Multinational Firms' Market Entry and Expansion, with Evidence from Eastern Europe

Andrew Bernard and Catherine Thomas

Tuck, LSE

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Introduction

- This chapter focuses on how MNCs make entry and expansion decisions: location choices and entry modes.
- We take the decision to invest—and not transact at arm's length—as given.
- The focus is on host country characteristics, bilateral host-source attributes, and information frictions.
- It complements the Davies and Markusen chapter by examining inward FDI to one region.

Summary

- We review how some host country attributes and bilateral attributes attract or repel all types of FDI.
- And how other attributes attract some forms of FDI while repelling others (or vice versa).
- Sequential firm-level decisions reveal some evidence of “demonstration effects” for both entry via acquisition and greenfield entry.

Eastern European Data

- We have constructed a data set of FDI stocks in 10 Eastern European countries in 2007, and the firm-level flows into each country between 2008 and 2017.
- Sources: Bureau van Dijk data on firm ownership over time.
- 9% of firms with more than 10 employees are foreign-owned by 2017, accounting for 25% of employment.
- Around 60% of firms that were foreign-owned in 2017 had received new foreign investment since 2007. 73% investments made via acquisition.
- Foreign ownership, new investment, and acquisitions are disproportionately in Manufacturing rather than in Services sectors.

Host Country Characteristics

- Is the parent firm looking for customers or factor inputs?
  - High income, large, countries offer customers but not low-cost factors.
  - Countries with high tariffs and NTBs complement investment to access customers, but not access to factors.
- The role(s) of local institutions: IPR protection, taxes, exchange rates.
- Entry mode related to complementarity of local assets with those of parent (sector specific, rather than customer or input related).

Correlations in Eastern European Data

	Population	GDP per capita	Corporate tax rate 2017	Number of Affiliates	Share of Firms under Foreign Control
	(1)	(2)	(3)	(4)	(5)
Population	1.00				
GDP per capita	-0.39	1.00			
Corporate tax rate 2017	-0.18	0.76	1.00		
Number of Affiliates	0.72	-0.40	-0.06	1.00	
Share of Firms under Foreign Control	0.11	0.15	0.37	0.35	1.00
Share of Recent Entries via Greenfield	-0.03	-0.04	0.37	0.32	0.41

	Population	GDP per capita	Corporate tax rate 2017
	(1)	(2)	(3)
Total Affiliate Revenues	0.85	-0.31	-0.28
Mean Affiliate Revenues	0.22	-0.07	-0.61
Mean Affiliate Revenue per Employee	-0.03	0.58	0.07
Mean Affiliate Total Assets per Employee	-0.31	0.49	0.21

Bilateral source-host country factors

- Distance creates a trade cost that is:
  - Positively associated with customer-seeking affiliate activity (replication).
  - Negatively associated with input-seeking production fragmentation (differentiation).
- Distance creates an operating cost—monitoring (Head and Ries, 2008).
- Evidence of agglomeration in affiliate activity, controlling for distance (Head et al. 1995; Barry et al. 2003).

Gravity in Eastern Europe I

	ln(Counts of Investments)	ln(Total Revenues Year of Investment)	ln(Mean Revenues Year of Investment)
	(1)	(2)	(5)
Distance (ln, weighted)	-1.5228***	-2.1449***	-0.5758***
Distance (ln, weighted)*Greenfield	0.0260	-0.0229	-0.1111
GreenfieldYN	-0.9347**	-2.4895**	-1.0030
Constant	13.3089***	34.9057***	20.4844***
Source Country FE	Y	Y	Y
Host Country FE	Y	Y	Y
Observations	894	820	820
R-squared	0.723	0.635	0.471

Robust standard errors clustered at the country pair.
*** p<0.01, ** p<0.05, * p<0.1

- No differential impact on Greenfield.
- Employment and total assets are similar to revenues, on extensive and intensive margins.

Gravity in Eastern Europe II

Distance and Bilateral FDI Stock	ln(Counts of Investments)	ln(Total Revenues Year of Investment)	ln(Mean Revenues Year of Investment)
	(1)	(2)	(5)
Distance (ln, weighted)	-0.4681***	-1.1614***	-0.5427**
Distance (ln, weighted)*Greenfield	-0.0723	-0.2329	-0.1584
Log of Country-Pair Old FDI Stock	0.6803***	0.6279***	0.0070
Log of Country-Pair Old FDI Stock*Greenfield	-0.1457***	-0.1931	-0.0063
GreenfieldYN	0.0044	-0.6060	-0.6519
Constant	4.3302***	21.1799***	18.7612***
	(1.098)	(1.760)	(1.463)
Source Country FE	Y	Y	Y
Host Country FE	Y	Y	Y
Observations	737	682	682
R-squared	0.831	0.675	0.488

Robust standard errors clustered at the country pair.
*** p<0.01, ** p<0.05, * p<0.1

- Stocks are unrelated to intensive margins.
- Some evidence that Greenfield is less positively correlated with existing stocks.

MNC firm-host country factors

- Firm-level attributes matter for entry and expansion decisions.
- For example, export platform activities in a region.
- Existing affiliate "network" can play other roles. Information?

Understanding Agglomeration Forces I

Conditional Logit, i.e. conditioning on the number of new investments a parent makes in any one year.

	ALL FIRMS THAT MAKE AT LEAST ONE NEW INVESTMENT POST 2007					
	Entries made by all firms		Entries made by firms with prior investment in the region		First entries made by firms with no prior investment in the region	
VARIABLES, at end 2007	(1) entry	(2) entry	(3) entry	(4) entry	(9) entry	(10) entry
# MNC affialiates in Host from same Source Country	0.0321***	0.0335***	0.0008**	0.0006	0.1211***	0.1128***
# same-source affiliates in Host * Greenfield		-0.0048**		0.0006		0.0479
Grouped by Parent-Year	Y	Y	Y	Y	Y	Y
Host Country Fixed Effects	Y	Y	Y	Y	Y	Y
Observations	113,610	113,610	8,268	8,268	82,550	82,550

Robust standard errors clustered at the parent firm level.

*** p<0.01, ** p<0.05, * p<0.1

- FDI flows to where bilateral stocks are, due to entry choices made by MNCs new to the region.
- Similar effects by entry mode choice.

Understanding Agglomeration Forces II

Conditional Logit, i.e. conditioning on the number of new investments a parent makes in any one year.

	Second or later new investment			
	Entries made by firms with prior investment in the region		Entries made by firms with no prior investment in the region	
	(1)	(2)	(3)	(4)
VARIABLES, at end 2007	entry	entry	entry	entry
# MNC affialiates in Host from same Source Country	0.0009*	0.0005	-0.0009	-0.0004
# same-source affiliates in Host * Greenfield		0.0012		-0.0023
MNC itself had an affiliate in Host	-0.5205***	-0.5940***	-3.2051***	-3.3153***
MNC had affiliate in Host * Greenfield		0.2215		0.3755
Grouped by Parent-Year	Y	Y	Y	Y
Host Country Fixed Effects	Y	Y	Y	Y
Observations	4,714	4,714	1,384	1,384

Robust standard errors clustered at the parent firm level.

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

- By the second new investment, existing bilateral stock ceases to play a role, even for parents with no experience in region prior to 2008.

Summing up

- Among countries with similar trade barriers (within EU single market, similar taxes), the majority of FDI is more consistent with vertical FDI motives: from close by countries, into large, low-income countries; disproportionately in manufacturing.
- Entry via acquisition more likely in manufacturing (complementary assets?).
- Because agglomeration forces exist only when an MNC is new to the region, herding unlikely to be related to operating externalities.
- It is more consistent with information frictions, i.e. "demonstration effects".
- Exploring how MNC affiliate networks develop offers more opportunity to understand firm motives, and, thereby, the determinants of local MNC impact.