

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

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

Extension of Bloom and Van Reenen (2007) methodology to 12 countries including India and China

OUTLINE

1. Why should management practices vary?

2. “Measuring” management practices

3. Evaluating the reliability of this measure

4. Describing management across firms & countries

5. Accounting for management across firms & countries

WHY SHOULD MANAGEMENT PRACTICES VARY?

Two models - not mutually exclusive

- “Optimal choice of management practices”
 - Another factor of production (like advertising)
 - No “better” or “worse” style of management – depends on firm’s circumstances
- “Managerial inefficiency”
 - Strictly “better” or “worse” styles of management
 - Part of a firms overall productivity

Empirically we find some support for both – today focus on “managerial inefficiency” evidence due to time constraints

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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
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MANAGEMENT SURVEY SAMPLE

- Interviewed over 4,500 firms across US, Asia & Europe
- 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 \approx 250) because firm practices more homogeneous
- Manufacturing as easier to measure productivity (currently piloting in Schools, Hospitals, Retail and Law Firms)

1. Why should management practices vary?

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a) Internal/External validation

b) Measurement error/bias

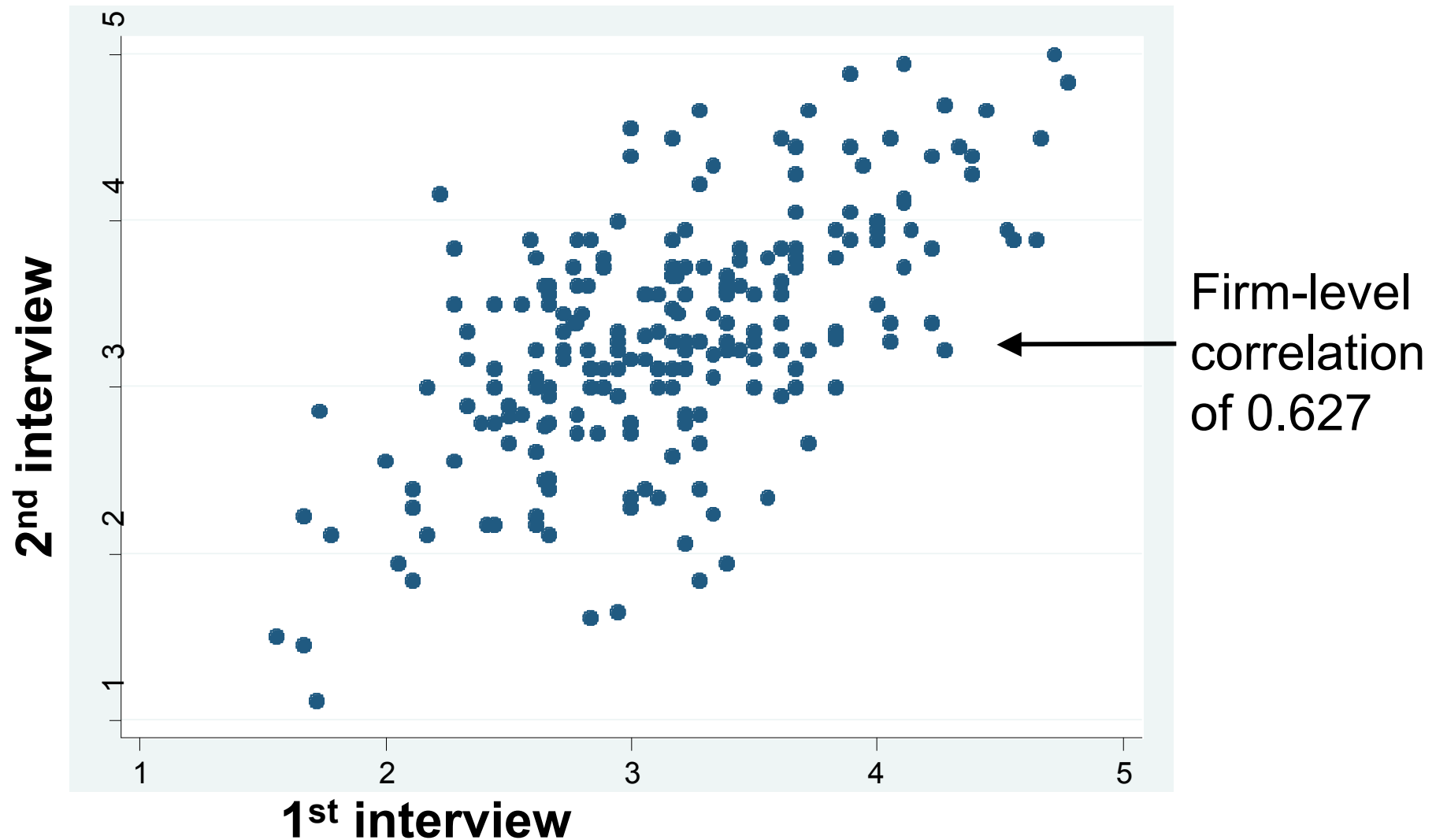
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INTERVAL VALIDATION OF THE SCORING

Re-interviewed 222 firms with different interviewers & managers

Firm average scores (over 18 question)



EXTERNAL VALIDATION OF THE SCORING

Performance
measure

country c

$$y_i^c = \beta MNG_i^c + \alpha^c l l_i^c + \alpha^c k k_i^c + \alpha^c m h_i^c + \gamma^{c'} x_i^c + u_i^c$$

management
(average z-scores)

In(labor)

In(capital)

In(materials)

other controls

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

EXTERNAL VALIDATION: PRODUCTIVITY & PROFIT

Dependent variable	Sales (in Ln)	Sales (in Ln)	Sales (in Ln)	ROCE	Sales growth	Tobin Q (in Ln)	Exit
Estimation ¹	OLS	OLS	OLS	OLS	OLS	OLS	Probit
Firms	All	All	All	All	All	Quoted	All
Management	0.300 (0.026)	0.213 (0.025)	0.198 (0.028)	1.880 (0.923)	0.032 (0.013)	0.250 (0.075)-	-0.200 [0.026]
Ln(Labor)	0.956 (0.024)	0.471 (0.033)	0.485 (0.021)	-0.494 (1.069)	0.001 (0.015)	0.209 (0.109)	0.233 [0.045]
Ln(Capital)		0.438 (0.021)	0.415 (0.013)	0.347 (0.505)	0.018 (0.010)	-0.029 (0.086)	-0.158 [0.045]
Ln(Skills) (% with degree)		0.059 (0.013)	0.036 (0.014)	0.347 (0.505)	0.004 (0.073)	0.130 (0.050)	-0.084 [0.231]
Ind. dummies	No	No	Yes	Yes	Yes	Yes	Yes
Noise control	No	No	Yes	Yes	Yes	Yes	Yes
Firms	3529	2706	2706	1752	2145	374	709

Cross sectional regressions. All columns include country controls. Robust S.E.s in () below. For probit p-values in [] below

EXTERNAL VALIDATION – ROBUSTNESS

Productivity 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)

OUTLINE

1. “Measuring” management practices

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4. Accounting for management across firms & countries:

FIG 1. COUNTRY LEVEL MANAGEMENT SCORES

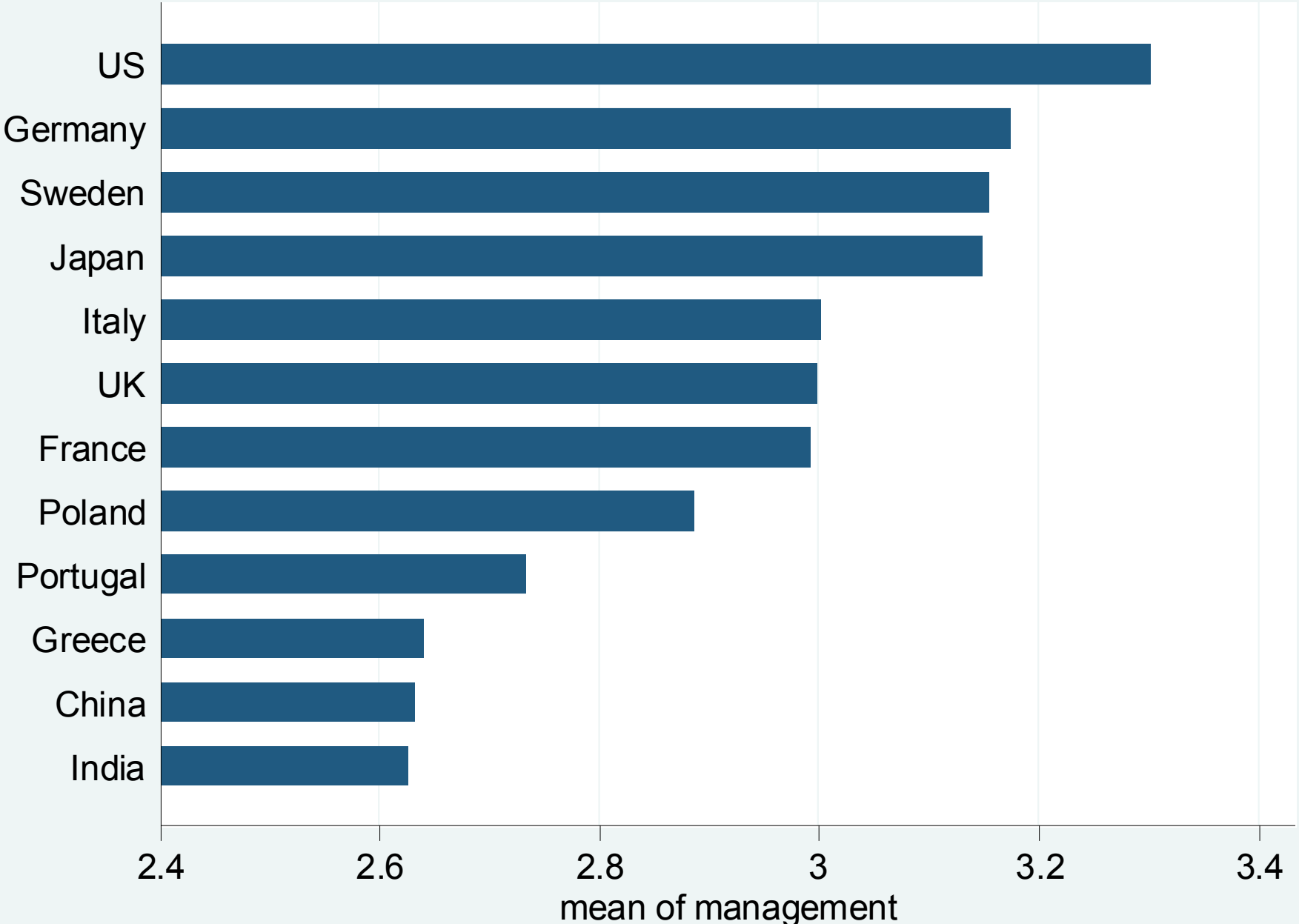


FIG 2. FIRM LEVEL MANAGEMENT SCORES



OUTLINE

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- **Competition**
- **Family firms**
- **Multinationals**
- **Labor market regulations**

COMPETITION & MODELS OF MANAGEMENT

Various ways that competition may influence 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

We find competition is strongly linked with better management

COMPETITION AND MANAGEMENT PRACTICES (TABLE 4)

3 competition proxies from Nickell (1996) & Aghion et al. (2005)

Competition proxies	Dependent variable: Management		
	Import penetration (SIC-3 industry, 1995-99)	0.066 (0.033)	
Rents measure¹ (SIC-3 except firm itself, 1995-99)		1.964 (0.721)	
# of competitors (Firm level, 2004)			0.158 (0.023)
Observations	2499	2980	3589
Full controls^{2,3}	Yes	Yes	Yes

¹ Rents = 1- (operating profit – capital costs)/sales

² Includes 108 SIC-3 industry, country, firm-size, public and interview noise (analyst, time, date, and manager characteristic) controls

³ S.E.s in () below, robust to heteroskedasticity, clustered by country-industry

FAMILY FIRMS & MANAGEMENT – AN OLD TOPIC

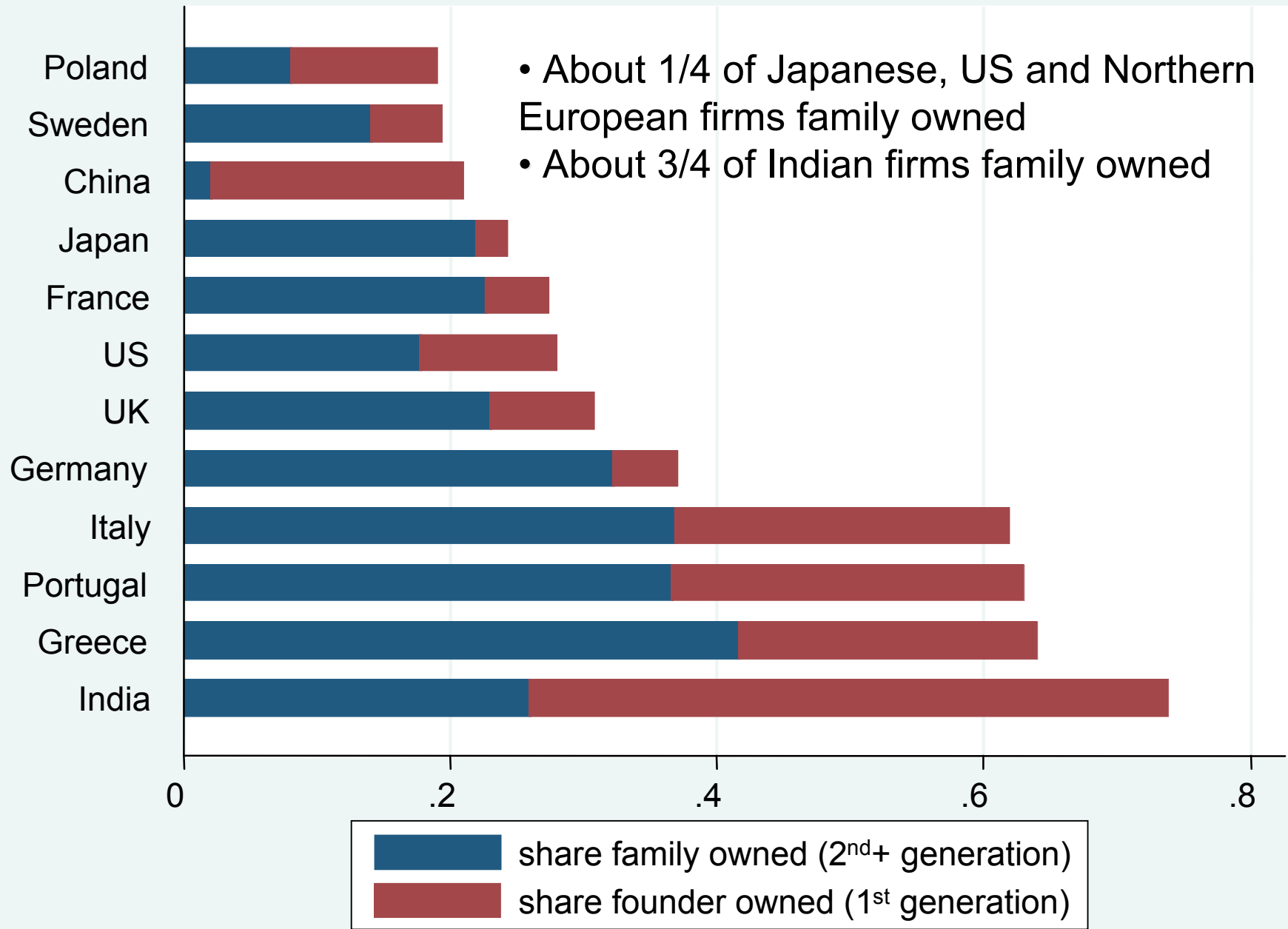
Alfred Chandler¹ and David Landes² claimed that the UK industrial decline relative to US & Germany was linked to family firms

“The Britain of the late 19th Century basked complacently in the sunset of economic hegemony. Now it was the turn of the 3rd generation...and the weakness of British enterprise reflected their combination of amateurism and complacency”

¹ Alfred Chandler, “Scale and Scope: The Dynamics of Industrial Capitalism”, (1994)

² David Landes, “The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present”, (1969)

FAMILY OWNERSHIP VARIES ACROSS COUNTRIES



FAMILY FIRMS AND MODELS OF MANAGEMENT PRACTICES

Likely family impact depends on involvement

- Ownership but not management probably positive
 - Concentrated ownership so better monitoring
- Management probably negative
 - Smaller pool to select CEO from
 - Possible “Carnegie” effect on future CEO’s
 - Less career incentive for non-family managers

FAMILY MANAGEMENT (PARTICULARLY A *PRIMO GENITURE* SELECTED CEO) IS PROBLEMATIC

%	Dependent variable: Management			
	Family ¹ largest shareholder	-0.137 (0.023)		
Family ¹ largest shareholder & family CEO		-0.169 (0.025)		-0.073 (0.049)
Family ¹ largest shareholder, family CEO & <i>primo geniture</i> ²			-0.254 (0.043)	-0.223 (0.046)
Observations	4141	4141	4141	4141

¹ Family defined as 2nd generation or later

² Based on question: “*How was management of the firm passed down: was it to the eldest son or by some other way?*”.

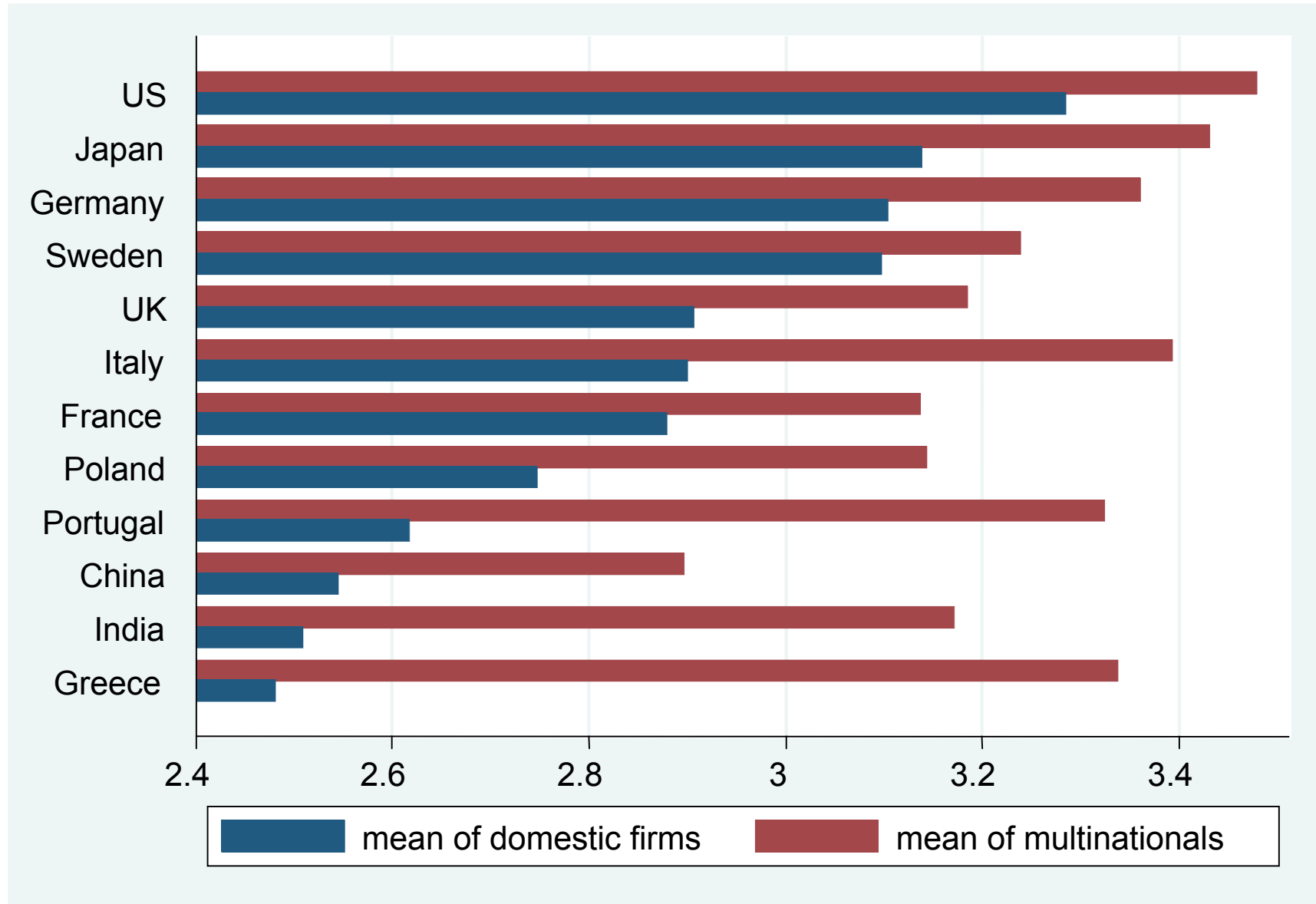
Note includes SIC-3 digit, country, skills, firm size and public controls

WE ALSO LOOK AT MULTINATIONALS AS A WAY TO EVALUATE THE ROLE OF LOCAL CONDITIONS

Interesting to examine because:

- If the management variations all due to local constraints then multinationals should look like domestic firms
- If instead management partly a technology then multinationals may export this

MULTINATIONALS DO APPEAR TO BE WELL MANAGED IN ALL COUNTRIES

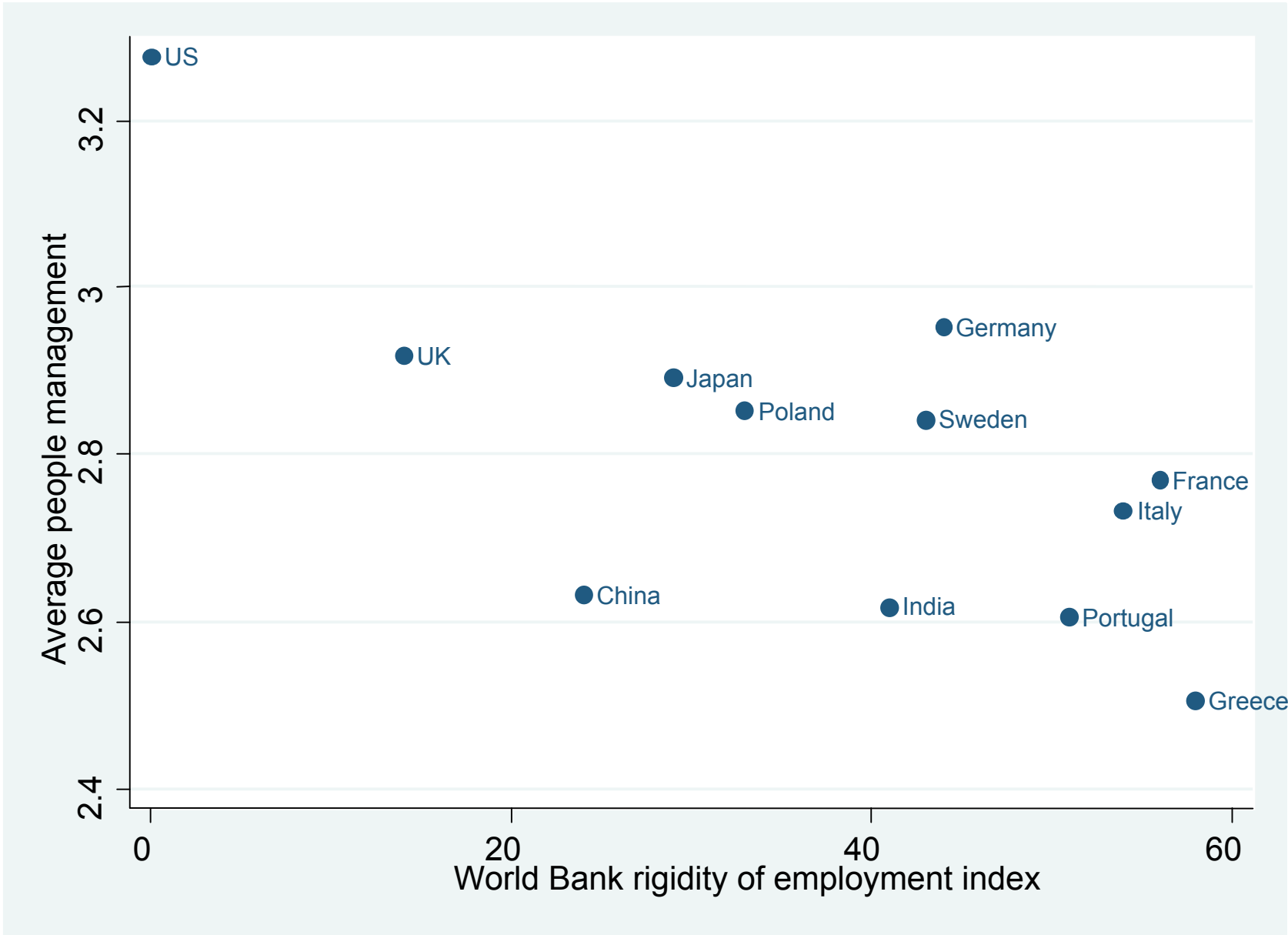


MANAGEMENT PRACTICES ALSO MAY REFLECT LABOR MARKET REGULATIONS

Tough hiring/firing practices may be impaired by law

The management practices for hiring, firing, pay and promotions is negatively correlated with strength of labor market regulations

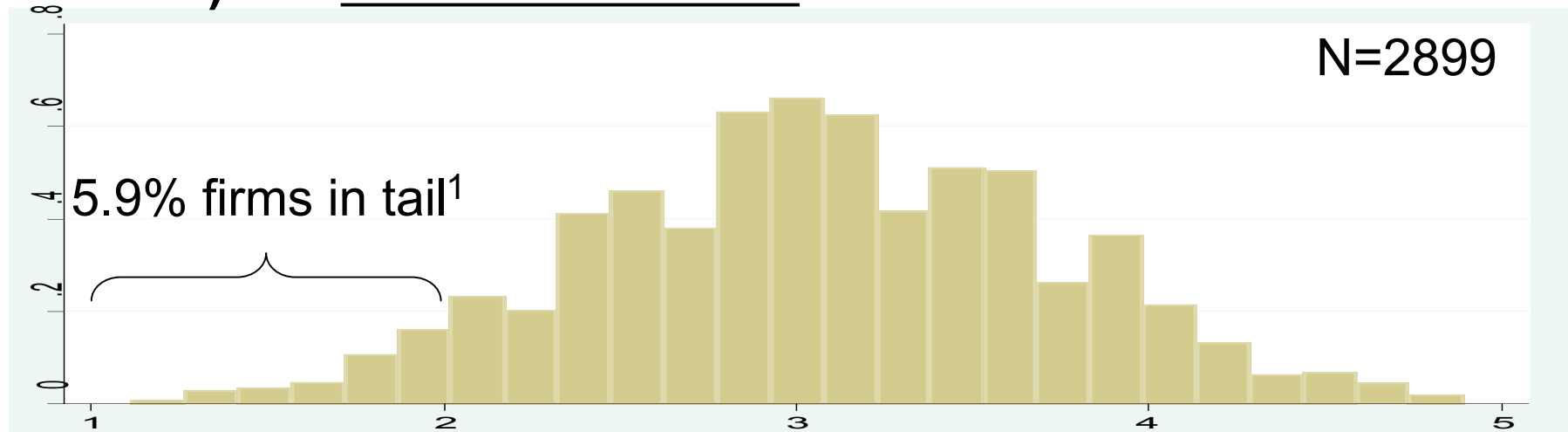
LABOR MARKET REGULATIONS ASSOCIATED WITH WEAKER HUMAN CAPITAL MANAGEMENT



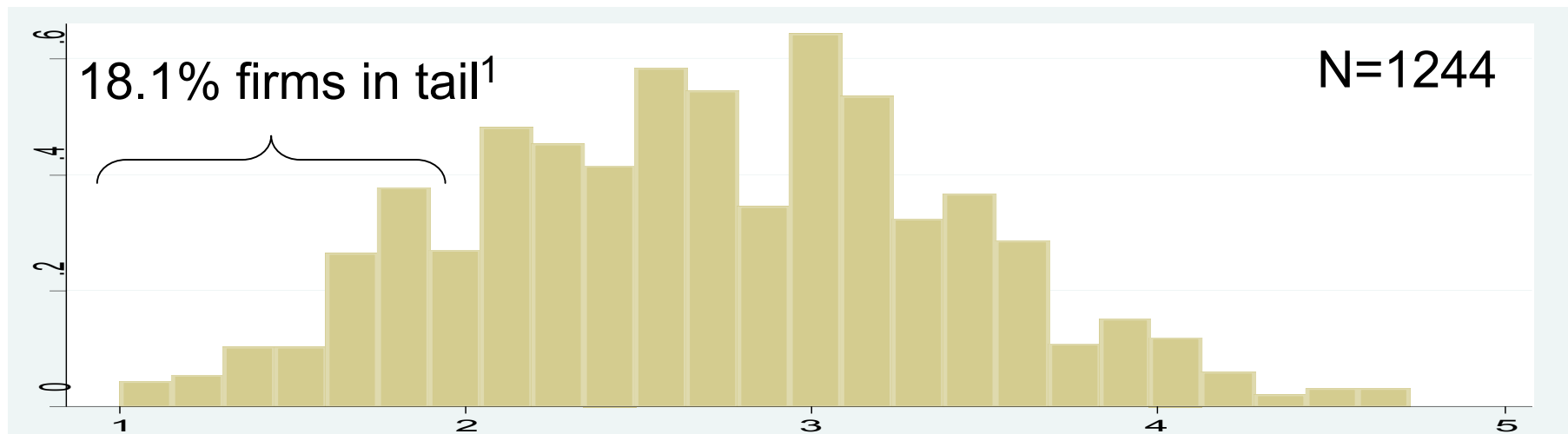
QUANTIFYING EFFECTS OF COMPETITION, FAMILY FIRMS, MULTINATIONAL & LABOR REGS:

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

“GOOD DOMESTIC” (MANY COMPETITORS, NOT PG FAMILY) OR MULTINATIONAL

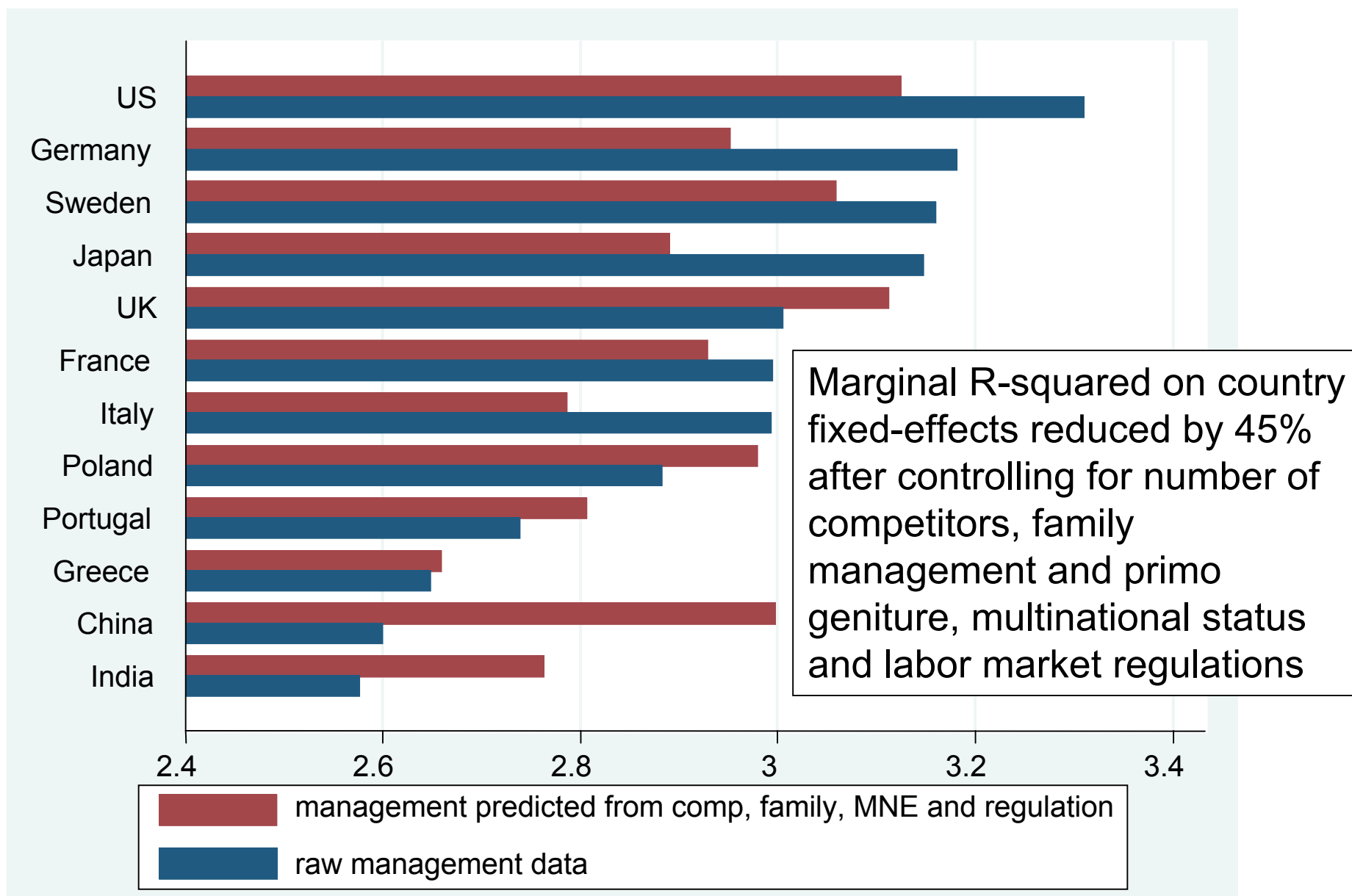


“BAD DOMESTIC” (FEW COMPETITORS OR PG FAMILY)



¹ Tail defined as a score ≤ 2 . In the whole sample 9.6% of firms are in the tail.

COMPETITION, FAMILY FIRMS, MULTINATIONALS & LABOR REGULATIONS ACCOUNT FOR $\approx \frac{1}{2}$ COUNTRY SPREAD



TO SUMMARIZE

- Original methodology for measuring management
- Product market competition, family management, multinational status and labor regulation *account for*
 - About 50% of tail of badly managed firms
 - About 50% cross country management gap
- Clearly major issue is the extent of causation