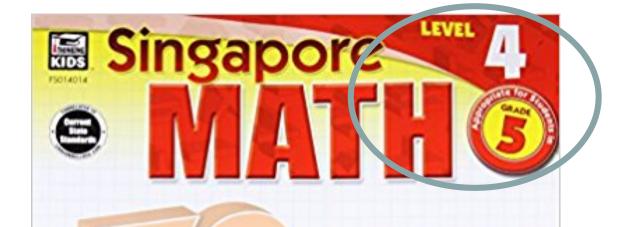
Measuring and Explaining Management Practices Around the World

Nick Bloom (Stanford)

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

ABFER May 24th 2018



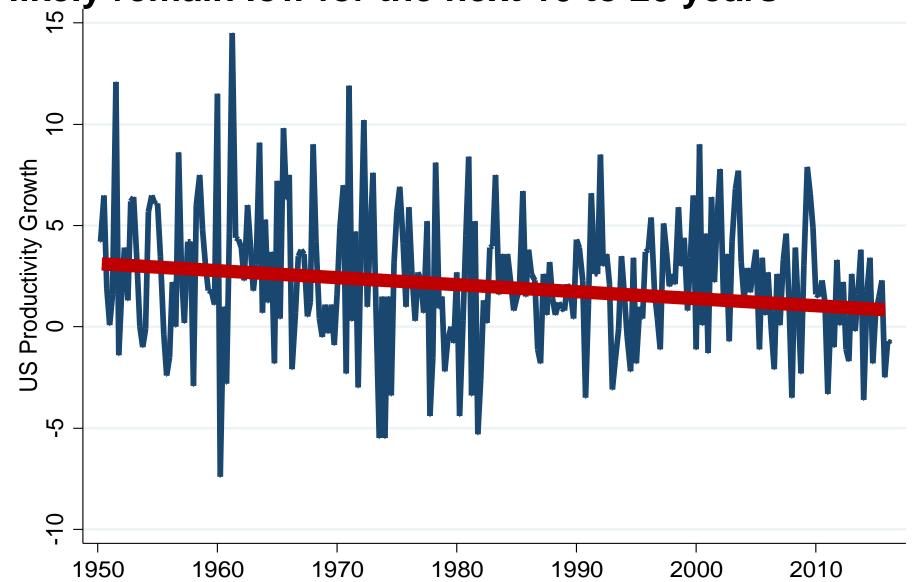


WORD PROBLEMS

- Word problems based on the leading math program in the world—Singapore Math!
- Introduction explaining the Singapore Math method
- Step-by-step solutions in the answer key
- Reproducible pages

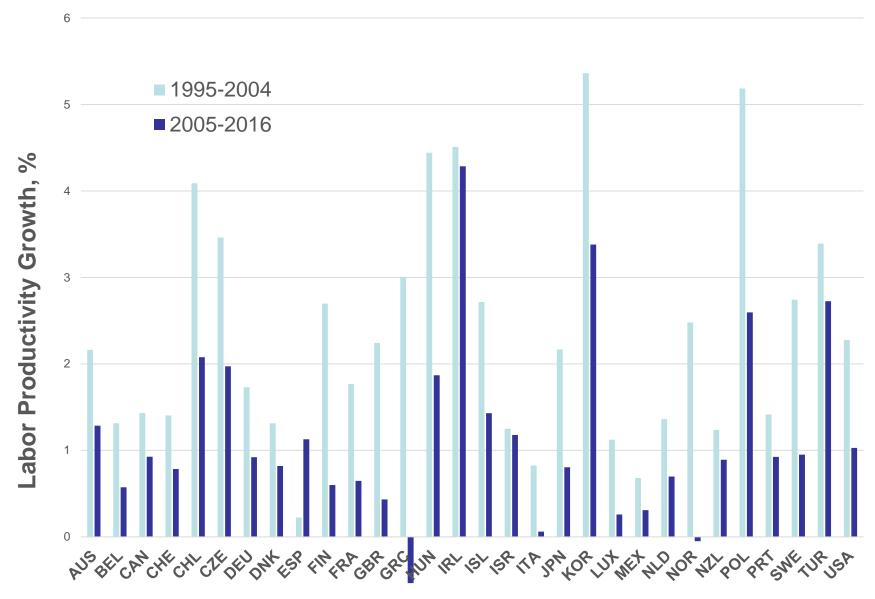


US productivity growth is slowing, and I argue will likely remain low for the next 10 to 20 years



Source: US BLS growth of real output per hour. On slowing productivity growth see Bloom, Jones, Webb and Van Reenen (2017), "Are Ideas Getting Harder to Find"?"

Indeed, productivity growth is slowing across almost all countries (including Singapore)



Source: OECD, Syverson (2018)

Francis Walker (1840-1897), founding President American Economic Association



THE

QUARTERLY JOURNAL

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ECONOMICS

APRIL, 1887

THE SOURCE OF BUSINESS PROFITS.

In the Fortnightly of September, 1879, Professor Henry Sidgwick, in reviewing the recent literature of the wages controversy, said, "It seems to me that, while Professor Walker's argument gives a coup de grâce to the wages fund theory,* it supplies no substitute for it; it leaves us with no theoretical determination whatever of the average proportions in which produce is divided between labor and capital."

I confess that at the time this seemed to me a hard judgment. The current political economy had for more than a generation declared that the measure of possible wages was found in existing capital; that the average rate of wages was wholly determined by the ratio between the amount of capital and the numbers of the laboring class; †

^{*}For both the natural history and the literary history of this doctrine, reference may be made to an article by the present writer in the *North American Review* for January, 1875.

^{†&}quot;The circulating capital of a country is its wage-fund. Hence, if we desire to calculate the average money-wages received by each laborer, we have

But there is still a wide debate – many people claim management is "hot air" or "BS"

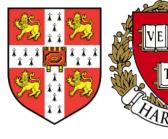
"No potential driving factor of productivity has seen a higher ratio of speculation to empirical study"

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







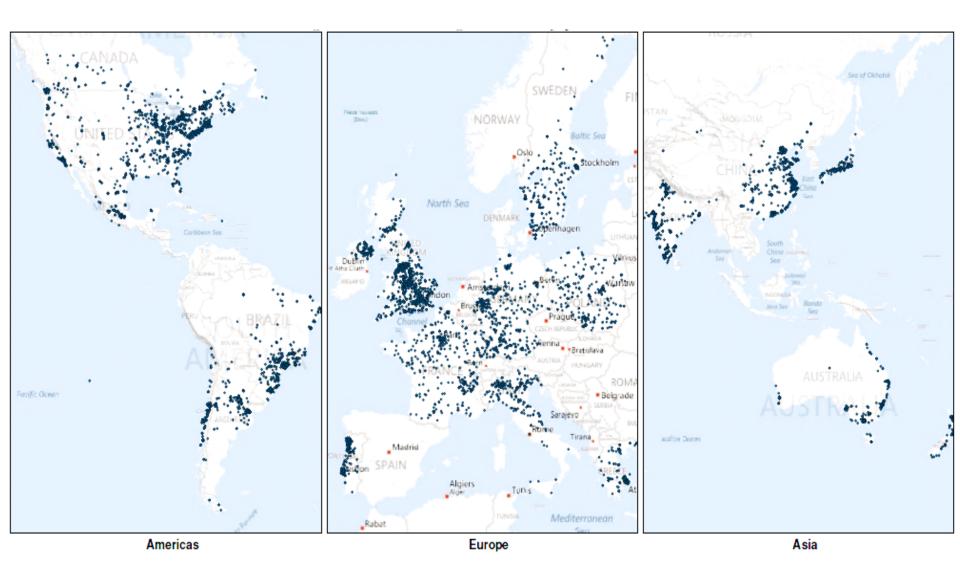




Accenture

McKinsey&Company

World Management Survey has covered more than 20,000 firms in 35 countries since 2002



Survey methodology (Bloom & Van Reenen, 2007, QJE)

1) Developing management guestions

 Scorecard for practices ≈45 m JOHN DREW · BLAIR McCALLUM · STEFAN ROGGENHOFER

JOURNEY TO LEAN

MAKING OPERATIONAL CHANGE STICK

ble management it managers

2) Getting firms to

- Introduced as
- Official Endors

3) Obtaining unbi

- Interviewers deliberation
- Managers are

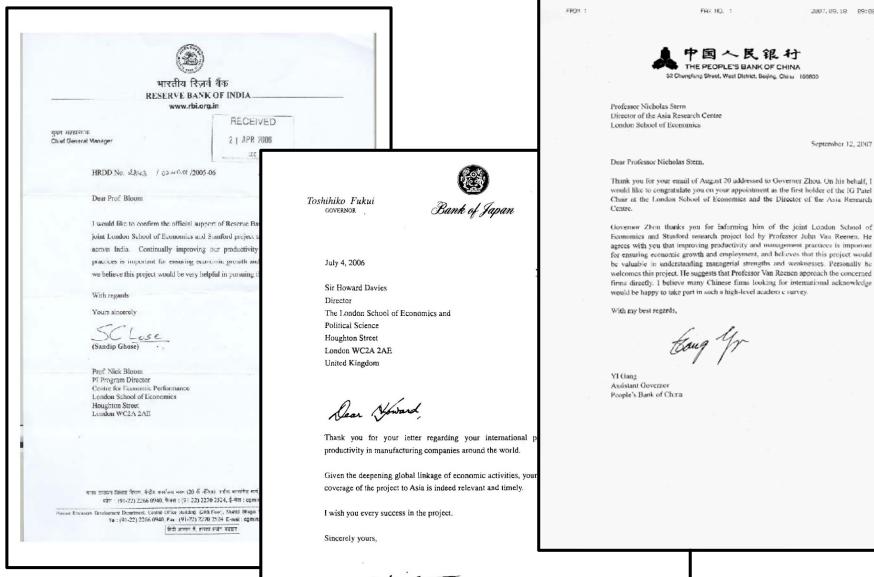
ew, no financials orld Bank, BOJ etc.

es, <u>"Double-blind"</u>

rformance

ey are scored

Some typical endorsement letters



2007.09.18 09:08 P1

September 12, 2007

would like to congratulate you on your appointment as the first holder of the [G Patel Chair at the London School of Economics and the Director of the Asia Research

Governor Zhou thanks you for informing him of the joint London School of Economics and Stunford research project led by Professor John Van Reenen, He agrees with you that improving productivity and management practices is important for ensuring economic growth and employment, and believes that this project would be valuable in understanding managerial strengths and weaknesses. Personally he welcomes this project. He suggests that Professor Van Reenen approach the concerned firms directly. I believe many Chinese firms looking for international acknowledge

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.

3) Obtaining unbiased comparable responses, "Double-blind"

- Interviewers do not know the company's performance
- Managers are not informed (in advance) they are scored

Example monitoring question, scored based on a number of questions starting with "How is performance tracked?"

				ı
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://worldmanagementsurvey.org/

Examples of performance metrics – Car Plant



Examples of a performance metrics – Hospital



Examples of performance metrics – Retail (Ctrip)



Examples of performance metrics – hotels (ASSA)



Example of <u>no</u> performance metrics: Textile Plant

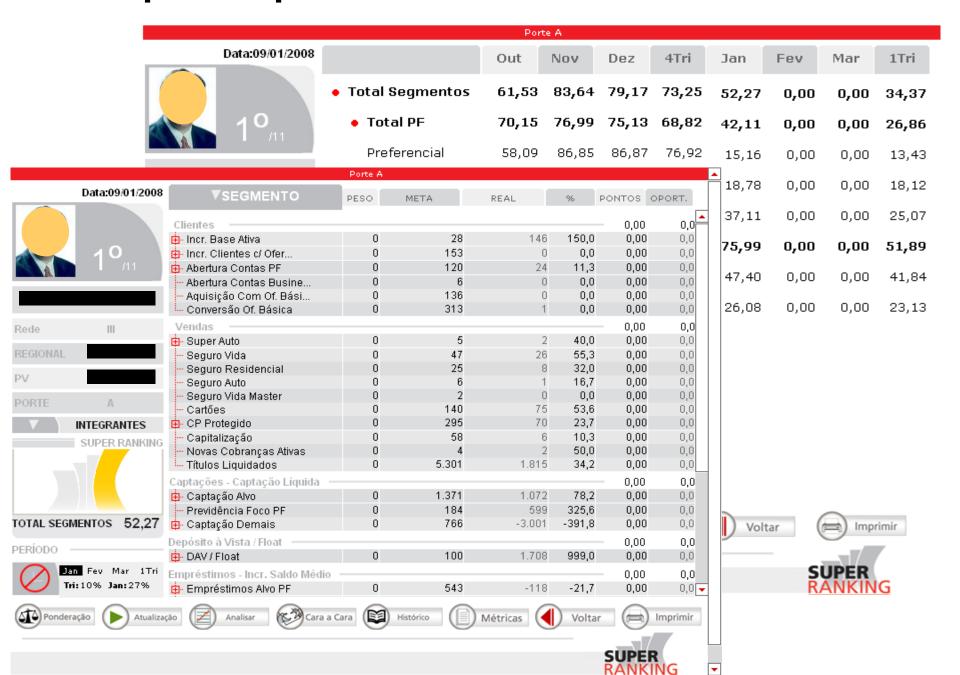


Example incentives question, scored based on questions starting with "How does the promotion system work?"

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	

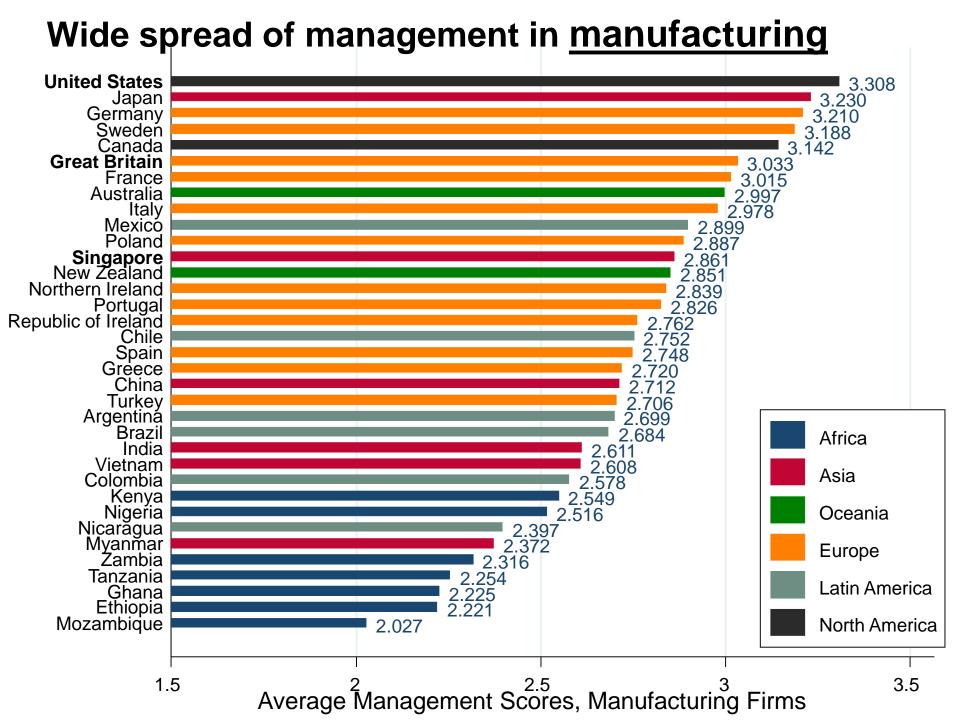
Note: All 18 questions & 50+ examples in http://worldmanagementsurvey.org/

Examples of performance reviews – Retail Bank

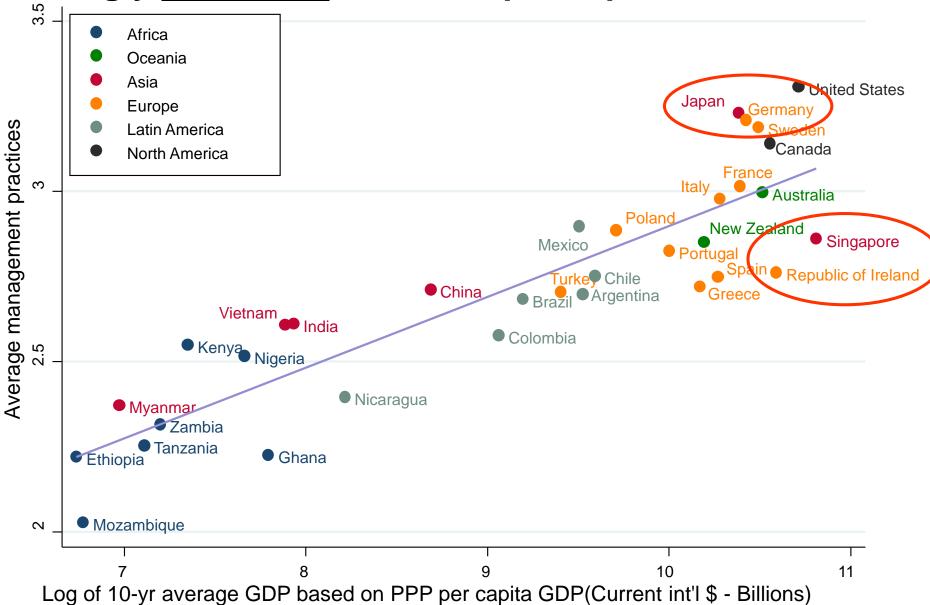


Interviewers survey multiple countries, typically all from the same place (e.g. London 2006)

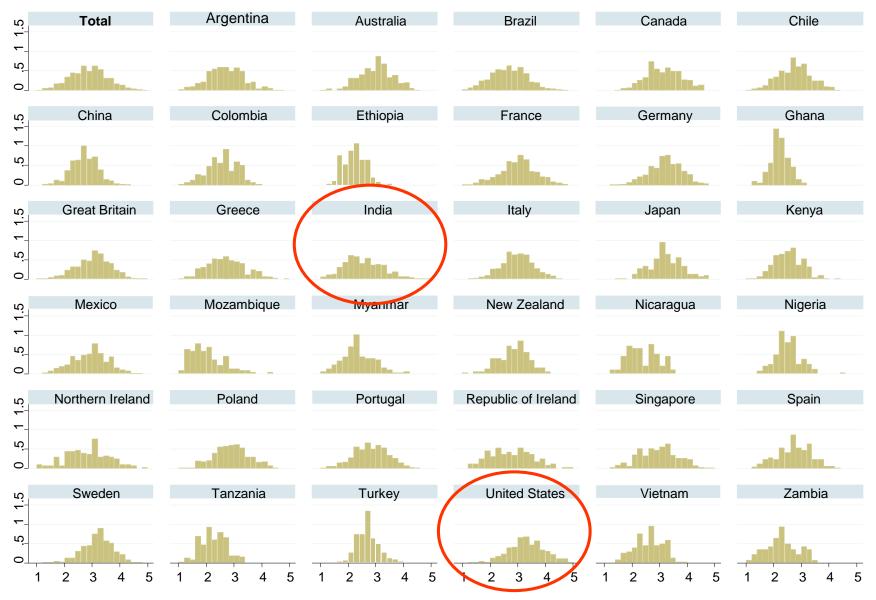




Average management scores across countries are strongly <u>correlated</u> with GDP per capita



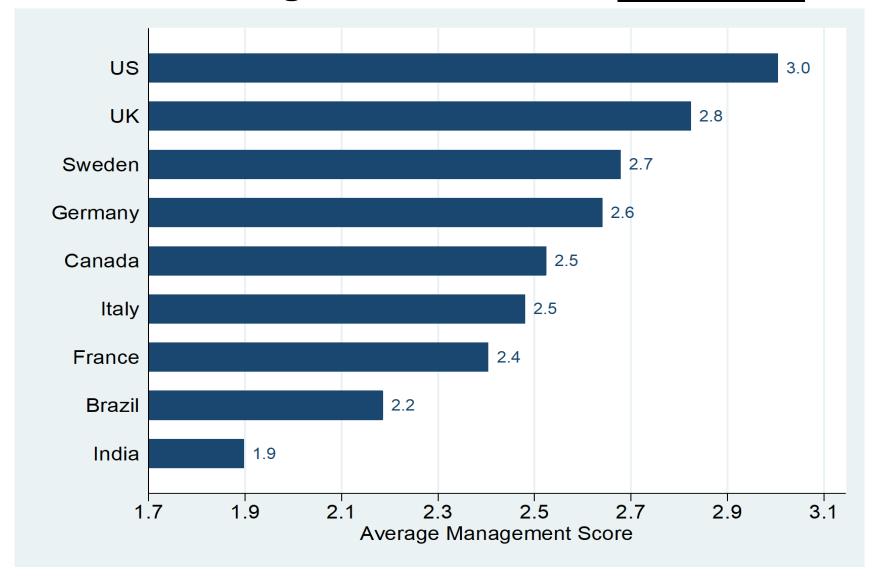
Management also varies heavily within countries



Fraction of Firms

Firm level average management scores, 1 (worst practice) to 5 (best practice)

Also been looking at other sectors: hospitals



Randomly surveyed population of hospitals in each country that offer acute care (take emergencies), and have an orthopedics and/or cardiology department. Total of 1687 hospitals.

So we find a huge spread in management practices across firms and countries....

....but does this matter?

I will try to summarize 15+ years research in 2 areas

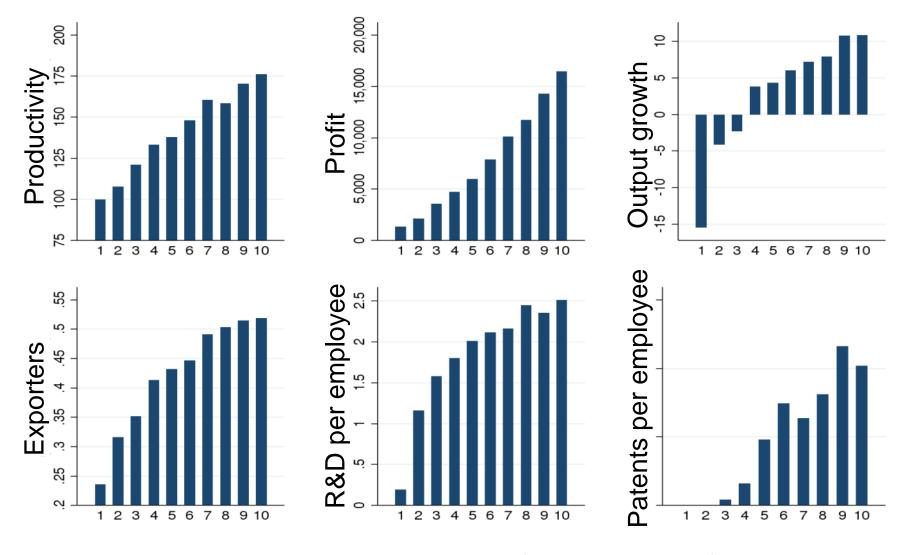
1) Measuring management

2) Impact of management on performance

- Regression results
- Field experiments

3) Drivers and policy

These management scores are robustly positively correlated with firm performance



Management score decile (worst=1, best=10)

Better management associated with <u>lower pollution</u>



Source: "Modern management: Good for the environment or all hot air?" Bloom, Genakos, Martin and Sadun, (2010, EJ). Data from UK census of production and WMS management survey. Energy intensity=energy/output.

Of course this correlation may not be causal.

So I've also been working with the World Bank on management randomized control trial

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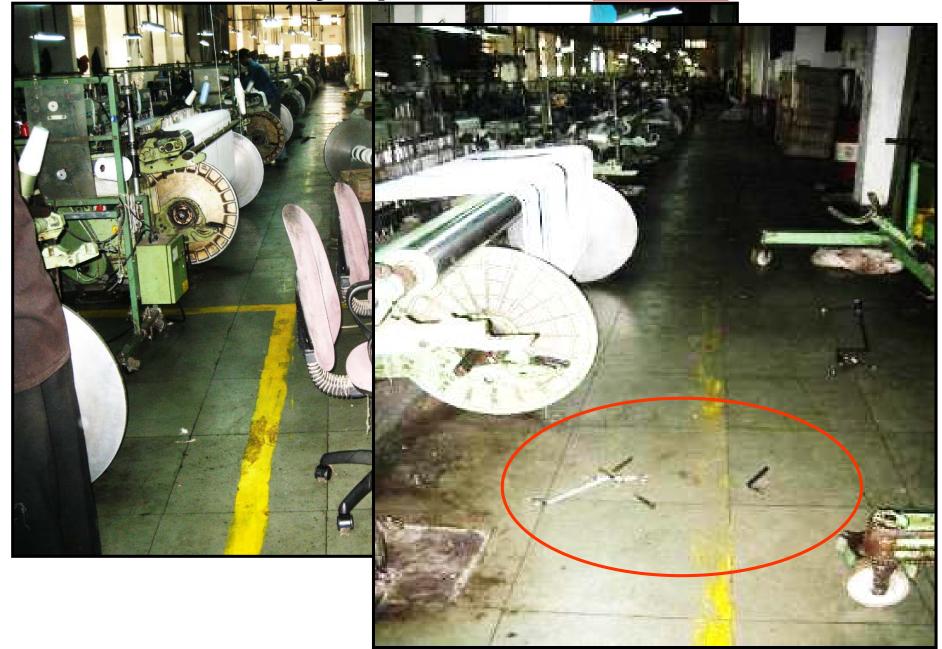
Issue 1

DOES MANAGEMENT MATTER? EVIDENCE FROM INDIA*

NICHOLAS BLOOM BENN EIFERT APRAJIT MAHAJAN DAVID MCKENZIE JOHN ROBERTS Took 28 large textile plants near Mumbai and randomized into treatment (improved management) & control (same as before)



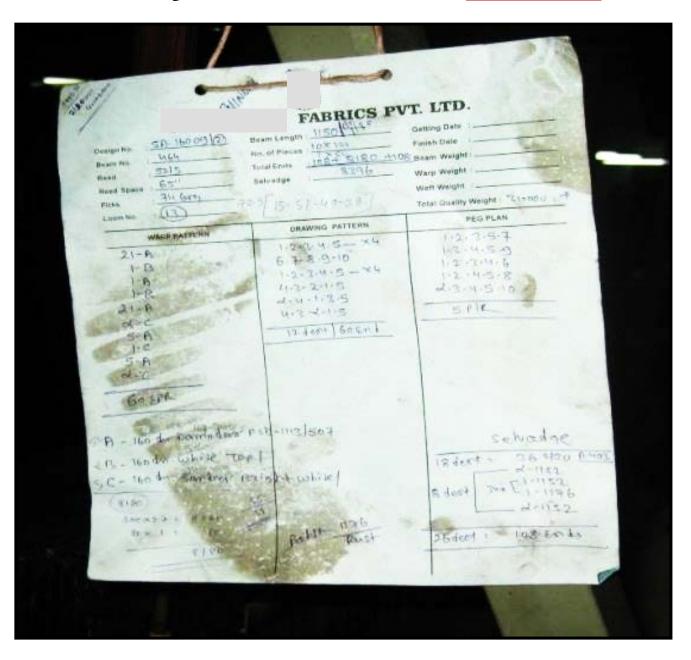
Factory operations: Before



Factory operations: After



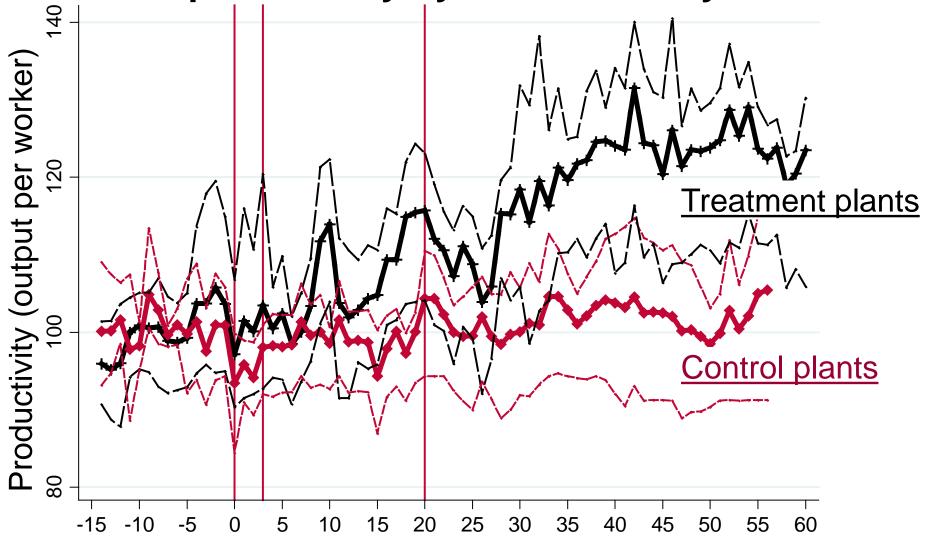
Factory information: **Before**



Factory information: <u>After</u>



These simple management improvements increased productivity by 20% within 1 year alone



Weeks after the start of the management experiment

Source: Bloom, Eifert, Mahajan, McKenzie & Roberts, forthcoming Quarterly Journal of Economics

- 1) Measuring management
- 2) Impact of management on performance
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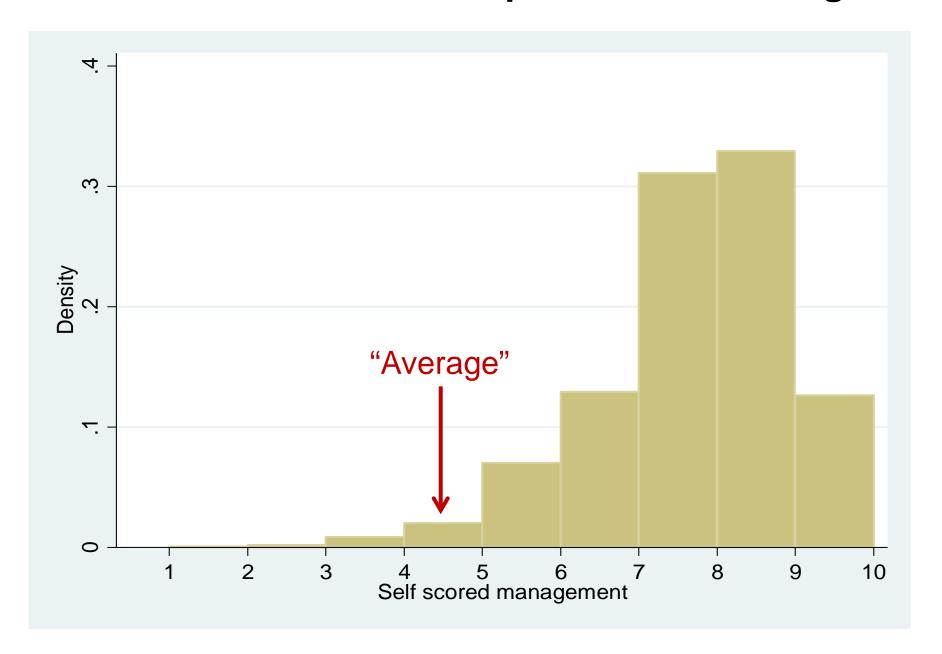
3) Drivers and policy

So why don't firms just improve their management practices – one reason is they cannot self assess

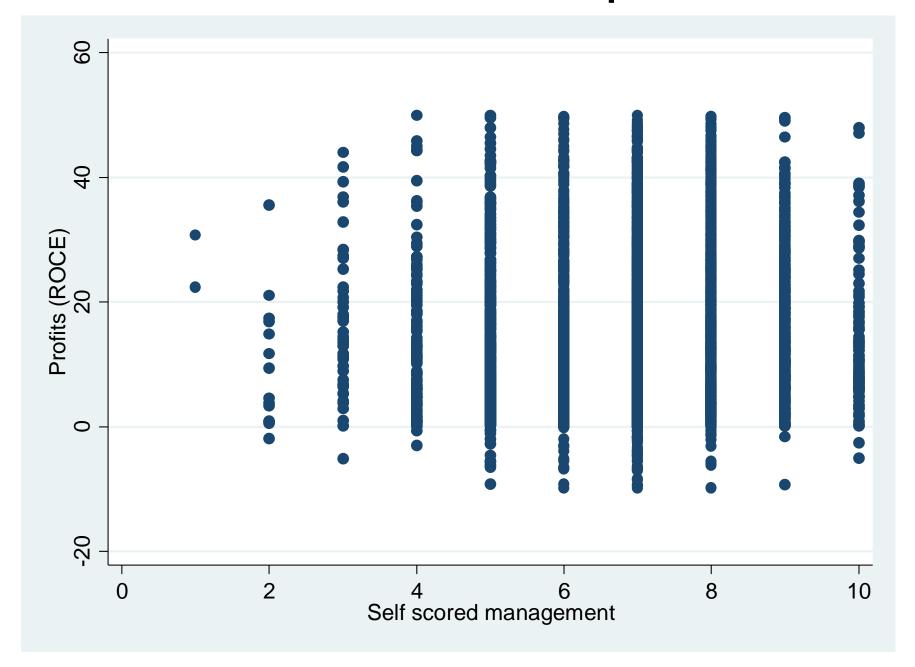
At the end of the survey we asked:

"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"

...and found firms are too optimistic on management



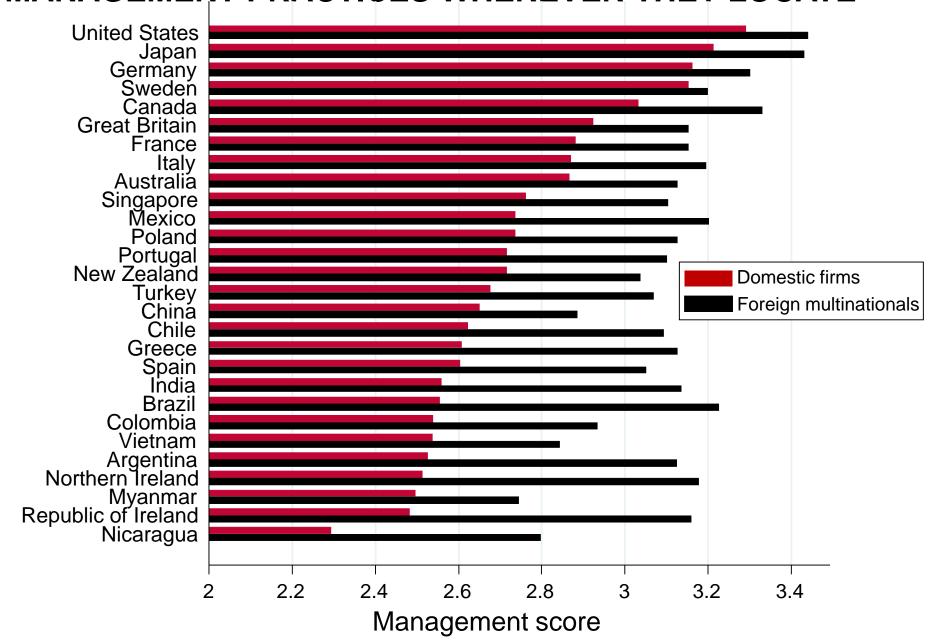
...and self-scores show no link to performance



So what policies Governments could enact?

- Ownership
- Competition
- Education
- Regulation

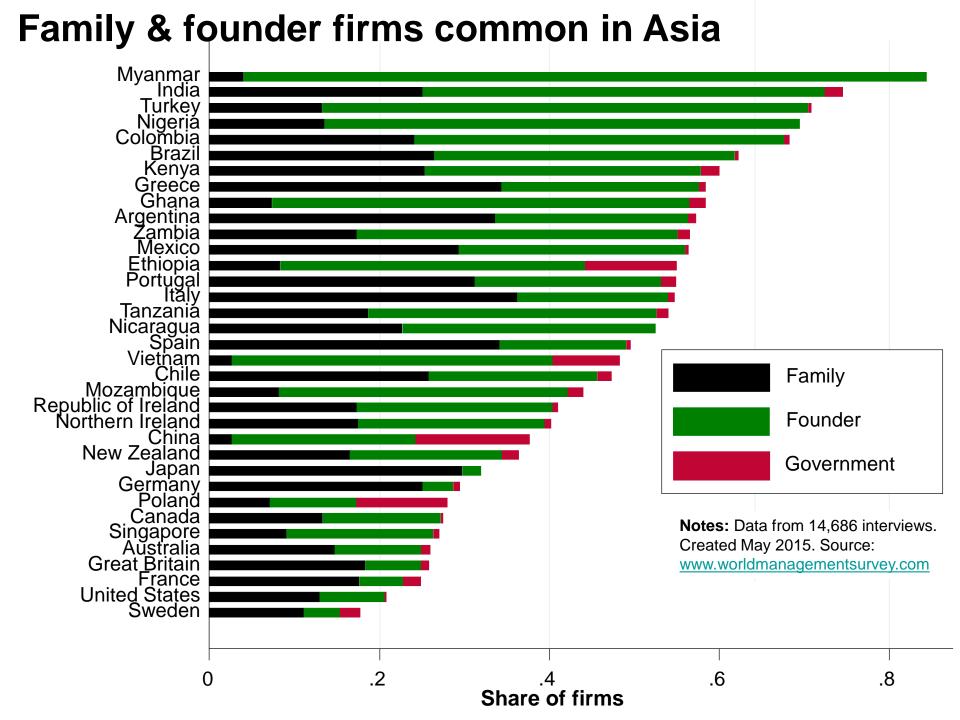
OWNERSHIP: MULTINATIONALS ACHIEVE GOOD MANAGEMENT PRACTICES WHEREVER THEY LOCATE



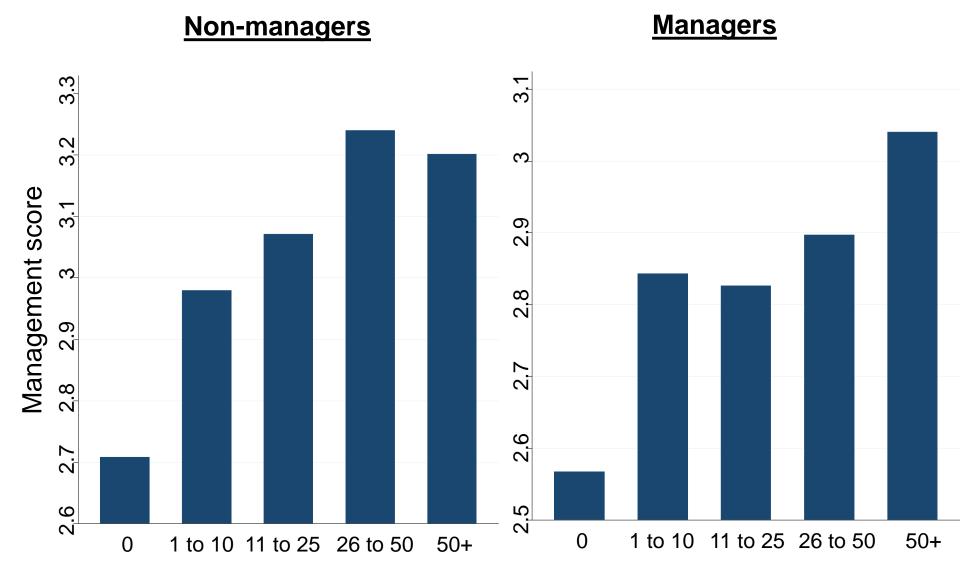
OWNERSHIP: FAMILY-RUN AND GOVERNMENT FIRMS TYPICALLY HAVE VERY POOR MANAGEMENT



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.



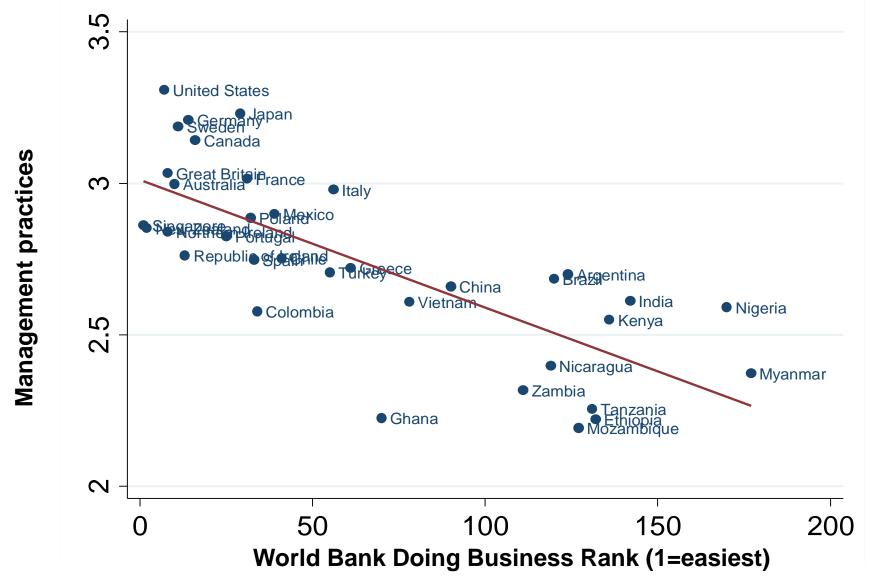
EDUCATION FOR NON-MANAGERS AND MANAGERS APPEAR LINKED TO BETTER MANAGEMENT



Percentage of employees with a college degree (%)

Sample of 8,032 manufacturing and 647 retail firms.

REGULATIONS: REGULATIONS CORRELATED WITH LESS EFFECTIVE MANAGEMENT PRACTICES



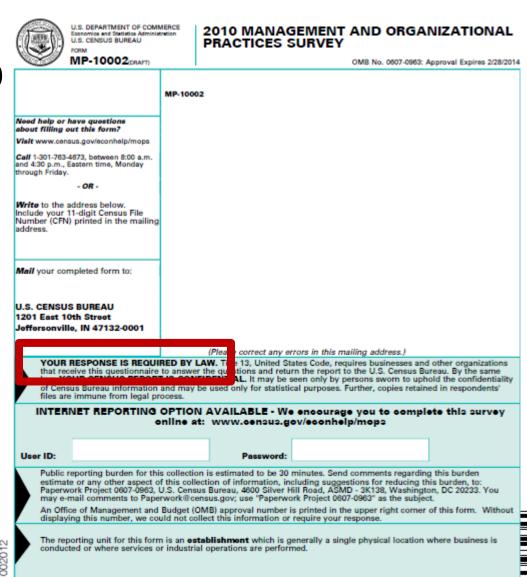
Note: Management scores for the 15,454 interviews in the WMS survey plotted against the World Bank's 2014 doing business "Ease of Doing Business" rank, where 1 is best and 189 is worst. See http://www.doingbusiness.org/rankings. Smaller and larger firms in China, Nigeria and Mozambique have been re-stratified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

Also been working with the US Census Bureau on running national management surveys (MOPS)

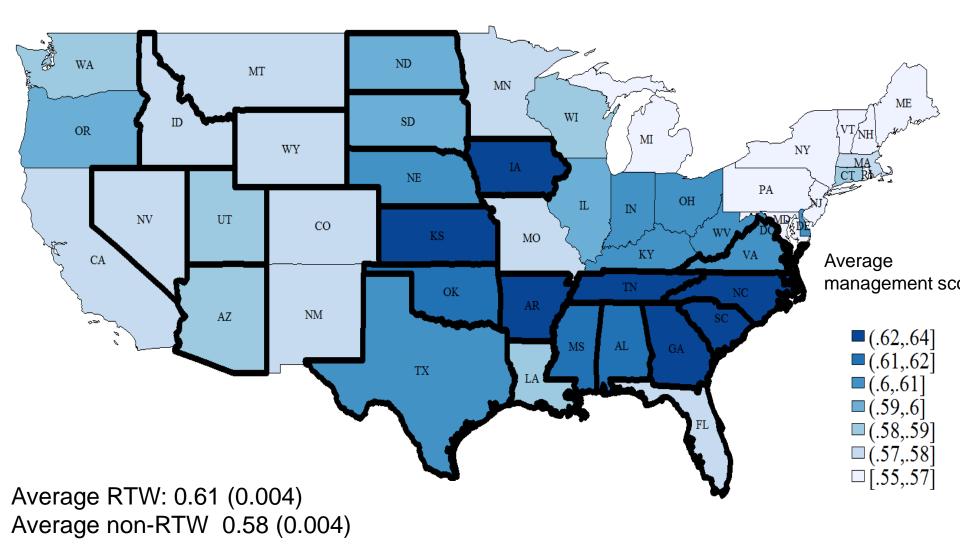
It was delivered to ≈50,000 manufacturing plants in 2010 and again in 2015

This was quick and easy to fill out - and mandatory - so 78% of plants responded, covering 5.6m employees (>50% of US manufacturing employment)

Samples all ages & sizes

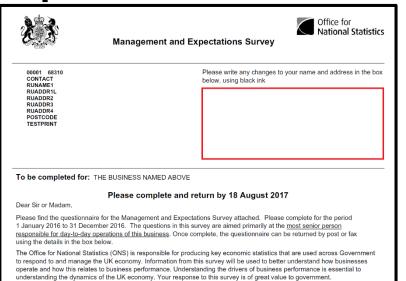


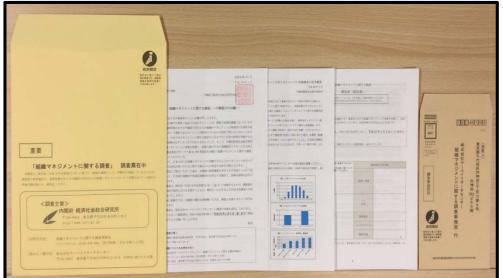
Regulation: Right to work (less regulation) improves management scores



Notes: Black outline: right-to-work states as of 2010. The RTW and non-RTW averages are calculated using the 35 states which are reported in the paper, weighted by the number of observations in each state.

MOPS surveys in other countries - including China, Japan and Pakistan – maybe Singapore soon?









Conclusions

You can measure management practices in large samples

Explains ≈1/3 cross-country & plant TFP spreads

Key drivers appear to be:

- competition
- ownership
- regulation
- skills

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..."

MY FAVOURITE QUOTES:

Don't get sick in Britain

Interviewer: "Do staff sometimes end up doing the wrong sort of work for their skills?"

NHS Manager: "You mean like doctors doing nurses jobs, and nurses doing porter jobs? Yeah, all the time. Last week, we had to get the healthier patients to push around the beds for the sicker patients"

Don't do Business in Indian hospitals

Interviewer: "Is this hospital for profit or not for profit"

Hospital Manager: "Oh no, this hospital is only for loss making"

MY FAVOURITE QUOTES:

Don't get sick in India

Interviewer: "Do you offer acute care?"

Switchboard: "Yes ma'am we do"

Interviewer: "Do you have an orthopaedic department?"

Switchboard: "Yes ma'am we do"

Interviewer: "What about a cardiology department?"

Switchboard: "Yes ma'am"

Interviewer: "Great – can you connect me to the ortho department"

Switchboard?: "Sorry ma'am - I'm a patient here"

More research, policy briefs & media available here www.worldmanagementsurvey.com

