Multinationals and the Globalization of Production

Introduction

Penn State // Fall 2017

Before we get started...

- ▶ Me: Prof. Kim Ruhl

- ▶ School: B.S. Bowling Green (OH), Ph.D. U. Minnesota
    - ▶ Studied computer science, economics

- ▶ Work: Minneapolis Fed, U. Texas–Austin, NYU Stern Bus. School

- ▶ Research: International finance and macro, trade, multinationals
    - ▶ Data + computational models
    - ▶ If you are curious: kimjruhl.com/research

- ▶ Not work: Fishing, hiking, robots, computers

You: Name + year + major + favorite lunch spot

Roadmap

- ► Today
    1. Big picture
        - ► What are multinationals?
        - ► Why do multinationals exist?
        - ► Types of multinationals
    2. Course information
        - ► Syllabus material
- ► Coming up
    - ► Multinational facts
    - ► Read: syllabus; OLI notes; section 2 Antras and Yeaple (2013)

Do not be shy! Ask questions, make comments.

What is a multinational firm?

► A firm that owns 10% or more of a foreign firm's voting stock

► The owning firm is the *parent firm*

► The owned firm is the *foreign affiliate* (FA)
  ► If $> 50\%$ owned by parent: *majority-owned foreign affiliate* (MOFA)

► Ownership structure may be complex (FA owns another FA . . .)

► FA may be created by greenfield or merger/acquisition

► The parent firm makes a foreign direct investment (FDI)

► We will use these as synonyms: multinational corporation, multinational firm, multinational enterprise (MNE), or just "multinational"

A few examples

- ► What do these companies do overseas? Why?

    - ► Alcoa [Pittsburgh/New York]: Aluminum, chemicals

    - ► Ford [Detroit]: Autos, trucks

    - ► Heinz [Pittsburgh]: Food processing

    - ► Uber [San Francisco]: Rideshare

    - ► American Eagle [Pittsburgh]: Clothing

    - ► Aramark [Philadelphia]: Facilities, food, uniforms

    - ► Intel [Santa Clara, CA]: Semiconductors

Why study multinational firms?

► Multinationals important part of the economy

  ► One of every five jobs in the United States

  ► U.S. MNEs pay, on average, 25% more than domestic firms

  ► Handle 90% of U.S. trade

  ► U.S. parents account for 75% of total U.S. R&D

► Multinationals have opportunities that domestic firms do not

  ► Access to different workforce

  ► Access to different legal/tax systems [good/bad for MNEs?]

Multinational obstacles

- Why aren't all firm multinationals?

- Managing operations abroad is costly

    - Language barriers

    - Legal structures

    - Time zones

    - Long-distance communication

    - Shipping goods abroad

    - Extra payments for expatriate personnel

Multinational benefits

► Ownership-Location-Internalization (OLI) framework

► Simple way to organize our thoughts

► For a firm we ask what *advantage* comes from

  ► ownership?

  ► location?

  ► internalization?

Ownership advantage

► The firm owns an asset valuable abroad

► Tangible assets [examples?]

► Intangible assets [examples?]

Location advantage

▶ What is the benefit of going overseas?

▶ Market access: *horizontal* or *export platform* FDI [examples?]

▶ Differences in production costs: *vertical* FDI [examples?]

Internalization advantage

► What is the benefit of internalizing the process?

► A deep question on the boundary of the firm.

► Why a foreign affiliate? Why not license? Contract with another firm?

This semester in 5 lines

1. Multinational data and facts

2. Horizontal FDI: market access

3. Vertical FDI: stages of production

4. Internalization: hold up problems

5. Taxes: a unique MNE advantage

▶ For each segment: models + data + case studies

Course information

[Ask questions as we go]

Expectations

▶ Prerequisites: Intermediate Micro or International Econ

▶ Class is a mixture of data, models, real-world cases

  ▶ Data skills: statistics, plotting [Excel, Stata, Python, etc.]

  ▶ Model skills: algebra, numerical examples [Excel, Python, etc.]

  ▶ Case studies: synthesize ideas, connect models to data

▶ Attendance

  ▶ No textbook $\rightarrow$ lecture is important

  ▶ Work through problems (useful for exams, problem sets)

  ▶ Chance to ask questions and make comments

Course materials

► No textbook: course is very specialized

► On the web: research papers, media, notes

► Slides posted before class

► Course web page (not Angel or Canvas!):

   http://www.kimjruhl.com/multinationals-f17

► Week-by-week breakdown of class

  ► Some readings require on-campus logins (then save or print)

Grades

Deliverable	Contribution
5 Problem Sets	5%
Exam 1	25%
Exam 2	25%
Final Exam	40%
Participation	5%

► Problem sets: 5 x 1% of final grade (✓ or ✓+ = 1%, ✓−=0%)

► Exams 1 and 2: not cumulative; final exam: cumulative

► All exams: closed book, one page notes; review session in prior class

► Part'n: ask questions, make comments, send me interesting articles

Attendance, again

▶ No attendance grade, but sign-in sheet

▶ Excused absences (department policy)

  ▶ See Economics Department website and syllabus

  ▶ Miss an exam? Need documentation

  ▶ If religious or university related, notify ASAP

  ▶ Exam may be made-up, or re-weighted

▶ **Important dates**

  ▶ Exams: October 5 (R), November 9 (R), finals week

  ▶ Problem sets: Sept. 7 & 28, Oct. 19, Nov. 2, Dec. 7

  ▶ Problem sets due 1:20pm on date specified; no late problem sets

Need some help?

► See me (office hours: T 4-5, W 11-noon, 615 Kern)

► Send me an email (kjr42@psu.edu)

► See the TA: Nikita Lipskiy (nxl148@psu.edu), office hours: TBD

Waiting list

▶ I cannot add you to the course

▶ Use waiting list on LionPATH