### **Discussion of Chapters 4 and 5**

# The Corporate Finance of Multinational Firms (Erel, Jang, and Weisbach)

#### **The International Market for Corporate Control (Chari)**

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Thanks to Tim Schmidt-Eisenlohr, Alexandra Tabova, and Daniel Beltran

Disclaimer: This presentation represents my own views and not necessarily those of the Federal Reserve Board of Governors or its staff.

### Multinational companies contribute disproportionately to several aspects of US economic activity

US multinational companies

All other companies

%

| Key indicators          | , Value added                                |  | 23                     | 77                |    |
|-------------------------|--|--|------------------------|-------------------|----|
| 2007                    | Employment                                   | Employment                                   |                        | 81                |    |
|                         | Exports                                      | Exports                                      |                        | <b>48</b> 52      |    |
|                         | Imports                                      | Imports                                      |                        | 63                |    |
|                         | Trade deficit                                | Trade deficit                                |                        | 78                |    |
|                         | Private sector                               | r R&D  | 74                     |                   | 26 |
|                         | Globally com                                 | Globally competitive sectors                 |                        | 56                |    |
| Contributions           | Labor produc                                 | Labor productivity                           |                        | 59                |    |
| to growth,<br>1990–2007 | Value added                                  | Value added                                  |                        | 69                |    |
|                         | Employment                                   | Employment                                   |                        | 89                |    |
|                         | Compound<br>annual growth<br>rate, 1990–2007 | Labor productiv<br>Value added<br>Employment | vity 3.6<br>4.5<br>0.7 | 1.5<br>2.9<br>1.5 |    |

SOURCE: McKinsey Global Institute analysis

#### Foreign Direct Investment (FDI) flows as % of World GDP



#### Accumulated stock of FDI as % of world GDP





Countries included: ARG, BGR, BRA, CHL, COL, CRI, CZE, HRV, IDN, ISR, KAZ, KOR, LVA, MEX, PER, PHL, POL, ROU, RUS, THA, TUR, UKR, URY, ZAF

**Quarterly gross capital inflows to EMEs** 

ITA, JPN, NLT, NOR, NZL, PRT, SWE, USA

**Quarterly gross capital inflows to AEs** 

#### For many countries, the stock of inward FDI exceeds 40% of GDP



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#### Chapter 4: The Corporate Finance of Multinational Firms Isil Erel, Yeejin Jang, and Michael S. Weisbach

- Fills an important niche in literature
- Broad and thorough review of corporate finances of MNCs and comparison with domestic firms
- Host of interesting facts from diverse sources

#### **Comparison between MNCs and domestic firms in the United States and abroad**

| Variable                         | U.S. multinationals<br>(relative to domestic) | Foreign multinationals<br>(relative to domestic) |  |  |
|----------------------------------|---|--|--|--|
| Share of publically listed firms | Rising (to 48% in 2017)                       | Stable (34% in 2017)                             |  |  |
| Firm Size                        | Larger  | Larger   |  |  |
| Cash flow                        | Larger  | Larger   |  |  |
| Cash flow standard dev.          | Lower   | Lower  |  |  |
| Cash holdings                    | Higher  | Lower  |  |  |
| Leverage                         | Lower   | Higher (EMEs), lower (AFEs)                      |  |  |
| Bank loans                       | Fewer   |  |  |  |
| Bond financing                   | Higher  |  |  |  |
| Foreign ownership of equity      | Higher  |  |  |  |
| Bond spreads                     | Lower   |  |  |  |
| Equity premia                    | Higher  |  |  |  |

#### **Main Comments**

- 1. Thematic unity
- 2. Comparison of MNCs and domestic firms
- 3. Definition of MNCs
- 4. Examine effects of global financial crisis and TCJA
- 5. More thorough examination of FX risks

#### **1. Thematic unity**

- How do all the facts fit together?
- Chapter starts by describing financial advantages of MNCs, but then dives into the data.
- Original Title: "Do multinational corporations have financial advantages over other firms?"
- This could provide guidance for the analysis. The authors could focus on the advantages of MNCs relative to domestic firms and how this affects corporate finance.

#### 1. Thematic unity (continued)

- 1. Start by identifying key differences between multinational and domestic firms (as the chapter now does):
  - MNCs exploit internal capital markets to borrow abroad at cheapest rates and shift funds to operations around globe.
  - MNCs profit from diversification across markets, reducing income volatility.
  - MNCs can exploit tax advantages; addressed elsewhere in book, but important
- 2. Explain how these differences should affect how MNCs structure and finance themselves -- profits, cash holding, leverage, etc. – and compare with actual findings.
  - Maybe also look at implications of different structures, like vertical vs. horizontal, for MNCs (Davies and Markusen, this volume)
- 3. Illustrate with examples of real-world companies

#### 2. Comparisons of MNCs with domestic firms

#### Panel A: U.S. Firms

|                         | N     | Multinational |        |        | Domestic |        | Diff. in Mean  |
|-------------------------|-------|---------------|--------|--------|----------|--------|----------------|
|                         | Mean  | Median        | Std    | Mean   | Median   | Std    | MNC - Domestic |
| Total Assets            | 6.266 | 0.437         | 43.246 | 3.880  | 0.181    | 44.046 | 2.386***       |
| Market Capitalization   | 4.902 | 0.479         | 22.140 | 1.332  | 0.106    | 8.223  | 3.570***       |
| Sales Growth            | 0.108 | 0.075         | 0.267  | 0.132  | 0.082    | 0.321  | -0.024***      |
| Cash Flow/Total Assets  | 0.115 | 0.124         | 0.147  | 0.074  | 0.078    | 0.168  | 0.041***       |
| Std of Cash Flow        | 0.070 | 0.046         | 0.078  | 0.076  | 0.042    | 0.103  | -0.006***      |
| Rated                   | 0.315 | 0.000         | 0.465  | 0.180  | 0.000    | 0.384  | 0.135***       |
| Investment Grade        | 0.152 | 0.000         | 0.359  | 0.080  | 0.000    | 0.272  | 0.071***       |
| Speculative Grade       | 0.135 | 0.000         | 0.341  | 0.082  | 0.000    | 0.274  | 0.053***       |
| Cash/Total Assets       | 0.189 | 0.114         | 0.197  | 0.158  | 0.061    | 0.215  | 0.031***       |
| Total Debt/Total Assets | 0.212 | 0.176         | 0.203  | 0.244  | 0.189    | 0.233  | -0.033***      |
| Zero Debt               | 0.147 | 0.000         | 0.354  | 0.128  | 0.000    | 0.334  | 0.019***       |
| # Firm-year Obs         | 47337 |               |        | 115768 |          |        |                |
| # Unique Firm           | 5367  |               |        | 14736  |          |        |                |

#### 3. Definition of an MNC

- Chapter starts with two definitions of an MNC:
  - 1. Firm with income earned abroad
    - Paper acknowledges problems if firms don't report foreign income when low or negative
  - 2. Firm with foreign sales
    - Paper explains this includes pure exporters with no foreign presence, and abandons this definition for most of analysis
    - But we (Daniel Beltran) looked at fine print of Worldscope data guide: excludes exports, so may actually be a better definition than #1
- Both definitions broadly consistent with BEA: "Enterprise groups with a direct investor resident in one country that has direct investment enterprises located in one or more other countries."

- Both definitions also broadly consistent with each other
- Show rising share of publically listed corporations that are MNCs



- But, a couple of problems
- First, trends abroad in share of MNCs in total companies very different than in US
  - Why?
  - Do differences reflect different economic processes or different data collections?
  - For example, differences in Worldscope coverage of foreign sales and income



- Second, chapter focuses exclusively on publically listed firms.
  - Domestic firms going private more than MNCs -- is rising MNC share misleading?
  - McKinsey says less than 1 percent of all companies are MNCs includes many small firms
  - Difference in listing practices could account for differences in MNC shares in US and abroad.
  - Focus on publically listed firms may exclude many private MNCs see Anusha's chapter



Suggestion:

- Use ORBIS database's explicit information on ownership structure (operations abroad) to distinguish between domestic firms and MNCs
- Establish a size cut-off to exclude smallest firms
- Compare results based on this definition to those using the foreign-income and foreign-sales criteria.

Also:

• Establish a common definition of MNCs across chapters of this volume?

#### 4. Examine how global financial crisis and TCJA have affected MNC finance trends.

#### 5. More thorough examination of FX risks

- Currency depreciations abroad lower dollar value of foreign investments, but may raise competitiveness and profitability of foreign activities.
- MNC operations in multiple countries diversifies FX risk.
- If, taking everything into account, MNCs face greater FX risks, worth explaining.

#### Chapter 5: The International Market for Corporate Control Anusha Chari

- Also addresses an important topic,
- fills a niche in literature,
- presents broad array of interesting facts from diverse sources

#### Key facts:

- M&A flows large part of overall FDI flows; number of M&A transactions tripled over the past two decades.
- M&A activity concentrated in relatively few countries, mainly US and Europe.
- Cross-border M&A deals occur in waves; megadeals on the rise
- Most M&A deals involve private firms; private equity transactions have increased significantly over time
- As we'd expect, tax haven countries account for a lot of M&As.

#### The chapter then goes on to review:

- The determinants of cross-border M&A
- The impact of M&A on target firms
- Public policy issues posed by M&As

- Readable paper
- Nice references to actual companies and case studies

#### Main comments

- 1. Incomplete analysis of determinants of cross-border M&A
- 2. Taxes!
- 3. Relative importance of M&A in FDI
- 4. Post-acquisition impact of M&A
- 5. Broader discussion of policy issues

#### 1. Incomplete analysis of determinants of cross-border M&A

Why do firms pursue cross-border M&A?

Anusha cites several factors:

- M&A deals tend to create surplus value through various means boost productivity, improve governance -- and boost stock prices
- M&A deals may exploit undervalued companies in target countries
- M&A deals may exploit cheap financing in acquiring countries

#### **1. Incomplete analysis of determinants of cross-border M&A (continued)**

(1) But how do these factors relate to other, commonly cited reasons why MNCs establish operations abroad, including those discussed in several other chapters of this volume, such as

- Developing supply chains?
- Expanding markets?
- Reducing competition by acquiring competitors?
- Profit shifting for tax purposes?

(2) What determines whether an MNC invests abroad through greenfield investment or through acquiring an existing company, ie, M&A?

(3) Why do firms pursue foreign M&A instead of domestic M&A? How does foreign M&A differ from domestic M&A? Is foreign M&A more profitable?

#### 2. Can't talk about cross-border M&A without talking about taxes

- Cross-border M&As have been used for corporate inversions for tax purposes:
  - After M&A, acquiring U.S firm incorporates in the foreign country (inverts) so not to pay U.S corporate tax and to access cash accumulated abroad without paying repatriation tax
- 40 percent of value of M&A deals by US companies in 2015 for tax inversion deals.
- In some cases, the newly acquired foreign subsidiary then acquires US companies using its tax-advantaged cash; recorded as inward FDI.

Value of tax inversion deals in cross-border M&A purchases by MNCs from the U.S. (billion USD)



#### 3. Chapter should provide a fuller picture of importance of M&A in FDI flows

- Apples and oranges: compares completed M&A deals with announced greenfield deals
- Announced deals informative for trend in greenfield investment, but not for level comparison with completed M&A deals



#### 3. Share of M&A in FDI flows (continued)

- Most of US direct investment abroad is reinvested retained earnings, not M&A or greenfield investment.
- Intercompany debt flows (green) is also a component of FDI flows



#### 3. Share of M&A in FDI flows (continued)

- Composition of FDI depends on the target country
- For the U.S., most inward FDI is M&A
- For developing countries, it is greenfield investment (next slide for plots)



#### Expenditures by Type of Investment, 1996-2018

#### M&A versus Greenfield in Advanced and Emerging economies (\$billions)



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#### 4. Post-acquisition impact of M&A

- Relies too heavily on Chari, Chen, and Dominguez (2012) analysis of emerging-market acquirers of companies abroad; would like to see more analysis of advanced-economy acquirers.
- Briefly notes cross-border M&A results in greater productivity improvements than domestic M&A want to see more on that.
- Focuses exclusively on how productivity, profits, and employment change for the target company in an M&A.
  - No discussion of impact on M&A might affect the target sector or economy more generally, re competition, tech diffusion, etc.
  - Or how M&A might differ in this respect from greenfield investment.
  - Even if space limited, at least acknowledge broader economy-wide effects and refer to literature on FDI and economic growth

#### **5. Broader discussion of policy considerations**

- Section focuses almost exclusively on two attempts to restrict inward FDI: (1) national security issues; (2) EU competition policy
- I would have liked to see:
  - broader assessment of the public policy issues involved as governments balance:
    - potential benefits of FDI (increased productivity growth, inward flows of capital financing, technological diffusion) and
    - potential costs (loss of markets to outside entities, loss of control, national security concerns, greater market concentration).
  - Some discussion of the pros and cons of encouraging inward M&A flows compared with greenfield investments.
    - Some countries might welcome greenfield investment, not outsiders taking over their domestic companies.

#### Conclusion

- Two very interesting and informative chapters.
- Play a key role in the volume by analyzing the financial dimensions of MNC activity,
- I look forward to seeing the final versions!

## **Thanks!**