Management and the Wealth of Nations

Nick Bloom (Stanford)

based on work with Renata Lemos (World Bank), Raffaella Sadun (Harvard), Daniela Scur (Oxford) & John Van Reenen (LSE/MIT)

Stanford June 2nd 2017
Management research has a bad reputation of being airport books and case studies...

“No potential driving factor of productivity has seen a higher ratio of speculation to empirical study”

- Chad Syversson (2011, Journal of Economic Literature)
Part of a research group looking scientifically at management, and summarize 15+ years research

1) Measuring management

2) Impact of management on performance
   - Regression results
   - Field experiments

3) Drivers and policy
World Management Survey has covered more than 20,000 firms since 2002
Carried out by survey teams of about 30 people about every three years (London 2006)
Survey methodology (Bloom & Van Reenen, 2007, QJE)

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

2) Getting firms to participate in the interview
   • Introduced as “Lean-manufacturing” interview, no financials
   • Official Endorsement: Bundesbank, RBI, World Bank etc.
Some typical endorsement letters

Toshihiko Fukui
GOVERNOR
Bank of Japan

July 4, 2006

Sir Howard Davies
Director
The London School of Economics and Political Science
Houghton Street
London WC2A 2AE
United Kingdom

Dear Howard,

Thank you for your letter regarding your international project on comparative productivity in manufacturing companies around the world.

Given the deepening global linkage of economic activities, your initiative to expand the coverage of the project to Asia is indeed relevant and timely.

I wish you every success in the project.

Sincerely yours,

J. van Reenen

Monsieur le Professeur,

Je vous remercie de m’avoir pratiques manageriales des entreprises américaines.

Décrire scientifiquement ces pratiques montre un intérêt manifeste pour les entreprises françaises et en Europe.

Convaincu de la grande portée de ces travaux, je tiens donc à vous assurer de mon soutien dans la conduite de votre enquête auprès des entreprises françaises.

Sincerely,

Prof. Nick Bloom
PI Program Director
Center for Economic Performance
London School of Economics
Houghton St.
London WC2A

May 28, 2013

Nicholas Bloom
Department of Economics
Stanford University

To confirm our enthusiastic support for the joint project between academic centers in North America, Asia and Latin American countries, provides a valuable and timely contribution to the research on sectoral competitiveness and overall regional development.

Best wishes.

Sincerely,

Bloom, Renata Lemos and Daniela Saur,
1) Developing management questions
   • Scorecard for 18 monitoring, targets & people management practices ≈45 minute phone interview of plant managers

2) Getting firms to participate in the interview
   • Introduced as “Lean-manufacturing” interview, no financials
   • Official Endorsement: Bundesbank, RBI, World Bank etc.

3) Obtaining unbiased comparable responses, “Double-blind”
   • Interviewers do not know the company’s performance
   • Managers are not informed (in advance) they are scored

Survey methodology (Bloom & Van Reenen, 2007, QJE)
Example monitoring question, scored based on a number of questions starting with “*How is performance tracked?*”

| Score | (1): Measures tracked do not indicate directly if overall business objectives are being met. Many 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 & 50+ examples in [http://worldmanagementssurvey.org/](http://worldmanagementssurvey.org/)
Examples of performance metrics – Car Plant
Example incentives question, scored based on questions starting with “How does the promotion system work?”

| 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 & 50+ examples in [http://worldmanagementsurvey.org/](http://worldmanagementsurvey.org/)
Management also varies heavily within countries

Firm level average management scores, 1 (worst practice) to 5 (best practice)
So we find a huge spread in management practices across firms and countries....

....but does this matter?
These management scores are positively correlated with firm performance.
Of course this correlation may not be causal.

So I’ve also been working with the World Bank on management randomized control trial
Pulling all our data together we estimate management accounts \(\approx \frac{1}{3}\) cross-country TFP gaps

<table>
<thead>
<tr>
<th></th>
<th>(1) Weighted Management</th>
<th>(2) Covariance</th>
<th>(3) Unweighted Management</th>
<th>(4) Weighted Mng. Gap with US</th>
<th>(5) % reallocation</th>
<th>(6) TFP Gap With US</th>
<th>(7) % TFP due to Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>.91</td>
<td>.47</td>
<td>.44</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>.61</td>
<td>.21</td>
<td>.41</td>
<td>-.3</td>
<td>89.1</td>
<td>.71</td>
<td>8.82</td>
</tr>
<tr>
<td>Sweden</td>
<td>.52</td>
<td>.13</td>
<td>.39</td>
<td>-.39</td>
<td>87.34</td>
<td>.92</td>
<td>48.46</td>
</tr>
<tr>
<td>Germany</td>
<td>.45</td>
<td>.29</td>
<td>.16</td>
<td>-.46</td>
<td>38.9</td>
<td>.83</td>
<td>24.46</td>
</tr>
<tr>
<td>Canada</td>
<td>.32</td>
<td>.27</td>
<td>.05</td>
<td>-.59</td>
<td>34.71</td>
<td>.88</td>
<td>45.55</td>
</tr>
<tr>
<td>Singapore</td>
<td>.25</td>
<td>.43</td>
<td>-.18</td>
<td>-.66</td>
<td>5.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Britain</td>
<td>.2</td>
<td>.26</td>
<td>-.05</td>
<td>-.71</td>
<td>30.46</td>
<td>.94</td>
<td>107.81</td>
</tr>
<tr>
<td>Mexico</td>
<td>.17</td>
<td>.4</td>
<td>-.23</td>
<td>-.74</td>
<td>9.51</td>
<td>.73</td>
<td>23.04</td>
</tr>
<tr>
<td>N. Ireland</td>
<td>.16</td>
<td>.58</td>
<td>-.42</td>
<td>-.75</td>
<td>-15.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>.05</td>
<td>.21</td>
<td>-.16</td>
<td>-.86</td>
<td>30.65</td>
<td>.83</td>
<td>45.24</td>
</tr>
<tr>
<td>Italy</td>
<td>0</td>
<td>.12</td>
<td>-.12</td>
<td>-.91</td>
<td>38.96</td>
<td>.82</td>
<td>45.4</td>
</tr>
<tr>
<td>Portugal</td>
<td>-.04</td>
<td>.37</td>
<td>-.41</td>
<td>-.95</td>
<td>10.55</td>
<td>.66</td>
<td>23.04</td>
</tr>
<tr>
<td>Poland</td>
<td>-.07</td>
<td>.14</td>
<td>-.21</td>
<td>-.98</td>
<td>33.89</td>
<td>.8</td>
<td>44.74</td>
</tr>
<tr>
<td>France</td>
<td>-.11</td>
<td>.11</td>
<td>-.22</td>
<td>-1.02</td>
<td>36.08</td>
<td>.84</td>
<td>58.87</td>
</tr>
<tr>
<td>Colombia</td>
<td>-.12</td>
<td>.37</td>
<td>-.48</td>
<td>-1.03</td>
<td>10.25</td>
<td>.52</td>
<td>15.69</td>
</tr>
<tr>
<td>NZ</td>
<td>-.14</td>
<td>.27</td>
<td>-.42</td>
<td>-1.05</td>
<td>18.68</td>
<td>.79</td>
<td>43.54</td>
</tr>
</tbody>
</table>

Source: Management as a Technology by Bloom, Sadun and van Reenen (2015)
1) Measuring management and its impact on GDP

2) Impact of management on performance
   - Regression results
   - Field experiments

3) Drivers and policy – how can we raise growth?
PROMOTE FDI: MULTINATIONALS ACHIEVE GOOD MANAGEMENT PRACTICES WHEREVER THEY LOCATE

Management score

- United States
- Japan
- Germany
- Sweden
- Canada
- Great Britain
- France
- Italy
- Australia
- Singapore
- Mexico
- Poland
- Portugal
- New Zealand
- Turkey
- China
- Chile
- Greece
- Spain
- India
- Brazil
- Colombia
- Vietnam
- Argentina
- Northern Ireland
- Myanmar
- Republic of Ireland
- Nicaragua

Domestic firms
Foreign multinationals
PROMOTE PROFESSIONAL OWNERSHIP: FAMILY-RUN AND GOVERNMENT FIRMS OFTEN 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.
RAISE EDUCATION FOR NON-MANAGERS AND MANAGERS APPEAR LINKED TO BETTER MANAGEMENT

Sample of 8,032 manufacturing and 647 retail firms.
MINIMIZE REGULATIONS: THESE ARE CORRELATED WITH LESS EFFECTIVE MANAGEMENT PRACTICES

Note: Management scores for the 15,454 interviews in the WMS survey plotted against the World Bank’s 2014 doing business “Ease of Doing Business” rank, where 1 is best and 189 is worst. See http://www.doingbusiness.org/rankings. Smaller and larger firms in China, Nigeria and Mozambique have been re-stratified in order to balance the sampling frame.
Conclusions

Management appears to be a major driver of growth

Policies to follow in particular in Japan would be:
- Encouraging multinationals
- Less regulation

Policies to follow in particular in the US would be:
- Improved education
- Less regulation
More research, policy briefs & media available here www.worldmanagementsurvey.com

RESEARCH
We have worked with thousands of managers from nearly 40 countries to measure performance in their firms.

DATE FOR YOUR CALENDARS: NEXT EMPIRICAL MANAGEMENT CONFERENCE AT MIT ON DECEMBER 8-9, CALL FOR PAPERS COMING IN JULY.

NEW PAPER: INTERNATIONAL DATA ON MEASURING MANAGEMENT PRACTICES

Benchmark your organization
Using our web-based tool, answer a set of questions to benchmark your organization against our full dataset in the four main sectors of the WMS research.

Survey Data