

# Communist Era Managers in Modern Times: A Comparison of Management Skills Across Generations

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# Introduction

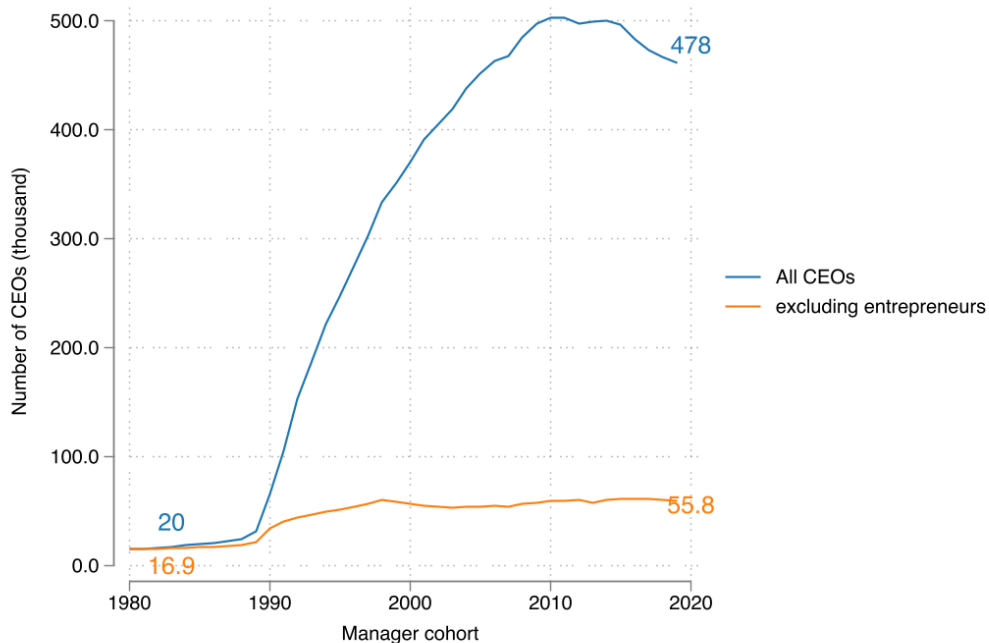
## Hungary, 1980 (Fortepan / Szalay Zoltán)



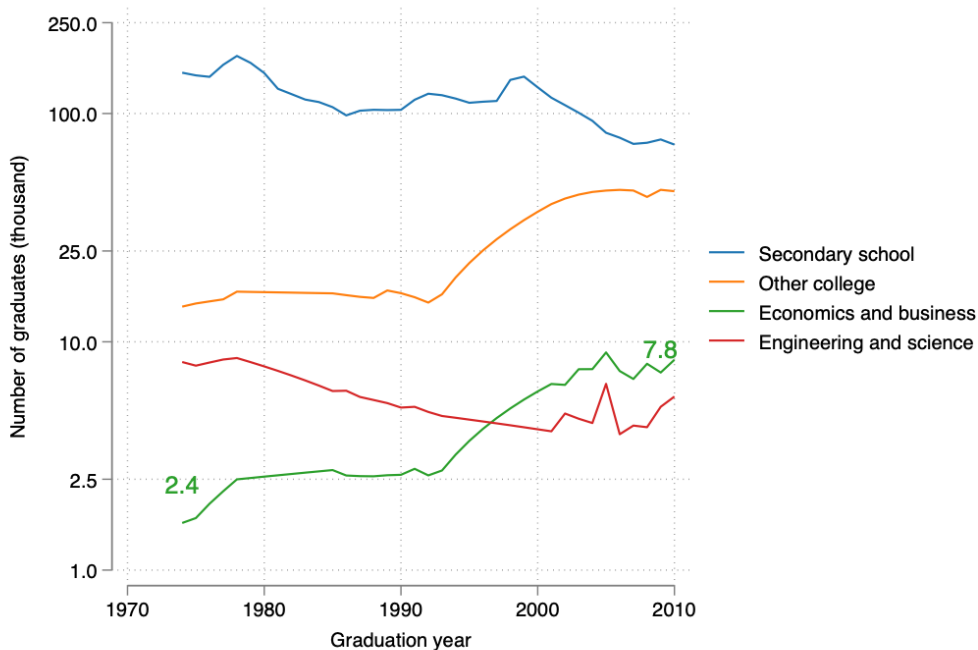
## Hungary, 1990 (MTI)



# Number of Executive Positions Increased



## Business Degrees Became More Prominent



## Would you like to be an entrepreneur?

Table 1

### Entrepreneurial Inclination 1988–1996 (%)

|                                  | 1988  | 1990         | 1992  | 1993  | 1994  | 1995  | 1996  |
|----------------------------------|-------|--------------|-------|-------|-------|-------|-------|
| Would become an entrepreneur     | 25    | 44           | 27    | 19    | 23    | 20    | 16    |
| It depends                       | 4     | <sup>a</sup> | 10    | 12    | 11    | 9     | 11    |
| Would not become an entrepreneur | 71    | 56           | 63    | 69    | 66    | 71    | 73    |
| N =                              | 2,941 | 986          | 4,073 | 3,773 | 3,902 | 4,093 | 3,564 |

<sup>a</sup>The answers had a dichotomous structure.

# We know that...

## Management matters

- Firms with better management practices are more productive (Bloom et al 2010).
- Management can be improved by intensive training (Bloom et al 2013, Giorcelli 2019).

## Managers matter

- Managers are important for firm performance (Bertrand and Schoar 2003, Bennedsen et al 2007).
- Top CEOs are paid a lot (Gabaix and Landier 2008, Frydman et al 2010).



# Literature

- Large-scale management interventions: Italy (Giorcelli 2019), US (Bianchi and Giorcelli 2022, Giorcelli 2023)
- Large-scale education interventions: Italy (Bianchi and Giorcelli 2020), Colombia (Ferreyra et al 2023), Vietnam (Vu 2023)
- Attitudes and histories of entrepreneurs in the transition period: Lengyel György et al (1989...), Laki and Szalai (2004, 2013), Alas and Aarna (2016)
- Long-lasting effects of socialism: Fuchs-Schündeln and Masella (2016), Fuchs-Schündeln and Schündeln (2020)

Data

# Administrative Data

## Manager Data 1985-2019

Universe of corporations (1m) and their CEOs (1.3m). Firm size (employment) as proxy for manager quality.

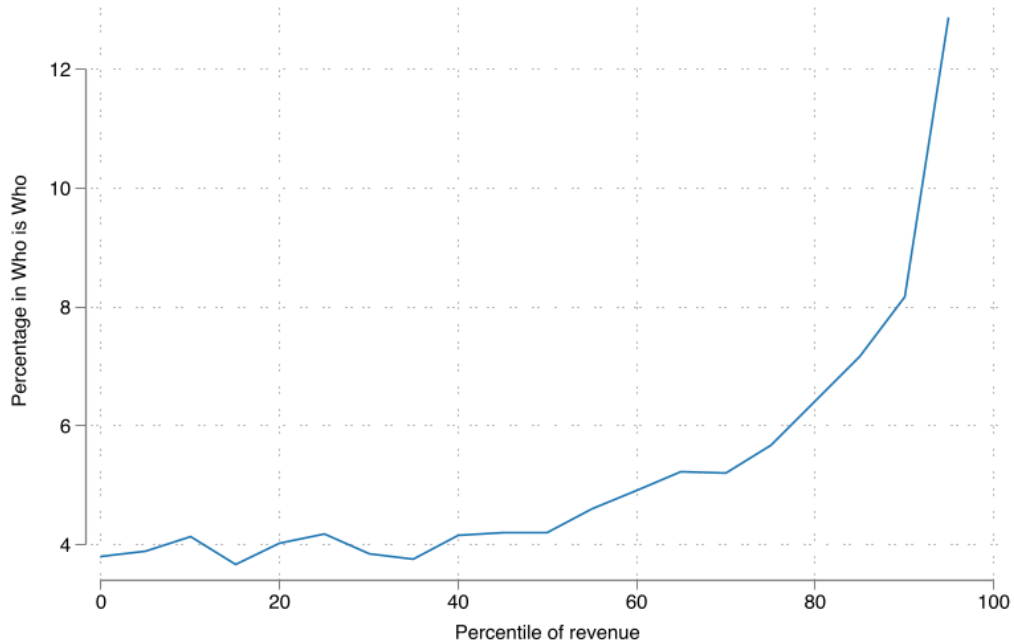
## Biographies

Full biographies (school, work experience, etc.) for 63k people in 2013. 30k matched to CEO panel.

## College graduates

Number of graduates by degree and year.

## Large Firms are Overrepresented in Who is Who



## Measuring Manager Quality

Log employment of firm  $i$  in year  $t$  in industry  $s$ , with a manager having entered in cohort  $c$  is

$$\ln L_{icst} = \beta_1 \text{manager\_age}_{ict} + \beta_2 \text{firm\_age}_{ict} + \mu_c + \xi_{st} + \epsilon_{ict}.$$

Quality:  $\mu_c$

## Degree of Selection

$$\ln \pi_{ic} = \theta \ln \lambda_i - \theta \mu_c + \varepsilon_{ic}.$$

Selectivity:  $\theta$

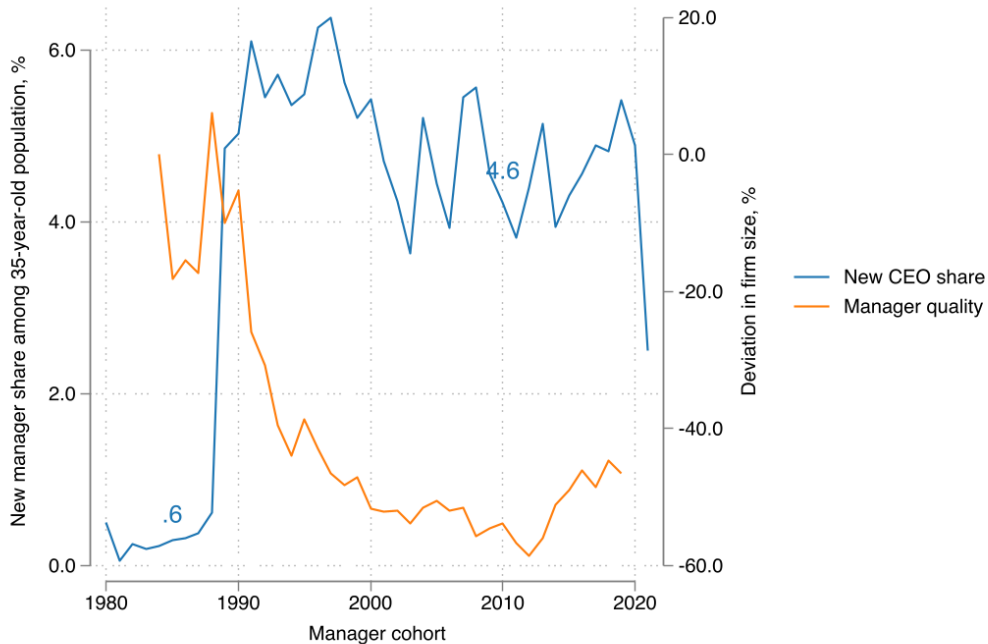
## Manager Selection by Degree

| VARIABLES                         | (1)<br>ln_pi         |
|-----------------------------------|----------------------|
| (firstnm) firm_size               | -6.872***<br>(1.982) |
| (firstnm) degree = 1, economics   | 4.032***<br>(0.368)  |
| (firstnm) degree = 2, engineering | 3.676***<br>(0.492)  |
| (firstnm) degree = 3, other       | 2.041***<br>(0.455)  |
| Constant                          | -14.92***<br>(2.106) |
| Observations                      | 87                   |
| $R^2$                             | 0.553                |

Robust standard errors in parentheses

\*\*\* p < 0.01 \*\* p < 0.05 \* p < 0.1

## Quantity Up, Quality Down





## World Management Survey

# Methodology

Structured phone interview with operations manager or CEO. 40-60 minutes.

“What do you do when there is a production problem?” “How do you motivate your employees?” “What happens if you don’t meet your target?”

Scored on 18 dimensions, 1-5 scale. Higher is better.

## Hungarian wave

Spring and Summer of 2018.

Target population: manufacturing firms with 50+ employees.

Sample: 762 firms.

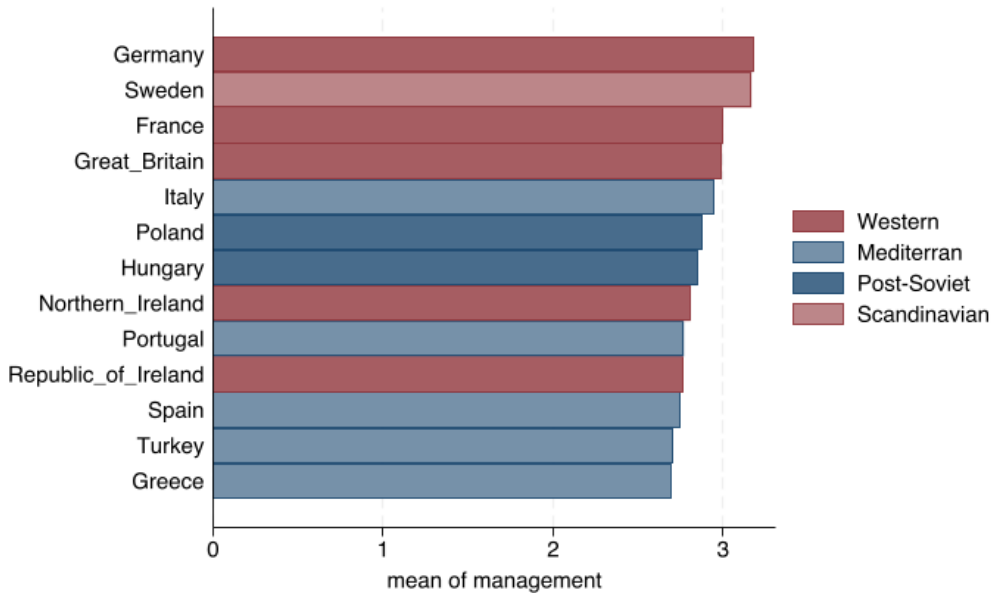
# Survey logistics

10 surveyors

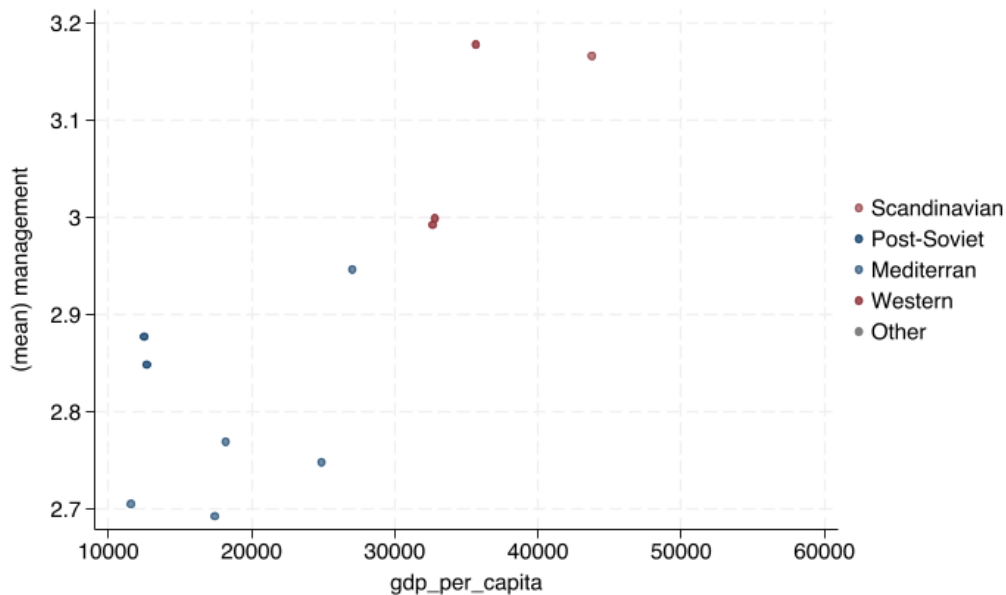
## Funnel

- 1 762 firms contacted by phone
- 2 281 (37%) resulted in direct contact to manager
- 3 144 (51%) scheduled an interview
- 4 126 (87%) completed the interview
- 5 118 (94%) usable responses

## Where is Hungary?

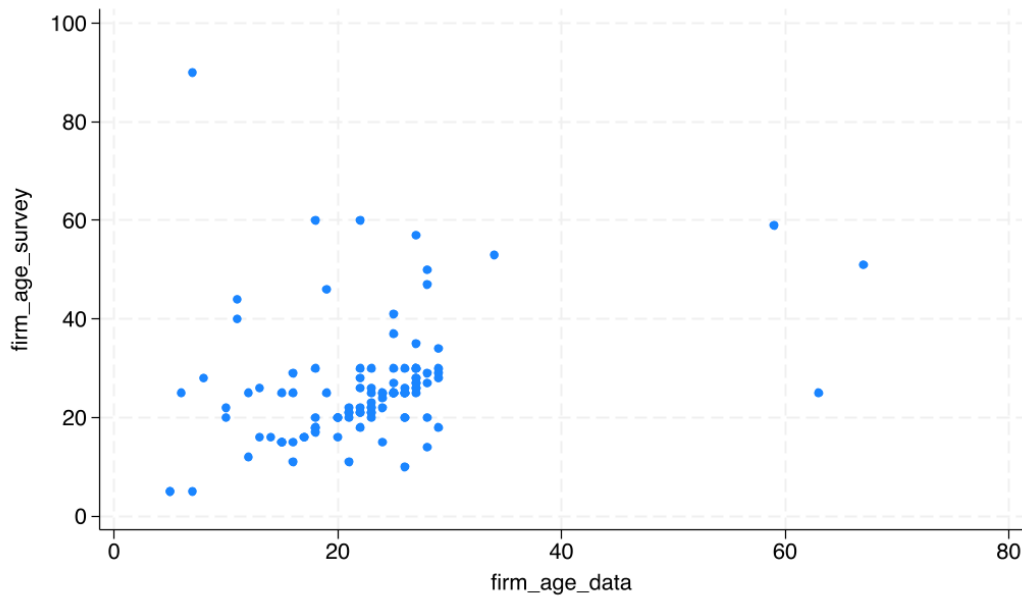


## Richer countries have better management



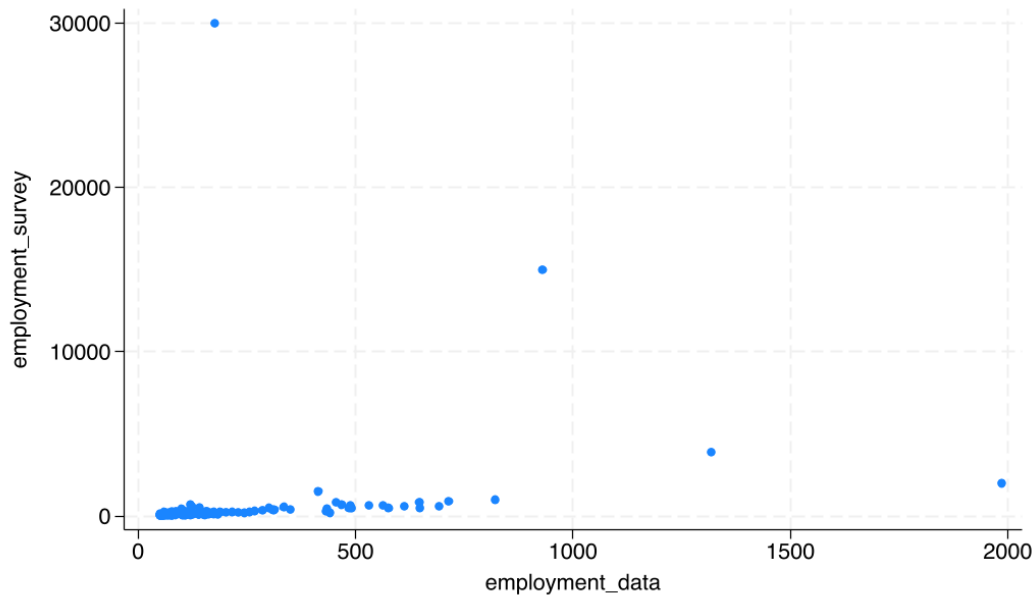
# Validation

## How old is your firm?

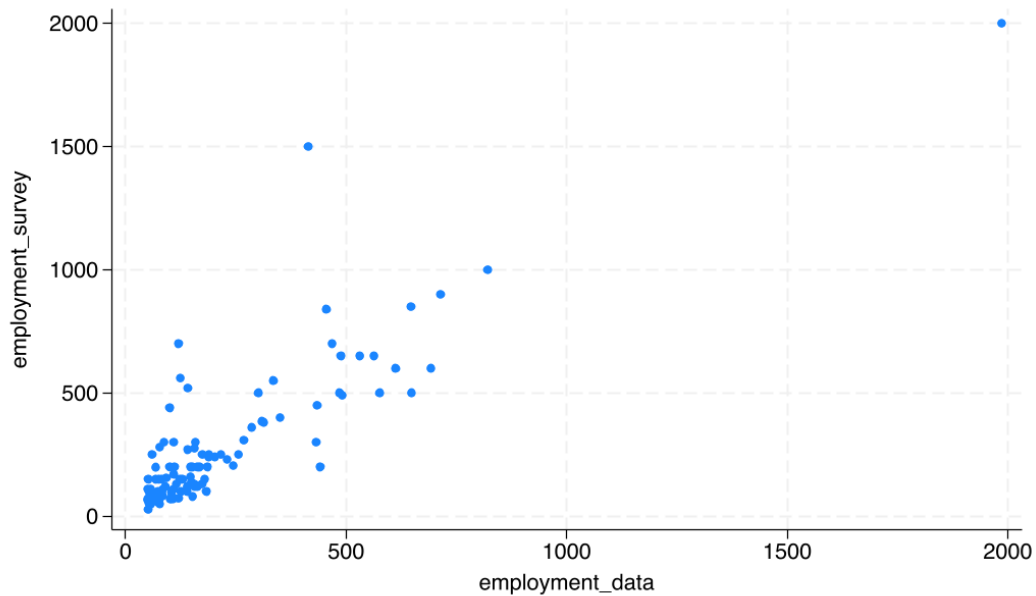




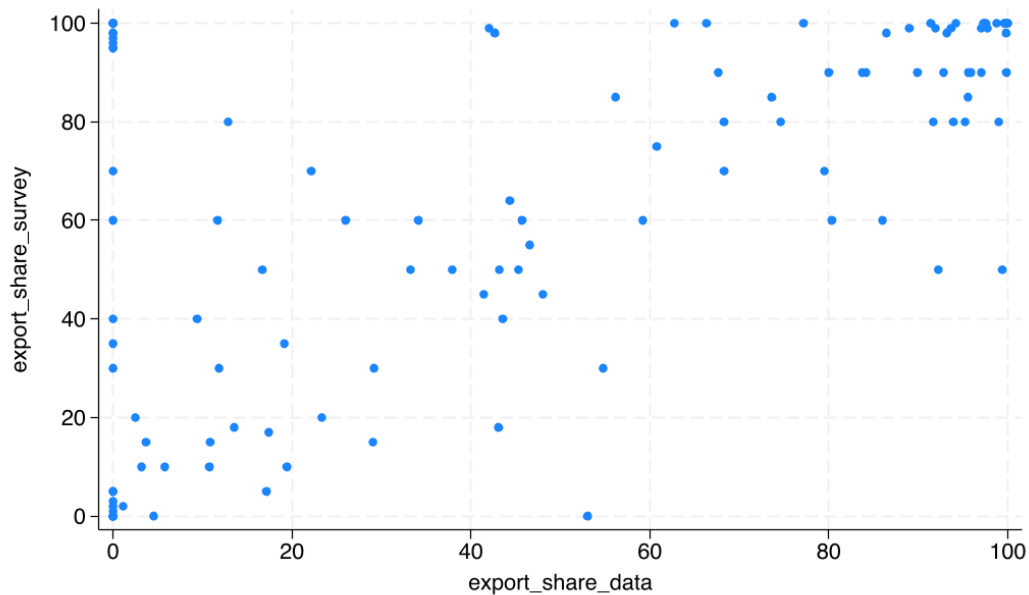
How many employees does your firm have?



...zooming in



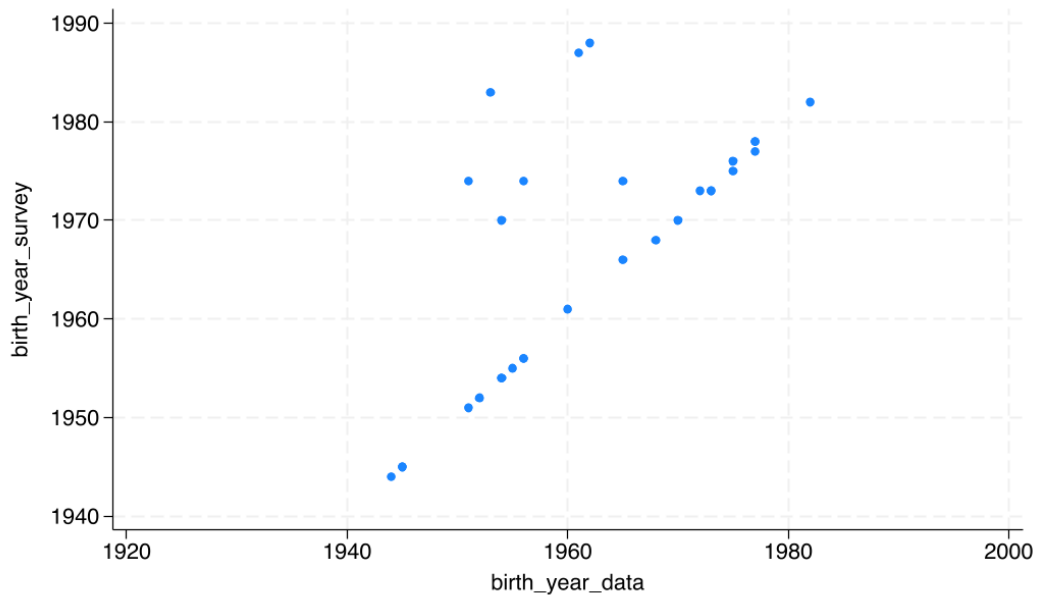
What percentage of your revenue is coming from exports?



## Birth year of respondent and the CEO



...if the respondent **is** the CEO



## Management Scores

## Larger foreign firms are better managed

| VARIABLES    | (1)<br>management    | (2)<br>management    | (3)<br>management    | (4)<br>management    |
|--------------|----------------------|----------------------|----------------------|----------------------|
| lnL          | 0.382***<br>(0.0615) | 0.361***<br>(0.0589) | 0.398***<br>(0.0679) | 0.449***<br>(0.0600) |
| entrepreneur | -0.319**<br>(0.128)  |                      |                      |                      |
| foreign      |                      | 0.461***<br>(0.109)  |                      |                      |
| exporter     |                      |                      | 0.274<br>(0.165)     |                      |
| expat        |                      |                      |                      | 0.0991<br>(0.152)    |
| Constant     | 1.068***<br>(0.352)  | 0.856***<br>(0.302)  | 0.637**<br>(0.320)   | 0.578*<br>(0.319)    |
| Observations | 118                  | 118                  | 118                  | 118                  |

## Management improves labor productivity

| VARIABLES    | (1)<br>lnQ          | (2)<br>TFP           | (3)<br>exporter      |
|--------------|---------------------|----------------------|----------------------|
| management   | 0.454***<br>(0.171) | 0.0385<br>(0.0478)   | 0.0839<br>(0.0670)   |
| lnL          | 1.097***<br>(0.147) | -0.00639<br>(0.0377) | 0.151***<br>(0.0481) |
| foreign      | 0.108<br>(0.217)    | 0.0381<br>(0.0420)   | 0.0833<br>(0.0703)   |
| Constant     | 8.167***<br>(0.682) | -0.0901<br>(0.148)   | -0.248<br>(0.235)    |
| Observations | 118                 | 114                  | 118                  |
| $R^2$        | 0.546               | 0.025                | 0.206                |

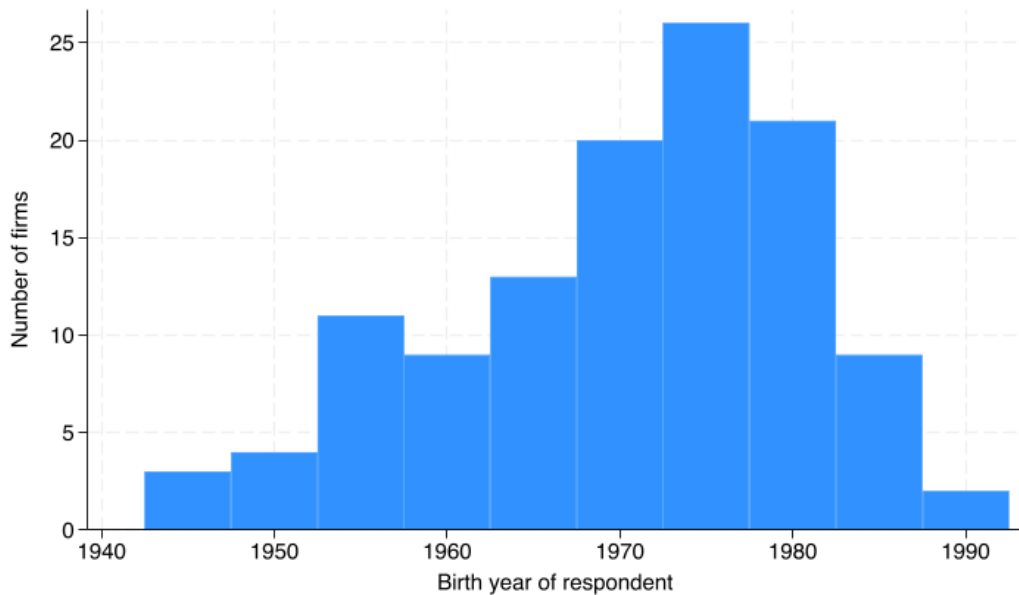
Robust standard errors in parentheses

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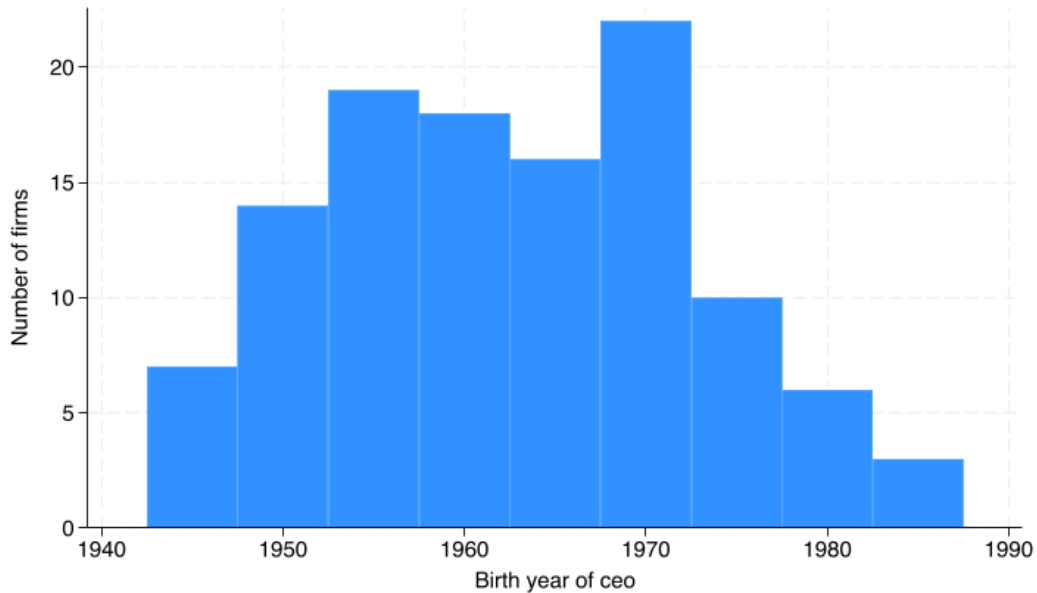


## Cohort Effects

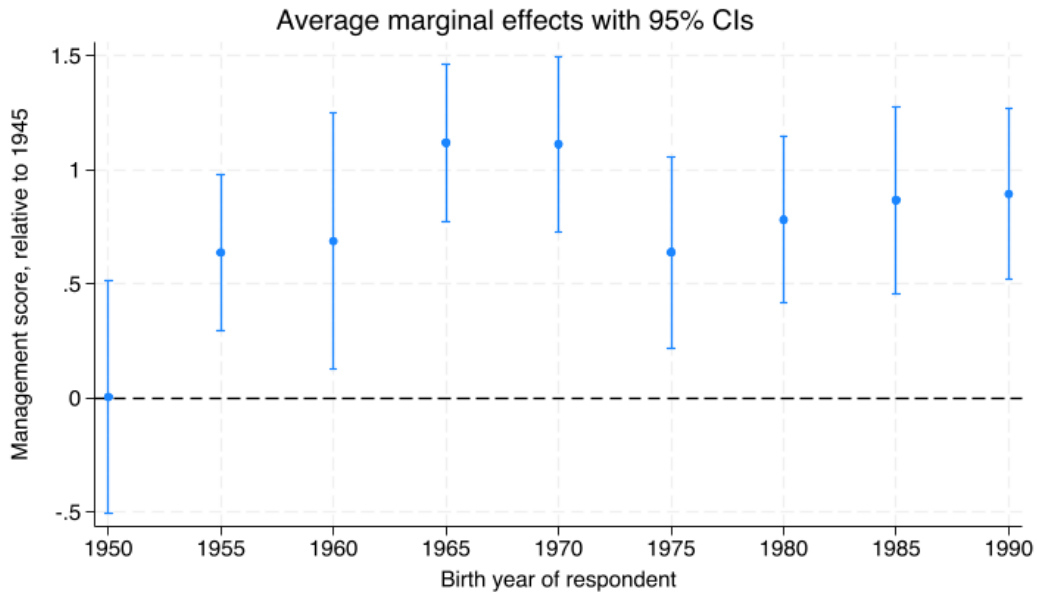
## Distribution of birth years of respondents



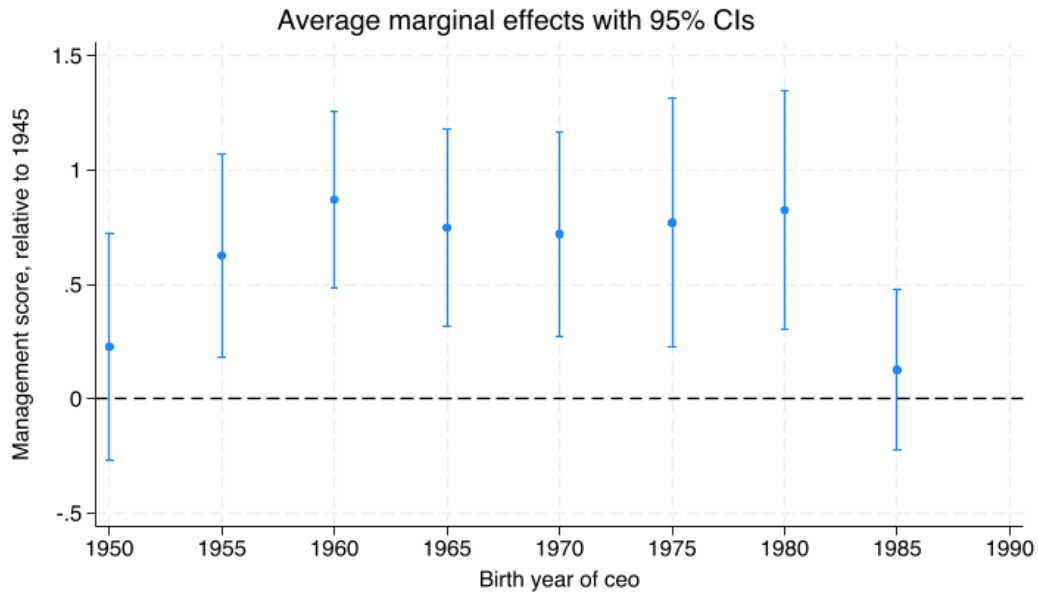
## Distribution of birth years of CEOs



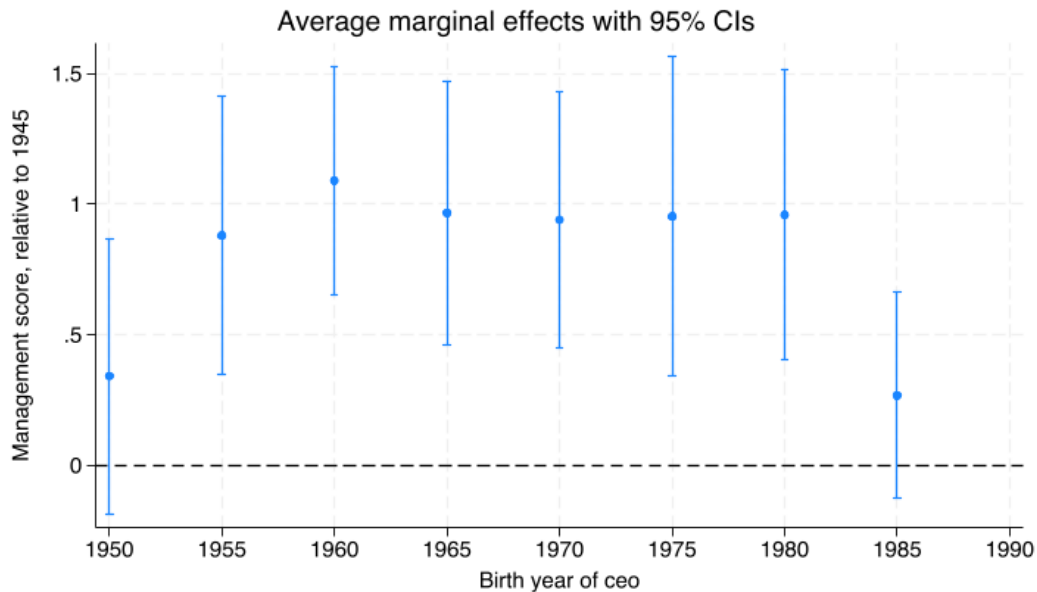
## Older respondents are worse managers



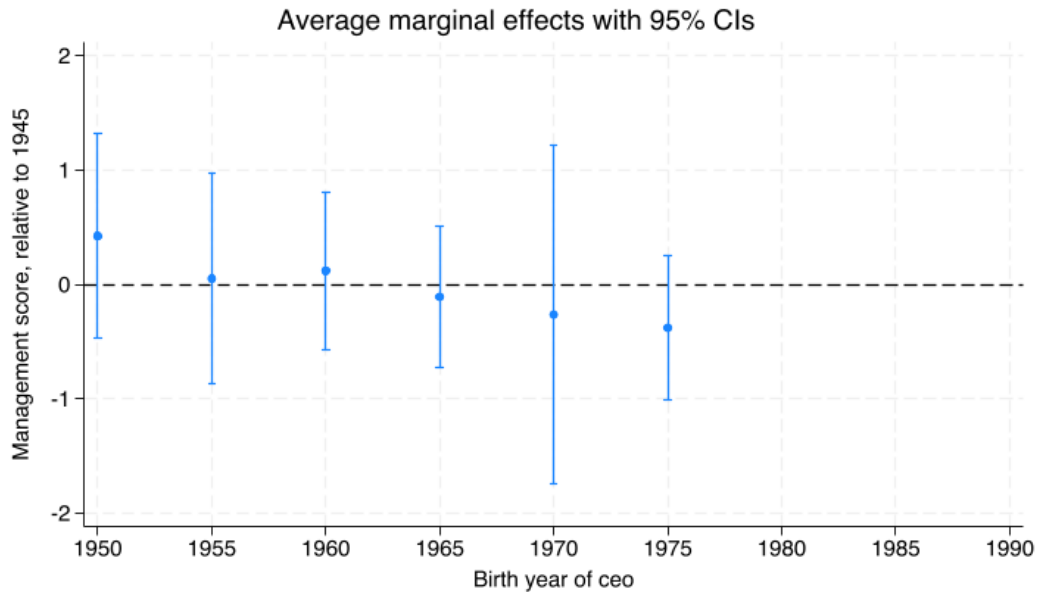
## Older CEOs are worse managers



## Cohort effects only matter for domestic CEOs



... not for expats



## Conclusion



# Summary

- 1 Management scores meaningfully correlate with firm outcomes.
- 2 Hungarian managers are worse than in richer countries.
- 3 Especially those born before 1955.

## Next Steps

- 1 Collect data from other countries: Germany, Poland.
- 2 Investigate the role of education and training in management quality.