

MANAGEMENT PRACTICES, OWNERSHIP & COMPETITION

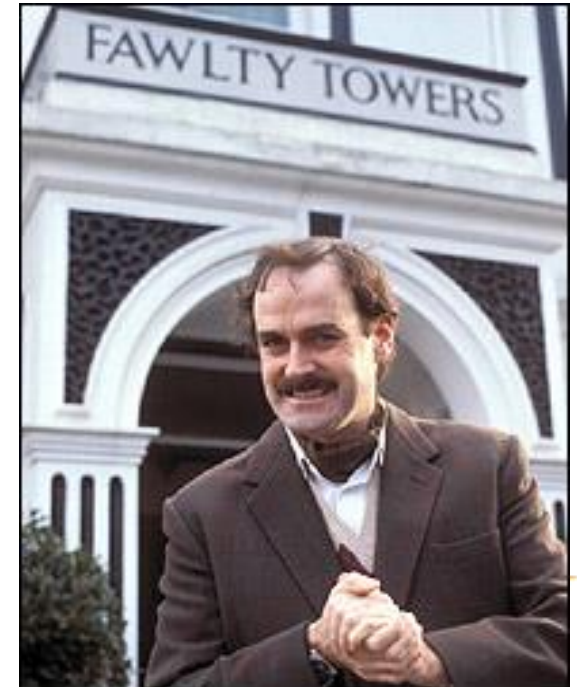
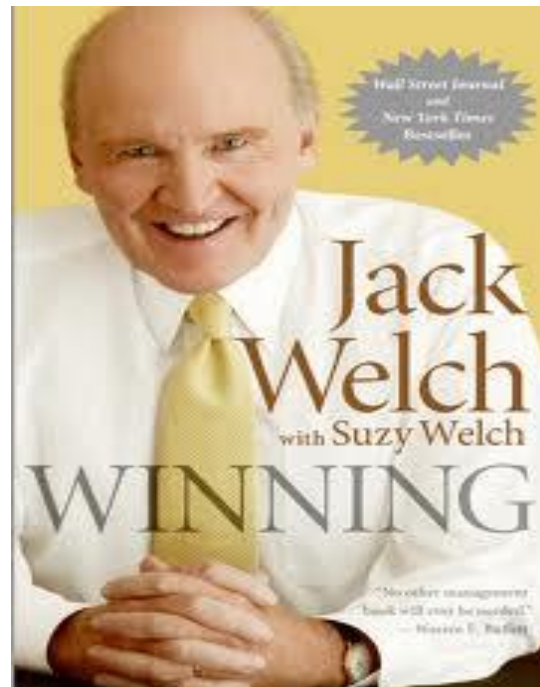
John Van Reenen (LSE)

Draws heavily on joint work with Nick Bloom
(Stanford) & Raffaella Sadun (HBS)

**Marianne and Marcus Wallenberg Foundation
Jubilee Symposium Stockholm, 2013**



MANAGEMENT PRACTICES, OWNERSHIP & COMPETITION

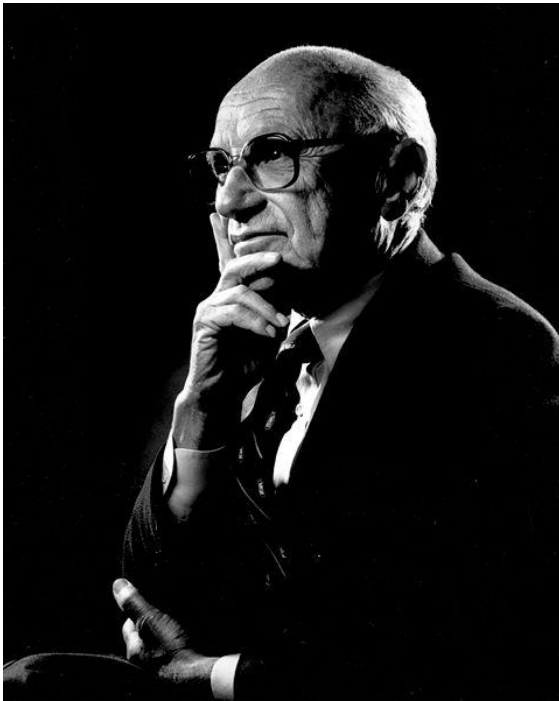


MOTIVATION

- Evidence of huge variation in profits & productivity across firms & nations
 - In narrow industry (e.g. US concrete) top 10% of plants four times as productive as bottom 10%
- How much of these are due to differences in management?
- What can policy makers (& business people) do to improve?
- Implications for Sweden (doing well, but room for improvement)

REASONS FOR BIG PRODUCTIVITY SPREAD

- **“Trad” economist: variation due to “hard technologies”**
 - R&D, patents, diffusion (e.g. Information & Communication Technologies)



REASONS FOR BIG PRODUCTIVITY SPREAD

- **“Trad” economist: variation due to “hard technologies”**
 - R&D, patents, diffusion like ICT (Information & Communication Technologies)
- **These hard technologies matter a lot, but:**
 - After controlling for technology, still mostly unexplained
 - Productivity effects of technologies like ICT depend on firm management/organization (e.g. Bloom Sadun & Van Reenen, 2012, AER on Sweden & 6 EU countries)
- **Heterogeneity of management practices**
 - Business case studies
 - Econometric tradition
 - Measurement hard

SUMMARY

- Develop a way of measuring **some** core management practices across industries & 20 countries
 - Huge differences in management quality across countries & firms
 - Productivity differences closely related to management
 - Management accounts for up to $\frac{1}{2}$ of between country productivity differences
- Systematic drivers of management differences
 - Competition, public ownership, skills, regulation
 - Important implications for Swedish business leaders & policy makers

Measuring Management

Modelling Management

Management & performance

Explaining Management

BLOOM - VAN REENEN (2007) SURVEY METHODOLOGY

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, Sveriges Riksbank, etc.
- Run >100 MBA types (loud, assertive & business experience)

MONITORING – e.g. “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

Note: All 18 questions and over 50 examples in Bloom & Van Reenen (2007)

<http://worldmanagementsurvey.org/>

INCENTIVES - e.g. "HOW DOES THE PROMOTION SYSTEM WORK?"

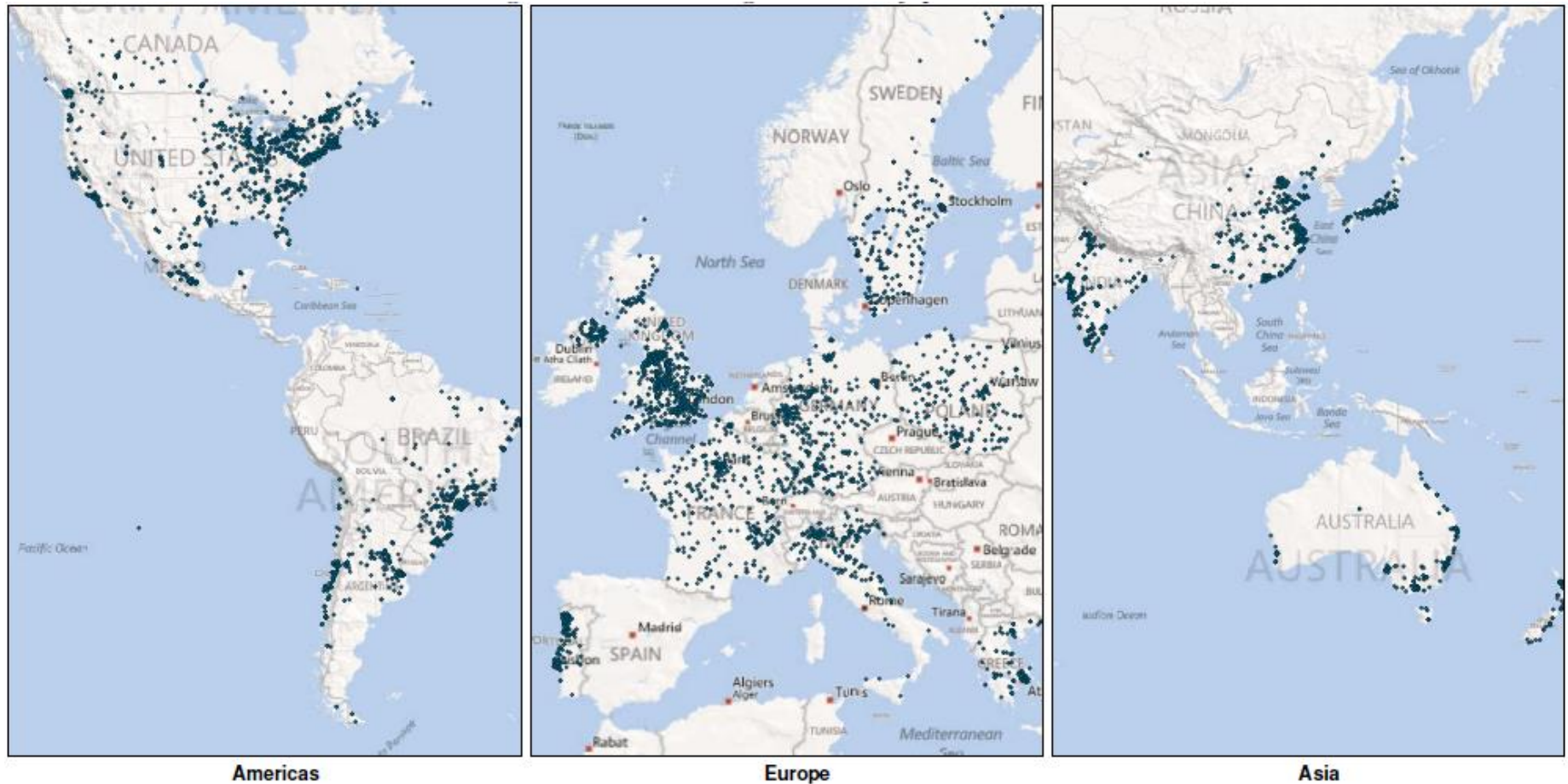
Score

(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

Plant locations from World Management Survey (~8,000 firms, 3 major waves: 2004, 2006, 2009; 20 countries)



Medium sized manufacturing firms(50-5,000 workers, median≈250)

Now extended to Hospitals, Retail, Schools, Universities, etc.

2013: extending to African countries & more Latin America

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MANAGEMENT CAUSE OF FIRM PERFORMANCE

“It is on account of the wide range [of ability] among the employers of labor that we have the phenomenon in every community and in every trade some employers realizing no profits at all, while others are making fair profits; others, again, large profits; others, still, colossal profits.”

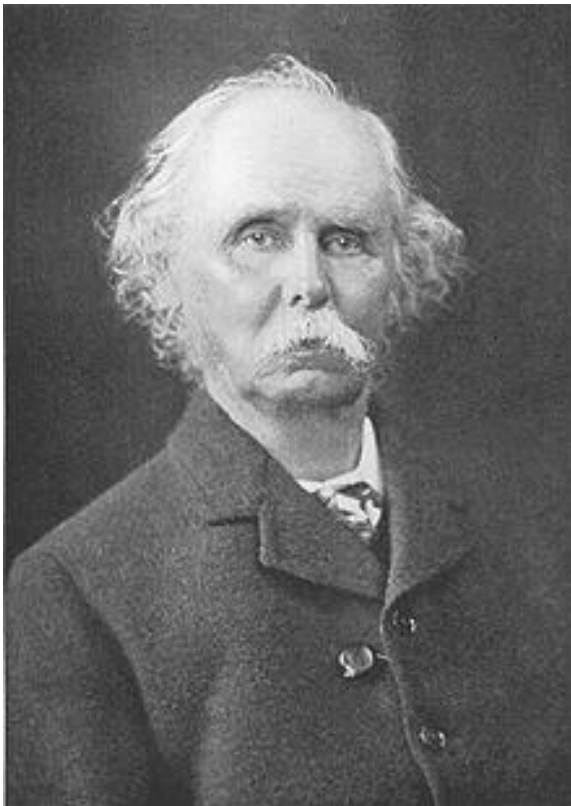


Francis Walker (*QJE*, April 1887)

Walker ran the 1870 and 1880 US Census

MANAGEMENT ANOTHER FACTOR OF PRODUCTION

“I am very nearly in agreement with General Walker’s Theory of profits....the earnings of management of a manufacturer represents the value of the addition which his work makes to the total produce of capital and industry....”



Alfred Marshall (QJE, July 1887)

MANAGEMENT AS CONTINGENCY

“There can be no one best way of organizing a business.

Conformity with the ‘rules’ of management did not result in success or non-conformity in commercial failure. Of the 20 firms assessed as ‘above average’ in success only 9 had an organizational pattern of the orthodox kind”



Joan Woodward (*Management and Technology*, 1958)

From a detailed survey of 200 UK manufacturing firms

ECONOMIC PERSPECTIVES ON MANAGEMENT

- **Management as Design**

Contingency: No better or worse management: different optimal “styles” (Organizational Econ; Woodward)

- **Management as a Technology (MAT)**

- Management the key driver of firm’s productivity

- Bloom, Sadun & Van Reenen (2013): analytical & simulation models gives 3 results found in data:

- Performance increasing in management
- Competition improves management
- Management & firm size correlation (“reallocation”) weaker in more distorted economies

- We show positive evidence for both perspectives, but MAT more important in our data

MY FAVOURITE QUOTES:

The traditional British Chat-Up

[Male manager speaking to an Australian female interviewer]

Production Manager: “Your accent is really cute and I love the way you talk. Do you fancy meeting up near the factory?”

Interviewer “Sorry, but I’m washing my hair every night for the next month....”

MY FAVOURITE QUOTES:

The traditional Indian Chat-Up

Production Manager: “Are you a Brahmin?”

Interviewer “Yes, why do you ask?”

Production manager “And are you married?”

Interviewer “No?”

Production manager “Excellent, excellent, my son is looking for a bride and I think you could be perfect. I must contact your parents to discuss this”

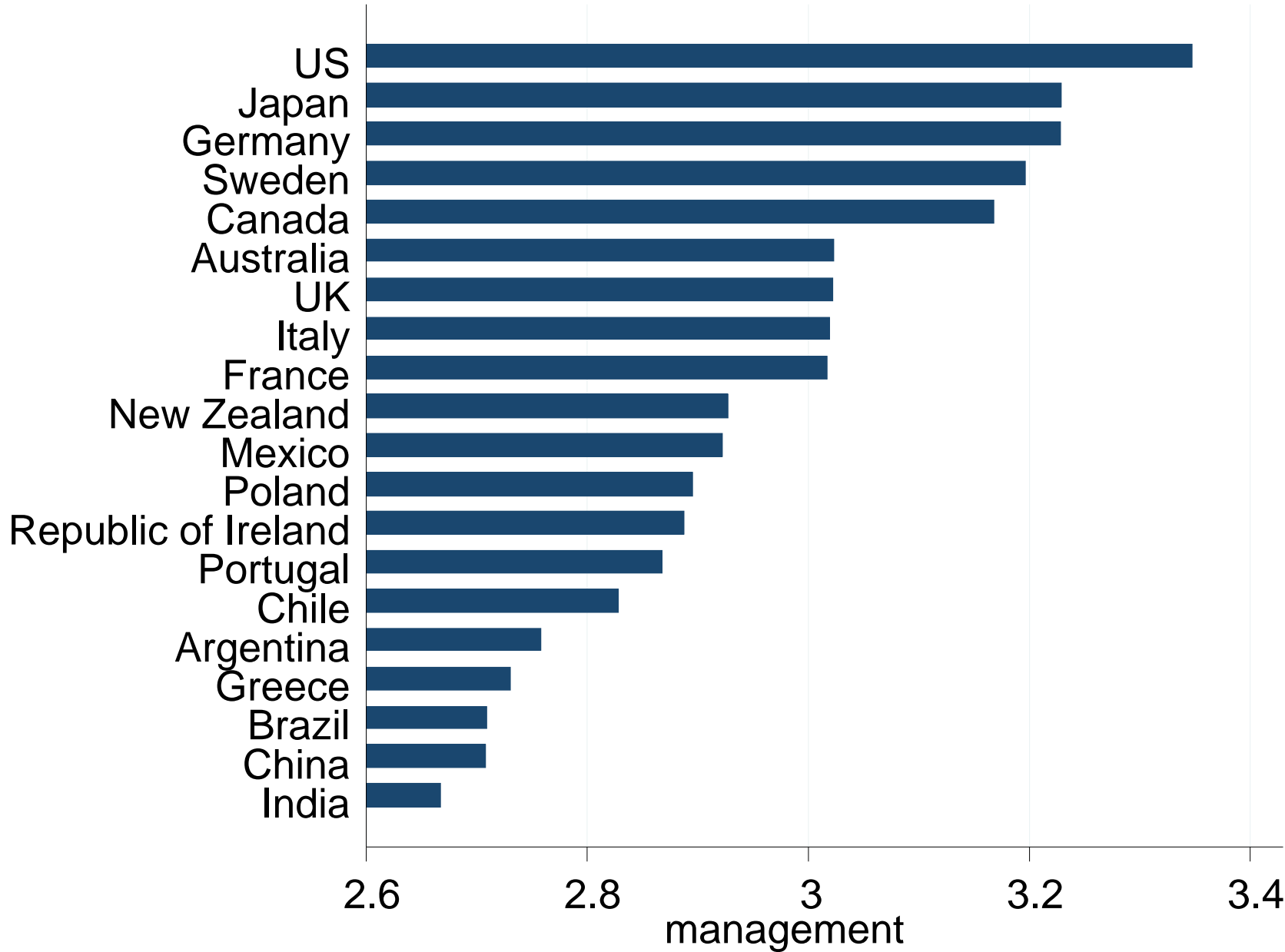
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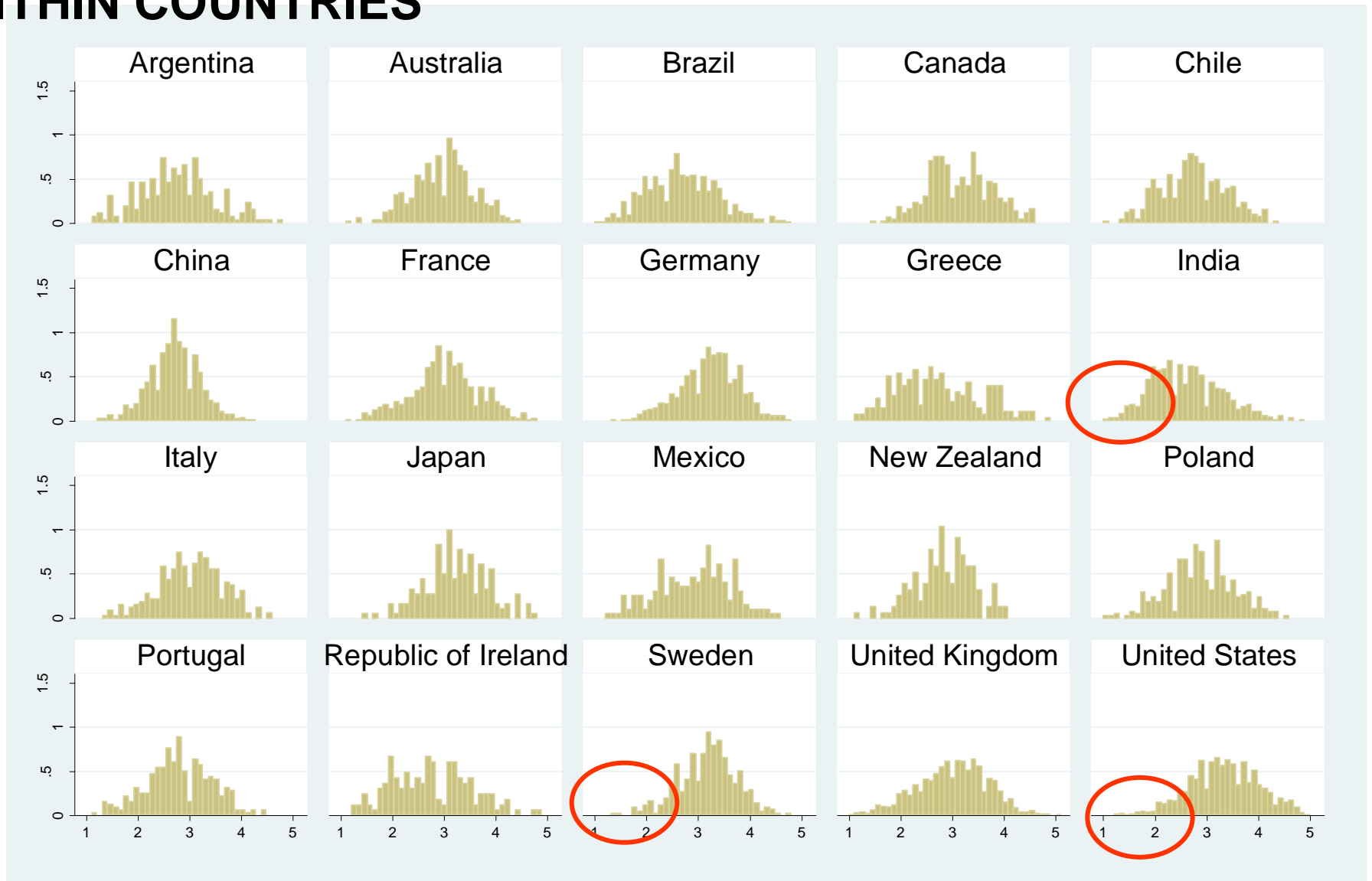
Explaining Management

MANAGEMENT PRACTICE SCORES ACROSS COUNTRIES



Note: Unweighted averages taken across all firms within each country; 9,995 obs

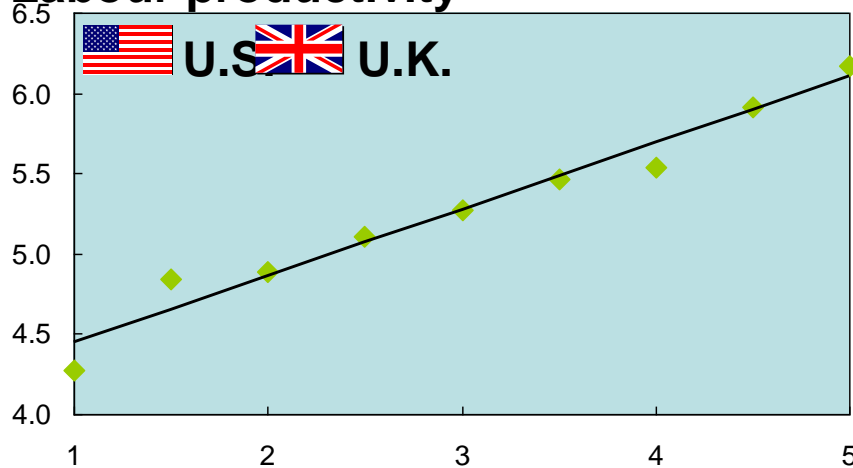
HUGE VARIATION IN MANAGEMENT SCORES ACROSS FIRMS WITHIN COUNTRIES



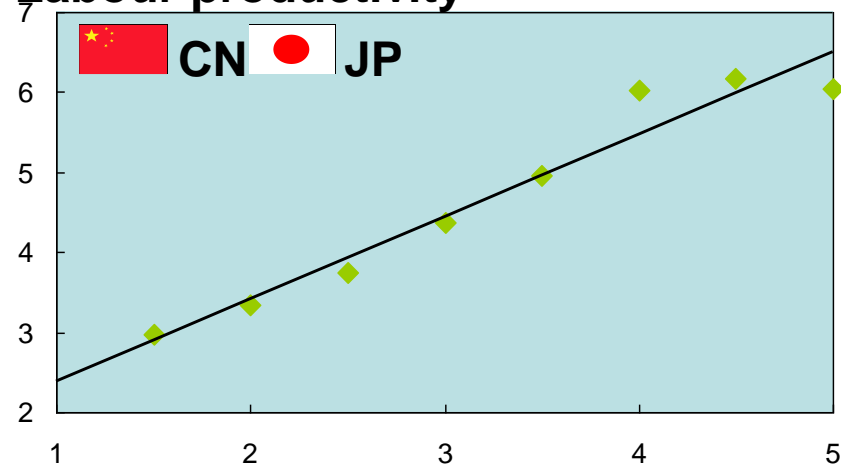
Note: Bars are the histogram of the actual density. Scores from 9,995 management interviews across 20 countries.

LINK BETWEEN PRODUCTIVITY & MANAGEMENT HOLDS TRUE ACROSS DIFFERENT COUNTRIES

Labour productivity*

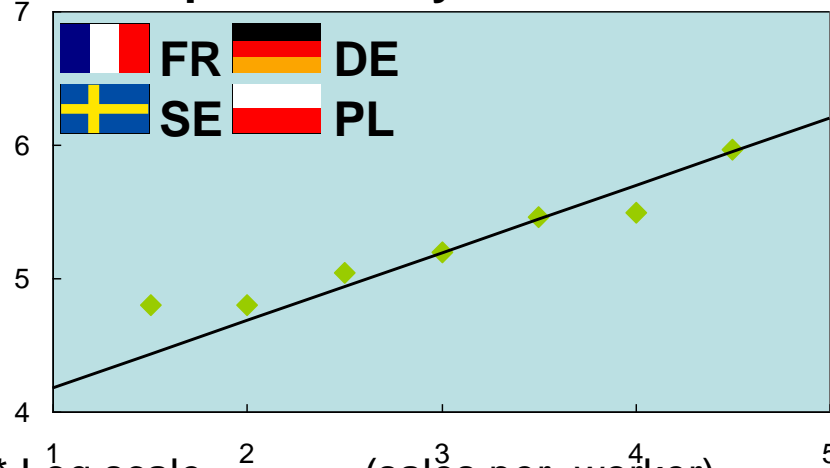


Labour productivity*

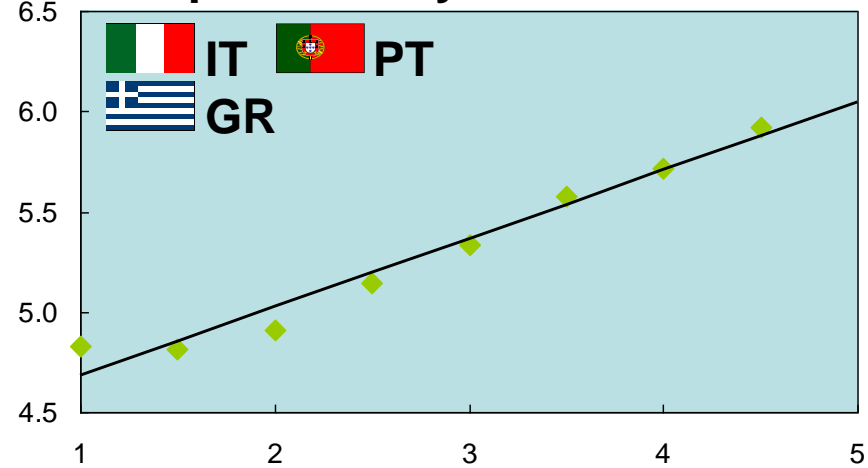


management practice score**

Labour productivity*



Labour productivity*



* Log scale (sales per worker)

management practice score**

** Firms are grouped in 0.5 increments of assessed management score

BUT DOES MANAGEMENT CAUSE BETTER PERFORMANCE? RANDOMIZED CONTROL TRIALS: BLOOM ET AL (2013)

- Experiment on plants in Indian textile firms outside Mumbai
- Randomized treatment plants get heavy management consulting, control plants get very light consulting (just enough to get data)
- Collected weekly performance data on all plants from 2008 to 2010
- Improved management practices led to large & significant improvements in:
 - **Productivity:** One standard deviation increase in management caused 10% higher (TF) productivity
 - **Profitability:** around \$325k p.a. compared to ~\$200k market cost of consultancy

MANY PARTS OF THE FACTORIES ARE DIRTY AND UNSAFE



THE FACTORIES ARE ALSO DISORGANIZED



Instrument not removed after use, blocking hallway.

Oil leaking from the machine

Cotton lying on the floor

Instrument blocking the hallway

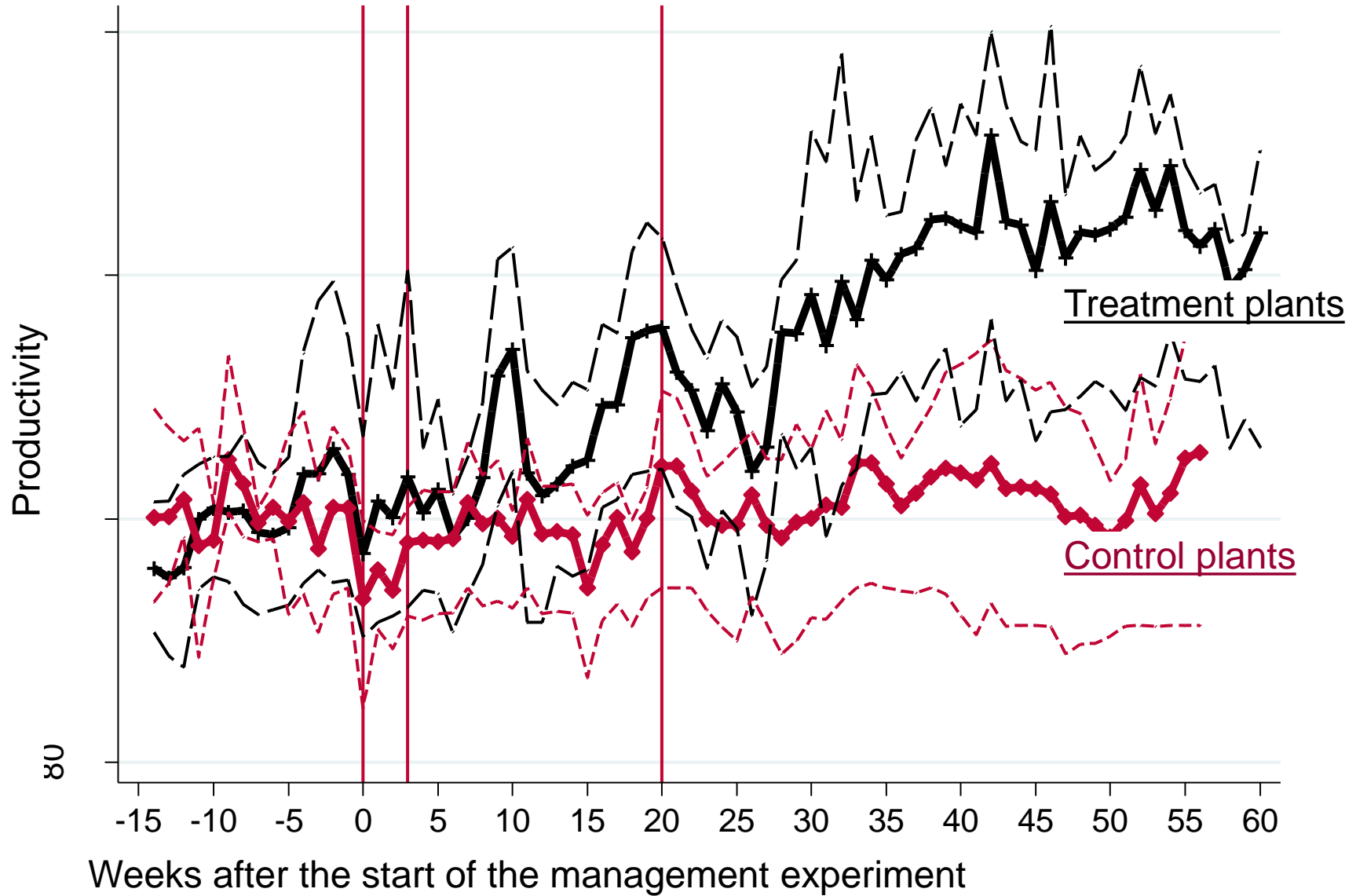
THE TREATED FIRMS INTRODUCED BASIC INITIATIVES

Worker involved in “5S” initiative on the shop floor, marking out the area around the model machine



Snag tagging to identify the abnormalities on & around the machines, such as redundant materials, broken equipment, or accident areas. The operator and the maintenance team is responsible for removing these abnormalities.

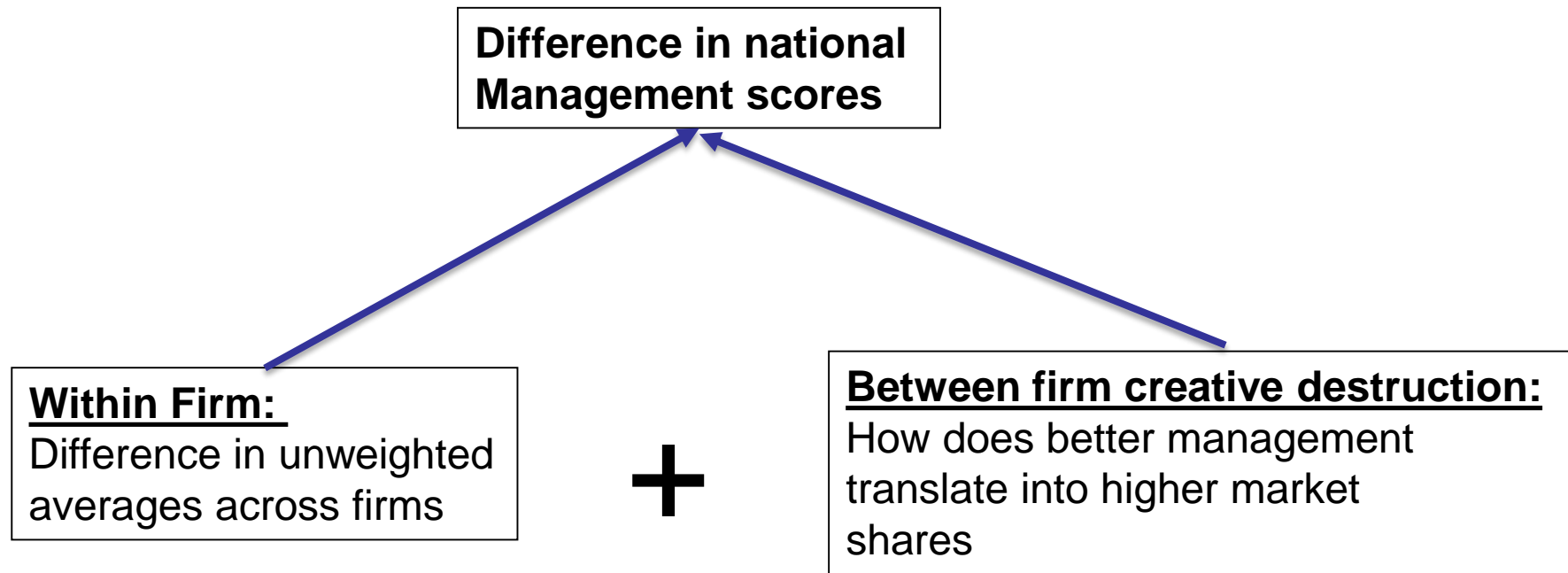
PRODUCTIVITY IMPROVEMENTS IN RCT EXPERIMENT ON ADOPTION OF MANAGEMENT PRACTICES



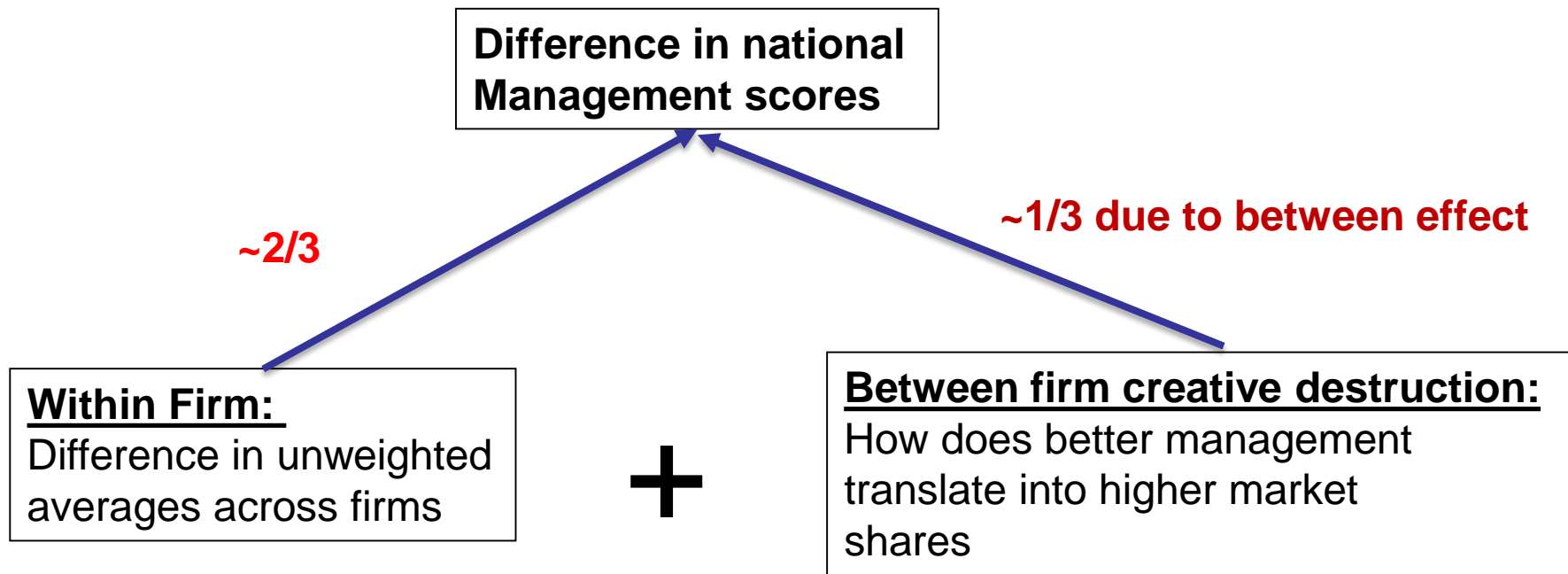
ACCOUNTING FOR THE CROSS COUNTRY DIFFERENCES IN MANAGEMENT & PRODUCTIVITY (US BENCHMARK)

**Difference in national
Management scores**

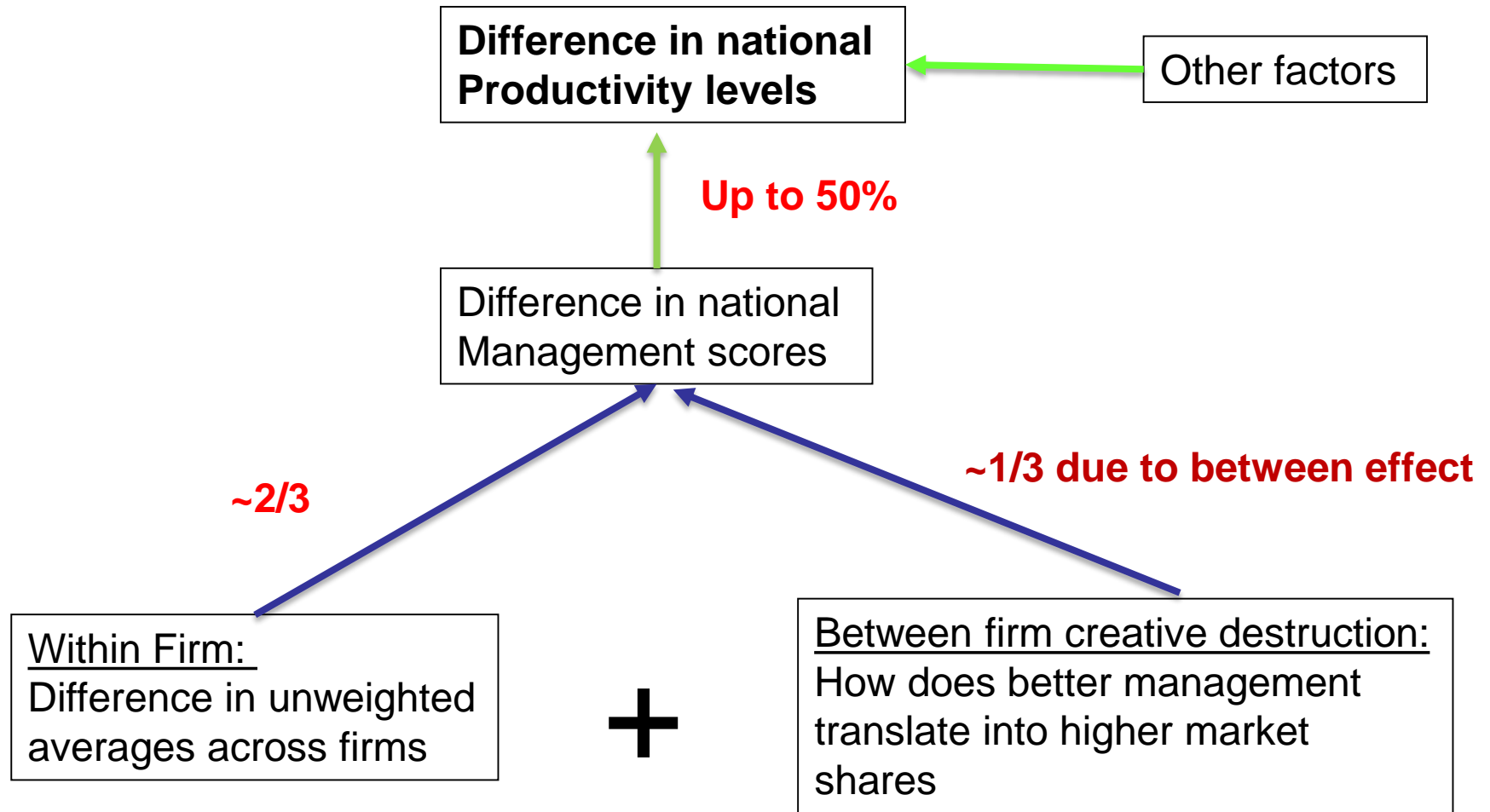
ACCOUNTING FOR THE CROSS COUNTRY DIFFERENCES IN MANAGEMENT & PRODUCTIVITY (US BENCHMARK)



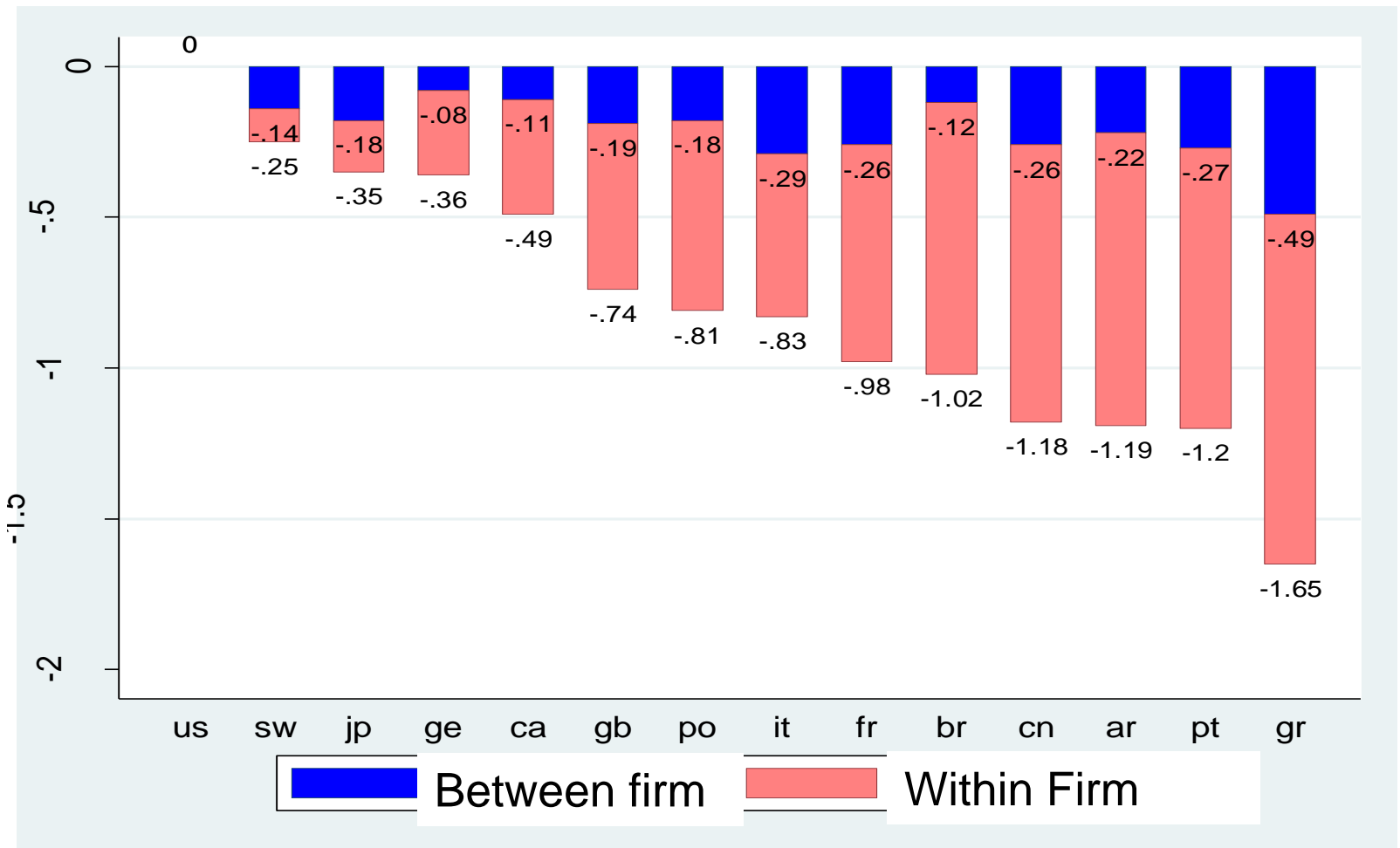
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MANAGEMENT SCORES & REALLOCATION ACROSS COUNTRIES RELATIVE TO THE US LEVEL

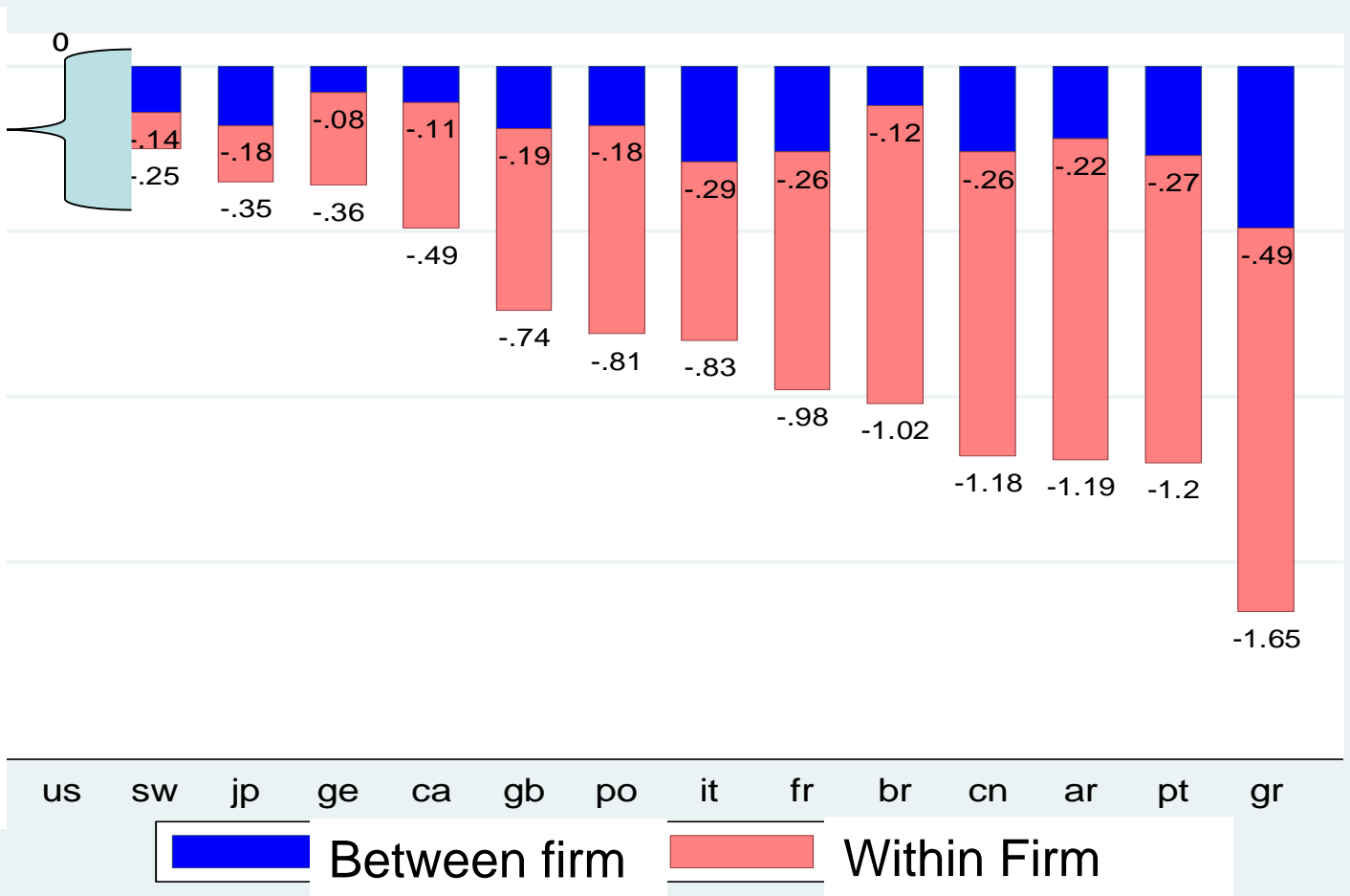


Notes: Total weighted mean management deficit with the US is the number on top of bar. This is decomposed into (i) reallocation effect (OP, blue bar) and (ii) unweighted average management scores (sd=1, red bar) . Domestic firms, scores corrected for sampling bias

Similar ranking to Bartelsman, Haltiwanger & Scarpetta (2013, AER) sub-sample

MANAGEMENT SCORES & REALLOCATION ACROSS COUNTRIES RELATIVE TO THE US LEVEL

Over 50% of US-Sweden management gap due to better US reallocation



Notes: Total weighted mean management deficit with the US is the number on top of bar. This is decomposed into (i) reallocation effect (OP, blue bar) and (ii) unweighted average management scores (sd=1, red bar) . Domestic firms, scores corrected for sampling bias

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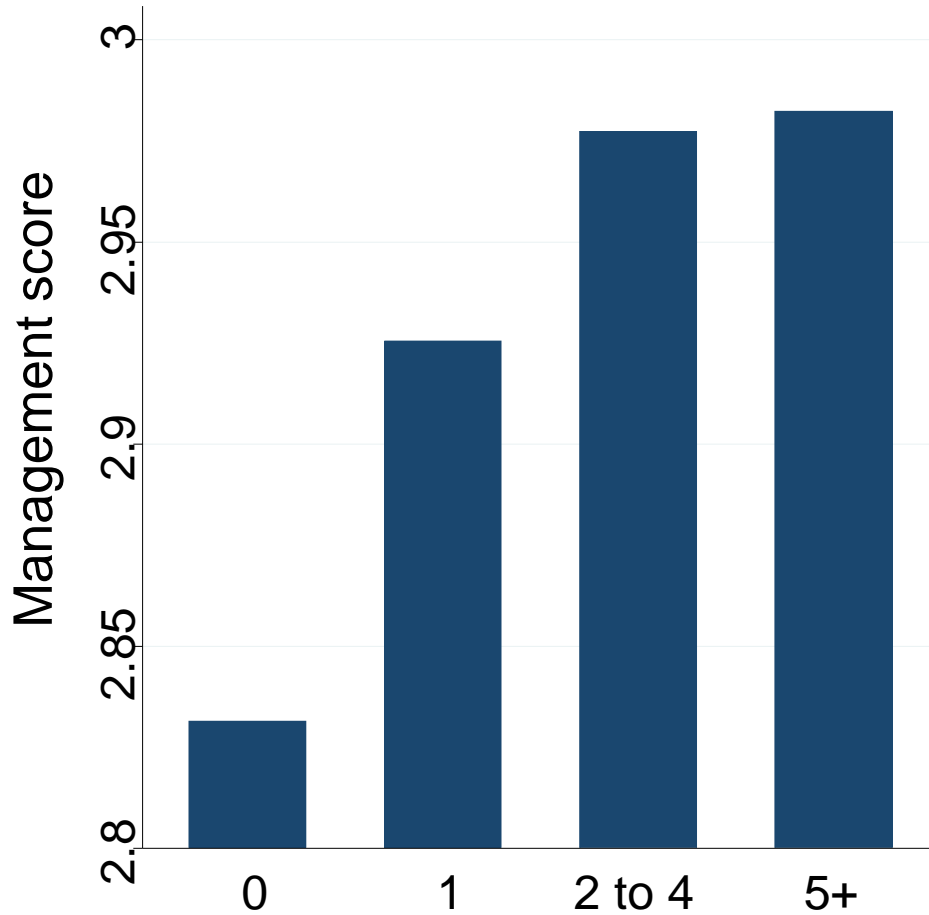
Explaining Management

Why does management vary so much?

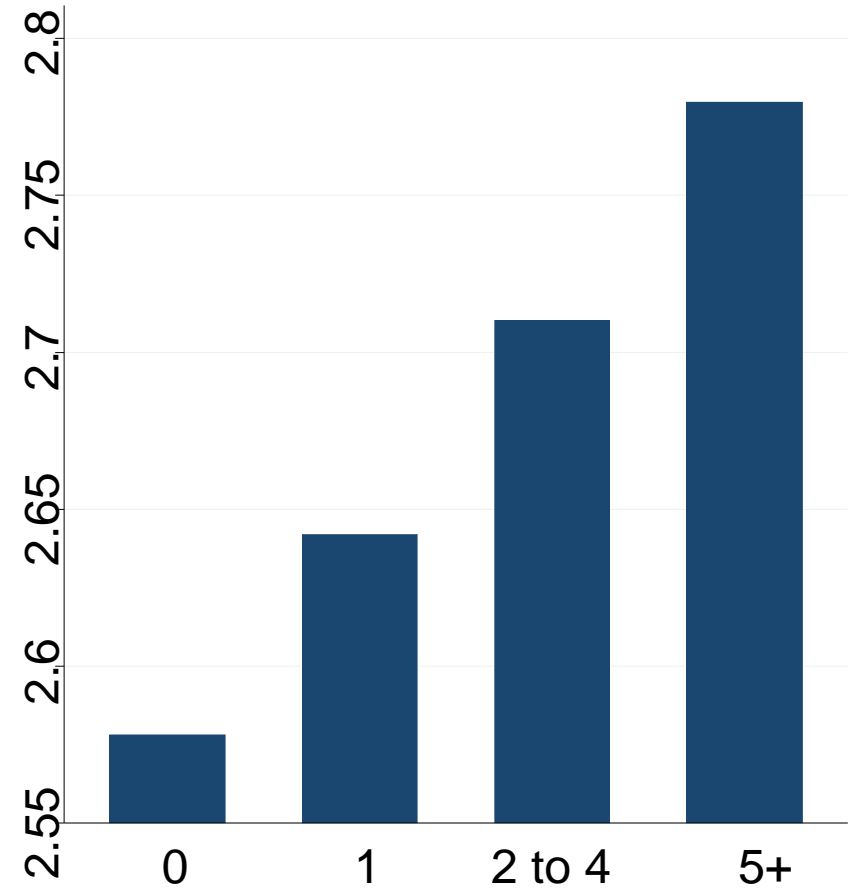
- Competition
- Family firms
- Multinationals
- Education
- Labor market regulation
- Information

COMPETITION IMPROVES MANAGEMENT

Manufacturing and Retail (mainly private sector)



Hospitals and Schools (mainly public sector)



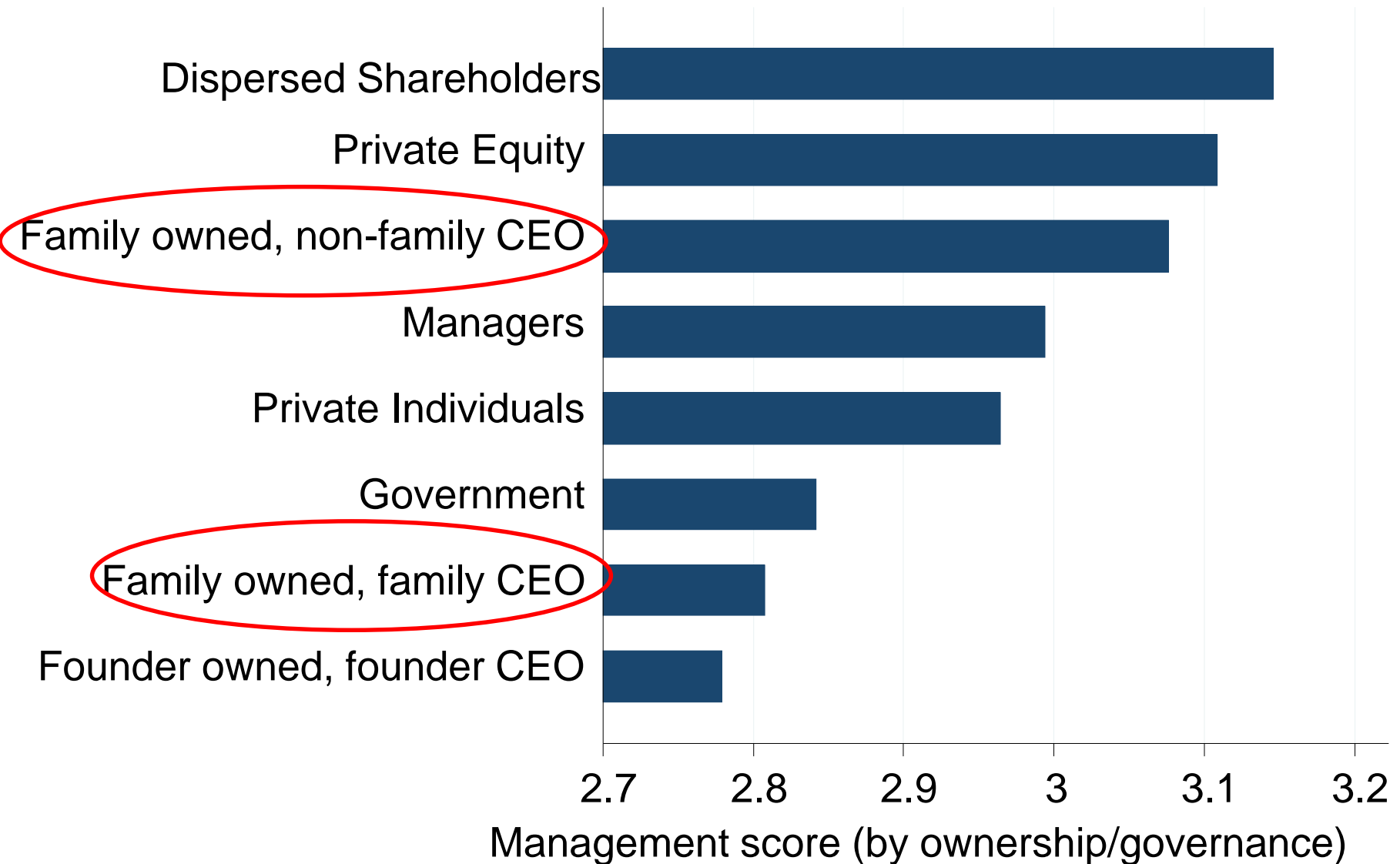
Number of Reported Competitors

Sample of 9469 manufacturing and 661 retail firms (private sector panel) and 1183 hospitals and 780 schools (public sector panel). Reported competitors defined from the response to the question “How many competitors does your [organization] face?”

COMPETITION EFFECT IS CAUSAL

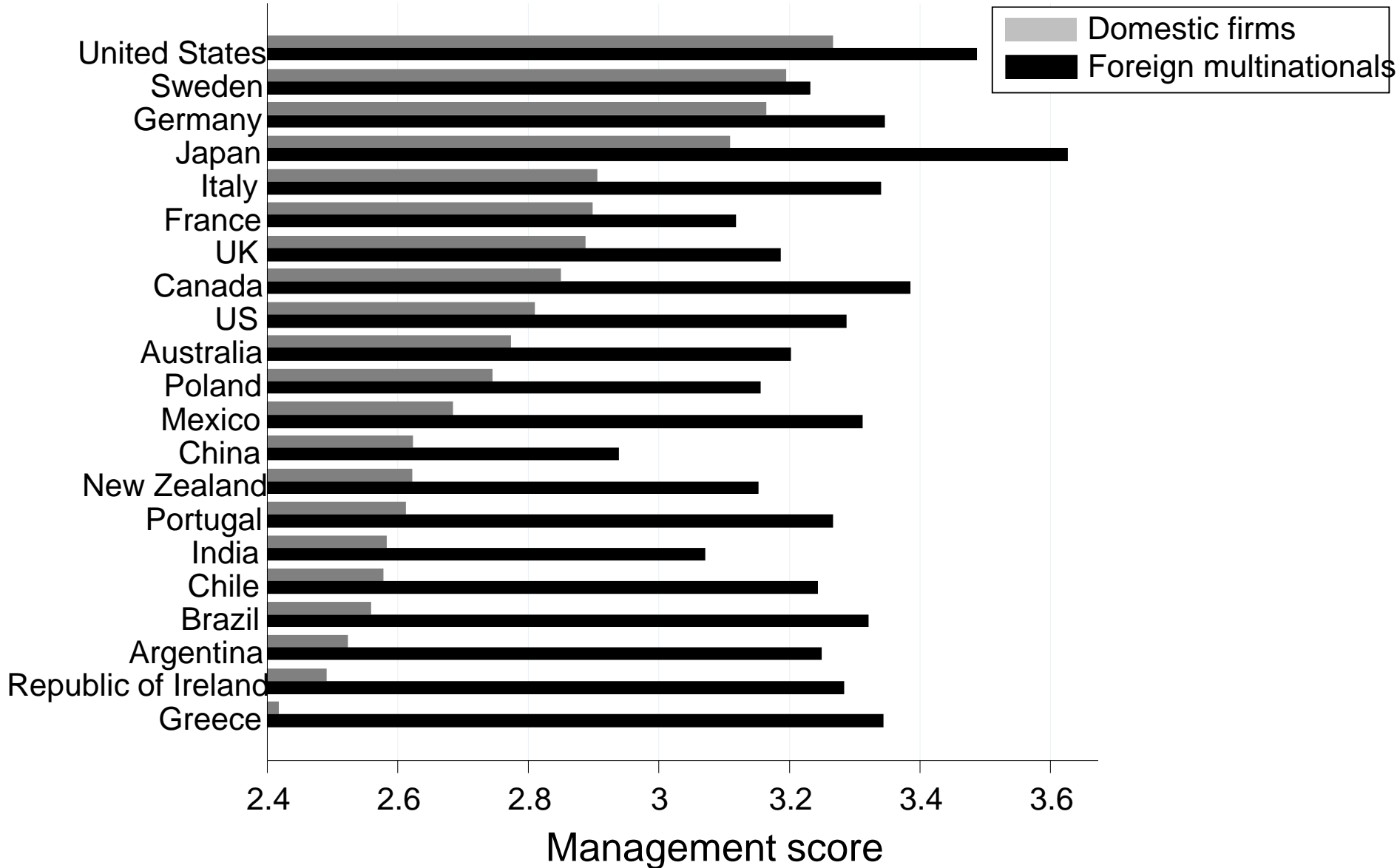
- Competition helps improve management through:
 - Creative destruction (between firm selection)
 - Managerial effort (within firm)
- Use “natural experiments” to generate exogenous increases in competition. Examples:
 - Trade liberalization following China accession to WTO & subsequent phase out of MFA quotas in textiles & apparel industries Bloom, Draca & Van Reenen (2013)
 - Hospital competition in England under Blair reforms (Bloom, Propper, Seiler & Van Reenen, 2013)

ON AVERAGE FAMILY-RUN FIRMS & GOVERNMENT OWNED ORGANIZATIONS HAVE POOR MANAGEMENT



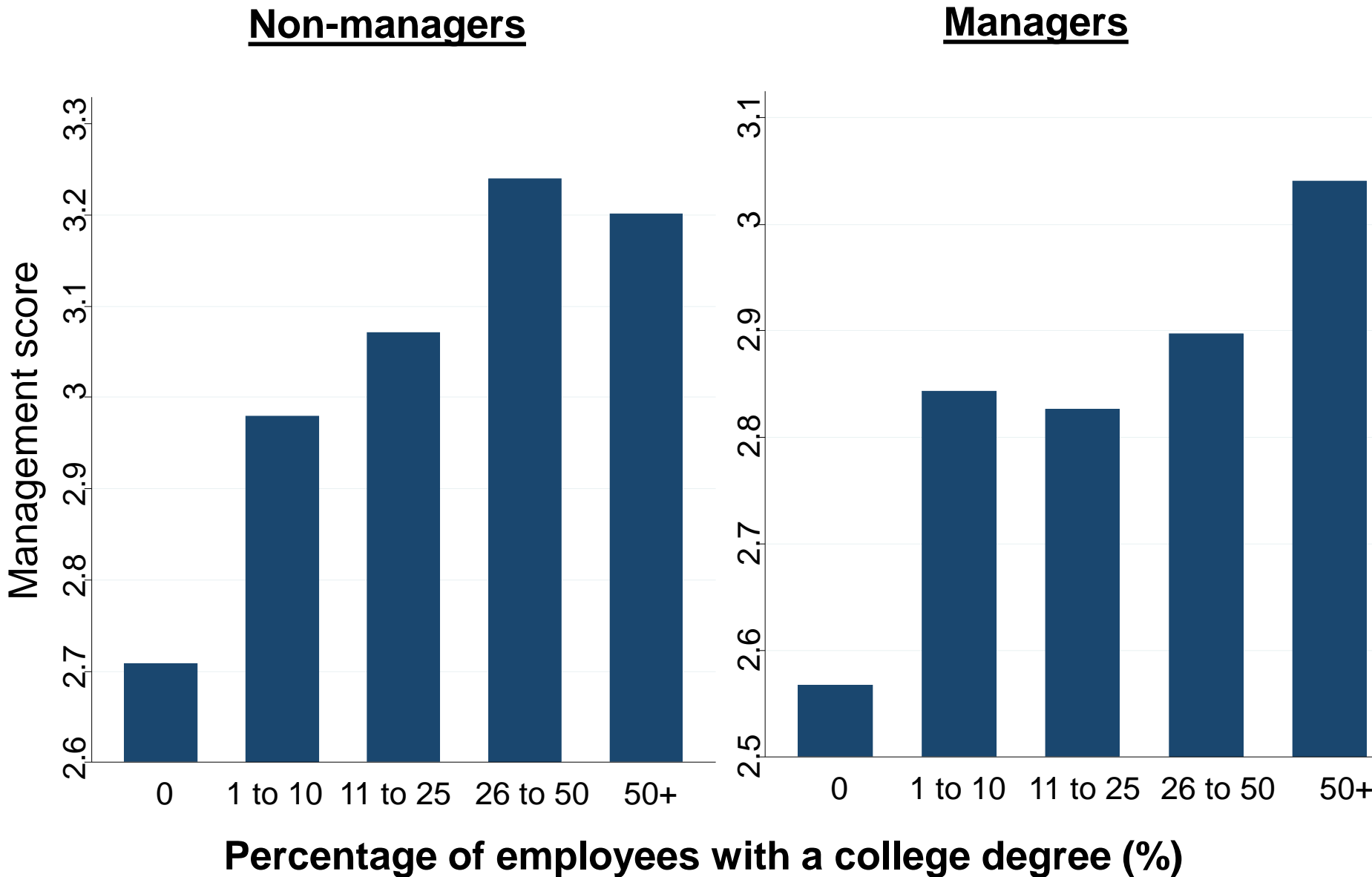
Management scores after controlling for country, industry and number of employees. Data from 9085 manufacturers and 658 retailers. “Founder owned , founder CEO” firms are those still owned and managed by their founders. “Family firms” are those owned by descendants of the founder “Dispersed shareholder” firms are those with no shareholder with more than 25% of equity, such as widely held public firms.

MULTINATIONALS APPEAR TO ACHIEVE GOOD MANAGEMENT PRACTICES WHEREVER THEY LOCATE



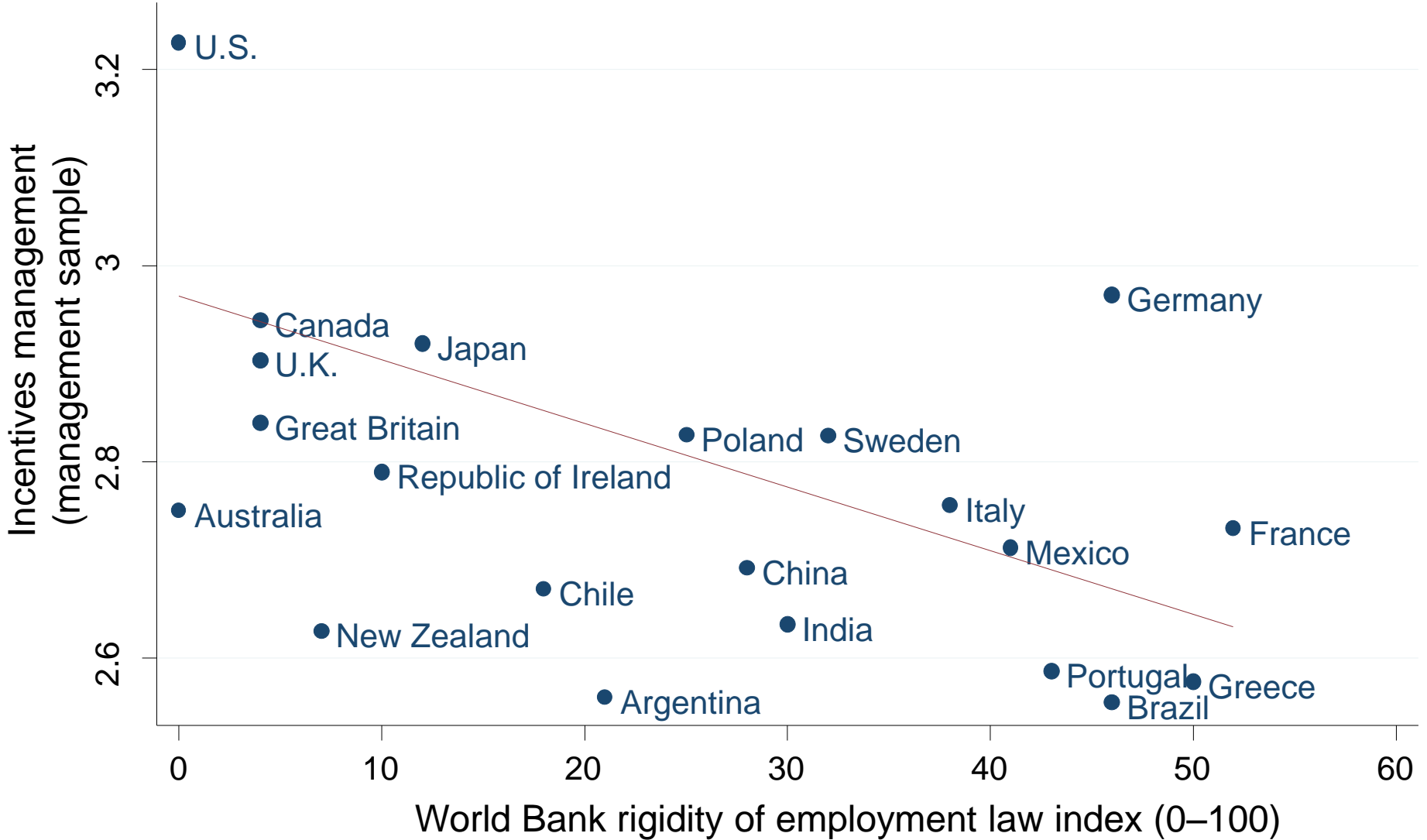
Sample of 7,262 manufacturing and 661 retail firms, of which 5,441 are purely domestic and 2,482 are foreign multinationals. Domestic multinationals are excluded – that is the domestic subsidiaries of multinational firms (like a Toyota subsidiary in Japan).

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



Sample of 8,032 manufacturing and 647 retail firms.

LABOR MARKET REGULATION NEGATIVELY CORRELATED WITH PEOPLE MANAGEMENT



Note: Averaged across all manufacturing firms within each country (9,079 observations). We did not include other sectors as we do not have the same international coverage. Incentives management is defined as management practices around hiring, firing, pay, and promotions. The index is from the Doing Business database: <http://www.doingbusiness.org/ExploreTopics/EmployingWorkers/>.

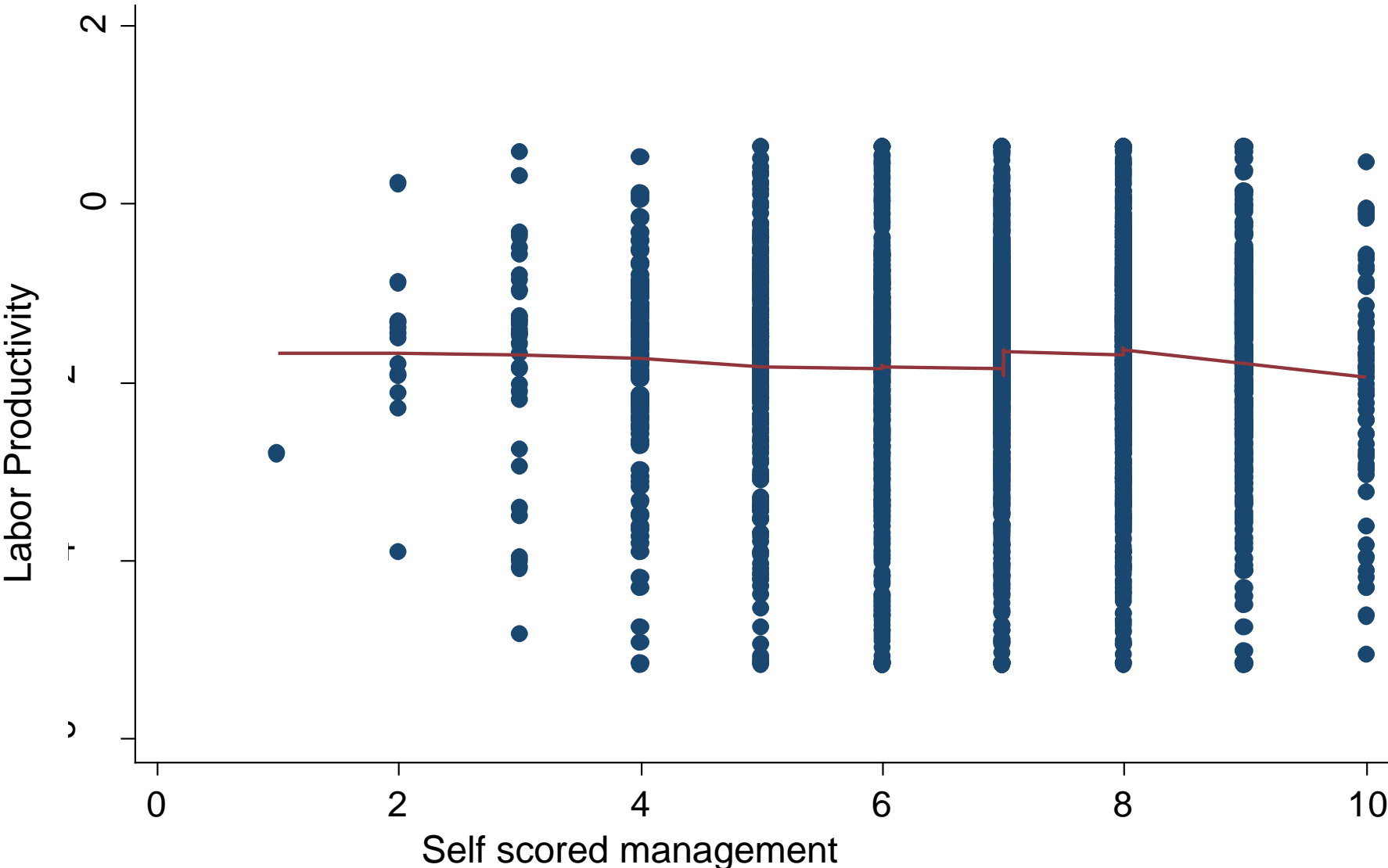
INFORMATION: ARE FIRMS AWARE OF THEIR MANAGEMENT PRACTICES BEING GOOD/BAD?

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”

We also asked them to give themselves scores on operations and people management separately

SELF-SCORES ARE UNCORRELATED WITH PRODUCTIVITY



* Insignificant 0.03 correlation with labor productivity, cf. management score has a 0.295

CONCLUSIONS: POLICY IMPLICATIONS

- **For business people (an optimistic story)**
 - Many basic things can be done to improve performance
 - Even in difficult environments, there are excellent firms (e.g. multinational evidence)
 - Family firms need to think about succession planning
- **For Policy makers**
 - Enhance competition
 - Reduce tax distortion (e.g. towards family & small firms)
 - Human capital improvements
 - Spreading information on best practice

CONCLUSIONS: SWEDISH SITUATION

- **Sweden successful**

- Very high in management rankings
- Strong international sector (multinationals)
- Competitive product & labor markets
- High skills

- **Room for improvement**

- Most of US-Sweden gap due to slower reallocation
- Public sector productivity
- Domestic firms, family firms, etc.
- Some slippage in education results (youth & immigrant issues)

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...”

FURTHER READING

- **Website with all reports & methods**
 - <http://worldmanagementsurvey.org/>
- **Harvard Business Review: <http://hbr.org/2012/11/does-management-really-work/ar/1>**
- **Summary**
http://cep.lse.ac.uk/_new/publications/abstract.asp?index=3962
- **Management as a Technology**
http://cep.lse.ac.uk/textonly/_new/staff/vanreenen/pdf/mat_2012fmar16_ucb.pdf

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

FUNDAMENTAL CAUSES OF MANAGEMENT VARIATIONS

- Jan Rifkind's (HBS) 4 'shuns
 - **Perception** (I don't know I'm bad)
 - **Persuasion** (I don't know how to change)
 - **Motivation** (I don't want to change – competition, family firms, etc.)
 - **Organization** (I can't get everyone else to change)