

# MANAGEMENT PRACTICES IN MEXICO

*International MOPS Workshop*

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U.S. Census Bureau*

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# Agenda

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**I. The ENAPROCE 2015 Survey**

**II. Management practices results for Mexico**

**III. Next steps**

# ENAPROCE 2015

# ENAPROCE 2015 IS THE FIRST LARGE-SCALE MANAGEMENT SURVEY IN MEXICO

- Fully comparable with the U.S. MOPS
- Statistically representative at the state and sector levels.
- Includes information for 25,456 firms of the manufacturing, commerce, and services sectors.
  - A different questionnaire was applied to 9,103 microenterprises.
- The survey was implemented by INEGI (national statistics office), which guaranteed a very low non-response rate (4%).
- The sample framework is the 2014 Economic Census, which allows to match the information with other National high-quality statistical projects.

# GREAT SURVEY! NON RESPONSE+ATTRITION RATE IS <4%...OF WHICH 2% DUE TO FIRM DEATH



## ENCUESTA NACIONAL SOBRE PRODUCTIVIDAD Y COMPETITIVIDAD DE LAS MIPYMES CUESTIONARIO PARA LAS EMPRESAS PYMES (MANUFACTURAS)

Este cuestionario deberá ser devuelto a más tardar el día \_\_\_\_\_ de \_\_\_\_\_ de 2015.

### → CONFIDENCIALIDAD Y OBLIGATORIEDAD

Conforme con las disposiciones de la Ley del Sistema Nacional de Información Estadística y Geográfica en vigor:

**Artículo 37.** “Los datos que proporcionen para fines estadísticos los informantes del Sistema a las Unidades en términos de la presente Ley, serán estrictamente confidenciales y bajo ninguna circunstancia podrán utilizarse para otro fin que no sea el estadístico”.

**Artículo 38.** “Los datos e informes que los informantes del Sistema proporcionen para fines estadísticos y que provengan de registros administrativos, serán manejados observando los principios de confidencialidad y reserva, por lo que no podrán divulgarse en ningún caso en forma nominativa o individualizada, ni harán prueba ante la autoridad judicial o administrativa, incluyendo la fiscal, en juicio o fuera de él”.

**Artículo 45.** “Los informantes del Sistema estarán obligados a proporcionar, con veracidad y oportunidad, los datos e informes que les soliciten las autoridades competentes para fines estadísticos, censales y geográficos, y prestarán apoyo a las mismas”.

### EMPRESA MANUFACTURERA

Es la unidad económica y jurídica que bajo una entidad propietaria o controladora, puede estar constituida por uno o varios establecimientos que operan bajo la misma denominación o razón social, como son: oficinas, agencias, terminales, talleres, etcétera.

Los datos asentados en este cuestionario deben corresponder solamente a esta empresa e incluir todas las actividades que realice.

Los directores, administradores, gerentes, representantes o encargados de la unidad económica son solidariamente responsables de la información asentada en los documentos autorizados o suscritos por ellos.

# THE INSTRUMENT COVERS MANY ASPECTS OF FIRM-LEVEL PERFORMANCE AND CHARACTERISTICS

**Firm characteristics**  
(Performance (revenues, assets, inputs), age, size, employees education, wages, White/blue collar workers, exports, FDI, Investment)

**Training**

**Firm organization (ownership)**

**Credit use and latent credit demand**

**Knowledge and use of government programs**

**Integration into GVCs**

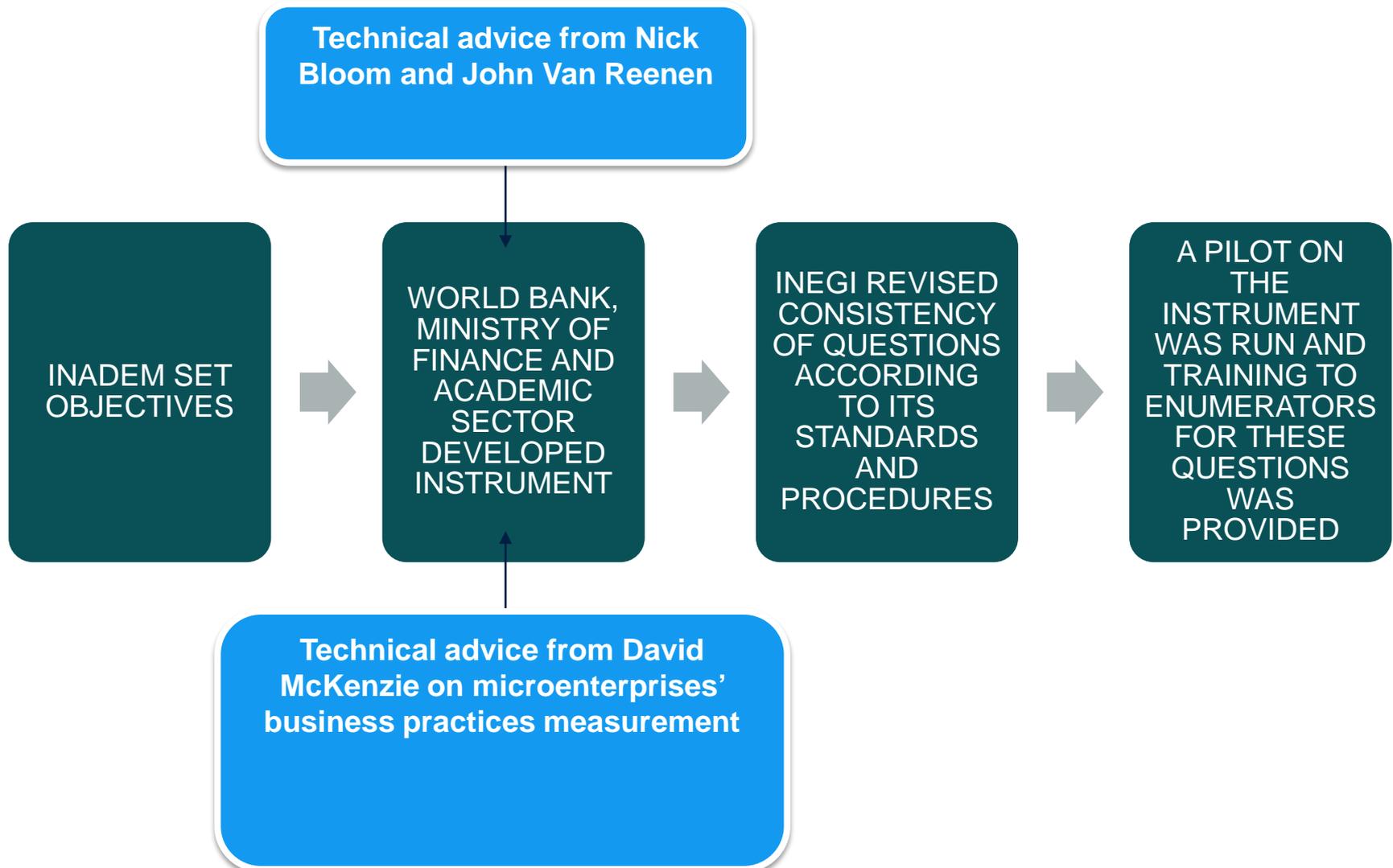
**Management & business practices**

**IT use, R&D and Innovation**

**Business Environment & Regulation**

**US  
MOPS  
Section A  
(16 questions)**

# CONTENT DEVELOPING PROCESS



# THE INSTRUMENT COVERS MANY ASPECTS OF FIRM-LEVEL PERFORMANCE AND CHARACTERISTICS

Size	Firms in the sample	Using sampling weights
Large	1,731	10,917
SMEs	14,622	96,121
Micro	9,103	3,952,422
Total	25,456	4,059,460

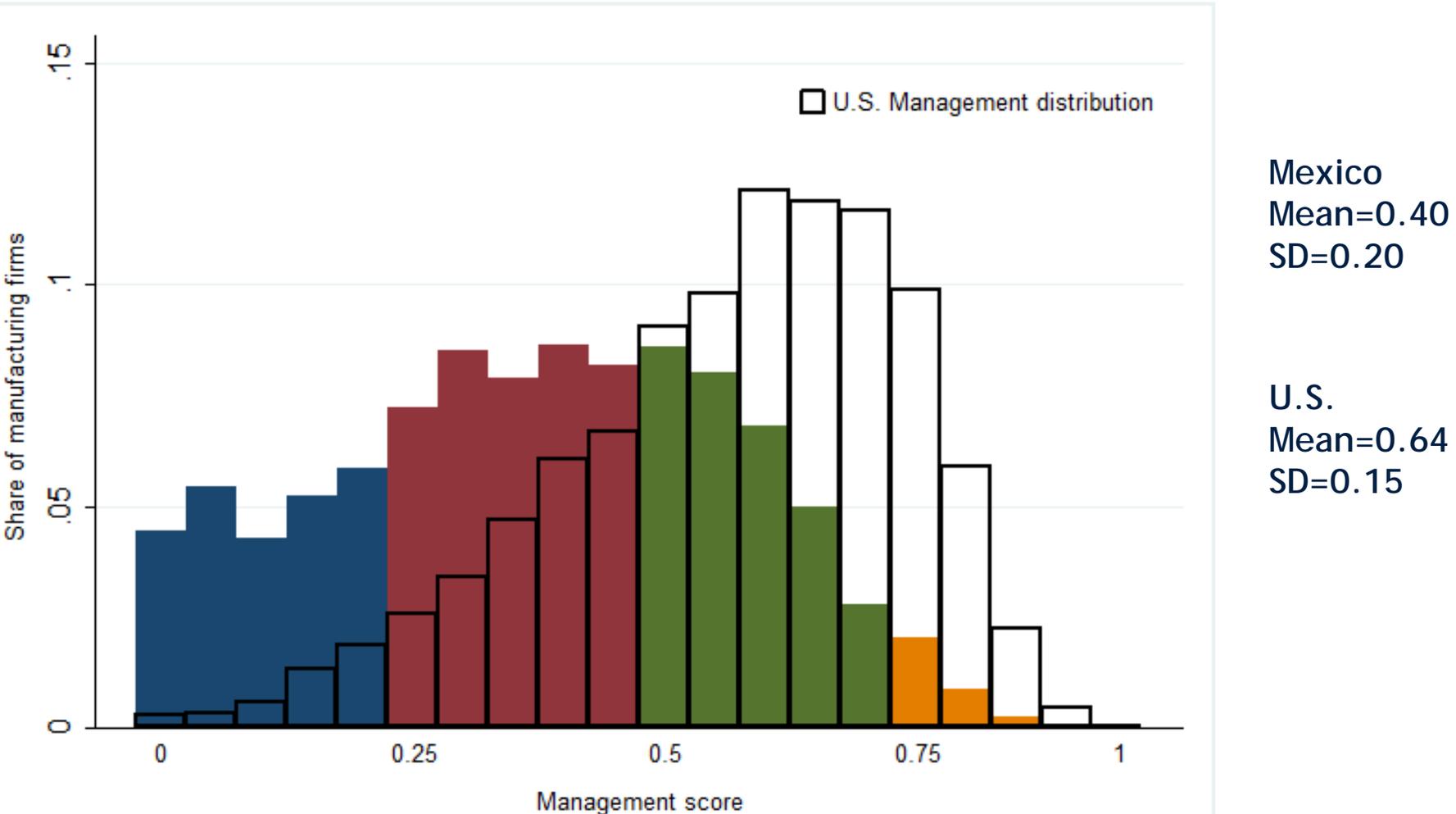
# MANAGEMENT PRACTICES RESULTS FOR MEXICO

# ANALYSIS OF MANAGEMENT PRACTICES RESULTS

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- We restrict our analysis to SMEs and large firms from the Manufacturing and Services sectors (11,199 firms).
  - Measurement problems on TFP in the commerce sector.
  - Microenterprises include only a subset of questions-not fully comparable.

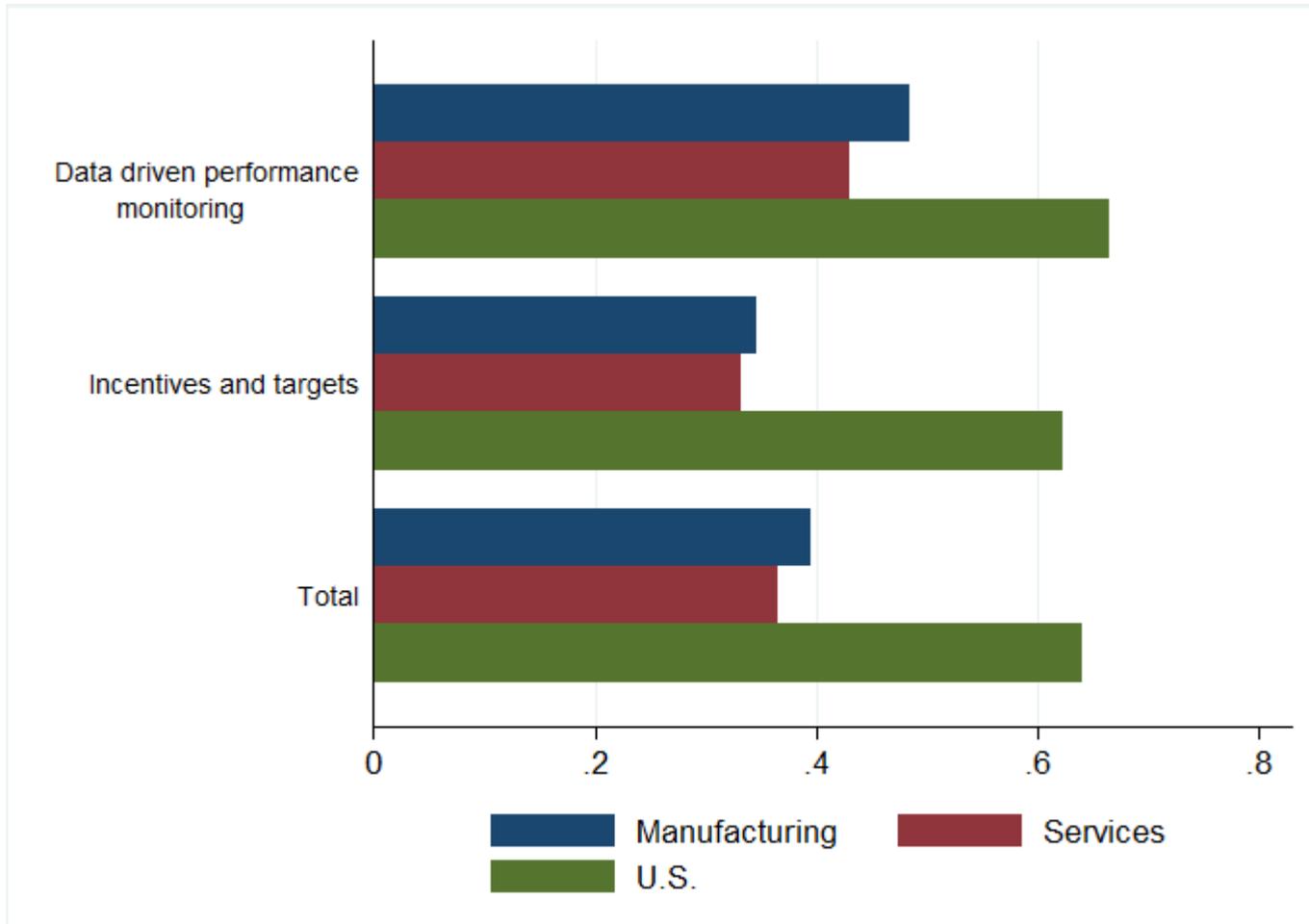
# COMPARING MEXICO'S AND U.S. FIRMS, MEXICO LAGS BEHIND IN MANUFACTURING MANAGERIAL SKILLS AND PRACTICES



Source: Authors' calculations using data from ENAPROCE 2015 and Bloom, Brynjolfsson, Foster, Jarmin, Saporta-Eksten and van Reenen, J. (2013).  
 Note: U.S. data only includes the manufacturing sector

# THE SERVICES SECTOR SCORES EVEN LOWER...

Management scores by sector vs. U.S.



\*Differences between manufacturing and services are statistically significant at the 1% level.

Source: Authors' calculations using data from ENAPROCE 2015 and Bloom, Brynjolfsson, Foster, Jarmin, Saporta-Eksten and van Reenen, J. (2013).

Note: U.S. data only includes the manufacturing sector

# MANAGEMENT PRACTICES' REGIONAL PATTERNS DIFFER ACROSS SECTORS...

Best management practices in manufacturing are observed in the North, near the U.S. border

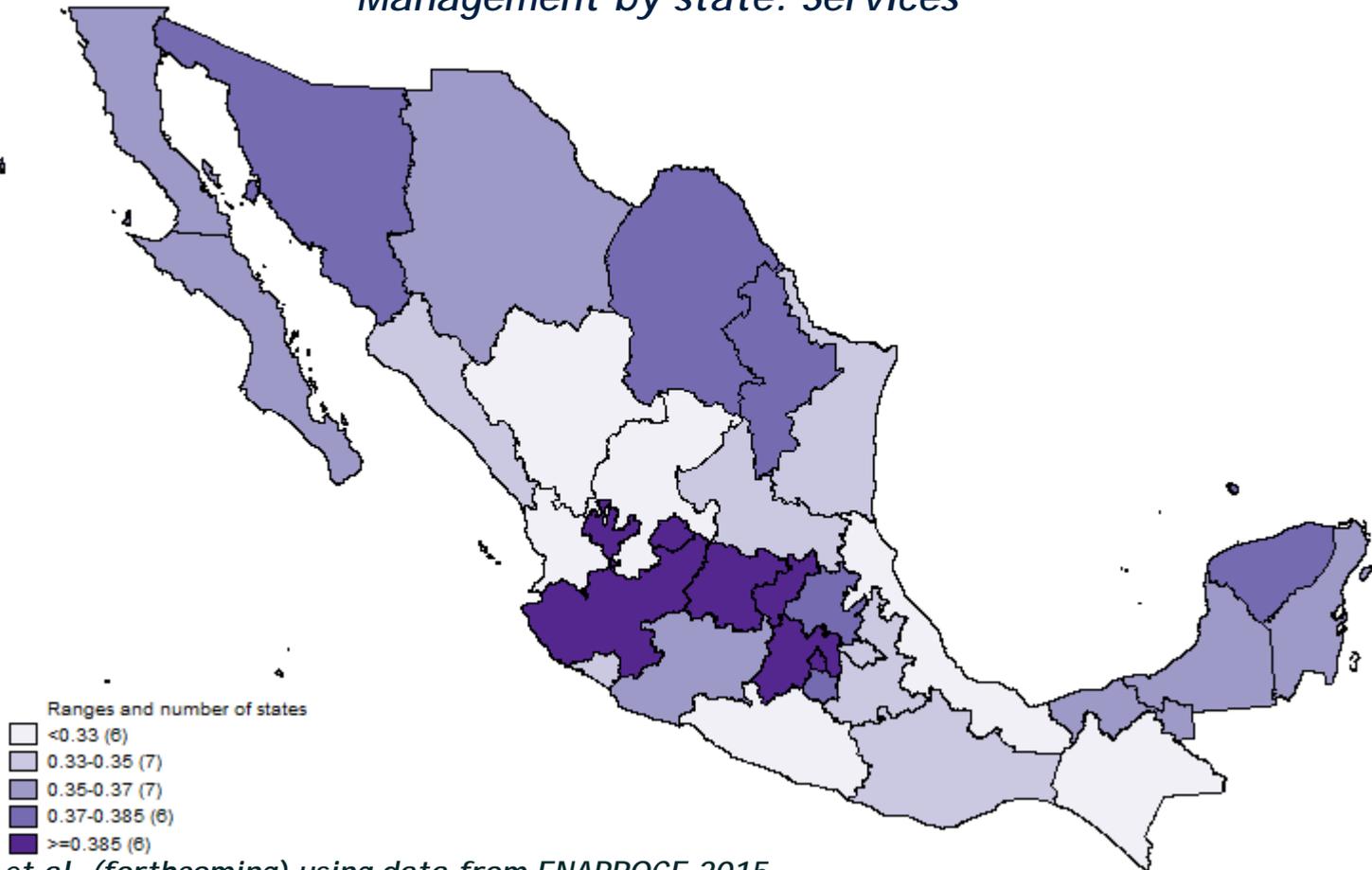


Source: Bloom et al. (forthcoming) using data from ENAPROCE 2015

# MANAGEMENT PRACTICES' REGIONAL PATTERNS DIFFER ACROSS SECTORS...

Best management practices in services are observed in the Centre of the country, where three of the biggest Metropolitan Areas are located

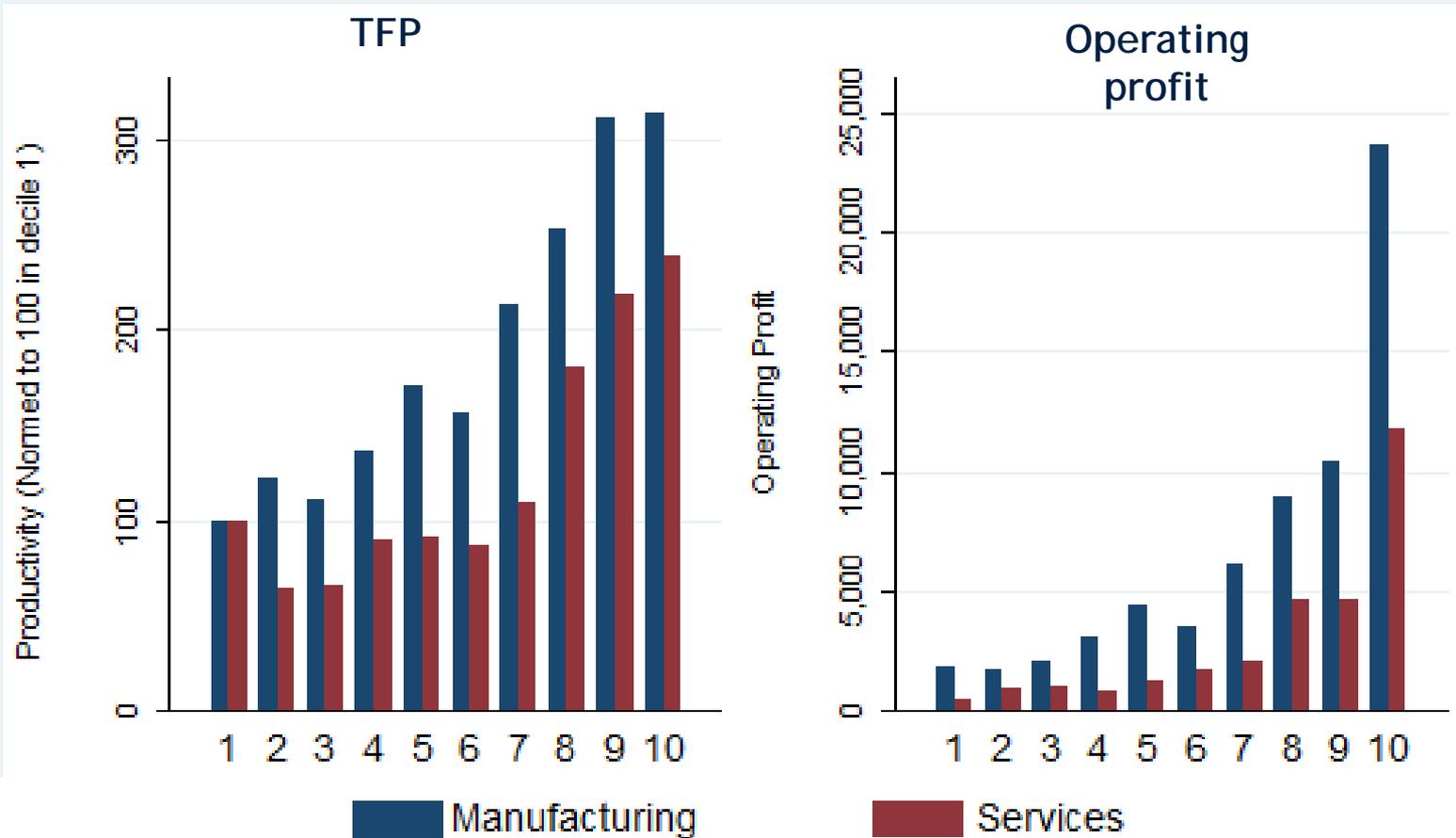
*Management by state: Services*



Source: Bloom et al. (forthcoming) using data from ENAPROCE 2015

# SIMILARLY TO WHAT IS OBSERVED IN THE U.S. MOPS, FIRMS WITH BETTER MANAGEMENT HAVE BETTER PERFORMANCE

Management and performance



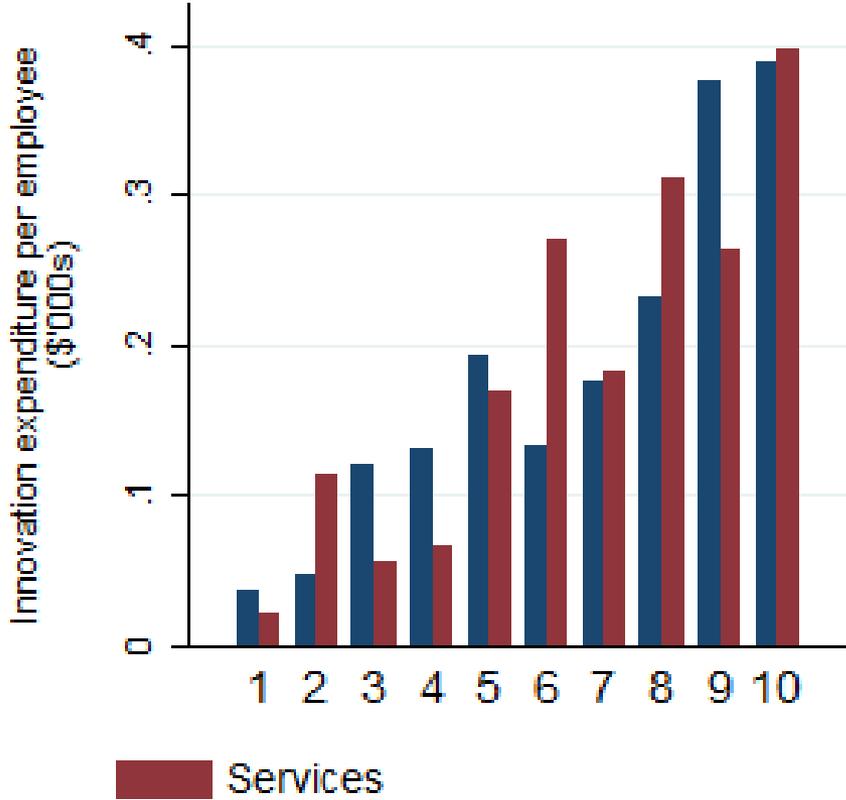
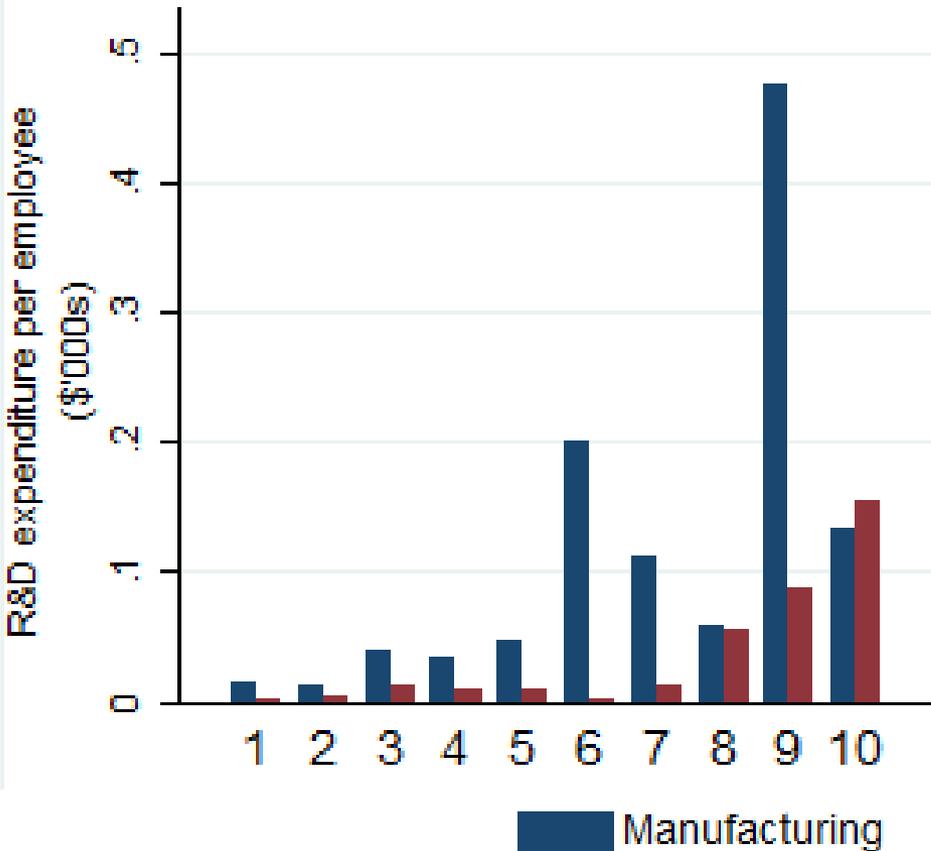
Source: Bloom et al. (forthcoming) using data from ENAPROCE 2015

# BETTER MANAGED FIRMS IN THE MANUFACTURING SECTOR HAVE A HIGHER PROBABILITY OF EXPORTING



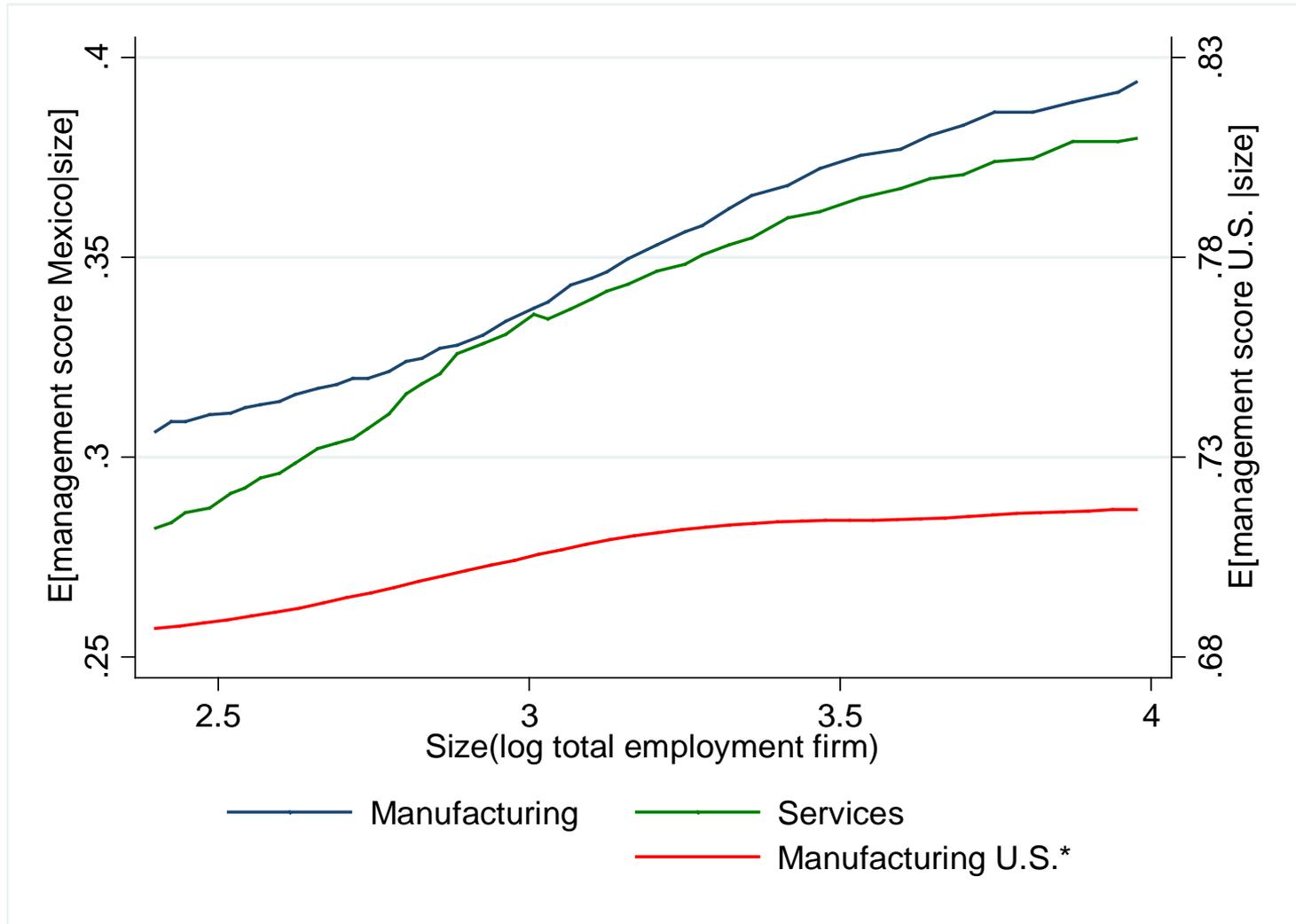
# BETTER MANAGED FIRMS SPEND MORE IN R&D AND INNOVATION

Management and R&D and innovation expenditure



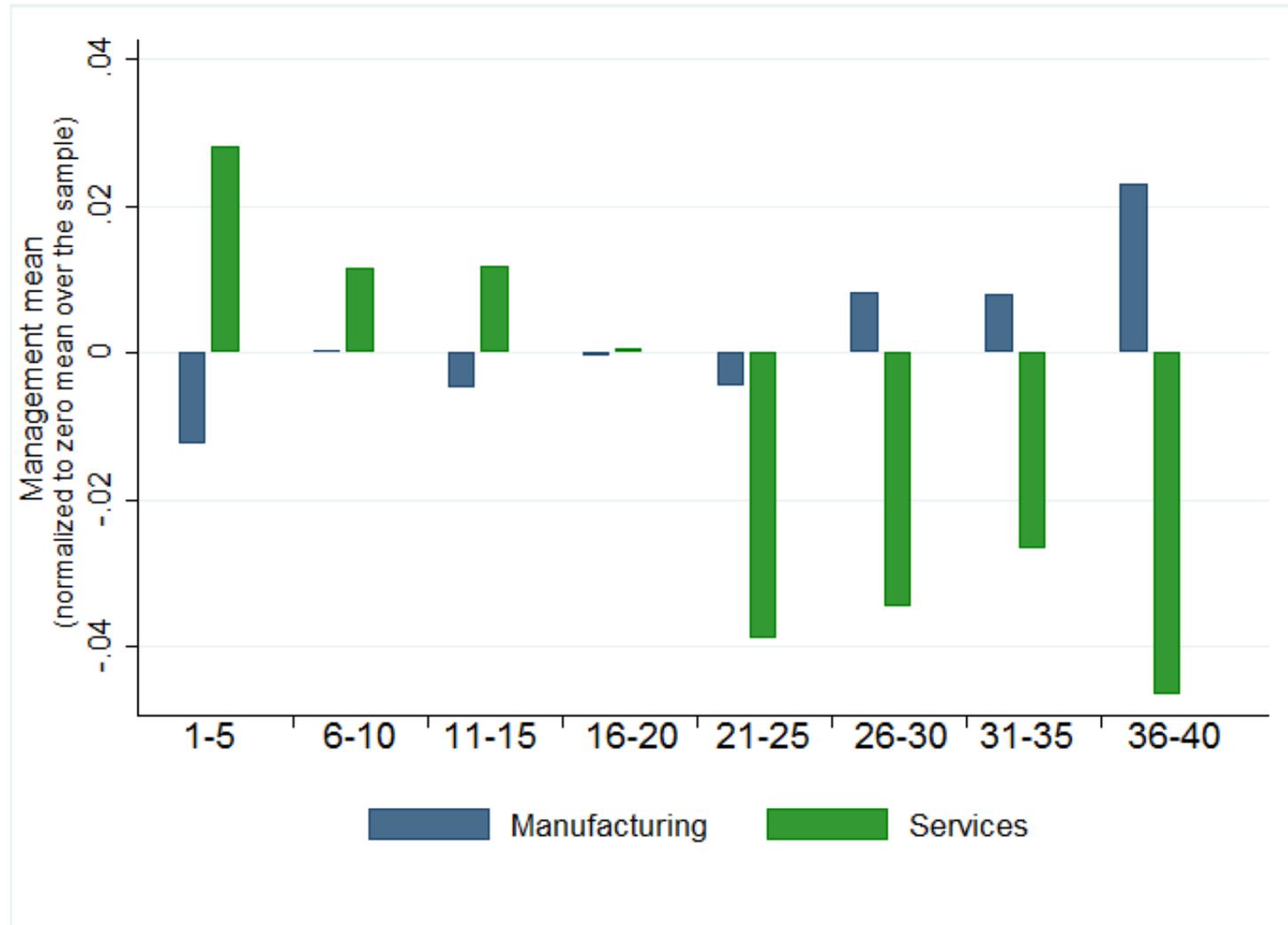
Source: Bloom et al. (forthcoming) using data from ENAPROCE 2015

# SIZE INCREASES WITH MANAGERIAL PRACTICES IN MEXICO BUT LESS SO THAN IN THE US ...EVIDENCE OF MISALLOCATION?



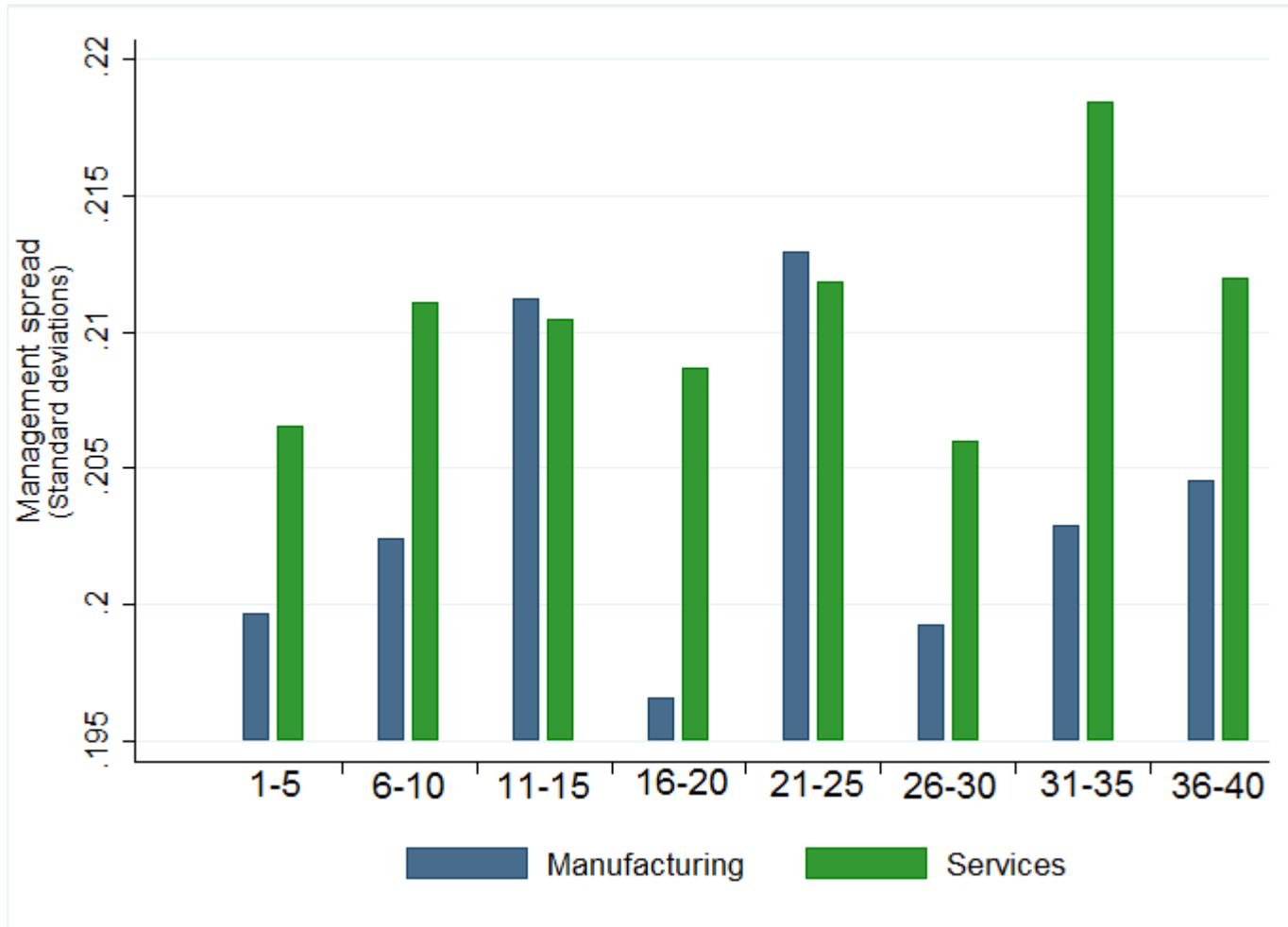
Source: Bloom et al. (forthcoming) using data from ENAPROCE 2015

# OLDER SERVICES FIRMS ARE NOT BETTER MANAGED WHILE MANUFACTURING FIRMS ARE...MORE EVIDENCE OF MISALLOCATION?

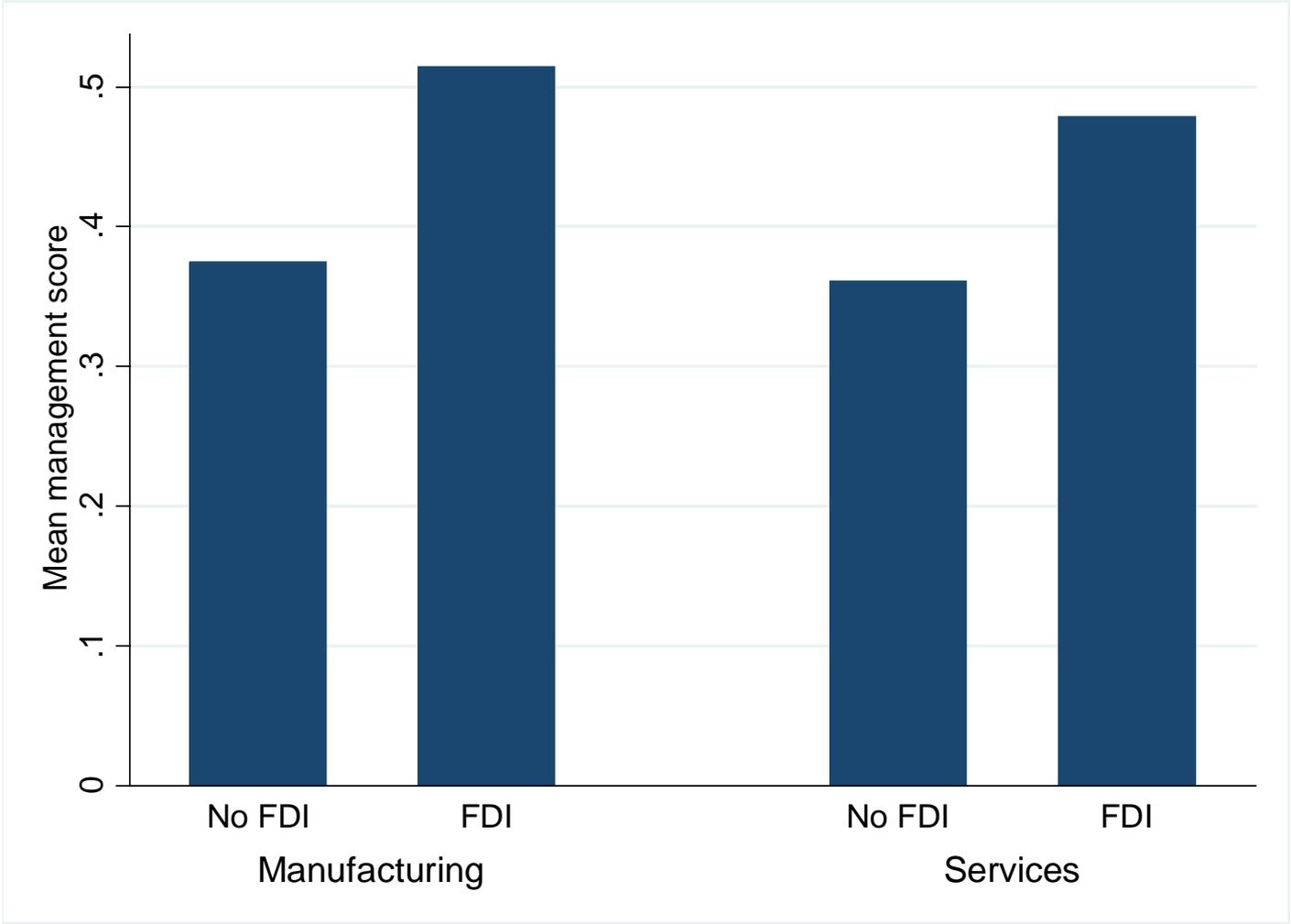


Source: Bloom et al. (forthcoming) using data from ENAPROCE 2015

# MANAGEMENT DISPERSION DOES NOT DECREASE WITH AGE, ESPECIALLY IN THE CASE OF SERVICES

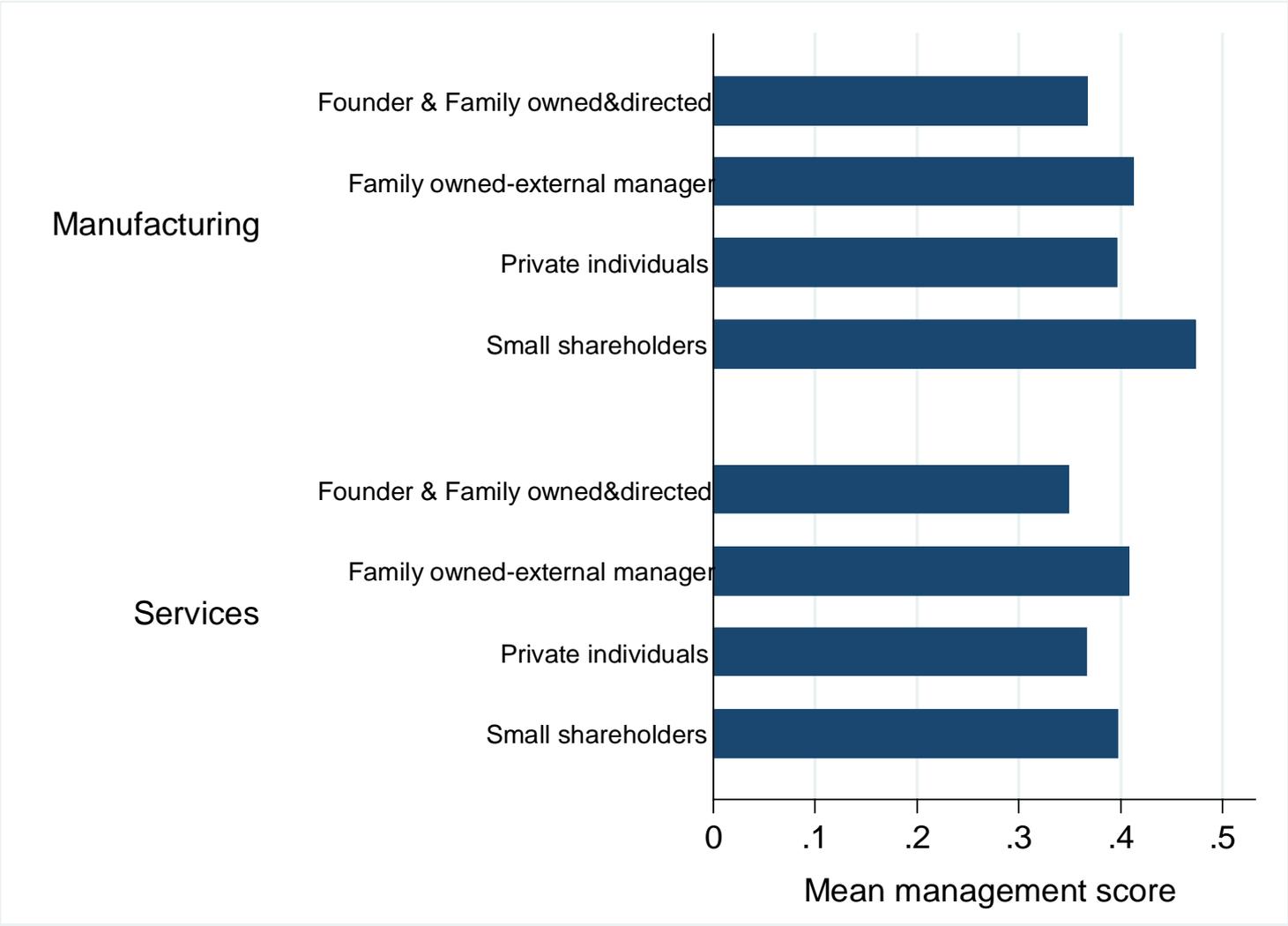


# FIRMS WITH FDI HAVE MUCH BETTER MANAGEMENT PRACTICES REGARDLESS OF THE SECTOR



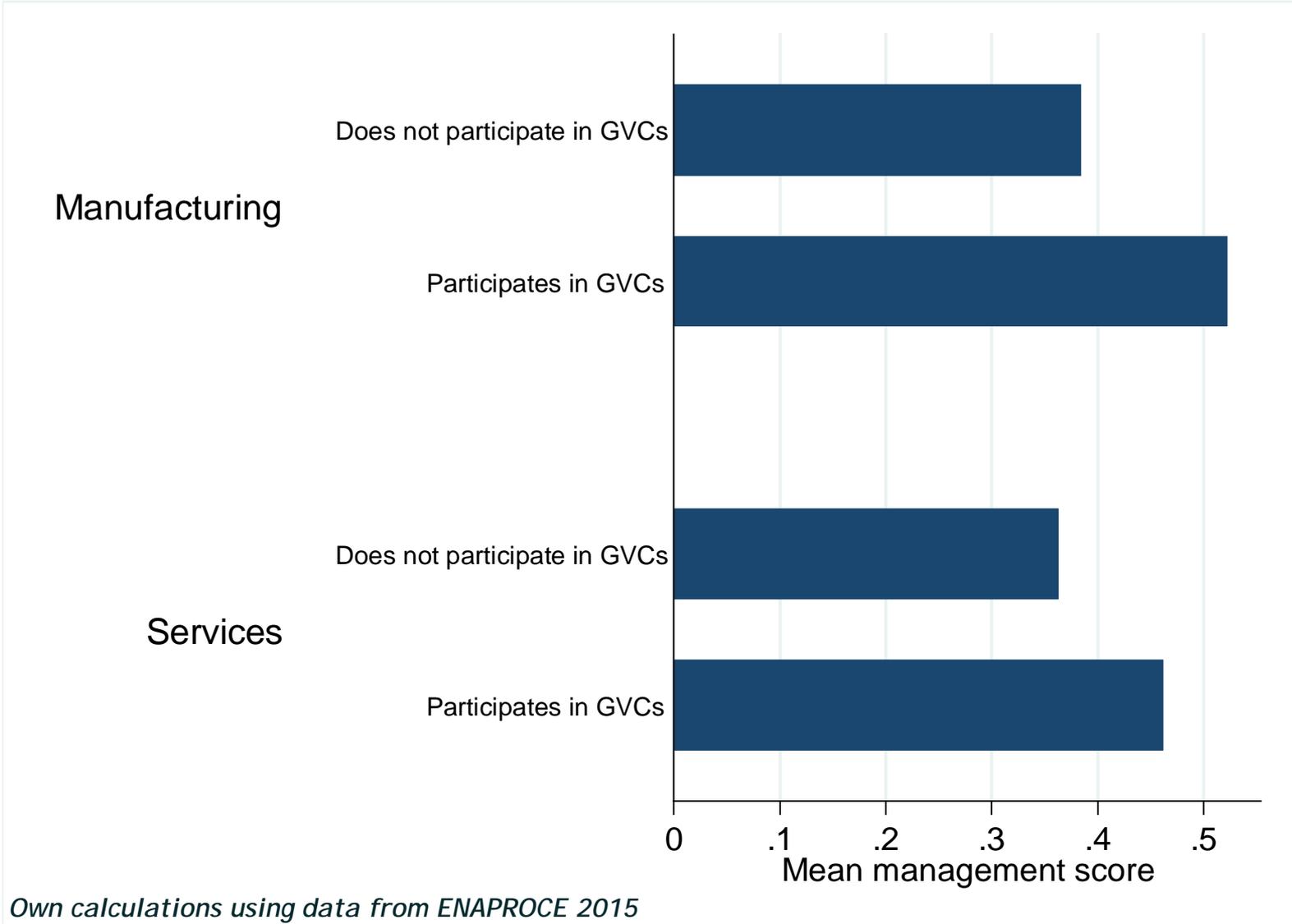
Source: Own calculations using data from ENAPROCE 2015

# FAMILY OWNED FIRMS HAVE WORSE MANAGEMENT SCORES WHEN THEY ARE ALSO FAMILY MANAGED



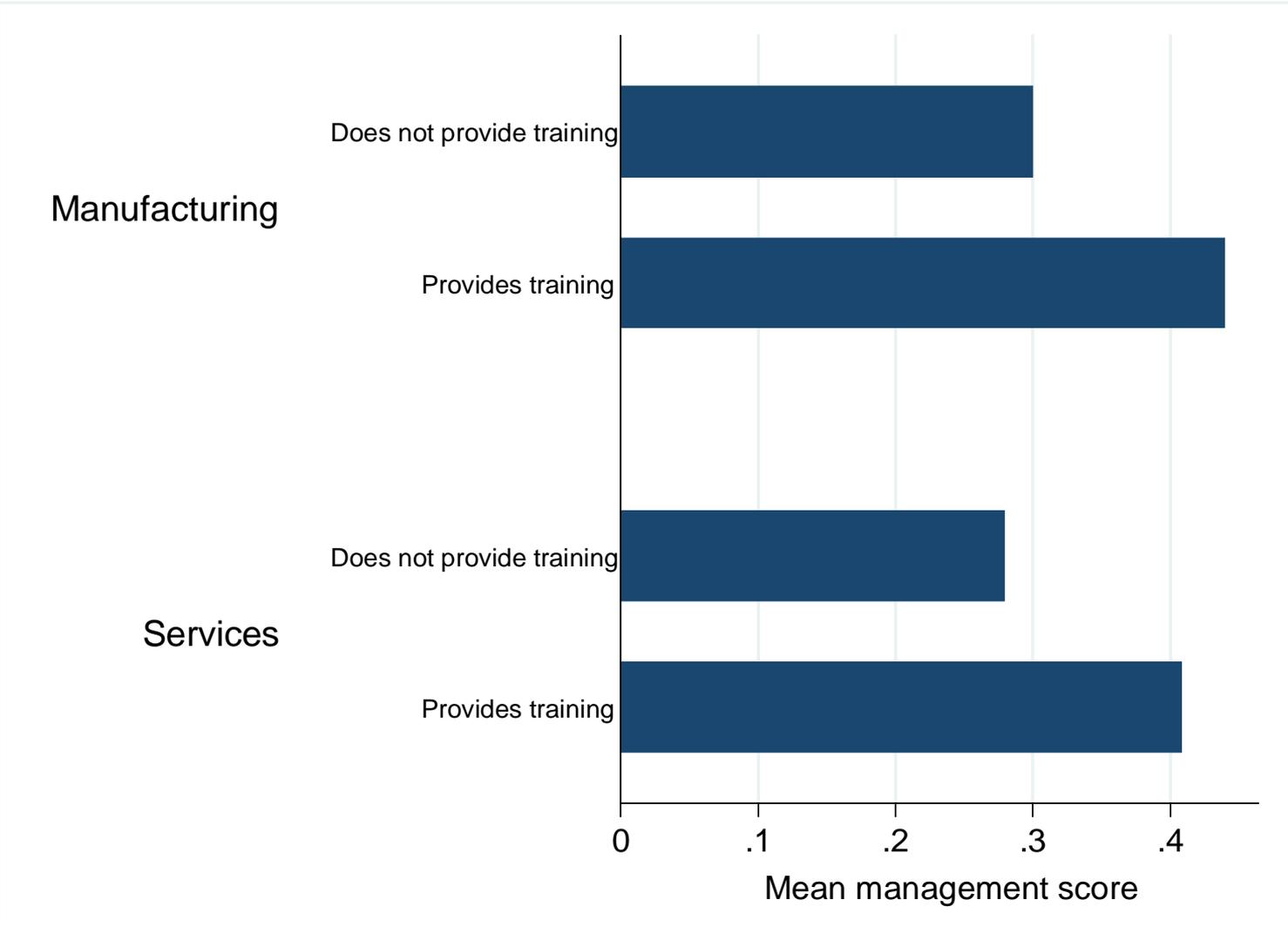
Source: Own calculations using data from ENAPROCE 2015

# FIRMS THAT PARTICIPATE IN GVCs ARE SIGNIFICANTLY BETTER MANAGED



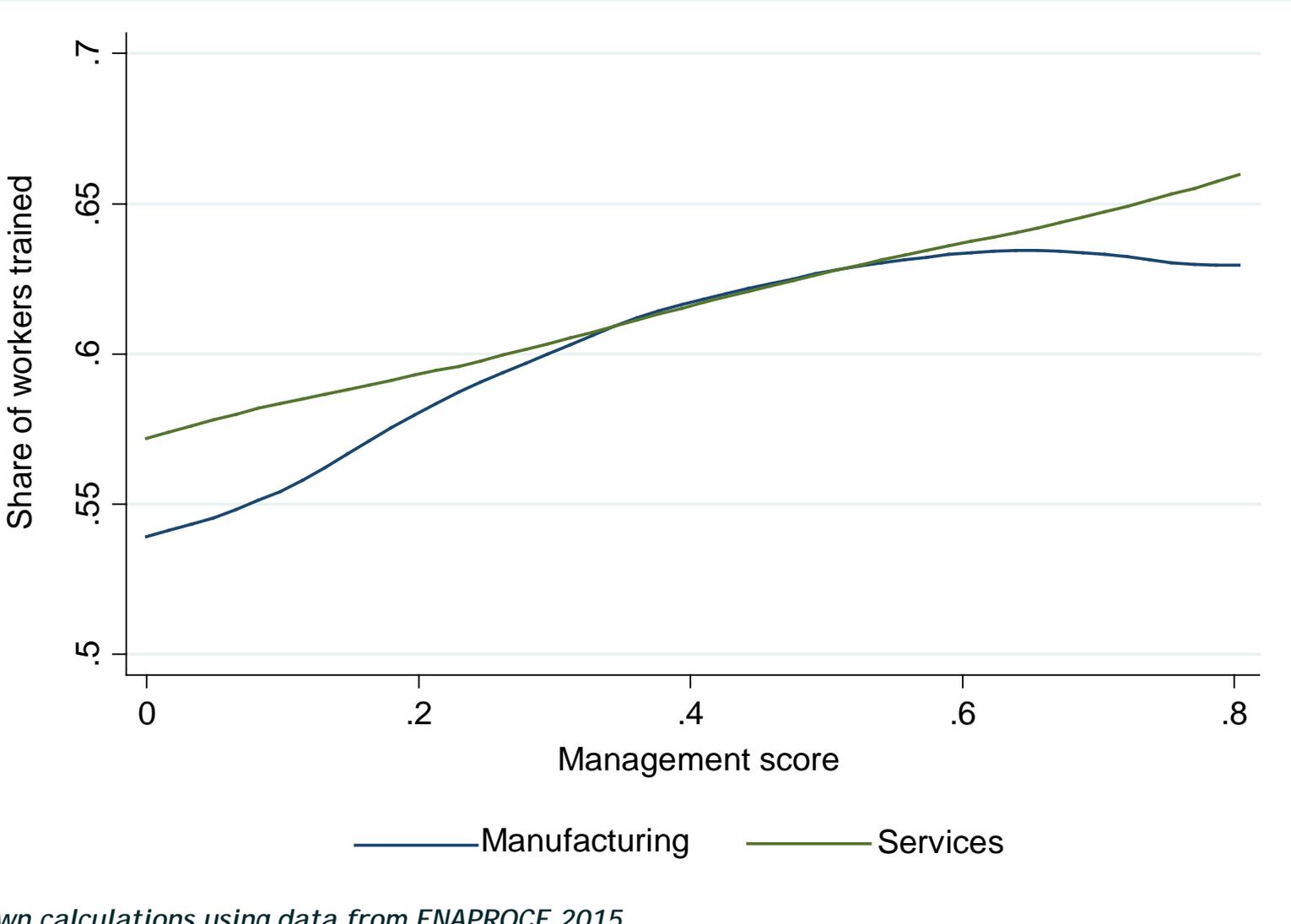
Source: Own calculations using data from ENAPROCE 2015

# FIRMS THAT PROVIDE TRAINING ARE ALSO BETTER MANAGED



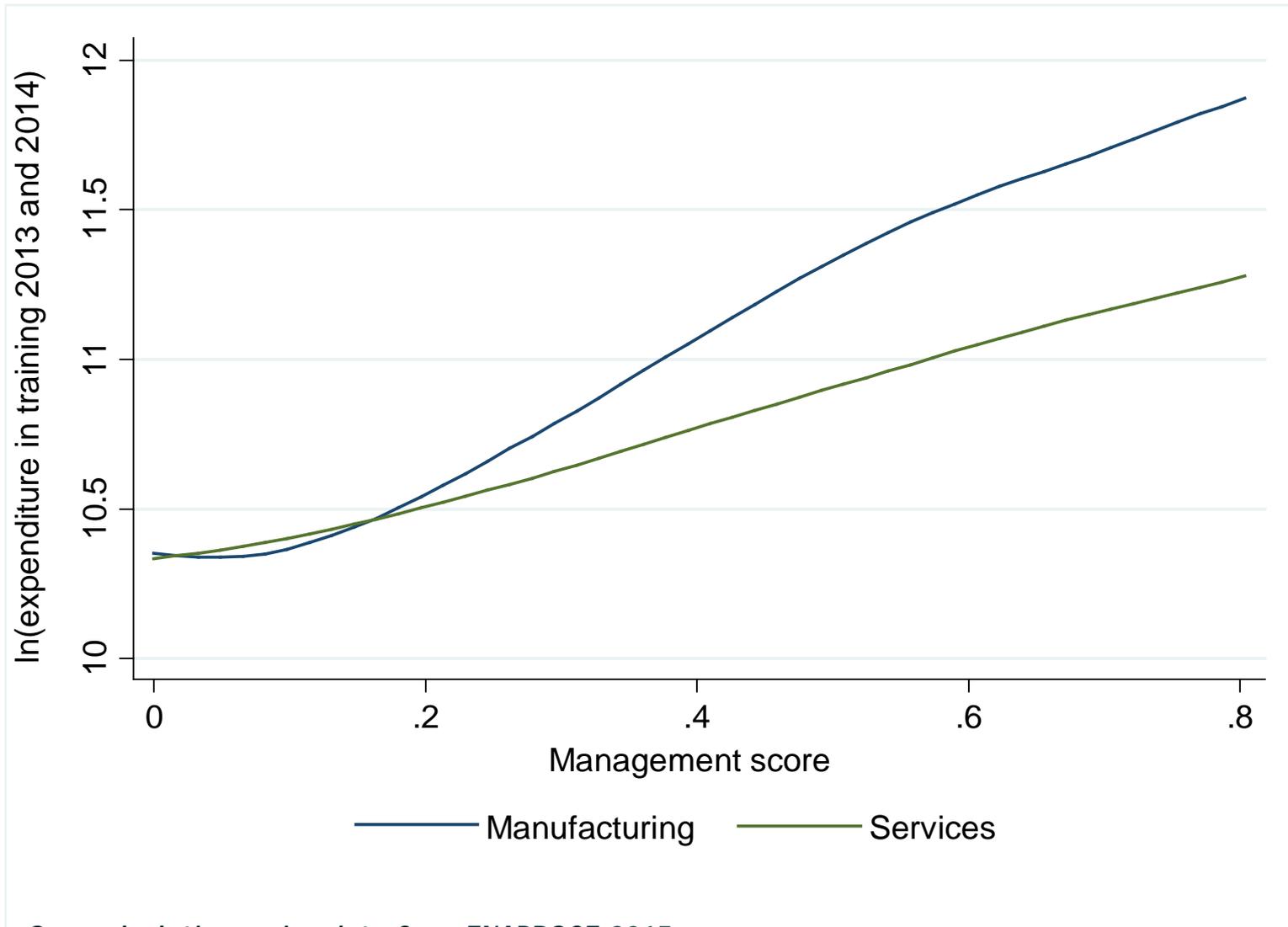
Source: Own calculations using data from ENAPROCE 2015

# THE SHARE OF WORKERS TRAINED INCREASE WITH BETTER MANAGEMENT



Source: Own calculations using data from ENAPROCE 2015

# AND THE SAME IS OBSERVED WITH EXPENDITURE IN TRAINING, ESPECIALLY IN THE CASE OF MANUFACTURING



Source: Own calculations using data from ENAPROCE 2015

**NEXT STEPS**

# NEXT STEPS

## ENAPROCE 2018

- Follow the same firms as ENAPROCE 2015 (panel), replacing for attrition.
- Add section on uncertainty
- Add information on organization (gender and nationality of CEO) and decision making.
- Analyze relation between management and firm growth and survival.

### RISKS

- Funding provided by four different institutions within the Mexican government.
- Mexico's elections could affect funding.
- It is a special survey so it is constrained by INEGI's other special surveys in 2018.