### 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 2<sup>nd</sup> 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)

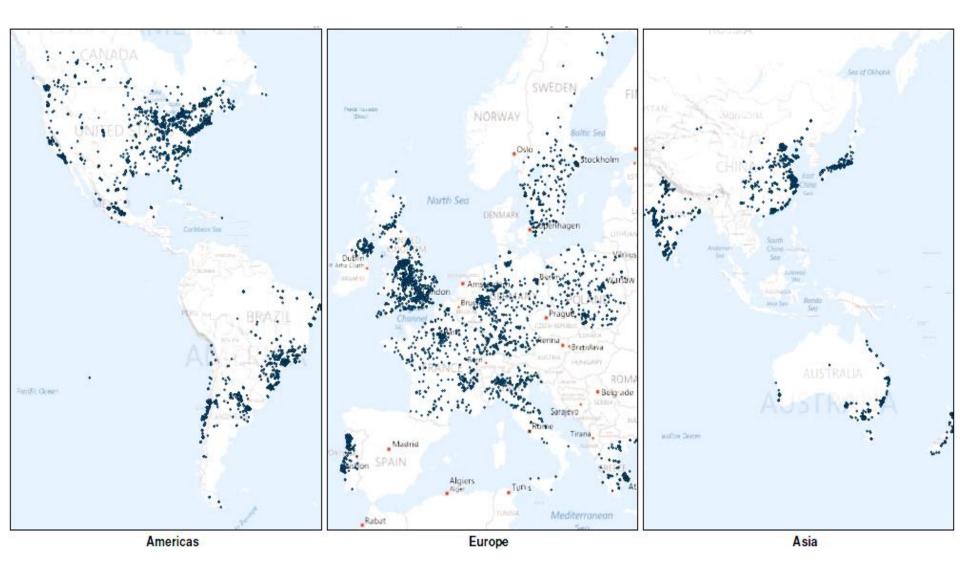


## Part of a research group looking scientifically at management, and summarize 15+ years research

- 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

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With nov best regards.

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

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

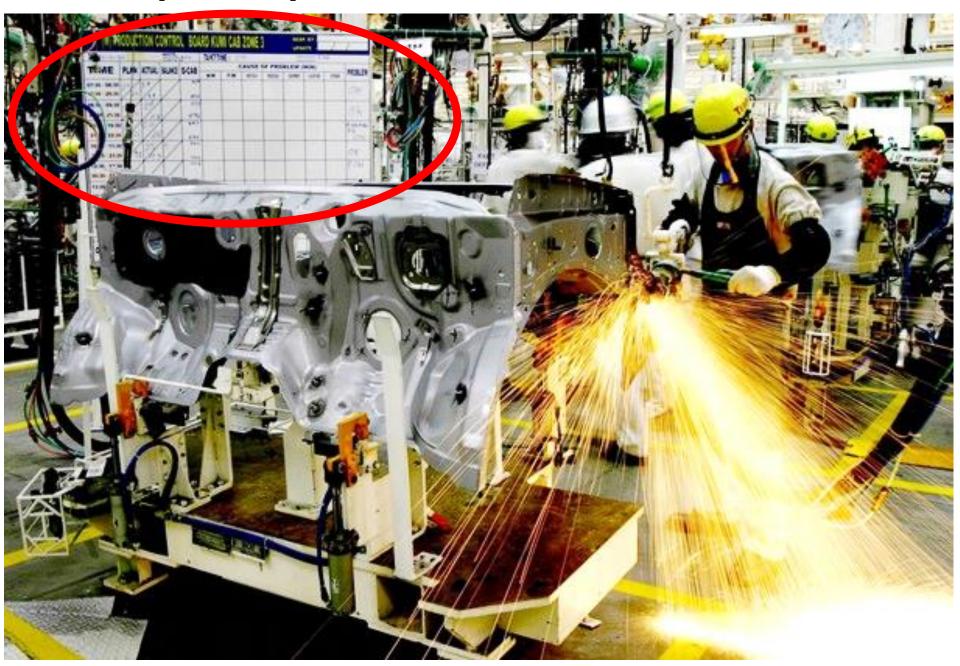
- Interviewers do not know the company's performance
- Managers are not informed (in advance) they are scored

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

		]	
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 <a href="http://worldmanagementsurvey.org/">http://worldmanagementsurvey.org/</a>

#### **Examples of performance metrics – Car Plant**

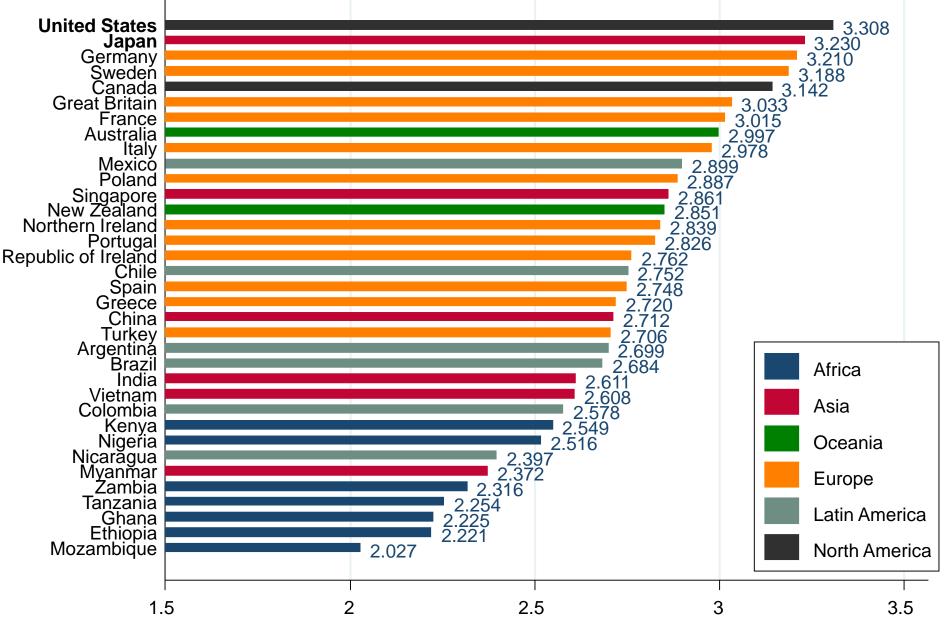


Example incentives question, scored based on questions starting with "How does the promotion system work?"

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

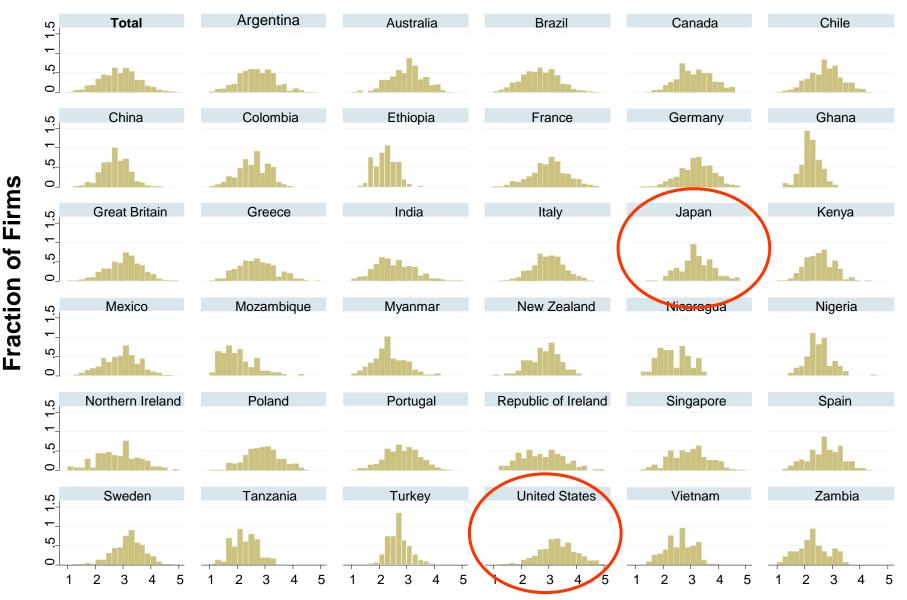
**Note:** All 18 questions & 50+ examples in <a href="http://worldmanagementsurvey.org/">http://worldmanagementsurvey.org/</a>

#### Wide spread of management in manufacturing



Average Management Scores, Manufacturing Firms

#### Management also varies heavily within countries

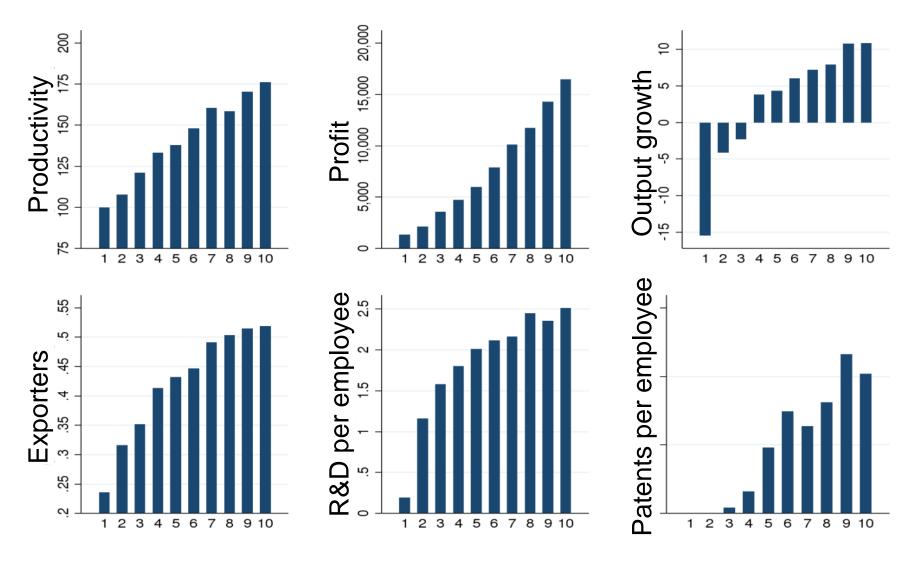


Firm level average management scores, 1 (worst practice) to 5 (best practice)

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

### ....but does this matter?

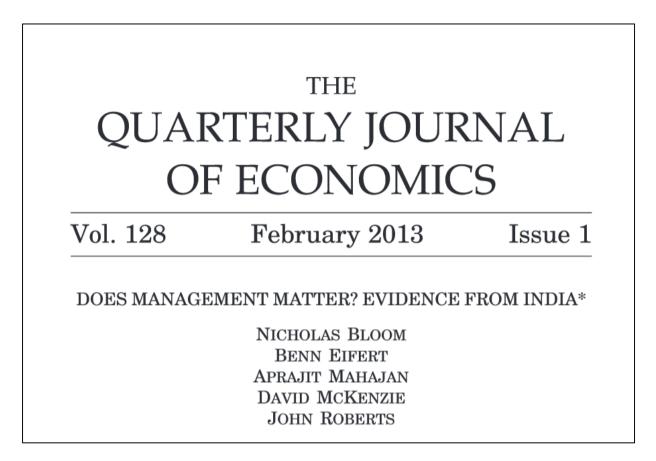
## These management scores are positively <u>correlated</u> with firm performance



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

### 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 ≈1/3 cross-country TFP gaps

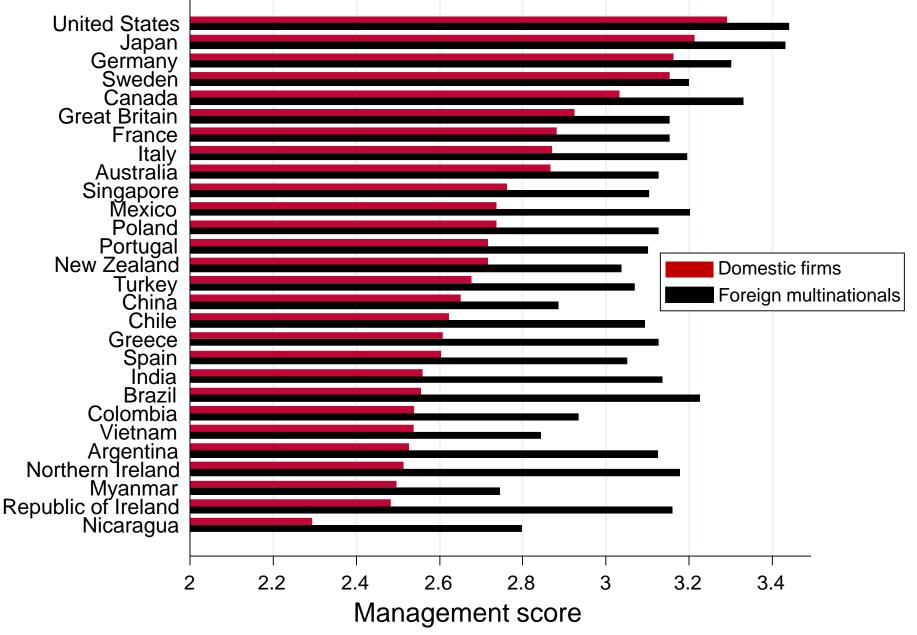
	(1) Weightd Man- agement	(2) Covariance	(3) Unwghtd Man- agement	(4) Weighted Mng. Gap with US	(5) % reallo- cation	(6) TFP Gap With US	(7) % TFP due to Man- agement
Average	agement		agement	inter ob	24.93		31.4
US	.91	.47	.44	0	1	1	
Japan	.61	.21	.41	3	89.1	.71	8.82
Sweden	.52	.13	.39	39	87.34	.92	48.46
Germany	.45	.29	.16	46	38.9	.83	24.46
Canada	.32	.27	.05	59	34.71	.88	45.55
Singapore	.25	.43	18	66	5.95		
Britain	.2	.26	05	71	30.46	.94	107.81
Mexico	.17	.4	23	74	9.51	.73	23.04
N. Ireland	.16	.58	42	75	-15.18		
Australia	.05	.21	16	86	30.65	.83	45.24
Italy	0	.12	12	91	38.96	.82	45.4
Portugal	04	.37	41	95	10.55	.66	23.04
Poland	07	.14	21	98	33.89	.8	44.74
France	11	.11	22	-1.02	36.08	.84	58.87
Colombia	12	.37	48	-1.03	10.25	.52	15.69
NZ	14	.27	42	-1.05	18.68	.79	43.54

Source: Management as a Technology by Bloom, Sadun and van Reenen (2015)

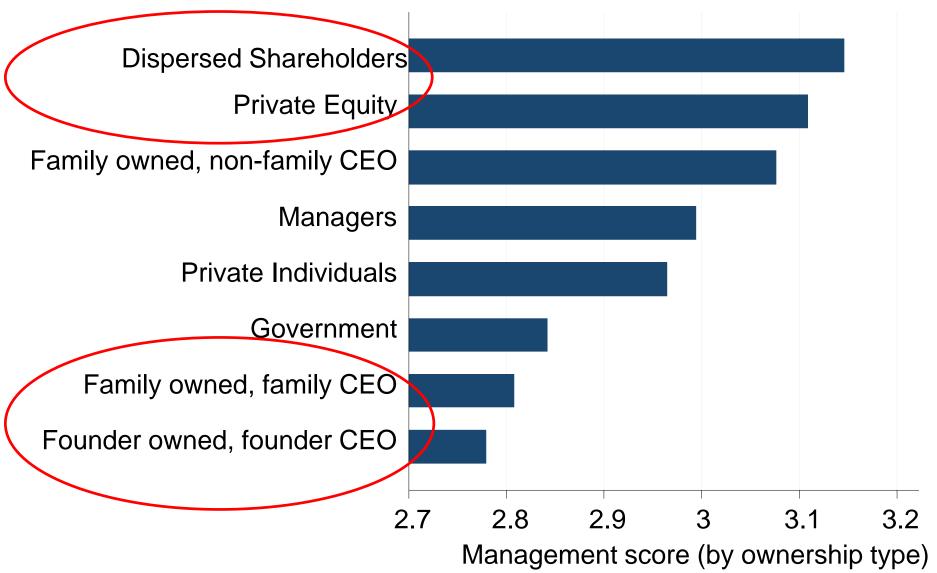
- 1) Measuring management and its impact on GDP
- 2) Impact of management on performance
  - Regression results
  - Field experiments

3) Drivers and policy – how can we raise growth?

#### PROMOTE FDI: MULTINATIONALS ACHIEVE GOOD MANAGEMENT PRACTICES WHEREVER THEY LOCATE

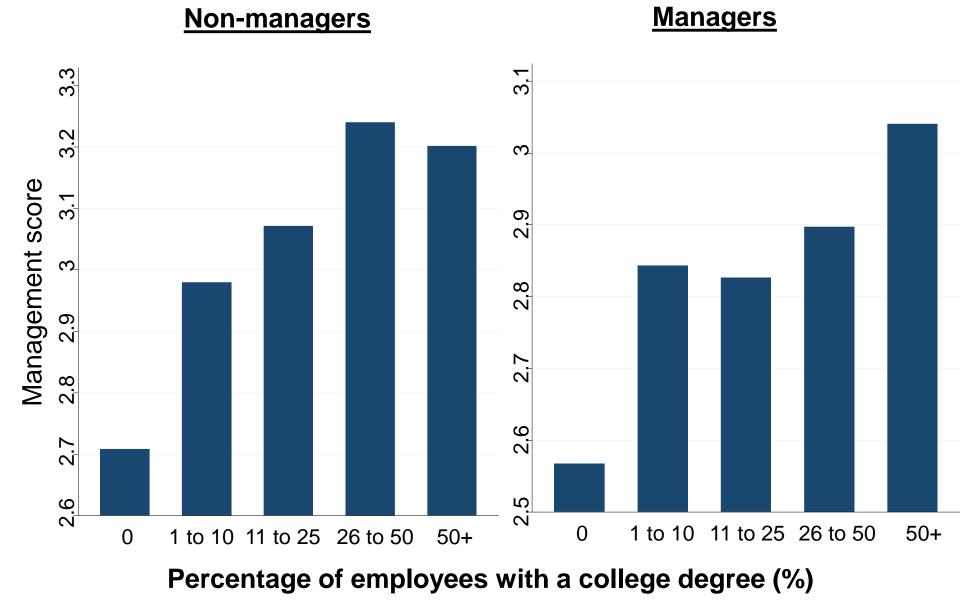


### PROMOTE PROFESSIONAL OWNERSHIP: FAMILY-RUN AND GOVERNMENT FIRMS OFTEN HAVE POOR MANAGEMENT



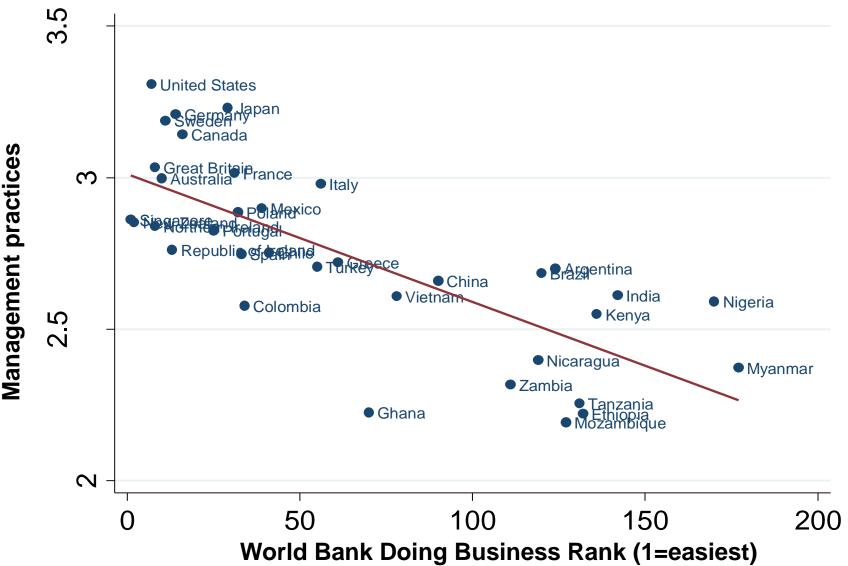
Management scores after controlling for country, industry and number of employees. Data from 9085 manufacturers and 658 retailers. "Founder owned, founder CEO" firms are those still owned and managed by their founders. "Family firms" are those owned by descendants of the founder "Dispersed shareholder" 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 <a href="http://www.doingbusiness.org/rankings">http://www.doingbusiness.org/rankings</a>. 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 <u>www.worldmanagementsurvey.com</u>

