

# Expatriate Managers and Firm Performance

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# Motivation

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- ▶ Some firms produce vastly more output per worker than others (Syverson, 2011).
  - ▶ technology
  - ▶ organization

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  - ▶ technology
  - ▶ organization
- ▶ Two interventions know to improve firm performance:
  1. foreign investment
  2. management training

## Foreign owned firms perform better than domestic firms

- ▶ US: Doms and Jensen (1998)
- ▶ UK: Griffith (1999)
- ▶ Hungary, Romania, Russia, Ukraine: Brown, Earle, Telegdy (2006)
- ▶ Indonesia: Arnold and Javorcik (2009)

## Management improves firm performance

- ▶ Good management practices increase productivity (Bloom and Van Reenen 2010; Bloom et al. 2012; Bloom et al. 2014) and market access (Bloom et al. 2016).
- ▶ CEOs behaving like “leaders” gradually improve firm performance. (Bandiera, Hansen, Prat and Sadun 2018)
- ▶ Large increase in the level and inequality of CEO pay. (Murphy and Zábojník 2004; Gabaix and Landier 2008; Tervio 2008; Frydman and Saks 2010)

## Manager identity matters

- ▶ Managers have persistent effects across firms on investment policy, R&D, advertising, return on assets. (Bertrand and Schoar 2003)
- ▶ Sudden CEO death worsens firm performance. (Bennedsen, Pérez-González and Wolfenzon 2007)
- ▶ Managers having past export experience increase likelihood of expoting. (Mion and Opromolla 2014; Mion, Opromolla and Sforza 2016:

# This paper

- ▶ Foreign owners improve firm performance by improving management.
- ▶ Compile new, unique data on which firm is run by expat manager: Hungary, 1992–2016.
- ▶ Research design:
  - ▶ differences-in-differences comparing expat-managed firms to domestic managed firms before and after takeover
  - ▶ controlling for domestic change in management



## Contributions

1. Linked firm-CEO data for the universe of corporations for Hungary.
2. Compare expat CEOs to local CEOs.

## Why care?

- ▶ Different modes of global engagement are highly correlated:
  - ▶ foreign investment/ownership
  - ▶ foreign management
  - ▶ foreign trade
- ▶ Which are most important for productivity gains?

## Three potential benefits

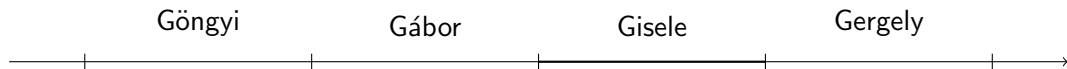
1. Better firm-specific skills and loyalty
2. Better general management skills
3. Reorganization

Data

# Data

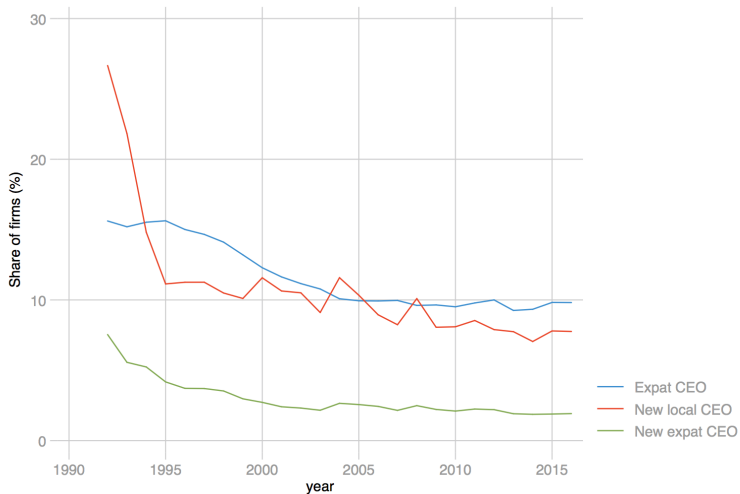
- ▶ Hungarian Manager Database, 1992–2016: names and addresses of all corporations and their executives.
- ▶ Analysis sample: foreign owned firms employing 20 people or more, excluding founder-managed years.
- ▶ Foreign manager: firm representative with a non-Hungarian name
  - ▶ e.g. Eva Bauer v Bauer Éva

## CEO succession



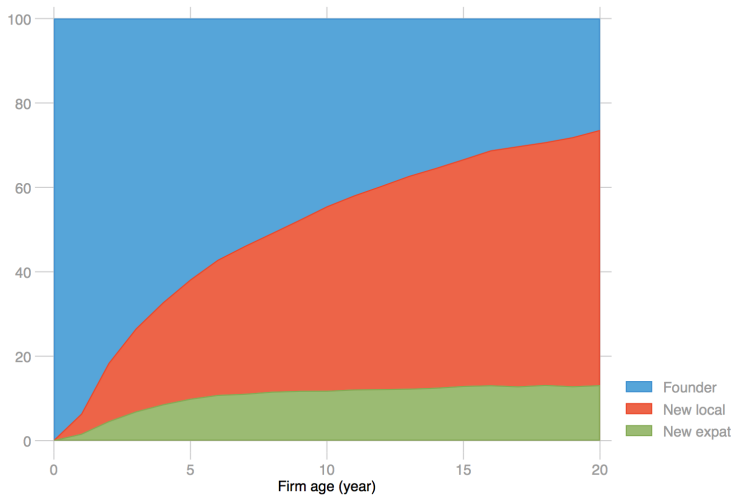
## Descriptives

# Local and expat managers over time

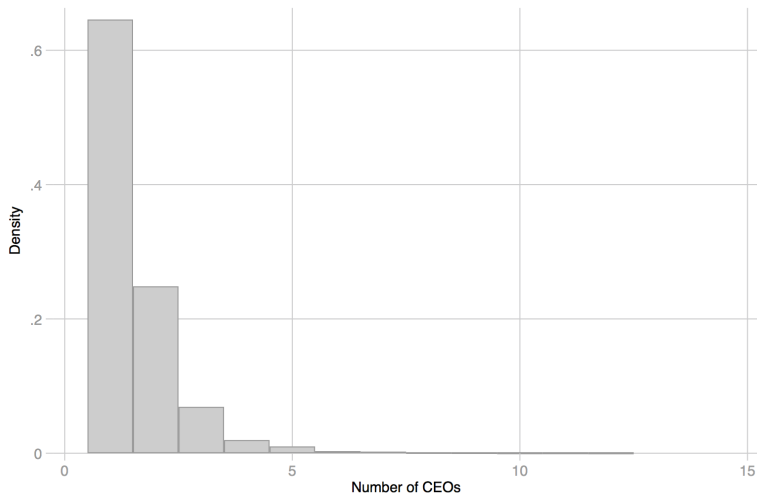




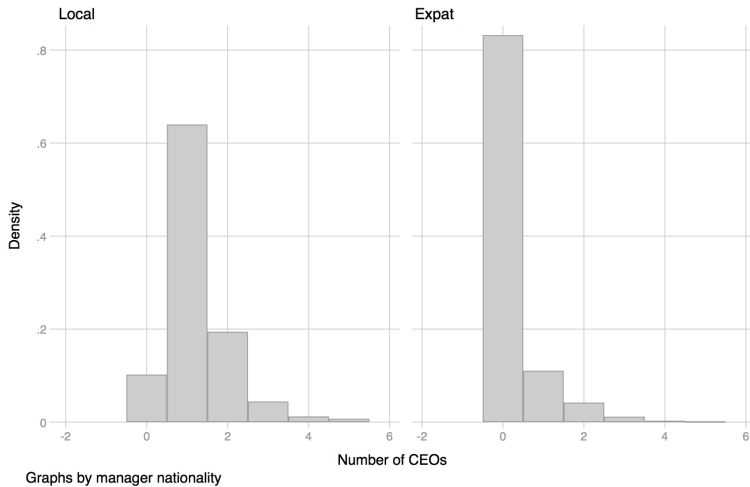
## Founder CEOs are slowly replaced



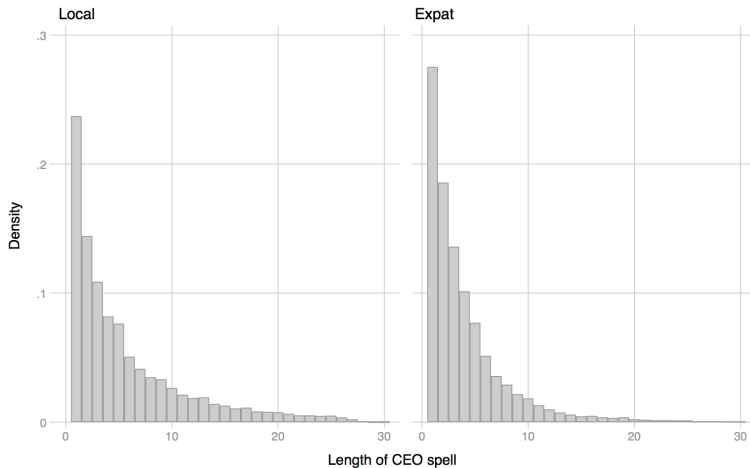
## Firms sometimes have multiple CEOs



## 80 percent of firms have no expat CEO



## Expat CEOs leave somewhat earlier



Graphs by manager nationality

## Number of CEO switches

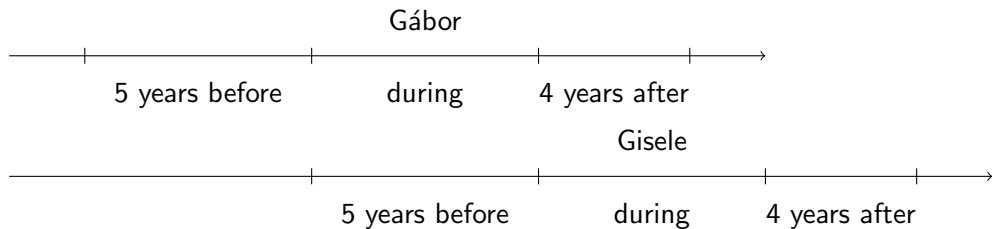
From	To domestic	To expat
domestic	15783	1849
expat	2493	4774

## Research design

## Research design

- ▶ Take each CEO spell at each firm (e.g., Steve Ballmer, Microsoft, 2000–2014)
- ▶ Exclude founders (e.g., Bill Gates, Microsoft, 1975–1999)
- ▶ For each spell, collect firm-level data for three periods:
  - ▶ before (1975–1999)
  - ▶ during (2000–2014)
  - ▶ after (2015–)
- ▶ Comparing these periods, we estimate the impact of a new CEO and whether it is long lasting.

## Manager-level event study





## Estimating equation

$T_{im} \subset [1992, 2016]$ : tenure of CEO  $m$  at firm  $i$

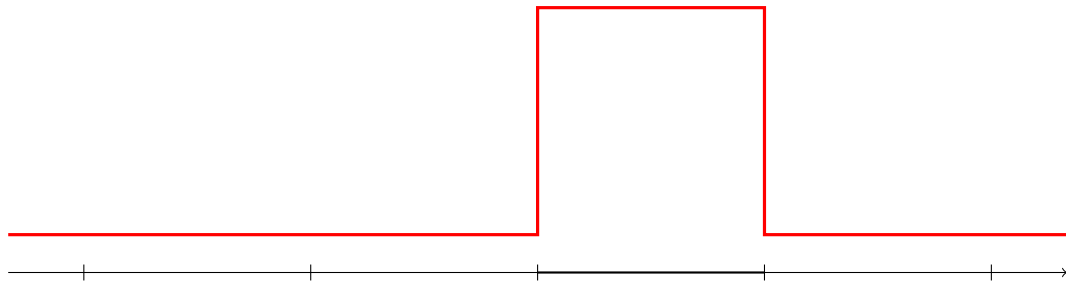
$I()$ : indicator function

$X_m$ : expat dummy

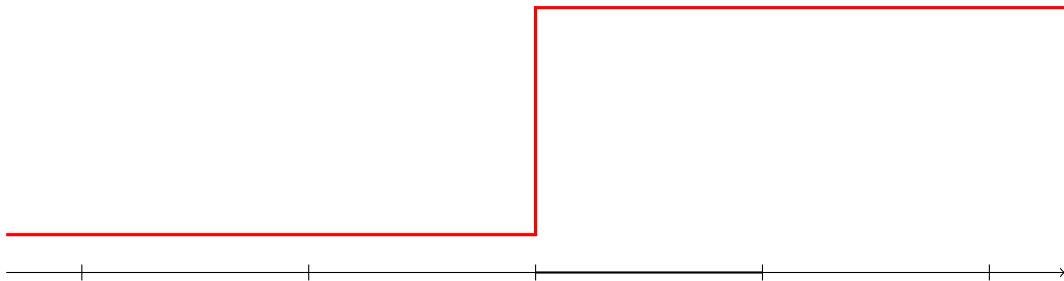
$$\begin{aligned} Y_{imt} = & \beta_1 I(t \in T_{im}) + \beta_2 I(t > T_{im}) \\ & + \gamma_1 X_m I(t \in T_{im}) + \gamma_2 X_m I(t > T_{im}) \\ & + f(\text{age}_{it}) + \mu_{im} + \nu_{st} + \varepsilon_{imt} \quad (1) \end{aligned}$$

## Mechanism

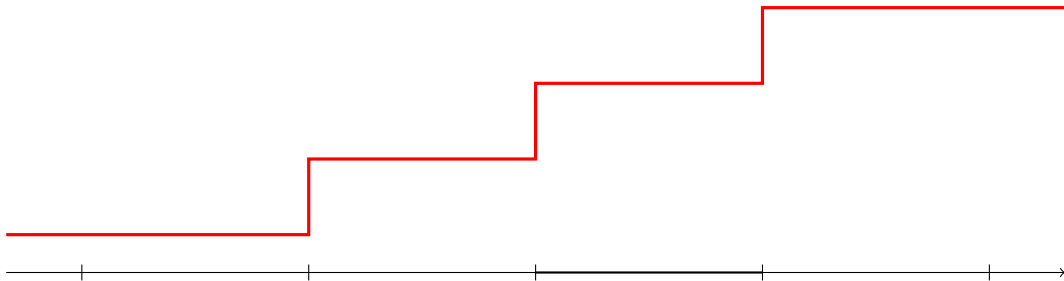
## Specific knowledge



## Technology transfer



# Reorganization



# Estimates

## Foreign firms are better in every respect (OLS estimates)

	(1) lnL	(2) lnKL	(3) lnQL	(4) exporter
Foreign owner (dummy)	0.399*** (0.020)	0.537*** (0.032)	0.655*** (0.024)	0.332*** (0.008)
Expat manager (dummy)	-0.000 (0.024)	0.110*** (0.038)	-0.088*** (0.027)	0.060*** (0.008)
$R^2$	0.072	0.156	0.210	0.204
Number of observations	322,194	287,853	322,194	322,194

Notes: All specifications control for industry-year fixed effects. Standard errors, clustered by firm, are reported in parantheses. Coefficients significantly different from zero at 1, 5 and 10 percent are marked by \*\*\*, \*\* and \*, respectively.

## Foreign takeover is associated with higher capital intensity, productivity and exporting (firm FE estimates)

	(1) lnL	(2) lnKL	(3) lnQL	(4) exporter
Foreign owner (dummy)	0.001 (0.032)	0.108** (0.047)	0.071*** (0.022)	0.028** (0.012)
Expat manager (dummy)	-0.038*** (0.012)	0.050*** (0.014)	-0.007 (0.009)	0.016*** (0.004)
$R^2$	0.122	0.196	0.278	0.049
Number of observations	322,194	287,853	322,194	322,194

Notes: All specifications control for industry-year and firm fixed effects. Standard errors, clustered by firm, are reported in parantheses. Coefficients significantly different from zero at 1, 5 and 10 percent are marked by \*\*\*, \*\* and \*, respectively.



Foreign takeover is associated with higher capital intensity, productivity and exporting (firm FE estimates on acquisition sample only)

	(1) lnL	(2) lnKL	(3) lnQL	(4) exporter
Foreign owner (dummy)	0.038 (0.041)	-0.024 (0.057)	0.056* (0.029)	0.018 (0.014)
Expat manager (dummy)	0.047 (0.031)	0.023 (0.032)	0.034 (0.021)	0.035*** (0.009)
$R^2$	0.115	0.227	0.276	0.054
Number of observations	238,775	211,868	238,775	238,775

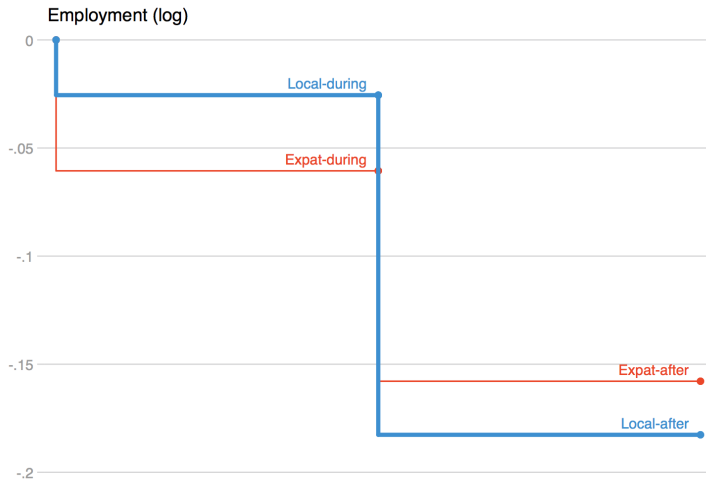
Notes: All specifications control for industry-year and firm fixed effects. Standard errors, clustered by firm, are reported in parantheses. Coefficients significantly different from zero at 1, 5 and 10 percent are marked by \*\*\*, \*\* and \*, respectively.

## Manager-level estimates on acquisitions sample

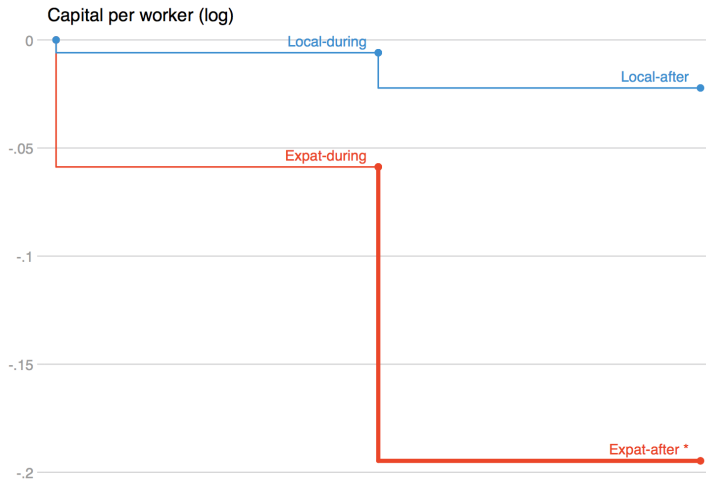
	(1) lnL	(2) lnKL	(3) lnQL	(4) exporter
Foreign owner (dummy)	0.050 (0.038)	-0.003 (0.051)	0.066** (0.026)	0.022* (0.013)
During manager tenure (dummy)	-0.026** (0.011)	-0.006 (0.013)	0.038*** (0.008)	-0.005 (0.003)
After manager tenure (dummy)	-0.183*** (0.020)	-0.022 (0.023)	0.070*** (0.014)	-0.021*** (0.006)
During expat manager (dummy)	-0.035 (0.042)	-0.053 (0.050)	0.141*** (0.029)	0.033** (0.013)
After expat manager (dummy)	0.025 (0.056)	-0.173*** (0.067)	0.205*** (0.038)	0.038** (0.018)
$R^2$	0.112	0.192	0.228	0.050
Number of observations	368,105	329,669	368,105	368,105

Notes: All specifications control for industry-year, firm age and manager spell fixed effects.

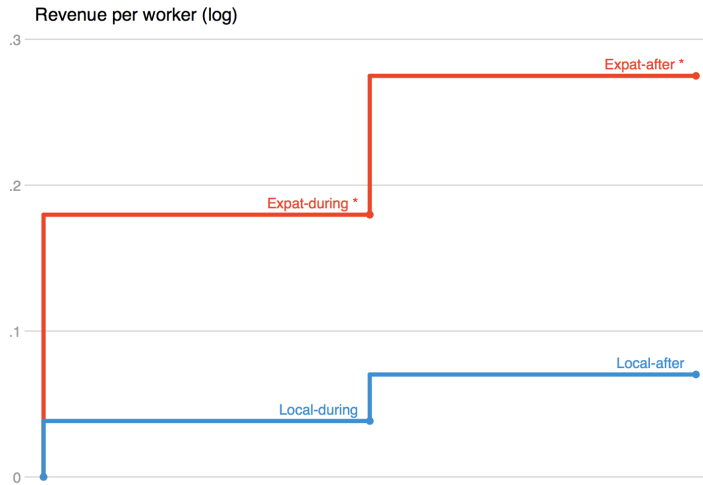
# Local and expat managers reduce employment by same amount



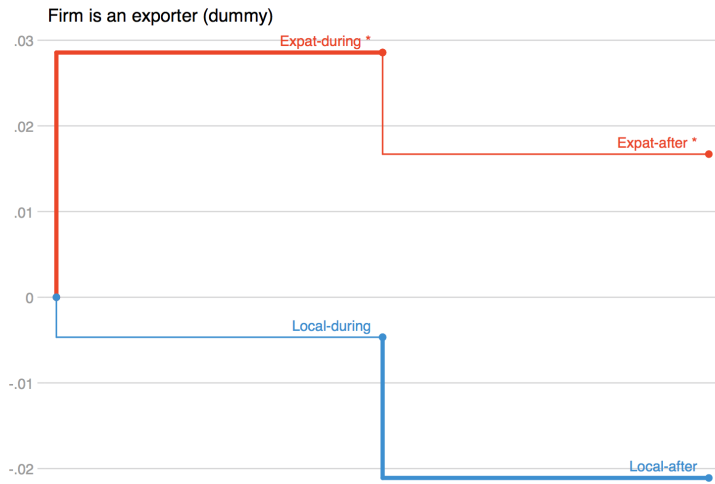
# Capital intensity drops after first expat manager leaves



# Expatriate managers improve revenue per worker by 15–25 percent

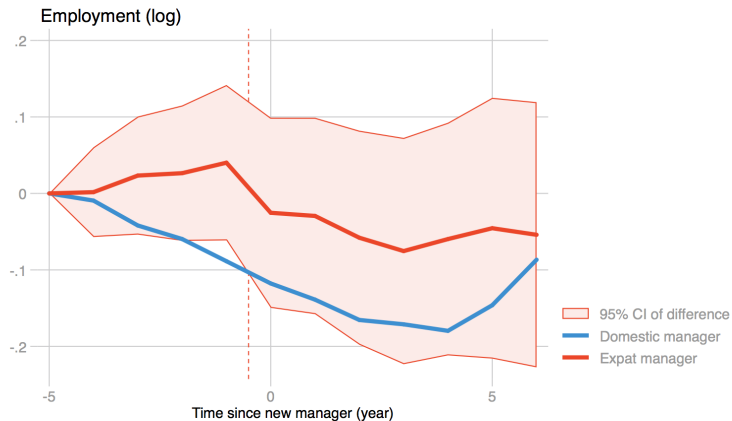


## Expat managers increase probability of exporting by 3pp



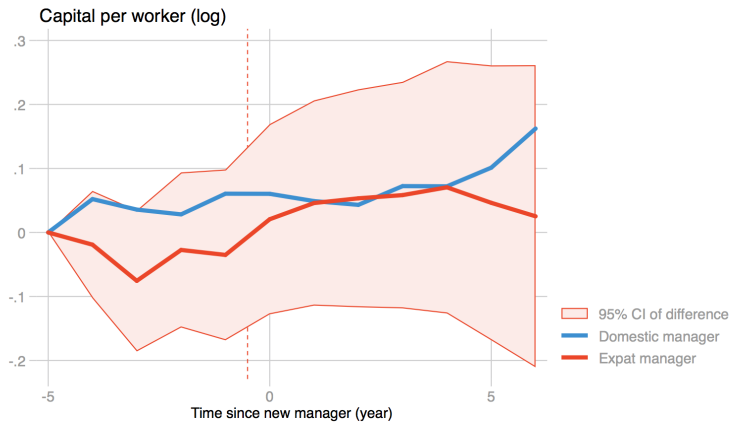
## Event studies

## Expatriate managers come to somewhat faster growing firms

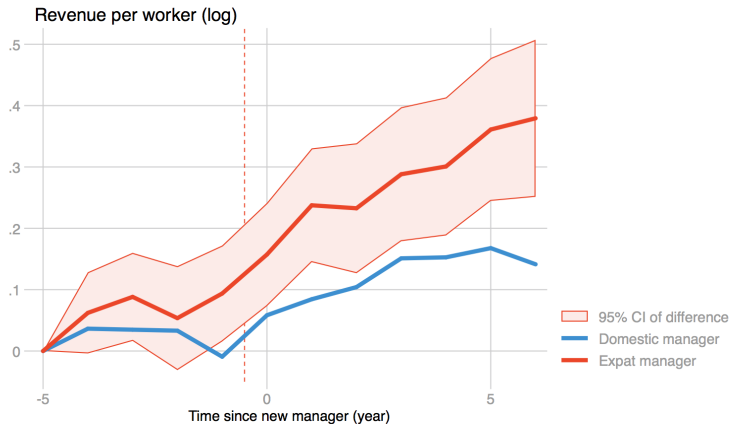




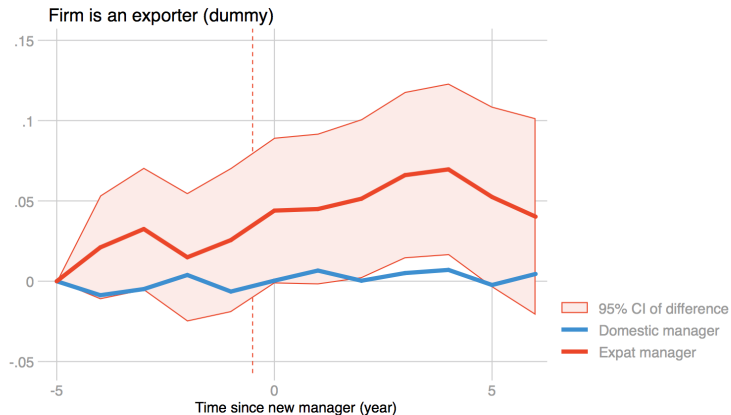
## No significant changes in capital per worker



# Expat managers have persistent effect on revenue per worker



# Expatriate managers gradually increase likelihood of exporting

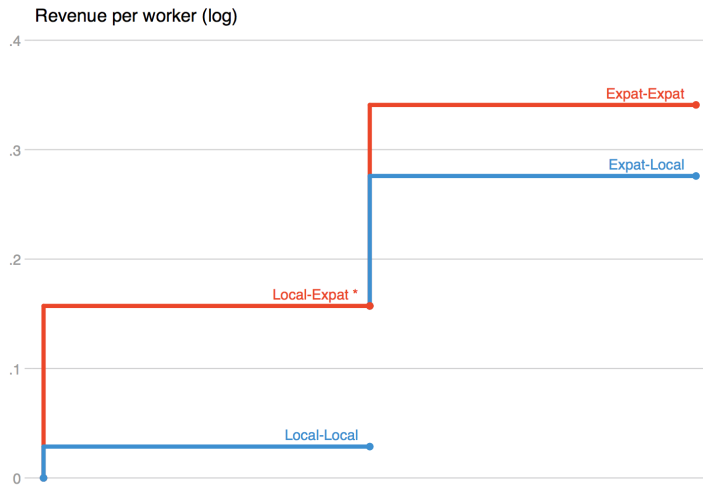


Estimates from manager switches

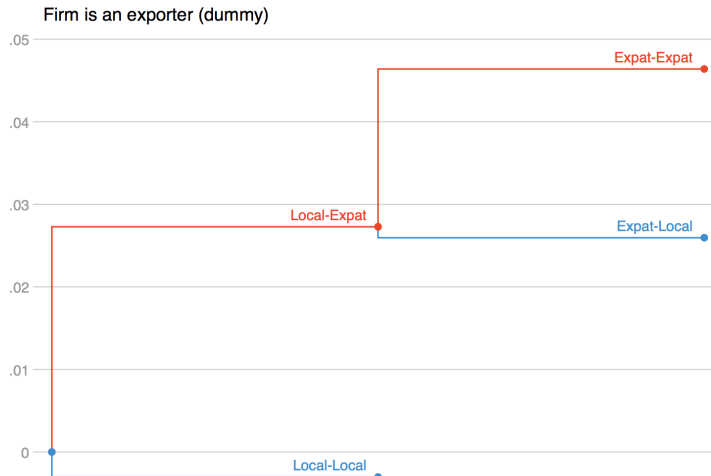
# All reorganization results in loss of employment



# Productivity effect of expats remains after they leave



# Exporting effect of expats remains after they leave



## Interpretation



# Interpretation

## Three alternative explanations

1. Firm-specific skills
  - ▶ heterogeneity with initial firm characteristics
2. General skills
  - ▶ labor productivity improvement has persistent effect
3. Reorganization
  - ▶ effects relative to domestic change in management

# Costs

Why does not every firm hire a foreign manager?

1. Wages are higher
2. Search costs are higher
3. Match is less than perfect

## Conclusions

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- ▶ Firms with expat managers improve output per worker and enter export markets.
- ▶ Patterns are consistent with a “technology transfer” interpretation.