

# The Natural Laws of Management

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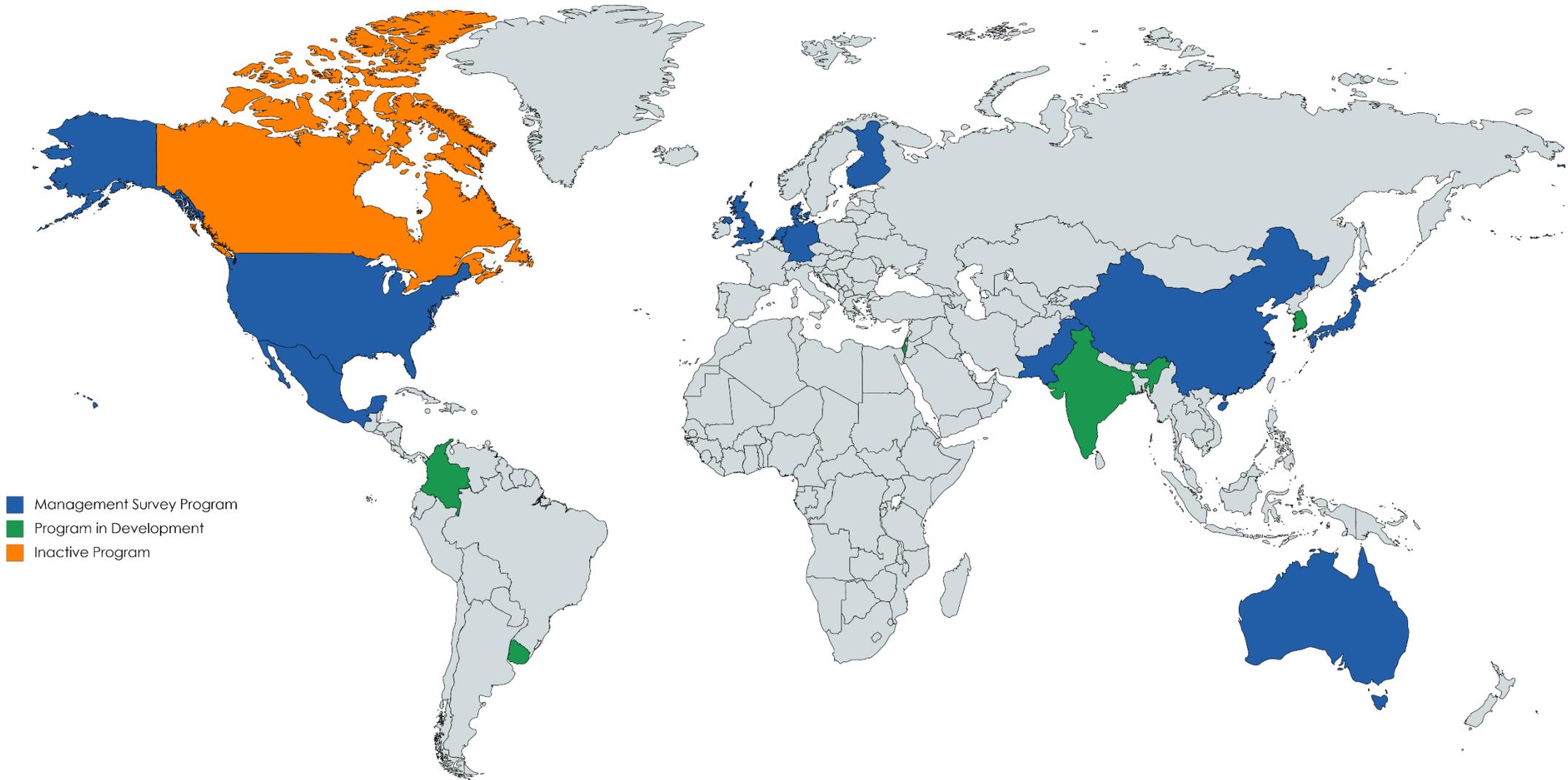
Disclaimer: Any opinions and conclusions expressed herein are those of the author and do not necessarily represent the views of the US Census Bureau. Results from the US MOPS were previously published in Bloom et al. (2013) and were reviewed to ensure that no confidential information is disclosed.

# International Surveys of Management Practices

- World Management Survey
- Management and Organizational Practices Survey
  - US – 2010 & 2015
  - Now active in at least 12 countries, more in planning stages
- What can we learn across countries?

# The Natural Laws of Management

- Wide dispersion in adoption of management practices within countries
- Structured management practices are positively correlated with performance metrics
  - Size, productivity, profitability, innovation, and exports
- Potential drivers of structured management adoption:
  - Positively correlated with education, competition, and multi-national ownership
  - Negatively correlated family ownership and unionization



- Management Survey Program
- Program in Development
- Inactive Program

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# Advantages and Challenges

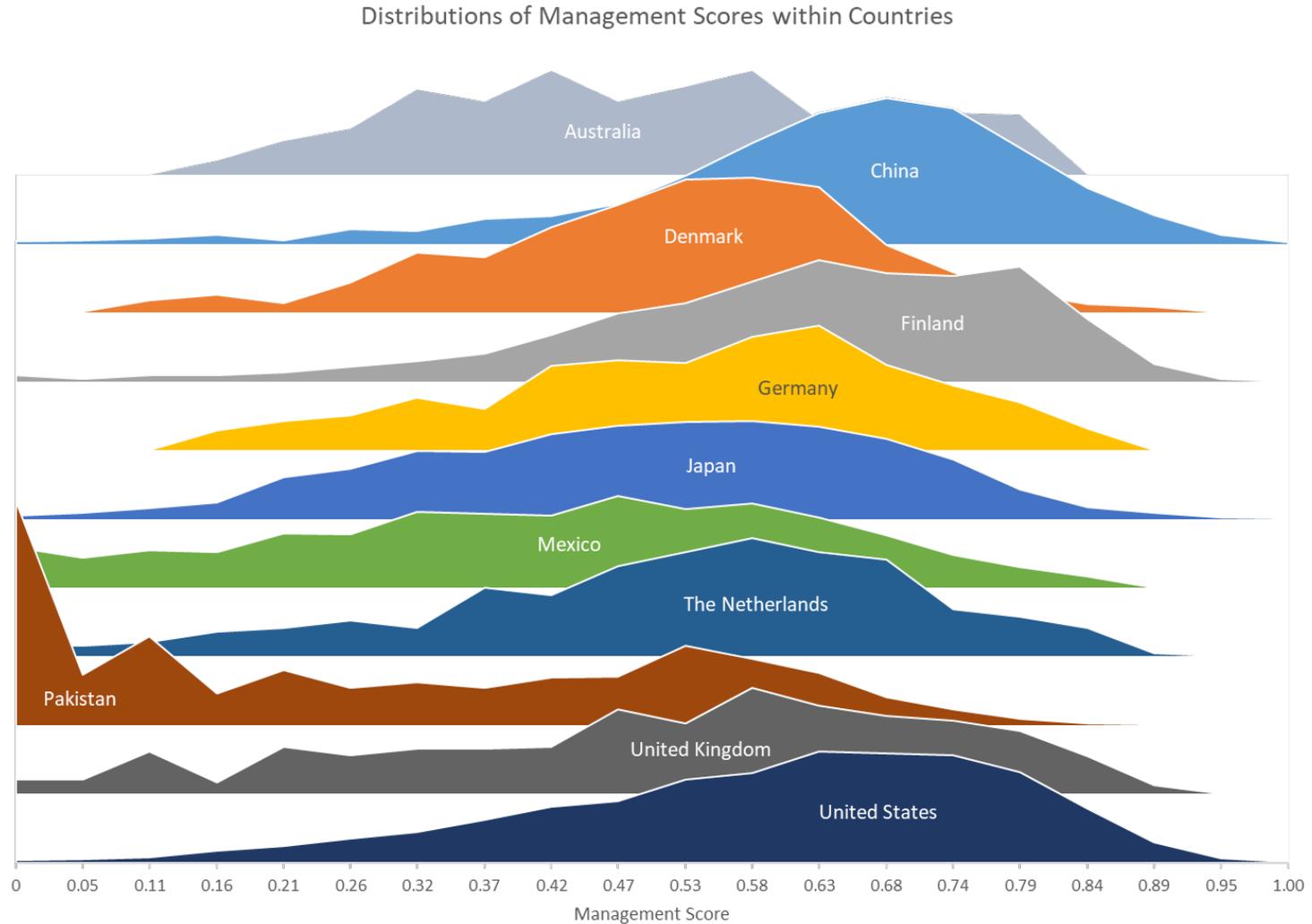
- Large sample sizes, often with backing of official statistical agencies and/or important research institutions
- Unlike WMS, the MOPS family of surveys are not designed for cross-country analysis
  - Sampling units: firm/plant/worker
  - Availability of covariates
  - Instrument: phone/face-to-face/paper/internet
  - Coverage: size, industry
  - Content
- Coordination

	Manufacturing	Services	Management	Organization	DDD	Uncertainty	Background	Recall	Reference Year	Mail	Electronic	Face-to-Face	Telephone	Reporting Unit	Mandatory	Size	Notes
US	X		X	X	X	X	X	X	2015, 2010 (reported and recall), 2005 (recall)	X	X			Establishment	X	All employer	
Australia	X	X	X		X		X		2015-2016	X	X	X		Business	X	300+ employees	Reference period is financial year. Covers most sectors (excluding finance, religious, public sector).
Canada	X	X	X						2009, 2012	X	X			Business	X	20+ employees, 250 CAD+ in revenues	Covers all sectors. Predates MOPS - Based on WMS. Specified that the CEO should complete. Management was only one module on larger survey.
China	X		X						2015, 2016			X		Business			Questions are asked of approximately 8 respondents/firm: CEOs, middle managers, workers. Covered content other than management. Larger wave planned for next year.
Colombia																	In pilot phase
Denmark	X	X	X	X	X				2018		X			Establishment		> 5 employees	
Finland	X		X	X			X	X	2016, 2011 (recall)		X			Establishment		50+ employees at enterprise level, turnover > 40 mil Euros, balance sheet > 300 mil Euros	Direct translation of US MOPS. Telephone calls were used to establish contact information. Firms reported some difficulty with responding at the establishment level.
Germany	X		X	X			X	X	2013, 2008 (recall)	X	X			Establishment		25+ employees	Some content removed due to local regulations (firing). Additional background questions. Telephone calls used to announce survey.
Japan	X	X	X	X	Services Only	Manufacturing Only		X	2015, 2010 (recall)	X				Establishment		30+	Retail and information services. Direct translation of US MOPS. Telephone follow-ups. Also included content on competition/innovation for services.
Mexico	X	X	X	X	X				2015	X	X			Business	X	Does not include micro-enterprises	Direct translation of US MOPS. Performance data in survey. Survey included other sections on training, ownership, credit, government programs, global value chain, IT/R&D, and business environment. Also included deferred interviews. Planning to add uncertainty and organization to 2018 wave.
Netherlands	X	X	X														Run by Rabobank
Pakistan	X		X	X			X		2014/2015, 2017/2018			2014/2015		Establishment	2017 wave	2017 wave: 10+ employees, \$50,000+ in revenue	Direct translation of US MOPS 2010. Hand-delivered paper surveys for 2017/2018.
UK	X	X	X			X	X		2015, 2018	X				Business		10+ employees	Management questions were condensed down to 8 questions. CEOs are called "Managing Directors." Language related to firing was changed
Uruguay																	In planning
WBES	X	X	X						2012/2013 (Europe & Central Asia), 2013/2014 (Middle East & North Africa), 2017 (South America)			X		Business		5+ employees	~130 countries. Measure data on business environment, firm performance, and sensitive questions. Covers formal private sector (non-agriculture, non-extractive). Concern over social desirability bias in face-to-face interviews.
World Bank Firm Capabilities & Innovation																	Russia, Croatia, and Mozambique

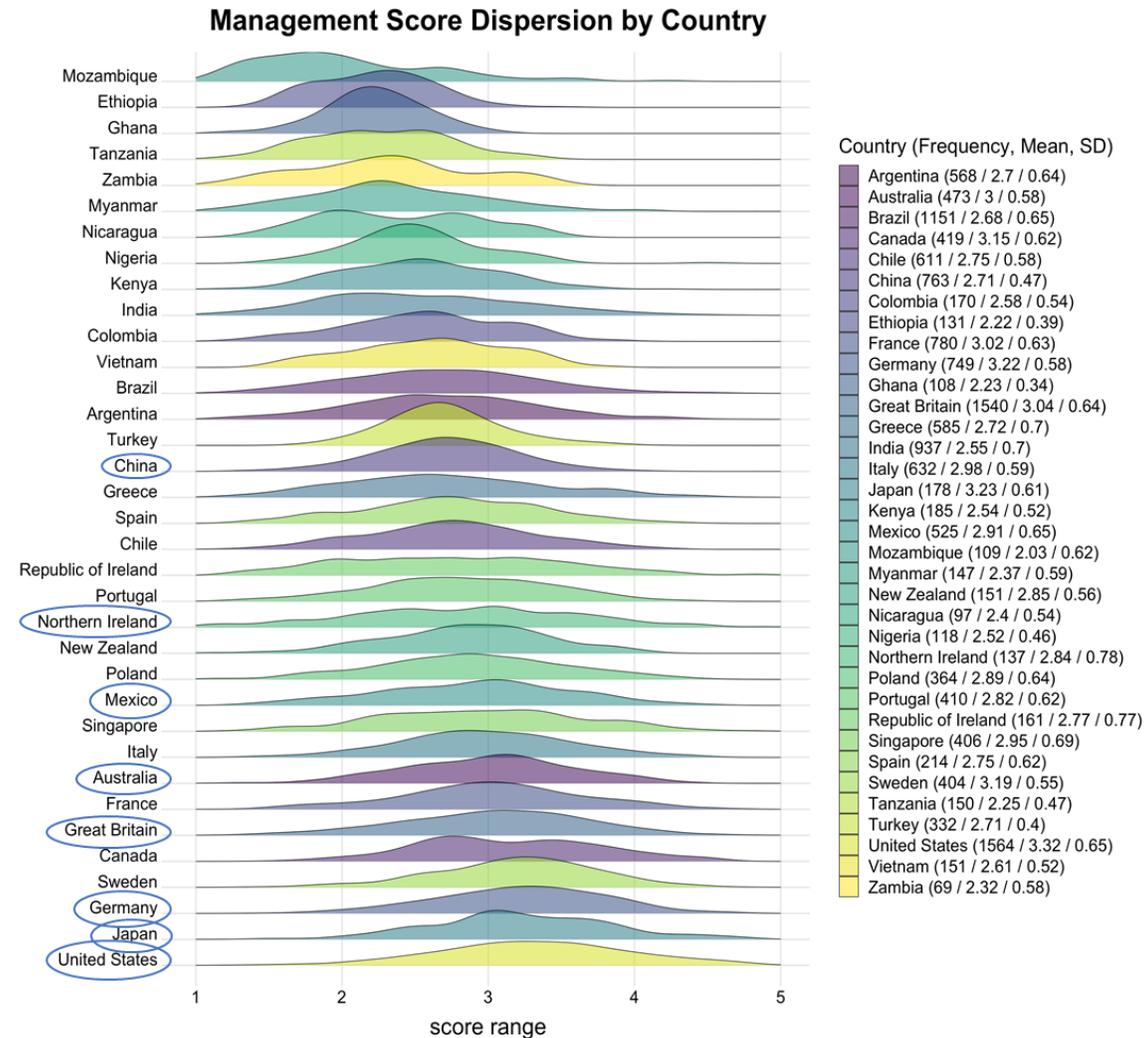
# Maximizing Comparability

- Manufacturing only
- Standardize scoring following Bloom et al. (2019)
- Unweighted data
- Heterogeneity remains:
  - Coverage
  - Sampling Unit
  - Measurement of covariates
- Some countries unable produce select analyses

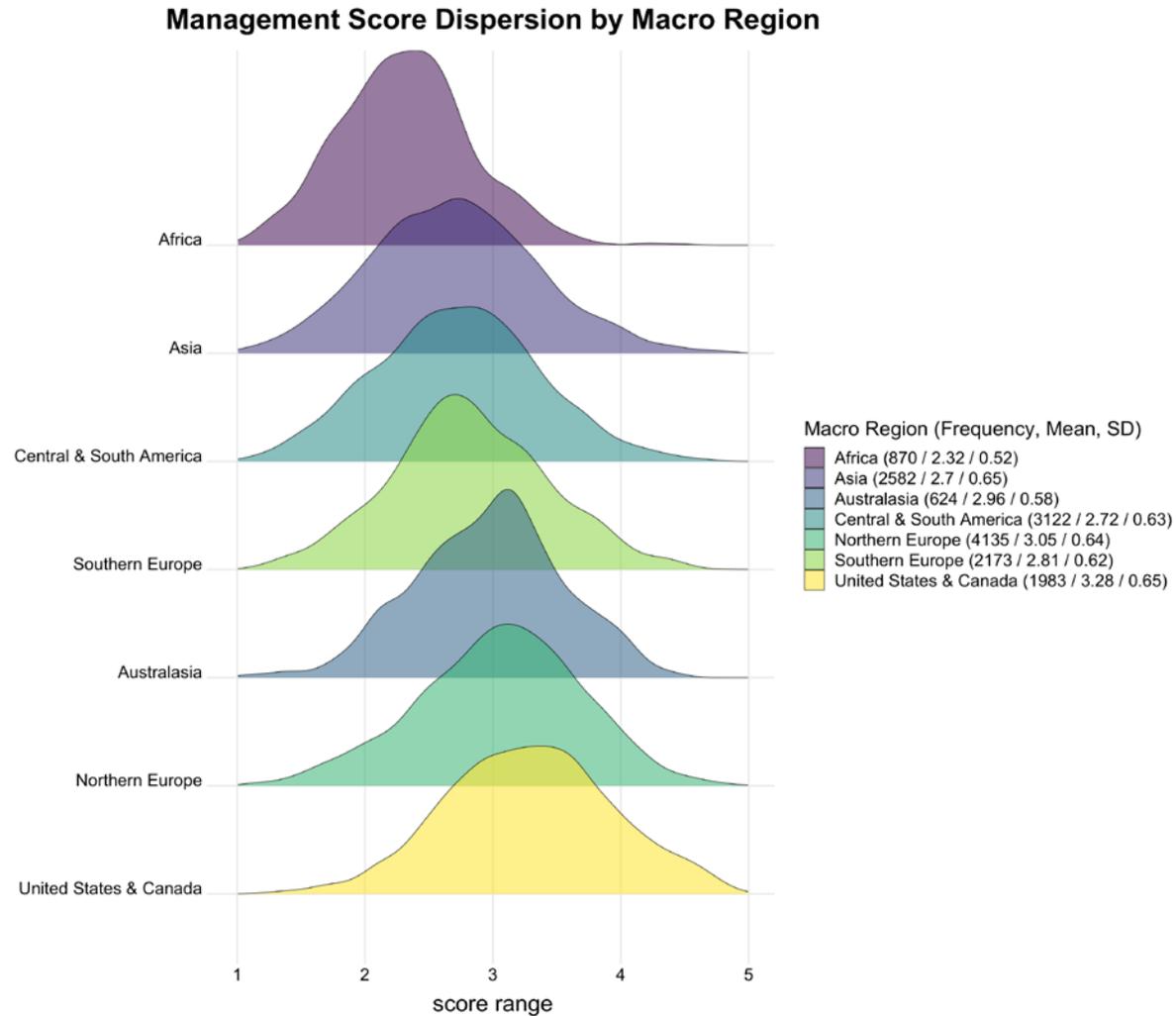
# Dispersion in Adoption



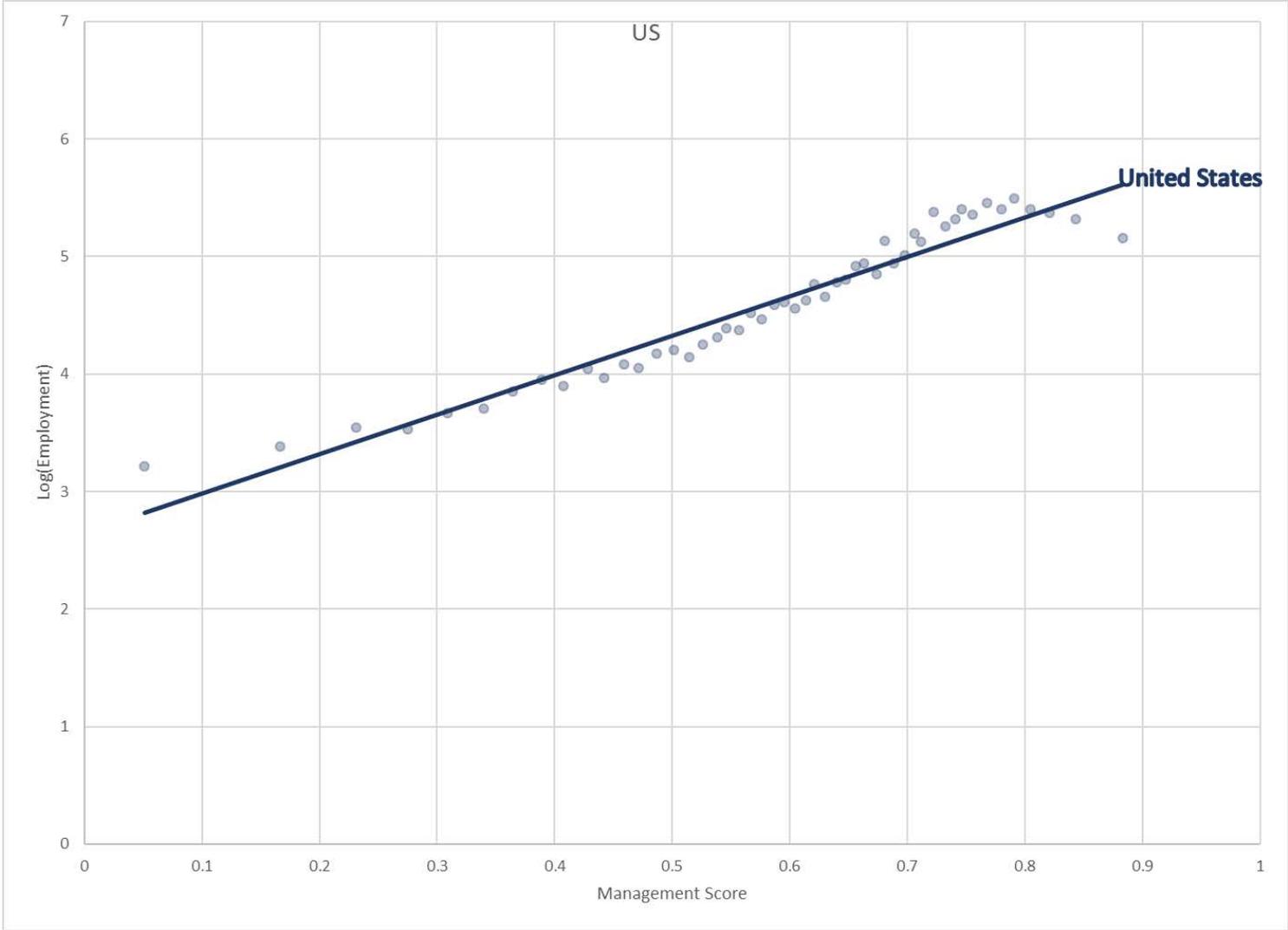
# WMS Designed for Cross-Country Comparisons



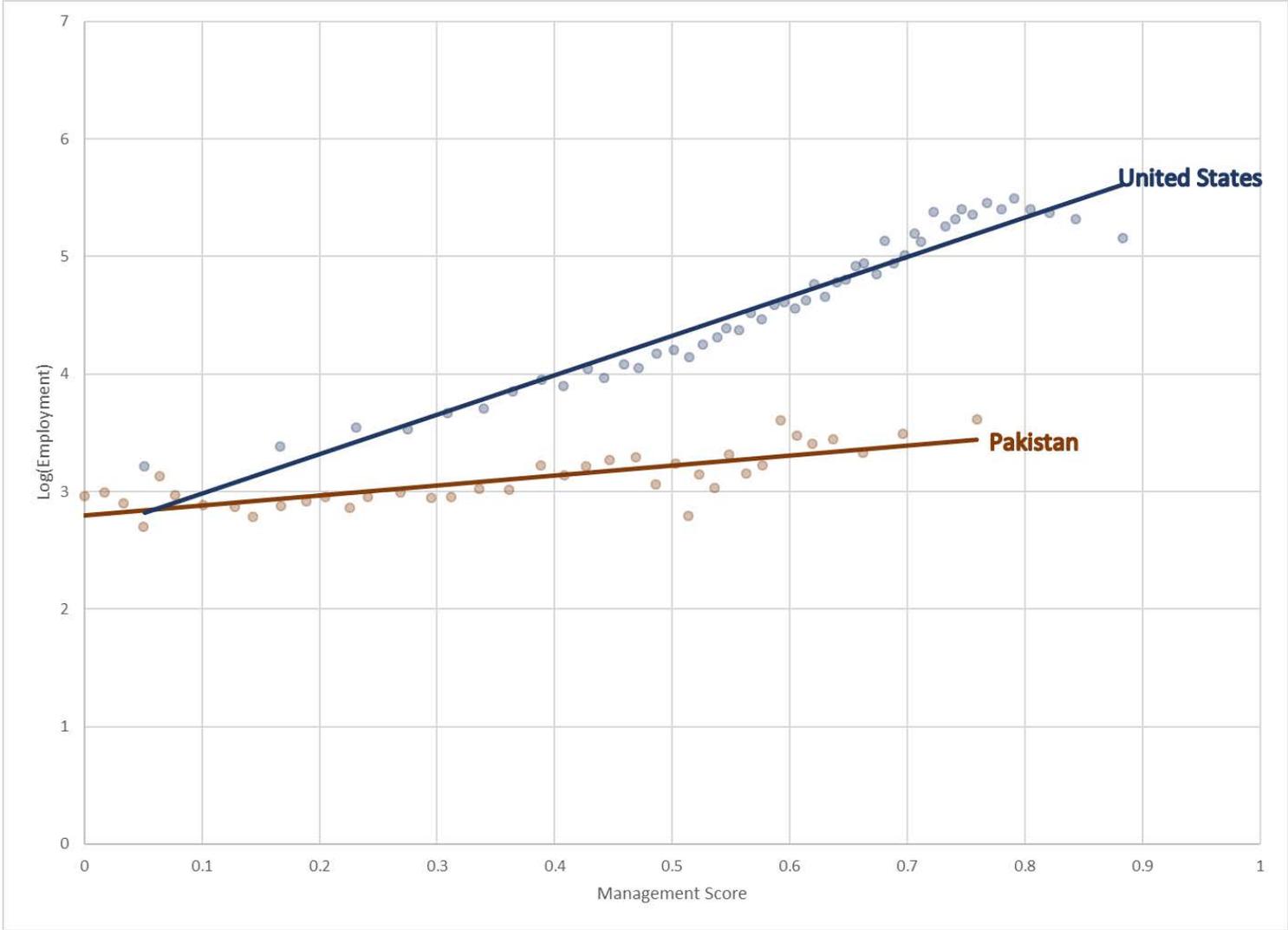
# WMS Scores Aggregated to Regions



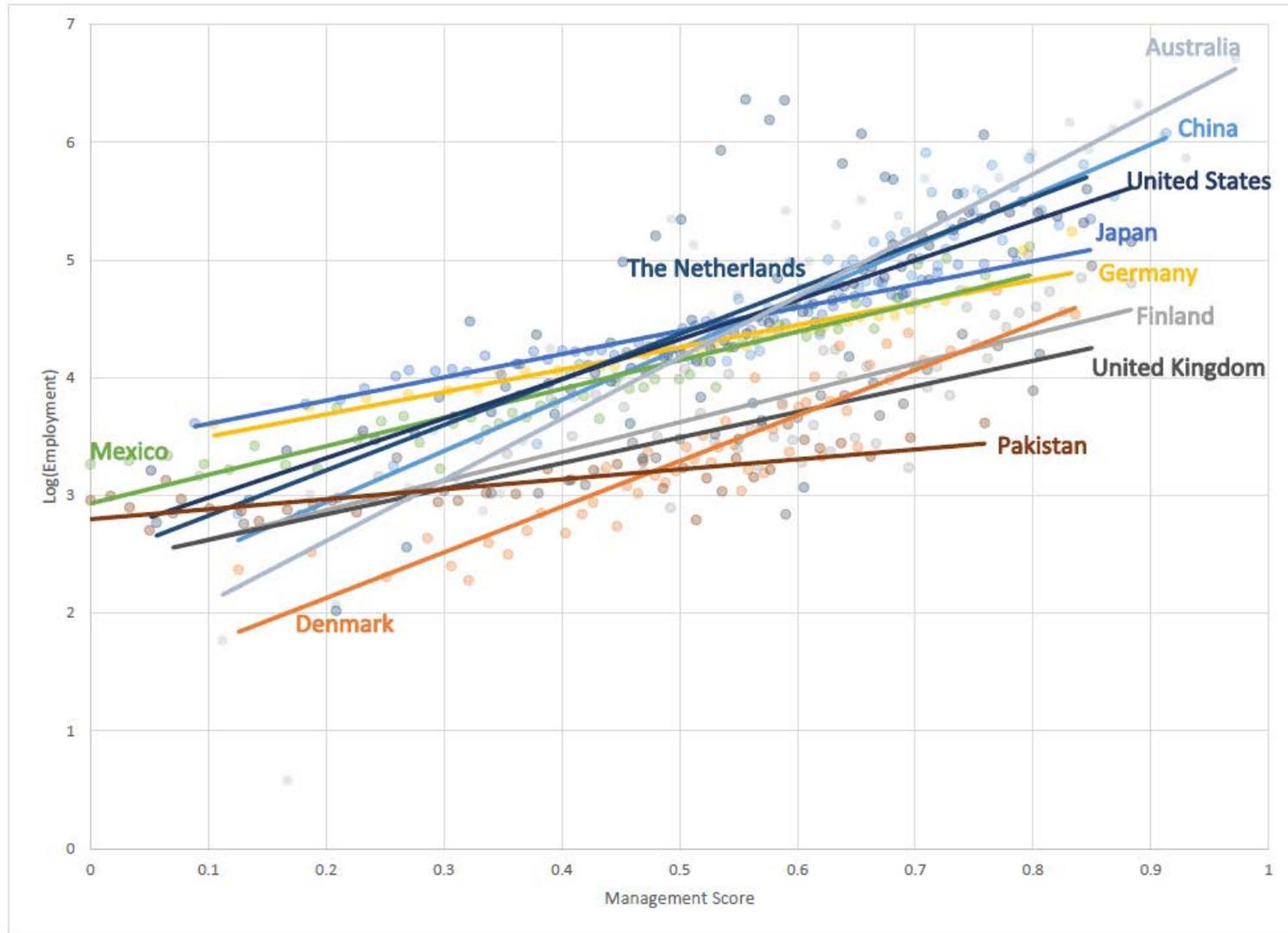
# Positive Relationship Between Management and Size



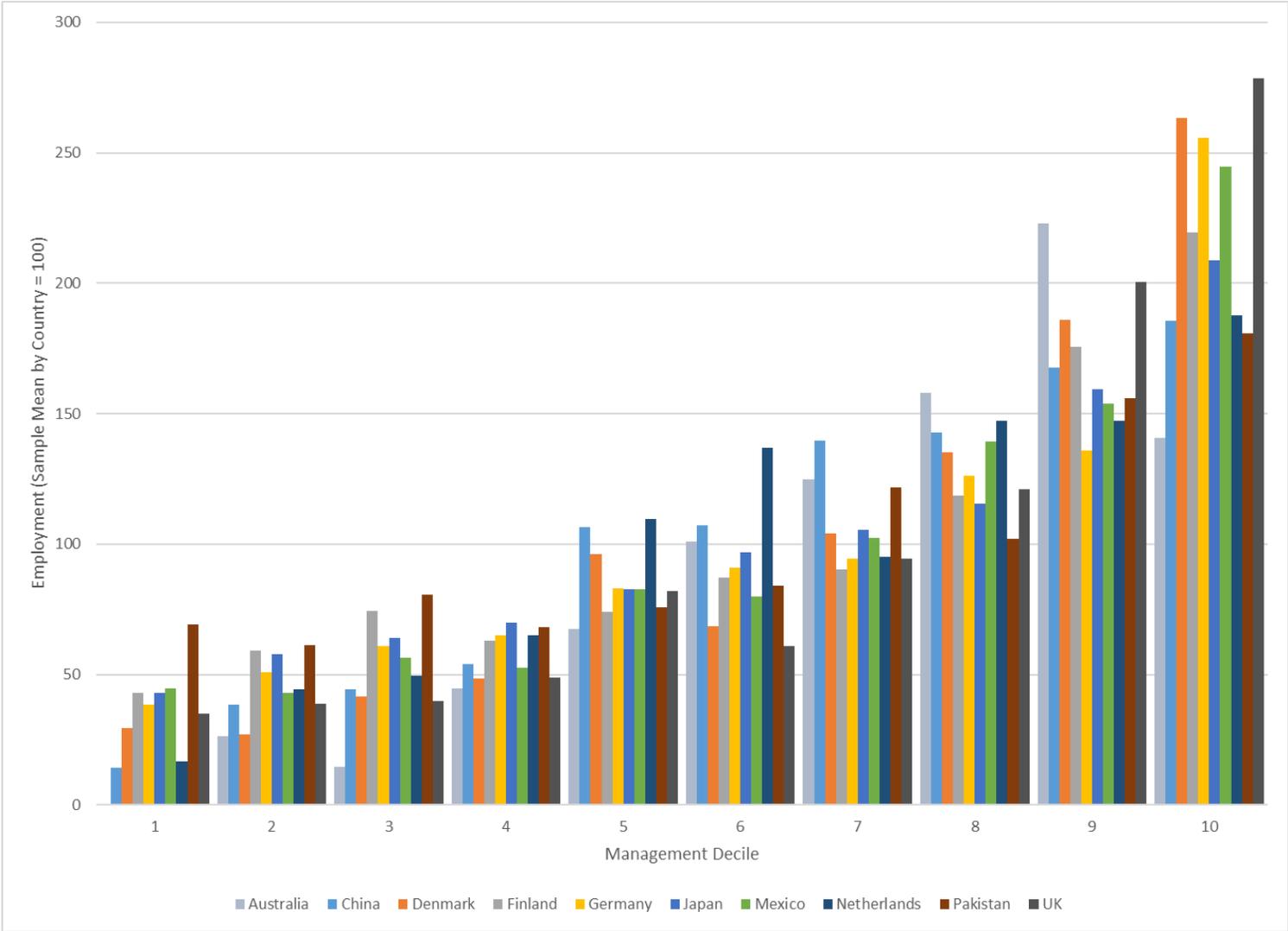
# Magnitude Differs Across Countries



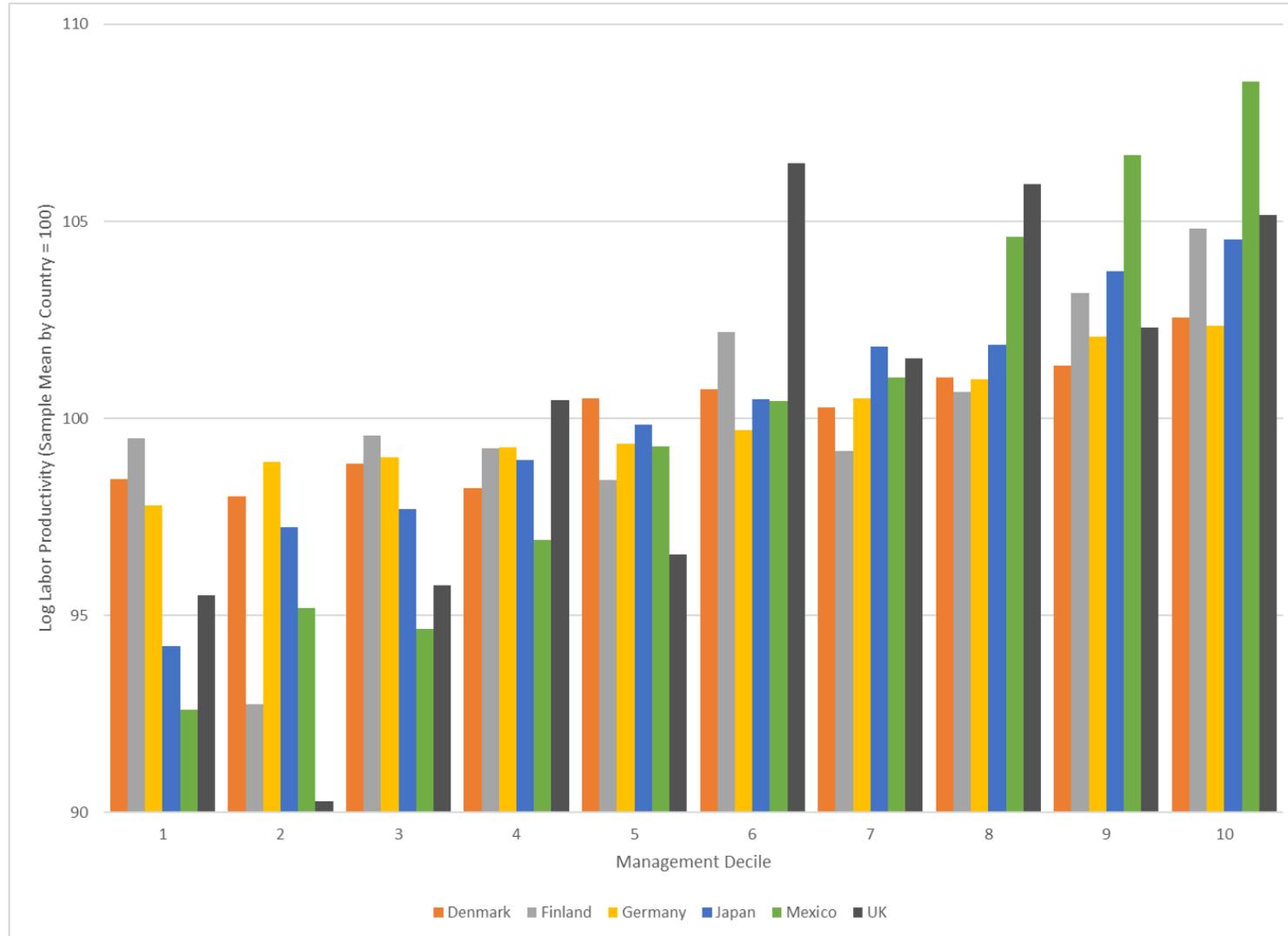
# Magnitude Differs Across Countries



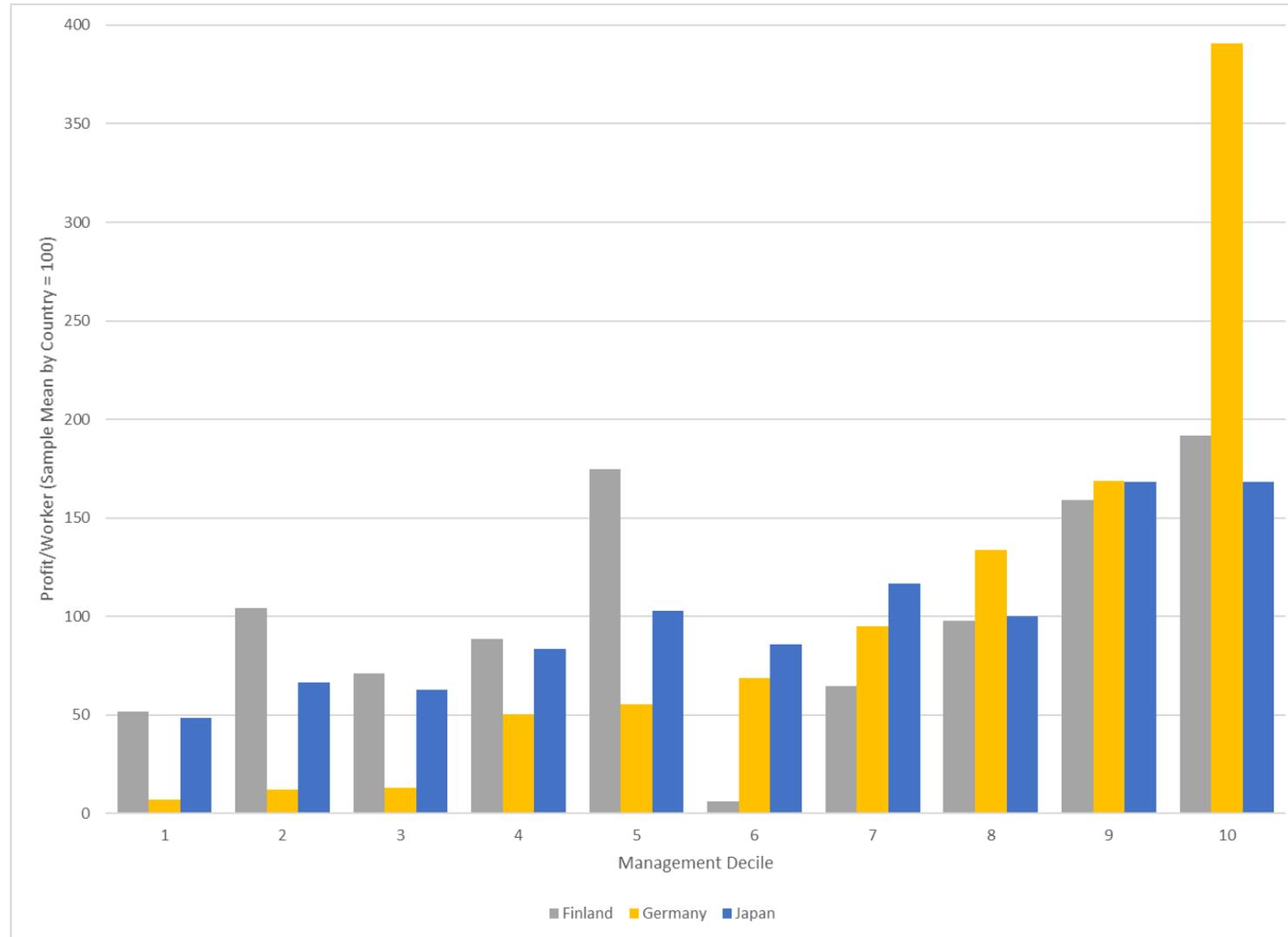
# Positive Relationship Between Management and Employment Size



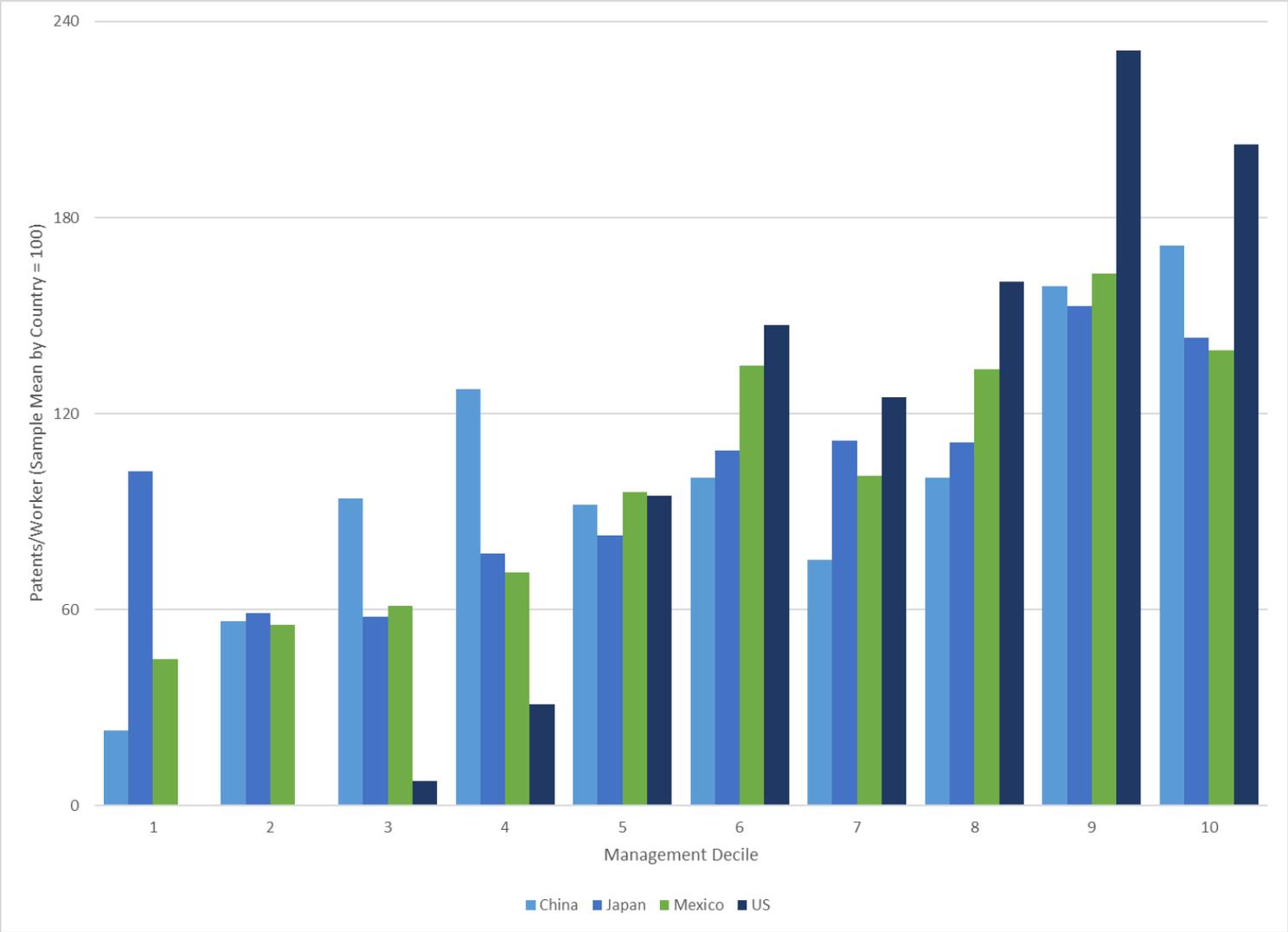
# Positive Relationship Between Management and Log(Labor Productivity)



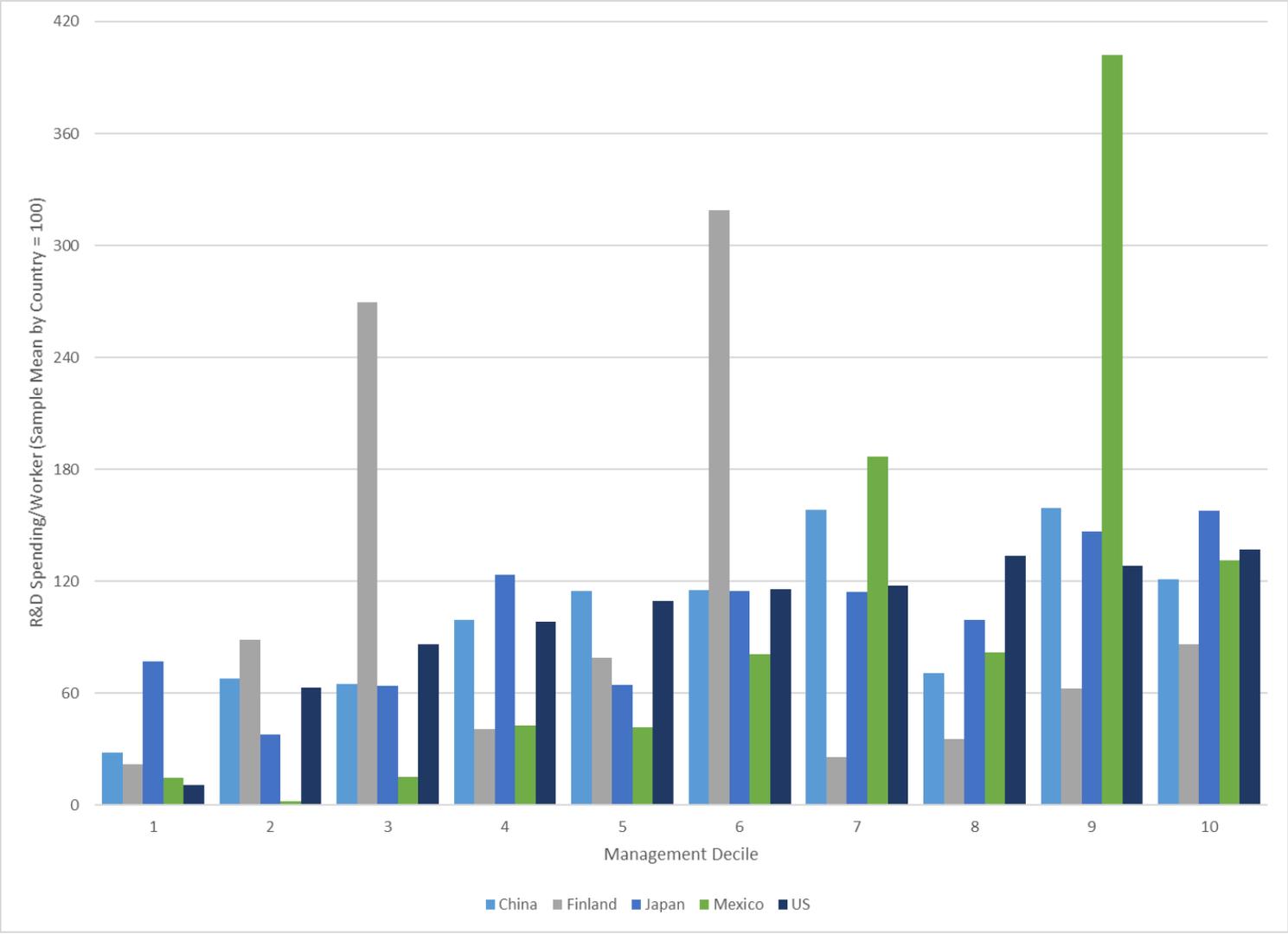
# Positive Relationship Between Management and Profit/Worker



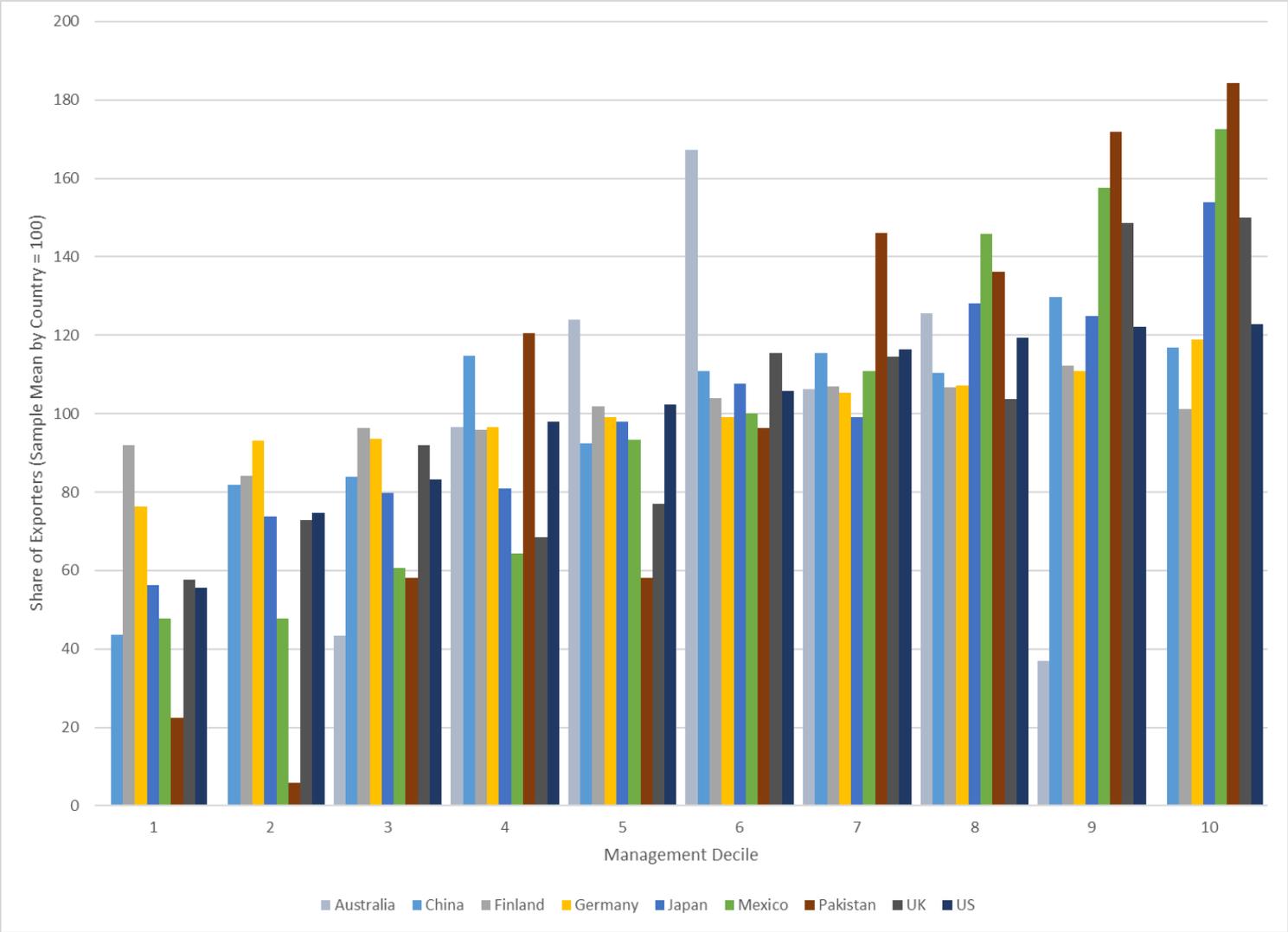
# Positive Relationship Between Management and Patents/Worker



# Positive Relationship Between Management and R&D Expenditure/Worker



# Positive Relationship Between Management and Exporter Status



# Next Steps

## ☐ Revisions to improve consistency in data

- De-mean dispersion
- Recalculate labor productivity in levels
- Including multiple survey waves

## ☐ Drivers

- Education
- Competition
- Ownership
- Unionization

# Conclusion

- Cooperative project among 11 countries
- Potential for more countries to join
- Establish several “Natural Laws of Management”
  - Broad dispersion in adoption within countries
  - Adoption positively correlated with performance
  - Potential drivers of structured management adoption

# Thank you

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