# Evolution of Agrifood FDI in Emerging Markets over Three Waves of Globalization:

## *Implications for US firms*

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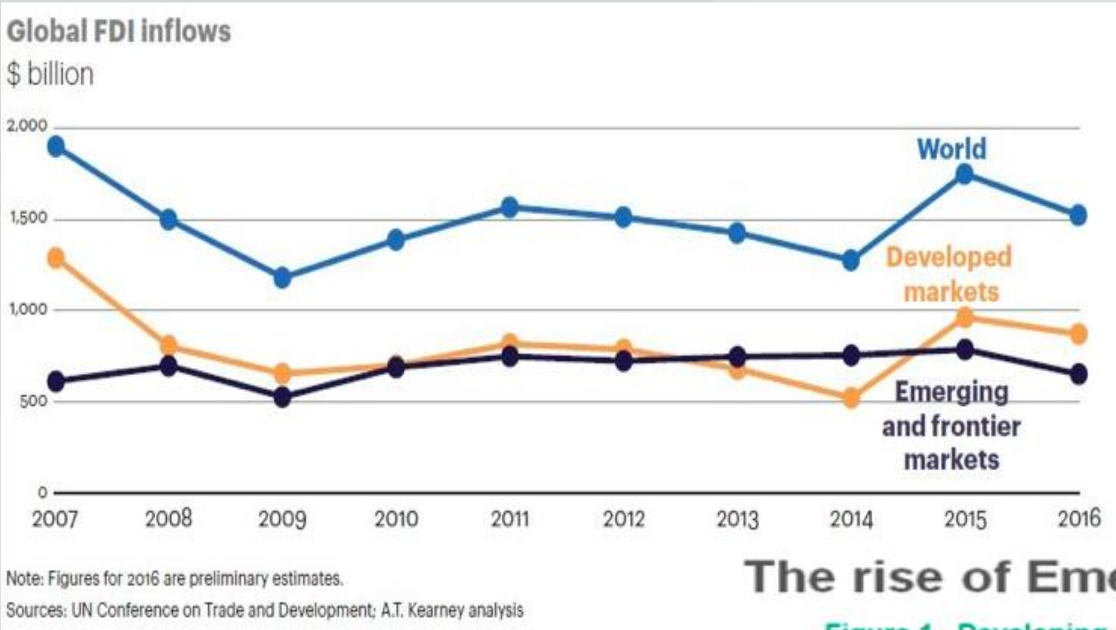
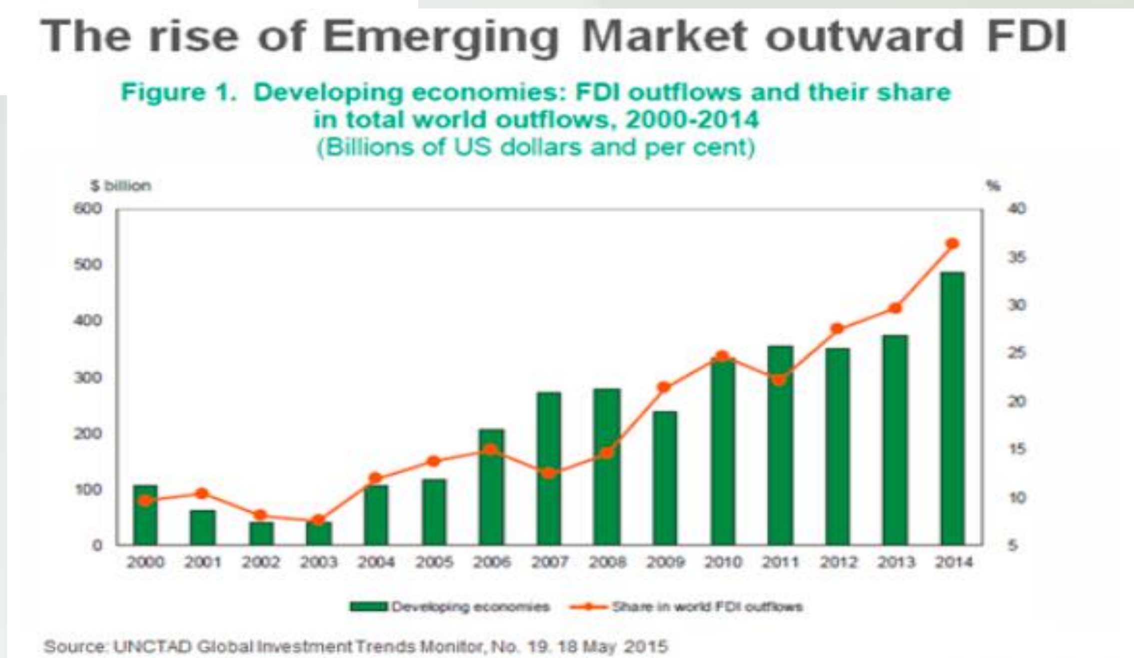
# Phenomenal Growth in Global FDI to DEEs

- **The phenomenal growth of FDI in the overall global economy has been well-documented**
  - Although most FDI (1970s-1990s) are between western nations with similar economies, the pattern is changing as the portion of investment flows from Western industrial economies to “***Developing and Emerging Economies (DEEs)***” has been growing rapidly
  - However, the growth in agrifood FDI to DEEs has received limited attention
    - Prior to 1950s, mostly vertical FDI (for raw materials) flowed into DEEs
    - Post-WWII, massive horizontal FDI flowed from US to Europe for rebuilding
- **Overview: This paper/presentation emphasizes three points**
  - The relevance of FDI conceptual approaches to the agrifood sector
    - **Supply side approach:** Knowledge-Capital Model (Markusen, 2002)
    - **Demand side approach:** Product Cycle Model (Vernon, 1966, 1979)

# Trends in global FDI: *Rise FDI in DEEs*



# Conceptual Framework: *Vertical FDI*

- **Efficiency Seeking:**
  - Motivated by lower factor cost (cheap labor and/or land) in ***FDI-receiving markets (FRM)*** for upstream (and maybe midstream) production
- **Fragmented production/processing stages:**
  - Production in ***FDI-sending markets (FSM)*** is skilled-labor intensive (knowledge-based R&D) - *(Helpman & Krugman, 1985)*
  - Production by foreign affiliate is less skilled-labor (and more land) intensive
  - Affiliate sales could complement exports into FRM
- **Examples in Agrifood Sector:**
  - **Soy from Brazil:** Cheap land and expensive capital ➔ soybean production and $1^{st}$ stage processing in Brazil ➔ $2^{nd}$ stage processing in Europe and China
  - **Dole's Food Co:** Invests in banana plantations in Central America and

# Conceptual Framework: *Horizontal FDI*

- **Market Seeking:** Motivated by search for additional markets outside FSM
- **Foreign affiliate production site:**
  - Production in FRM takes advantage of firm-level economies of scale/scope
  - Access to cheaper capital (low interest international loans and tax breaks)
  - Affiliate sales could substitute for exports from FSM
    - Can avoid cross-border trade costs: transportation and tariff
    - Can adapt product to local tastes (needs)

- **Examples in Agrifood Sector:**
  - **Gallo:** Co-invested with with Chileans in grape farming in Chile (for the domestic and export markets)
  - **Kellogg:** Built cornflakes plants in Mexico (for Mexican and Central American markets)
  - **Land O'Lakes:** co-invested with a Taiwanese firm in China for feed mills (for the China market)
  - **ADM:** set up soy processing plants in China (for the China market)
  - **Walmart** sets up stores in Mexico (for the Mexican market)

# 1st Wave of FDI into DEEs (1500 - 1900s)

- **Key Drivers:**
  - Rapid transformation of transport technology (e.g. rise of product-fitted steamboats and trains)
  - Demand pull in Western Europe and the US from increases in incomes and urbanization (1500s-1950s)
- **Characteristics and Patterns:**
  - Emphasis on ***Vertical FDI***:
    - Focused on plantations and collection centers for sourcing from smallholder producers of tropical food and fiber
  - FDI first led by European "charter companies" (e.g. Dutch East India Co)
    - then led by private MNE's (including by US firms in the 1900s)
  - Companies and their governments made concomitant investments in military and political support for the operations along the supply chain
  - Little capital or knowledge transmission beyond the FDI export enclave

# 2nd Wave of FDI into DEEs (1980 - Present)

- **Key Drivers:**
  - **Structural adjustment policies in DEEs (and resulting income growth)**
    - Liberalization of markets and FDI; Privatization of SOE's in agrifood sector
  - **Urbanization, shift in diets, and rise in women entering labor force**
    - **Urban areas** in DEEs account for **50-70%** of total food consumption & market
    - Shift in **diet patterns** from grain-dominated to diversified diets with higher <u>non-grains</u> (meat, fish, dairy, produce, edible oils) & <u>processed foods</u>
    - Increase in **women's opportunity cost of time** for cooking and shopping led to higher demand for processed foods and rise in supermarkets
  - **Major technological change in DEEs (transferred from US and Europe)**
    - **Changes occurred along the supply chain including:** farm chemicals, new seeds, changes in processing, transport, and storage

# 2nd Wave of FDI into DEEs (1980 - Present)

- **Characteristics and Patterns of FDI into DEEs:**
  - Emphasis on ***Horizontal FDI*:** focused on both midstream and downstream
  - **The retail transformation with FDI (Supermarkets revolution)**
    - Post-liberalization, there was a huge surge in the 1990s and 2000s in private investment in supermarkets in DEEs *(Reardon et al 2003)*
    - Rise in supermarket chains fueled by:
      - **Push factors** in the FSM (saturated home markets with low margins) and
      - **Pull factors** in DEEs (higher returns and initially light competition combined with growing demand) *(Dawson, 2001; Reardon & Berdegue, 2002)*
    - **Table 1A:** Recent trend in growth of supermarket sector in Latin America
      - Similar trends observed in Africa and Asia
    - **Fast food chains: is** another area of huge FDI growth in DEEs
      - Examples: KFC, McDonalds, Pizza Hut, etc

# 2nd Wave of FDI: *Rise of Supermarkets in DEEs*

**Table 1A: Edible grocery sales of leading modern retail chains, and GDP growth, over selected Latin American countries (2002-2016), in nominal millions of USD**

| Waves | Sales 2002 | Sales 2006 | Compound Sales Growth 2001-2006 | Compound Real GDP Growth 2002-2006 | Sales 2011 | Compound Sales Growth 2006-2011 | Compound Real GDP Growth 2006-2011 | Sales 2016 | Compound Sales Growth 2011-2016 | Compound Real GDP Growth 2011-2016 |
|---|---|---|---|---|---|---|---|---|---|---|
| First Wave | | | | | | | | | | |
| Argentina | 3,057 | 5,036 | 13% | 9% | 12,207 | 19% | 4% | 13,656 | 2% | -0.2% |
| Brazil[i] | 19,110 | 36,853 | 18% | 4% | 92,039 | 20% | 4% | 72,019 | -5% | -0.4% |
| Uruguay | 344 | 504 | 10% | 4% | 1,253 | 20% | 6% | 1,450 | 3% | 3% |
| Second Wave | | | | | | | | | | |
| Costa Rica | 563 | 1,059 | 17% | 5% | 2,058 | 14% | 4% | 2,711 | 6% | 4% |
| Chile | 2,101 | 4,778 | 23% | 6% | 11,300 | 19% | 4% | 11,536 | 0.4% | 3% |
| Colombia | 2,032 | 3,099 | 11% | 5% | 5,892 | 14% | 5% | 6,038 | 0.5% | 4% |
| Ecuador | 566 | 853 | 11% | 5% | 1,576 | 13% | 4% | 2,251 | 7% | 2% |
| Guatemala | 377 | 512 | 8% | 4% | 1,055 | 16% | 3% | 1,036 | -0.4% | 4% |
| Mexico[ii] | 11,368 | 17,155 | 11% | 3% | 24,331 | 7% | 2% | 22,027** | 1% | 3% |
| Third Wave | | | | | | | | | | |
| Bolivia | 28 | 43 | 11% | 4% | 92 | 17% | 5% | 179 | 14% | 5% |
| Nicaragua | 46 | 128 | 29% | 4% | 290 | 18% | 3% | 563 | 14% | 5% |
| Peru | 251 | 365 | 10% | 6% | 2,251 | 44% | 7% | 2,856 | 5% | 4% |

Source: Popkin and Reardon 2018

# $2^{nd}$ Wave of FDI into DEEs (1980 - Present)

- **Characteristics and Patterns of FDI into DEEs:**
  - **The midstream segment transformation:** ***Food Processing***
  - Processing sector in DEEs has seen several phases characterized by:
    - Move from **semi-concentrated to deconcentrated processing sector** (with the shift from the 1970s/1980s era of parastatals to the post-liberalization (1980s-2000s) proliferation of small and medium-sized enterprises (SMEs) in processing of grain, dairy, meat, fish, and horticultural product
    - Move from a **fragmented sector to again concentration** with the deluge of FDI and domestic private sector driven consolidation
  - **The midstream segments transformation:** ***Wholesale/Logistics***
    - Supermarkets, fast food chains, and large food processors have been shifting from **traditional wholesale channels** for procurement to **modern (dedicated) wholesalers** and 'third-party logistics' firms (3PL)
    - Large markets created by this investments are huge
      - China's wholesale market volume **increased 11,000%** (1990 to

# 2nd Wave of FDI into DEEs (1980 - Present)

- **Characteristics and Patterns of FDI into DEEs:**
  - **"Co-evolution" of downstream and midstream segments**
    - To reduce transaction costs and ensure that private standards are met, supermarket chains tend to source from large processors
    - ***Example:*** *Walmart chains in Mexico shifted from sourcing from wholesale market to sourcing from the US firm Driscolls for strawberries produced by Driscoll in Mexico*
  - **"Follow Sourcing" FDI**
    - To "fast tracks" supply chain development, US and EU retailers (and large processors) operating in DEEs prefer to 'import' the services of both processors and wholesalers they use in their home markets
    - ***Examples: Baakavor (****a large Icelandic vegetables wholesale/processing firm) serving Tesco in Western Europe, 'followed' Tesco to China.*
  - **Co-processing and Joint ventures as important modes of FDI**
    - There has been a increase in joint ventures (JV) in addition to

# 3rd Wave of FDI into DEEs (2000s - Present)

- **Characteristics and Patterns of FDI into DEEs:**
  - This new wave is a linear combination of the 1st and 2nd waves with new wrinkle where FDI is by DEE firms into DEE's and US/Europe/Japan
    - Shifting emphasis back to ***Vertical FDI*** (but Horizontal FDI still ongoing)
    - Rising "second rung" or newly emerging markets (e.g. Indonesia, Nigeria)
  - Govs and DEE firms are making large investments in "lower rung" countries
    - Goal: to improve the supply chain either of exports to the FRM, or exports from the FRM, or improve the political acceptance of FDI by the FSM
      - ***Example:*** *China's* ***"Belt & Road Initiative"*** *to build infrastructure in Asia & Africa*
- **Key Examples of intra-DEEs FDI:**
  - **Retail:** *Nando* (S. Africa) chicken fast food chain has 1000 outlets in Africa, Asia, EU
  - **1st stage processing:** *Olam International* (Nigeria) built many entrepots & mills in Africa

# Implications and Opportunities for US Firms

- **The opportunities are both for horizontal and vertical FDI**
  - The challenges are born from the opportunities (and vice versa).
  - Can take advantage growing demand for non-grains (meat, fish, dairy, and produce) and processed foods
  - DEE markets are becoming easier export and FDI destinations
- **Opportunities remain in leading DEEs (China, Brazil, India, etc), but potential higher returns are greater in 2nd rung DEEs**
  - Same kinds of transformations (rising incomes, the opportunity costs of women's time, quest for quality and product differentiation) are emerging quickly in what were "second rung" countries.
- **Potential for joint ventures and creation of export platforms in particular to third country DEEs, as well as developed countries**
  - Not just for inter-seasonal production of produce, but more

# Implications and Opportunities for US Firms

- **Top 2nd rung DEEs poised for take-off:**
  - **Indonesia:** big market that could be top 5 global economy in next 25 years
  - **Nigeria:** huge market with potential for more horizontal FDI and JV possibilities for export to rest of Africa
  - **Vietnam & Thailand:** potential pivot points for export to China, Japan, etc.
  - **Kenya:** currently a major export platform to Europe (and rest of Africa)
  - **Colombia and Peru:** are emerging as vertical and horizontal FDI options and JV for South America