

**Discussion of Setzler, Tintelnot:
“The Effects of Foreign Multinationals on Workers
and Firms in the United States”**

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July 2019

NAICS 3361 Motor Vehicle Manufacturing: Toyota vs General Motors

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NB: Toyota and GM are different

- Toyota is foreign, GM is not
- Toyota more productive than GM
- Toyota: 8 Emma / 2 Nick ; GM: 6 Emma / 4 Nick

Foreign Firms Have Higher TFP and Better Employees

- they pay more
- they generate positive local spillovers

Should We Care?

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- **Yes**
- Huge debate (economic and political) on how to approach FDI, all even more relevant in current polarized world, trade wars, etc.
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Toyota's own estimates of the job multiplier are different:



Capital:

\$7.1 BILLION
since 1996



Philanthropic:

\$700 MILLION
since 1996

\$69 MILLION
in 2015



PAYROLL

\$32.3 BILLION
in 2015

Main Comments

1. Empirics and Contribution
2. Foreign Wage Premium: Mechanisms
3. Foreign Spillovers: Mechanisms

1. Empirics and Contribution

Where contribution stands: **[Best paper using micro-data to establish policy-relevant facts on foreign firms in US]**

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Foreign Wage Premium:

- Lots of evidence from many countries, not controversial (Cameroon 20%, Denmark 75%, Finland 3%, France 13%, Germany 3%, Ghana 40-60%, Indonesia 20-60%, Kenya 24%, Malaysia 10%, Mexico 32%, Portugal -3-4%, Sweden, -2-6%, Uk 3-15%, USA 29%, Venezuela 31%, Zambia 37%, Zimbabwe 30%)
- Contribution is data: foreign ownership + matched employer-employee data
- To keep an eye on:
 - Assumption is job moves are exogenous (show more dynamics and trends around moves)
 - Can only observe parent-subsidiary linkages as snapshot in 2016 (measurement error may not be classical, show robustness to acquisitions)

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Foreign Spillovers:

- Top firms generate positive spillovers also not controversial (e.g. Greenstone, Hornbeck, Moretti 2010), especially in developed countries
- Contribution is use of shit-share design in new setting
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 - Bartik-style assumptions, tests, inference (e.g., Goldsmith-Pinkham et al 2019, Adao et al 2019, Borusyak et al 2018)
 - Compositional changes?

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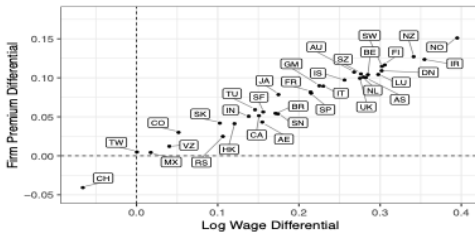
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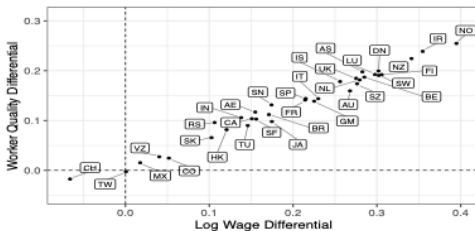
Where I hope extra contributions can be made: **[Open black box of “foreign-ness”]**

Larger Effects if MNEs of Developed Countries?

(a) Firm Premiums



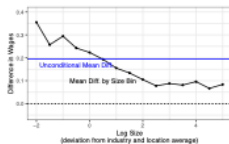
(b) Worker Quality



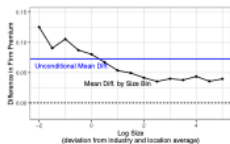
Replicating Findings in Brazil 1/4

USA

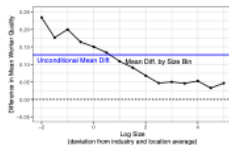
(a) Total Wage Difference



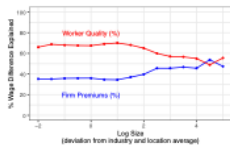
(b) Firm Premium Difference



(c) Worker Quality Difference

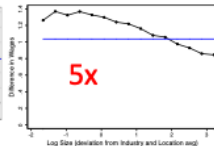


(d) Wage Difference Explained

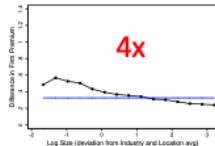


Brazil

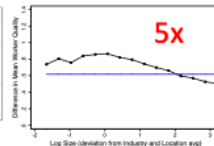
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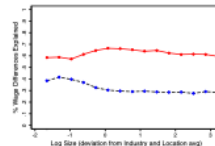
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Replicating Findings in Brazil 2/4

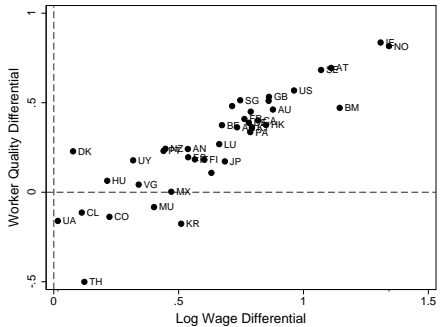
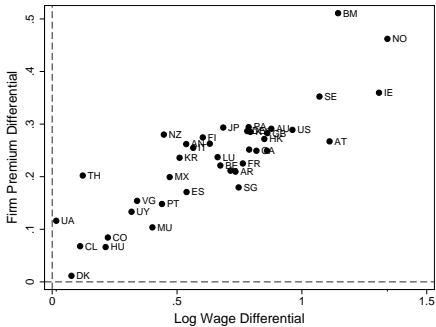
USA

Brazil

Outcome:	Shorter-term Wage Growth $\log(w_{1t}) - \log(w_{1,t-1})$	Longer-term Wage Growth $\log(w_{1,t+1}) - \log(w_{1,t-2})$
Domestic to Foreign Moves:	0.045*** (0.002)	0.073*** (0.003)
Foreign to Domestic Moves:	-0.042*** (0.002)	-0.035*** (0.002)
Domestic to Domestic Moves:	0.005*** (0.001)	0.012*** (0.001)
Foreign to Foreign Moves:	0.014*** (0.004)	0.031*** (0.003)
Stayers at Foreign Firms:	-0.001 (0.001)	0.000 (0.001)

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Domestic to Foreign Movers ✓	0.011*** (0.004)	0.025*** (0.005)
Foreign to Domestic Moves ✓	-0.173*** (0.003)	-0.118*** (0.004)
Domestic to Domestic Moves ✗	-0.033*** (0.001)	-0.038*** (0.002)
Foreign to Foreign Moves ✗	-0.061*** (0.005)	-0.012 (0.008)
Stayers at Foreign Firms: ✗	0.013*** (0.001)	0.005*** (0.002)

Replicating Findings in Brazil 3/4



Replicating Findings in Brazil 4/4

USA

VX

Brazil

	Full Sample	By Firm Size		
		Size 1-9	Size 10-99	Size 100+
Outcome: Log Full-time Workers				
2SLS Indirect Effect	0.45*** (0.12)	0.08 (0.06)	0.39*** (0.14)	1.23*** (0.43)
First Stage Coefficient	0.60*** (0.03)	0.63*** (0.03)	0.58*** (0.03)	0.53*** (0.04)
First Stage F-statistic	297	434	292	151
Firm Observations (Millions)	45.9	38.3	7.0	0.5

	Full Sample	By Firm Size		
		Size 1-9	Size 10-99	Size 100+
Outcome: Log Wage Bill				
2SLS Indirect Effect	0.47*** (0.14)	0.03 (0.09)	0.37*** (0.16)	1.15*** (0.42)
First Stage Coefficient	0.69*** (0.03)	0.63*** (0.03)	0.58*** (0.03)	0.53*** (0.04)
First Stage F-statistic	297	434	292	151
Firm Observations (Millions)	45.9	38.3	7.0	0.5

	Full Sample	By Firm size		
		Size 1-9	Size 10-99	Size 100+
Outcome: growth in Log Number of Workers				
Panel A.				
2SLS Spillover Estimate	1.235* (0.733)	0.518* (0.268)	0.793** (0.327)	0.109 (1.131)
Observations	34,978,038	25,583,059	8,703,636	690,704
Outcome: growth in Log Total Wage				
Panel B.				
2SLS Spillover Estimate	0.554 (0.768)	-0.342 (0.399)	0.074 (0.413)	-0.261 (1.189)
Observations	34,973,668	25,578,791	8,703,539	690,699

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Cannot disentangle everything, but maybe:

- Heterogeneity across sectors and firm types × Rule out unlikely channels × Make estimate as tight as possible (e.g., within 6-digit NAICS * zipcode * year) × Residual is “foreign-ness” (economic, cultural, behavioral, ...?)

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Here I think you can do a lot more:

- Heterogeneity across sectors can go a long way [customer-suppliers networks, product market competition, labor market networks, knowledge/innovation complementarities, ...]
- Do effects vary by geographic distance?
- Extensive vs intensive margin
- Employees' movements across foreign and domestic firms
- Change in firm's input and output (investment mix, innovation type)?
- Lots of other interesting outcomes!

My Takeaways

- Fantastic paper, huge policy implications
- Just some extra empirical checks
- More on mechanisms and “foreign-ness”
- Many many followups

Thank you