
Re-interviewed 222 firms with different interviewers & managers
Firm average scores (over 18 questions)
Firm-level correlation of 0.627

EXTERNAL VALIDATION OF THE SCORING

\[ y_i^c = \beta MNG_i^c + \alpha_i t_i^c + \alpha_k k_i^c + \alpha_m h_i^c + \gamma' x_i^c + u_i^c \]
\( y_i^c \) is the management score (average z-scores)
\( \alpha_k \) is the labor input
\( \alpha_m \) is the capital input
\( \gamma' \) is other controls

- Use most recent cross-section of data (typically 2006)
- Note – not a causal estimation, only an association

EXTERNAL VALIDATION: BETTER PERFORMANCE IS CORRELATED WITH BETTER MANAGEMENT

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Productivity</th>
<th>Profits (ROCE)</th>
<th>Sales growth</th>
<th>Share Price (Tobin Q)</th>
<th>Exit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimation</td>
<td>OLS</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>All</td>
<td>All</td>
<td>Quoted</td>
</tr>
<tr>
<td>Management</td>
<td>0.198***</td>
<td>1.880**</td>
<td>0.032**</td>
<td>0.250***</td>
<td>-0.200**</td>
</tr>
<tr>
<td>Firms</td>
<td>2706</td>
<td>1752</td>
<td>2145</td>
<td>374</td>
<td>709</td>
</tr>
</tbody>
</table>

Includes controls for labor, capital, skills, country, industry & noise
Significance levels: *** 1%, ** 5%, * 10%.

EXTERNAL VALIDATION – ROBUSTNESS

Main performance results significant in all main regions:
- Anglo-Saxon (US and UK)
- Northern Europe (France, Germany, Sweden & Poland)
- Southern Europe (Portugal, Greece and Italy)
- East Asia (China and Japan)
1. "Measuring" management practices
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FIG 1. COUNTRY LEVEL MANAGEMENT SCORES

FIG 2. FIRM LEVEL MANAGEMENT SCORES

OUTLINE

1. "Measuring" management practices
2. Evaluating the reliability of this measure
3. Describing management across firms & countries
4. Accounting for management across firms & countries
   - Competition
   - Ownership: Family firms & Multinationals
   - Labor market regulations
COMPETITION & MODELS OF MANAGEMENT

Three ways that competition may improve management
- **Selection** – badly run firms more likely to exit
- **Effort** – forces badly run firms to try harder to survive
- **Learning** – more firms in the market to learn from

THE 3 DIFFERENT MEASURES OF COMPETITION ARE ALL LINKED TO BETTER MANAGEMENT

<table>
<thead>
<tr>
<th>Competition proxies</th>
<th>Dependent variable: Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import penetration (SIC-3 industry, 1995-99)</td>
<td>0.066**</td>
</tr>
<tr>
<td>“1-Rents” measure (SIC-3 except firm itself, 1995-99)</td>
<td>1.964**</td>
</tr>
<tr>
<td># of competitors (Firm level, 2004)</td>
<td>0.158***</td>
</tr>
</tbody>
</table>

Includes controls for country, industry, firm-types and interview noise

FAMILY OWNERSHIP VARIES ACROSS COUNTRIES

- About 1/4 of Japanese, US and Northern European firms family owned
- About 3/4 of Indian firms family owned

FAMILY INVOLVEMENT IN FIRMS IN THEORY HAS AMBIGUOUS EFFECTS ON MANAGEMENT

- **Ownership** but not management probably positive
  - Concentrated ownership so better monitoring

- **Management** probably negative
  - *Family experience* and knowledge will be good, but
  - *Smaller pool* to select CEO from
  - *Less incentives* for non-family managers (only family members usually take top positions)
  - *Less incentives* for family manager (family members usually guaranteed top position)
IN PRACTICE FAMILY OWNED FIRMS ARE OFTEN NOT WELL MANAGED ON AVERAGE

Distribution of firm management scores by ownership. Overlaid dashed line is approximate density for dispersed shareholders, the most common US ownership type.

MULTINATIONALS APPEAR ABLE TO TRANSPORT GOOD MANAGEMENT AROUND THE WORLD

BUT UNFORTUNATELY MULTINATIONALS ARE STILL RELATIVELY UNCOMMON IN INDIA

LABOR MARKET REGULATIONS ARE ASSOCIATED WITH WEAKER HUMAN CAPITAL MANAGEMENT
QUANTIFYING EFFECTS OF COMPETITION, OWNERSHIP & LABOR REGS ON MANAGEMENT

- ACROSS FIRMS EXPLAINS ~ 1/2 VARIATION
- ACROSS COUNTRIES EXPLAINS ~ 1/2 VARIATION

TO SUMMARIZE

- Product market competition, family management, multinationals and labor regulation account for about 50% lower Indian management scores
- Policy implications for India are reasonably standard:
  - Liberal product markets (competition) and capital markets
  - Strong rule of law (to promote external CEOs)
  - Reduced labor regulations
- Currently organizing a field experiment with Berkeley and the World Bank in India to investigate these issues further

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BACKUP SLIDES

COUNTRY LEVEL RELATIVE MANAGEMENT

- Relatively better at ‘people’ management (hiring, firing, pay, promotions etc)
- Relatively better at ‘operations’ management (monitoring, continuous improvement, Lean etc)

FIRM LEVEL VARIATION MEANS LARGE DATA SETS ARE IMPORTANT FOR RESEARCH ON MANAGEMENT PRACTICES

Case studies provide rich firm-level details, but large data sets are also important to guard against outlier points (think Enron!)

WHY ARE INDIAN FIRMS POORLY MANAGED? A SURVEY AND RANDOMIZED FIELD INTERVENTION

Project outline

- Nick Bloom (Stanford, Economics)
- Benn Eifert (Berkeley)
- Tom Heller (Stanford, Law School)
- Erik Jensen (Stanford, Law School)
- Aprajit Mahajan (Stanford, Economics)
- David McKenzie (World Bank)
- John Roberts (Stanford, GSB)