

9. Imperfectly Competitive Markets

9.1 Imperfectly competitive markets

- ✦ Use and abuse of market power

- ✦ Market situations

 - ◆ Large country cases, e.g., endowment over strategic factor

 - ◆ Policy/regulations provides domestic market power

 - ◆ Economies of scale (EOS) – increases firm size

- ✦ Monopoly theory, revisited

Imperfectly Competitive Markets, continued ...

9.2 Monopoly: trade implications

✦ Domestic monopoly: import or export monopoly

✦ Int'l monopoly

- ✦ Large country case
- ✦ China's rare earths exports
 - Quasi-monopoly rents
 - Export quota rents from Δ TOT

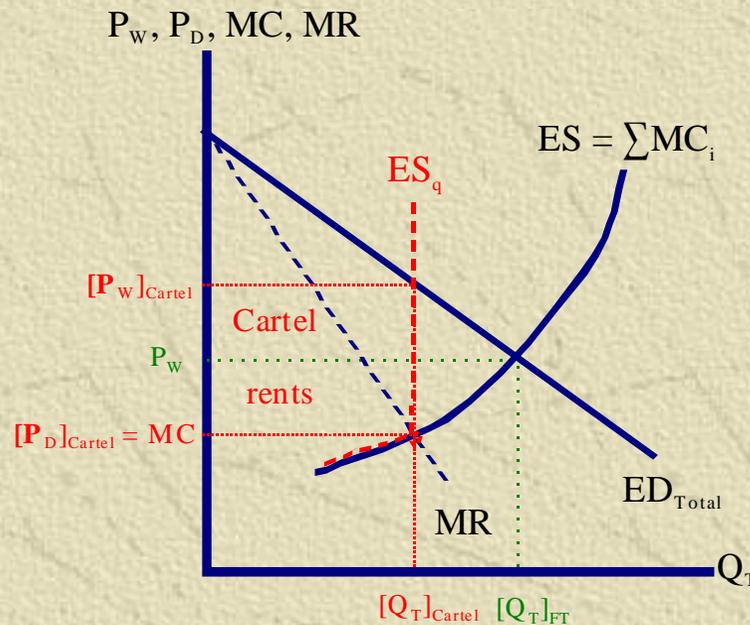


Imperfectly Competitive Markets, continued ...

✦ Oligopoly

◆ Cartel behavior (OPEC)

- Modeled as multi-plant monopoly: $\pi = P(q_1+q_2) \cdot Q - \sum TC_i(q_i)$
- Can a cartel stabilize int'l market? $\partial \pi / \partial q_1 = P + Q \cdot \partial P / \partial q_1 - MC_1 = 0$

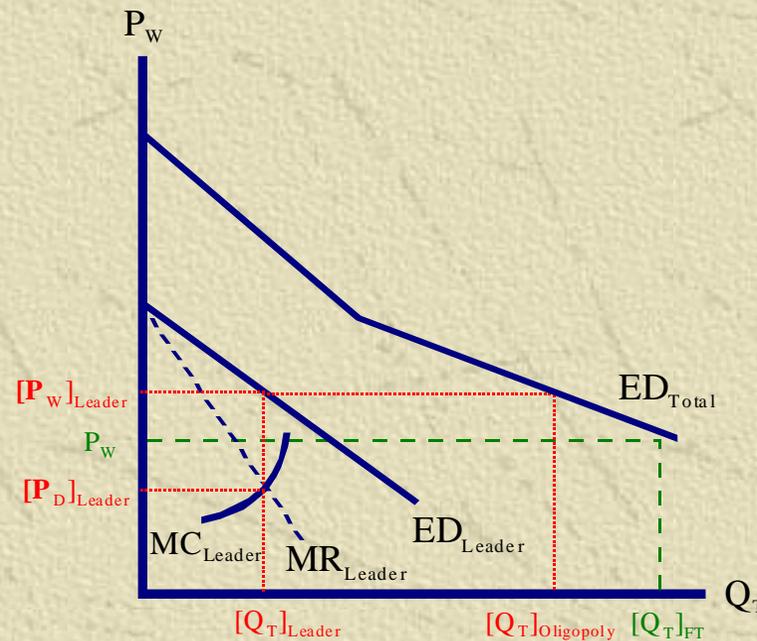


Note:

In reality OPEC applies production quota not exports.

Imperfectly Competitive Markets, continued ...

- ◆ Oligopolistic leader (Stackleberg leader-follower model)
 - 1 firm leads, others follow
 - Leader sets price from its share of world market, others follow
 - Model cannot explain why leader leads, followers follow



Imperfectly Competitive Markets, continued ...

9.3 Imperfect competition from economies of scale (EOS)

✦ Implications for H-O-S trade model

- ✦ EOS: definition and types
- ✦ Mkt structure, product differentiation, intra-industry trade

EOS: Implications for the H-O-S trade model

1. Type of industry	2. Goods markets	3. Input markets	4. Prodn functions	5. Prodn possibilities curve	6. Trade	7. SW and Y
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10. International Factor Mobility

10.1 Theoretical issues

✦ Relevant H-O-S theorems without int'al L,K mobility

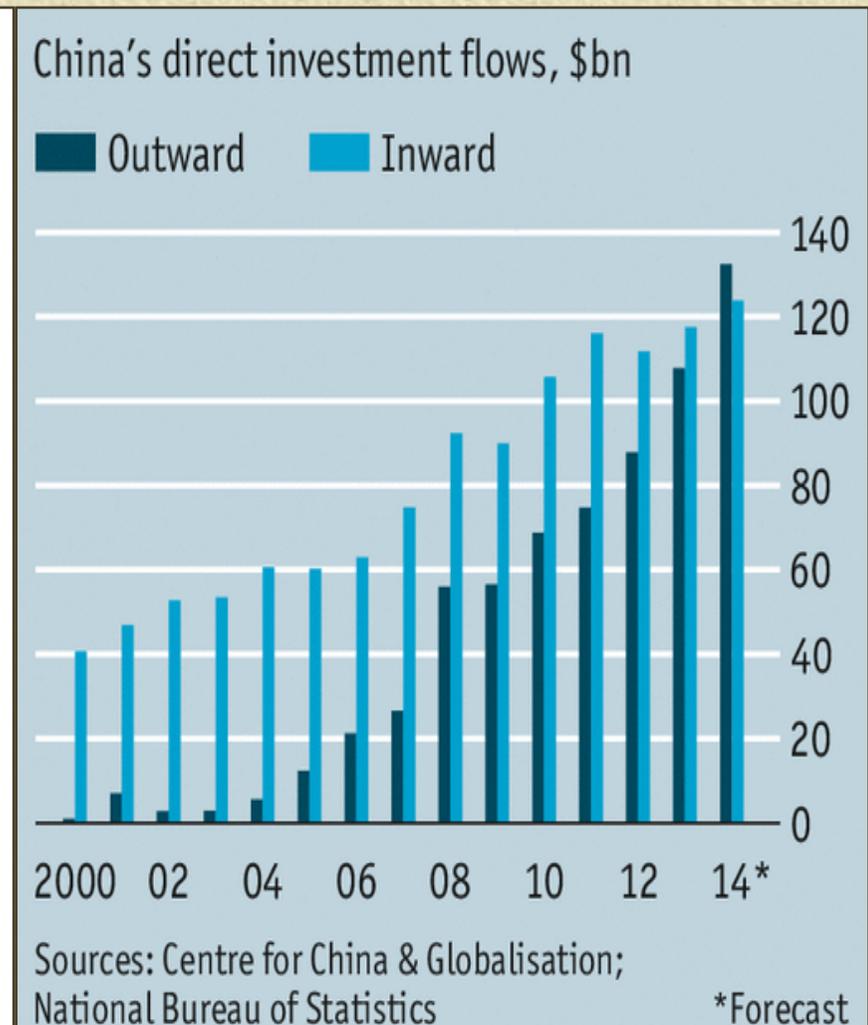
- ◆ Factor proportions
- ◆ Factor-P equalization
- ◆ Stolper-Samuelson
- ◆ Rybczynski

✦ Expectations when/if L,K is internationally mobile

- ◆ Case for / against trade or factor mobility
- ◆ Relation of L, K flow and trade
- ◆ Direction of L,K flow: expectation vs reality [Lucas paradox]

International Factor Mobility, continued ...

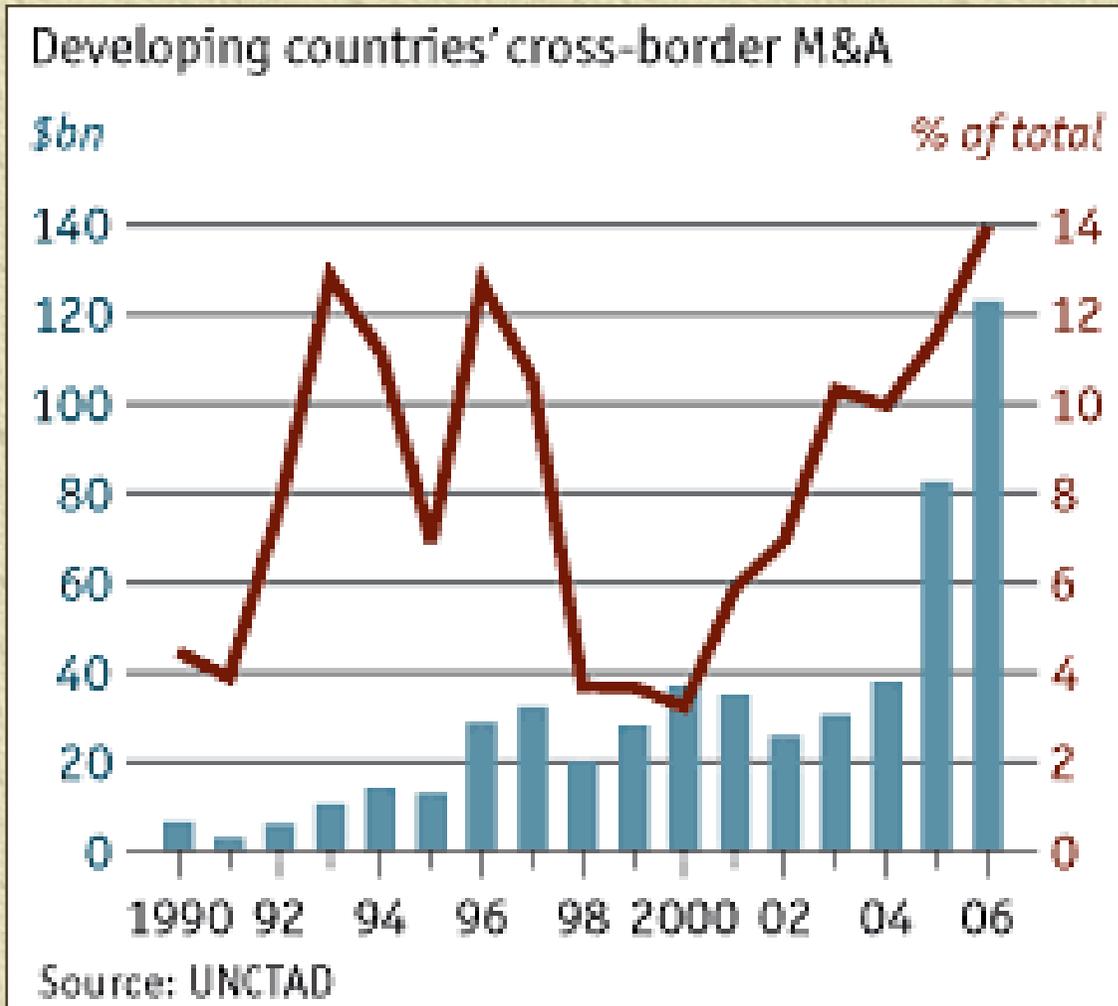
- Evidence of Lucas paradox: South-South K-flow and to North



Economist, "Investment flows: going out", 8 Nov 2014, p. 54

International Factor Mobility, continued ...

- Developing country multinational corporations



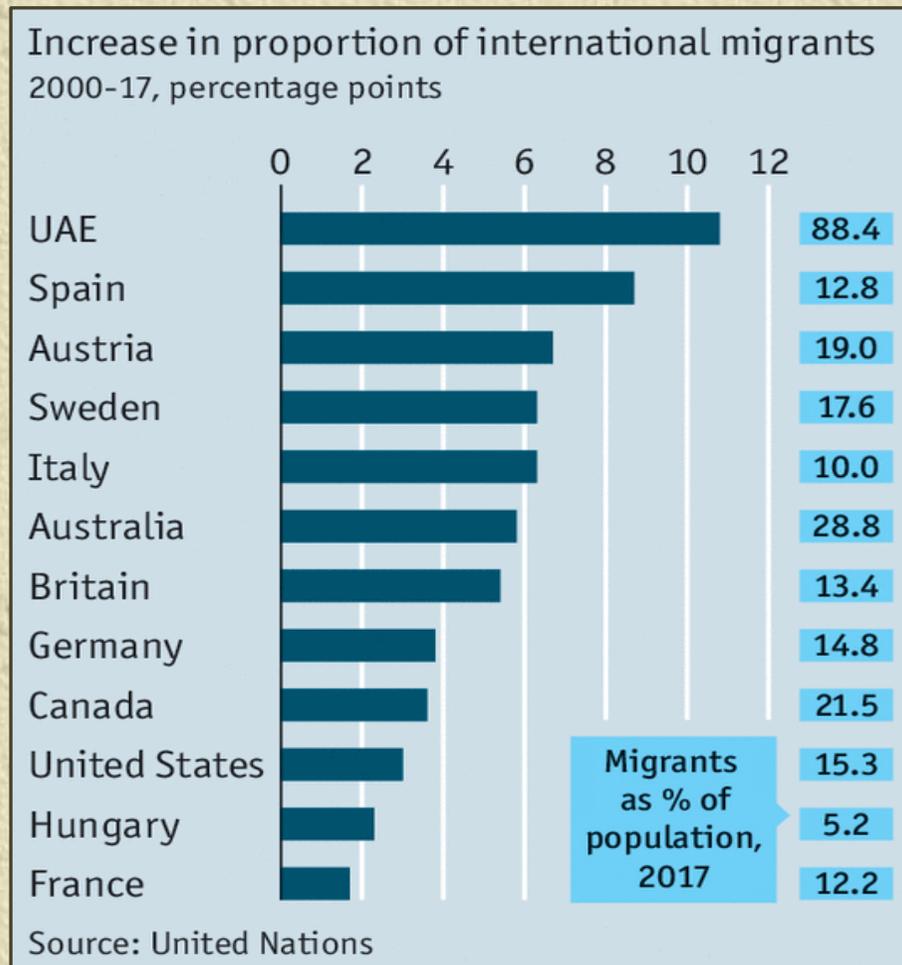
Counter to theoretical expectations, there have been periods when K-outflowed from emerging mkts.

K-flows do not always move from “North” to “South” and there is no correlation between fast-growing emerging mkt and K-inflows.

International Factor Mobility, continued ...

10.2 L mkts, int'al mobilization and mkt liberalization

✦ Trends in migration vs int'al L



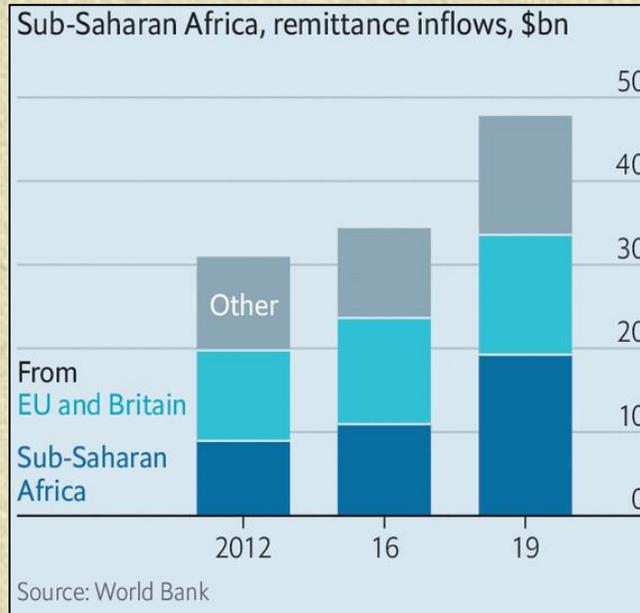
- Migration is related to work – 90% is worker and family
- Most migrants are within a country not across
 - 232 mln int'al migrants
 - 740 mln internal migrants
- Largest corridor of int'al migrants has been US-Mexico
- Globalization, demographic shifts, conflicts, income inequalities, climate change → ↑ L migrants.

Int'l Labour Org., "Labour migration: Fact sheet", 26 Mar 2014

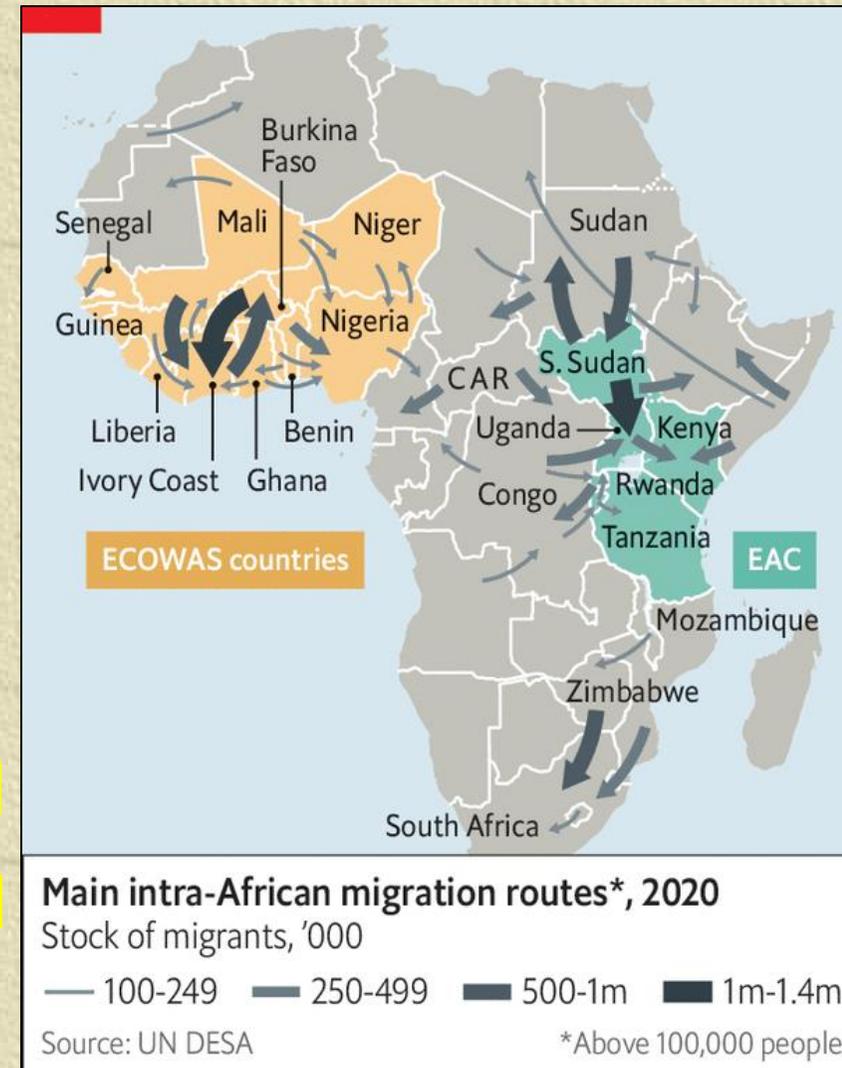
Economist, "Immigration: Crossing continents", 25 Aug 2018, p. 14-6.

International Factor Mobility, continued ...

◆ Inter-Africa migration



The African Union, to promote more integration, proposed a **protocol to allow free movement**. **Barriers to movement are high**. Border guards hassle migrants, delay them and demand pay-offs. **Qualifications from one country are not recognized in another**. In 1979 ECOWAS and EAC blocs agreed to visa-free movement and the right to work or start business in any member state.

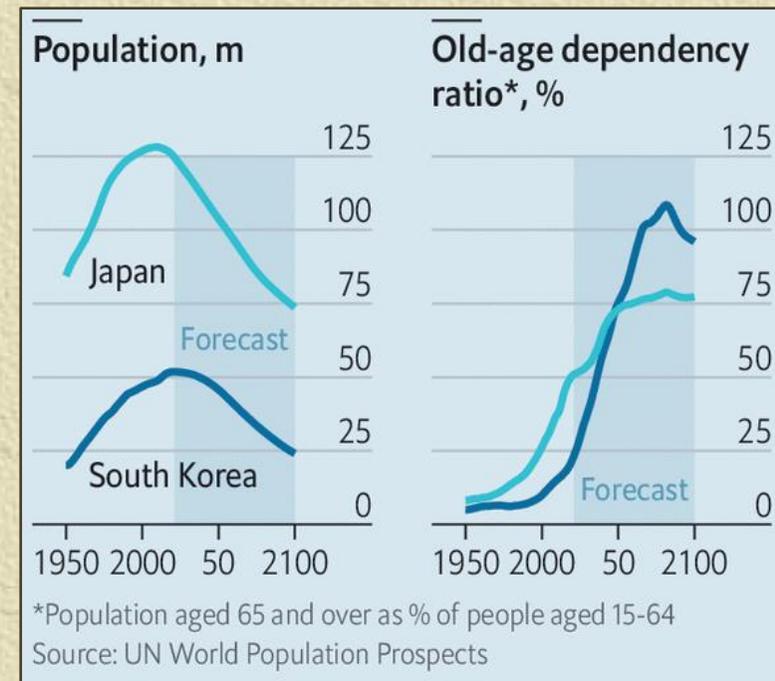


International Factor Mobility, continued ...

✦ Int'al L and concerns with mkt liberalization

- ✦ Concerns: jobs, wages, net social cost or benefit
- ✦ Pull-push factors and other issues
 - War, conflict, and political instability
 - Climate change and resource scarcity
 - Legal vs illegal migrants
 - Temporary (seasonal) vs permanent
 - Remittances, aid vs brain drain
 - Demographics

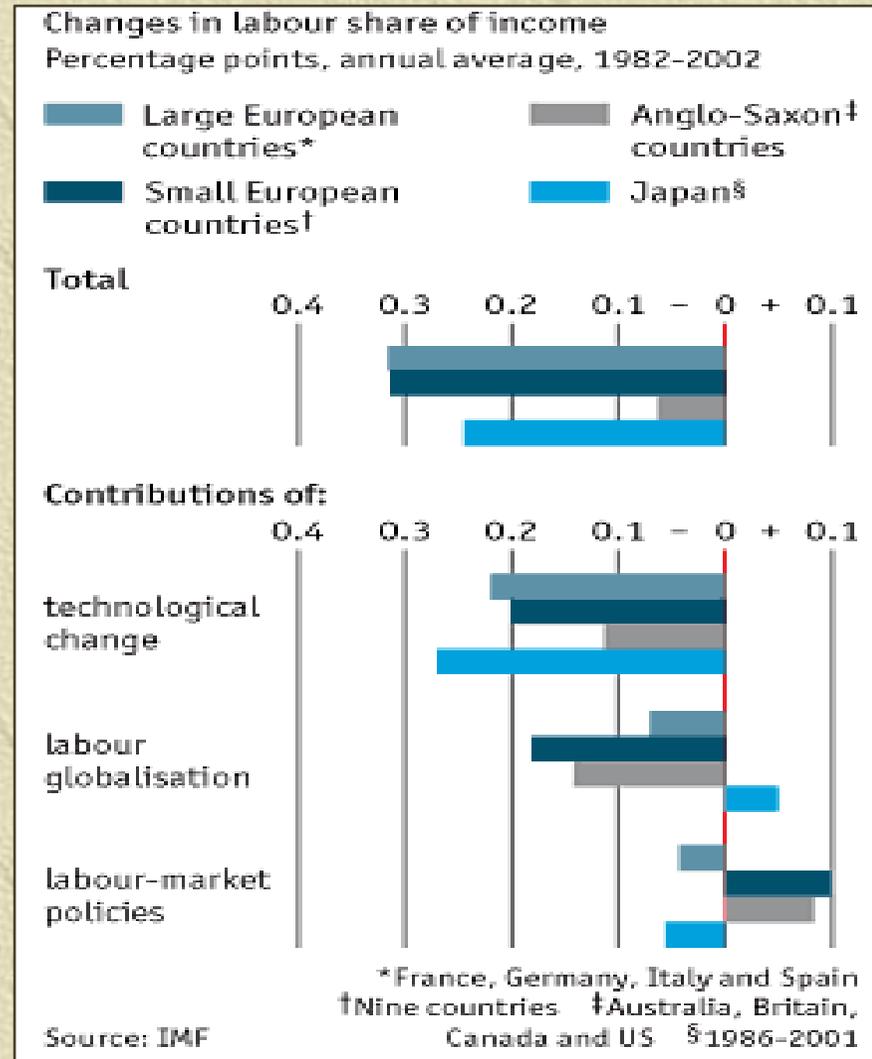
Japan and S. Korea (and China) face a long-term demographic problem. Will they try harder to attract labor migrants? There is a need for more foreigners to till fields, assemble widgets and care for the old. Both need more taxpayers too. Japan's population is expected to decline from 125m now to 104m by 2050. S. Korea's from 52m to 46m, and to 36m by 2070.



International Factor Mobility, continued ...

◆ Lump sum of L fallacy: effect of tech, globalization and mkt reform

- ↑ foreign L that competes with domestic labor → ↓ L share of GDP
- Hard to separate out effects:
 - Tech Δ, L migration, or offshoring had neg effect on domestic L share
 - L policies that ↑ L benefits r. t. wages → ↓ L share of GDP
 - regs that ↓ L cost → ↑ L share
- Shifts in jobs from unskilled to skilled L has → ↑ L share of GDP for skilled L.
- Perception: globalization hurts L; but L gets smaller slice of bigger pie

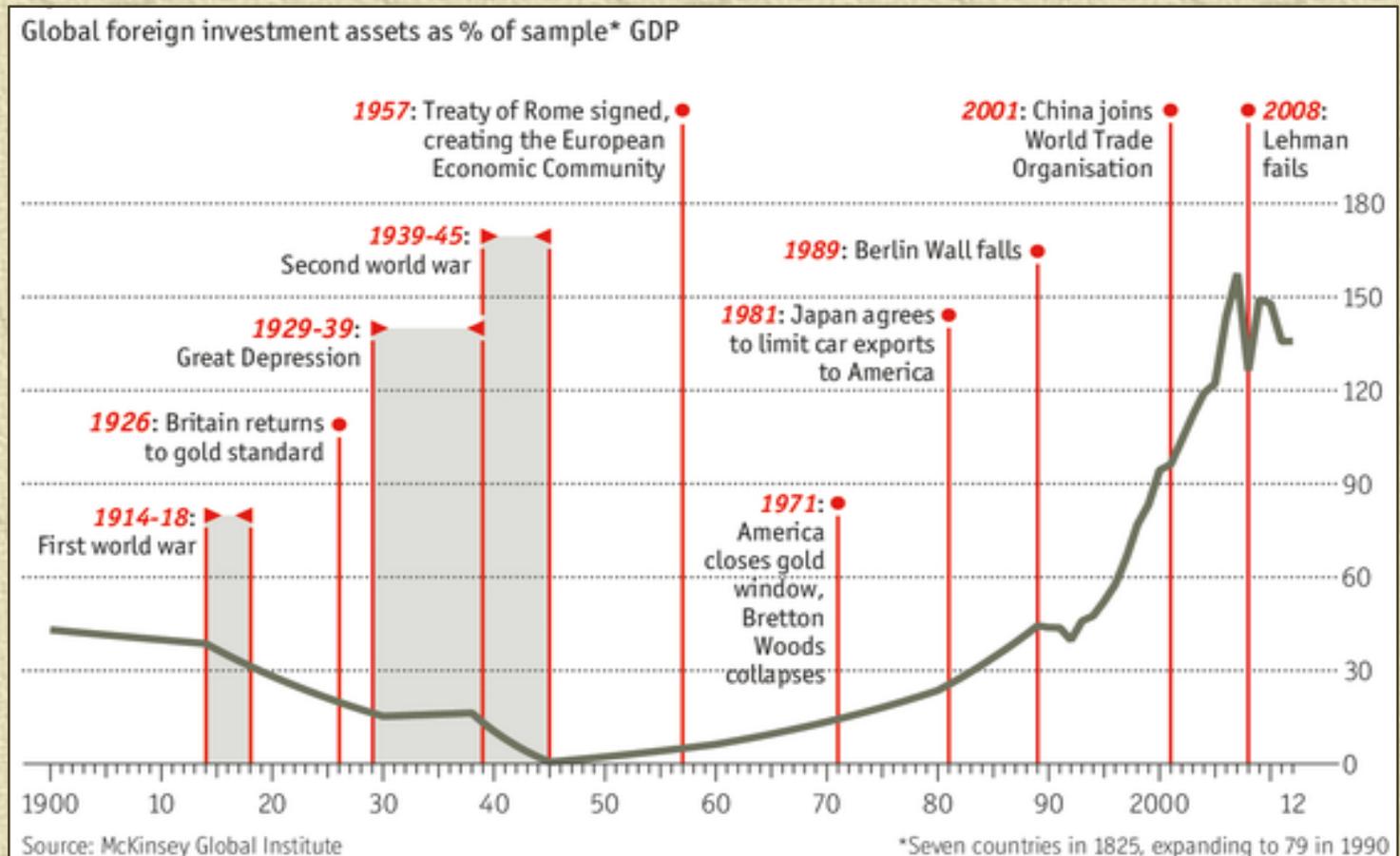


International Factor Mobility, continued ...

10.3 K mkts, international mobility and mkt liberalization

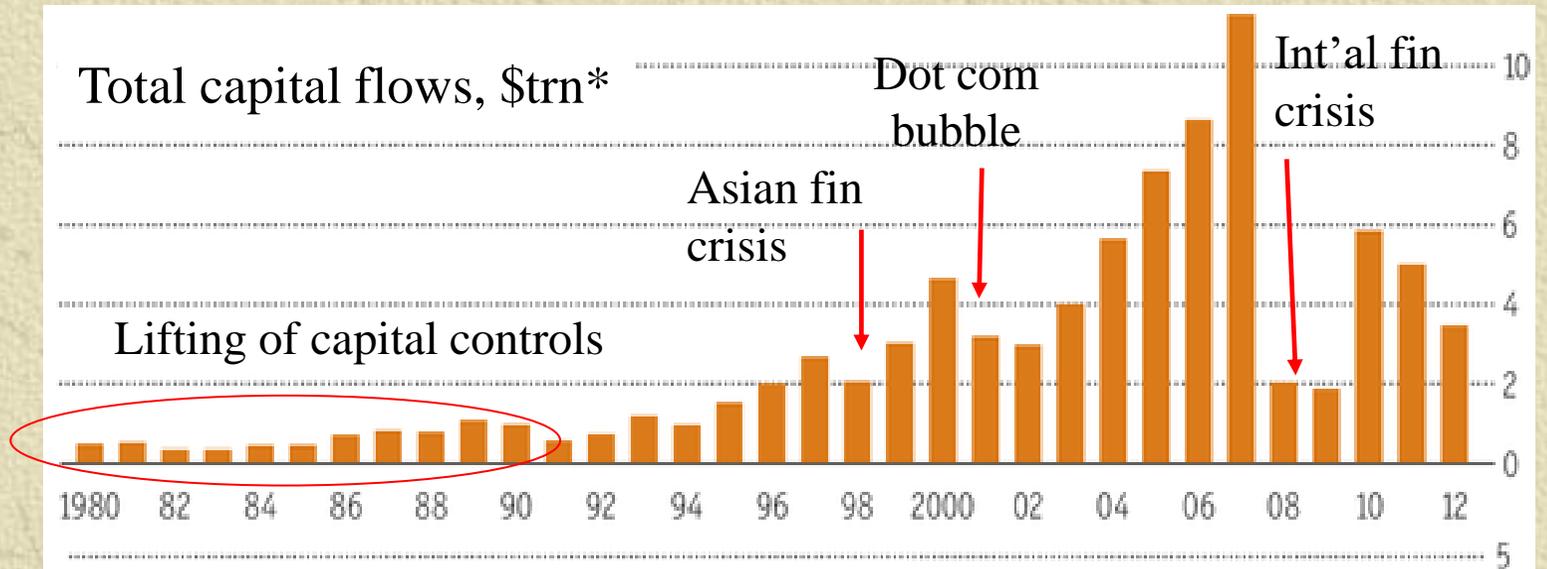
✦ Trends in international capital

◆ Stock of foreign capital

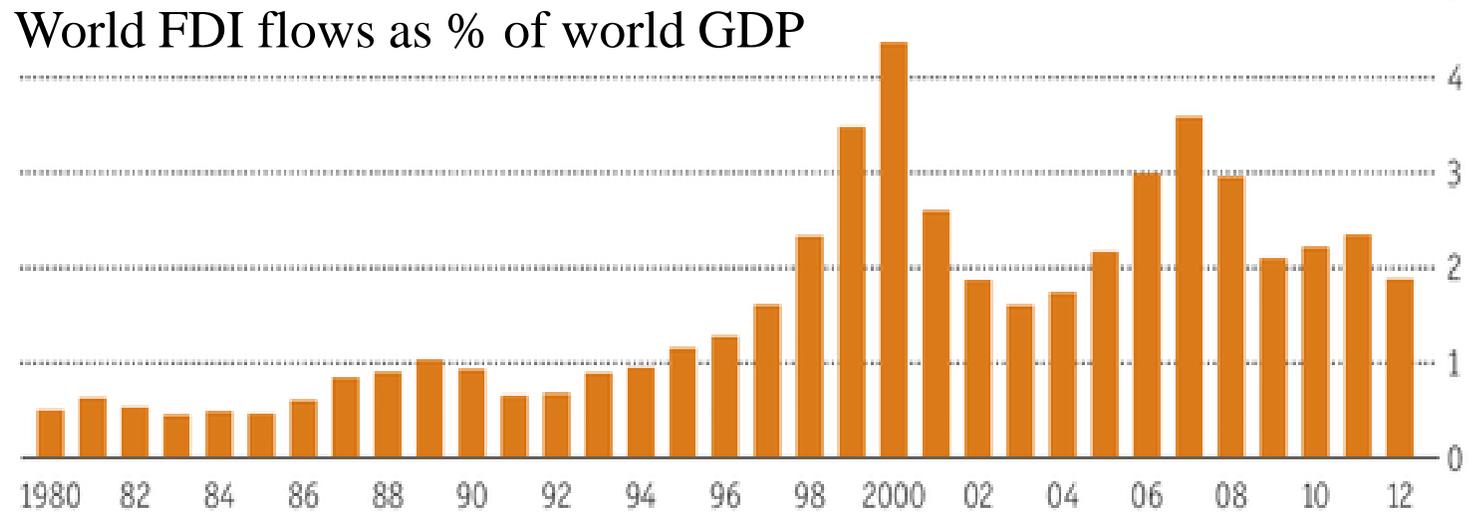


International Factor Mobility, continued ...

◆ Cross-border capital flows



60% of FDI flows into developed economies and 40% to developing.



Sources: UNCTAD; IMF; *The Economist*

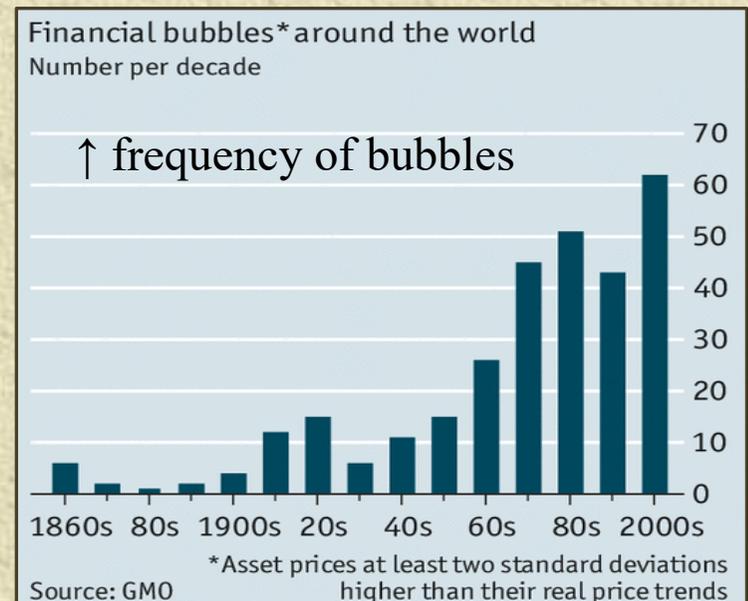
Economist, special report: World Economy, 12 Oct, 2013

International Factor Mobility, continued ...

✦ Concerns with K flows

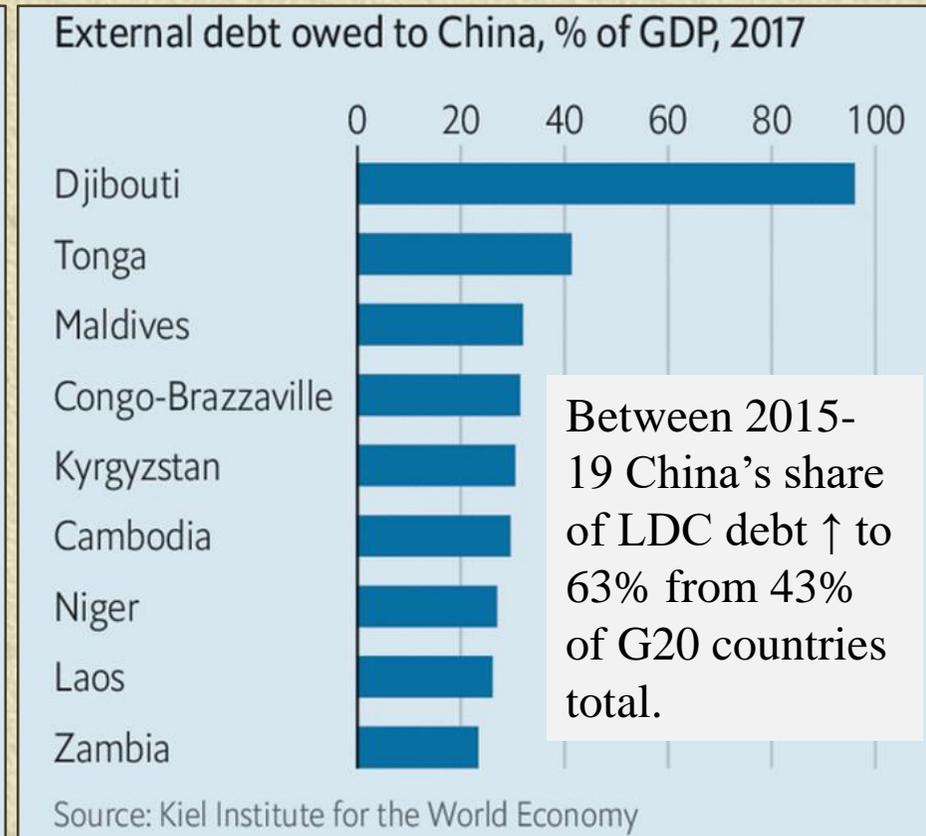
- ✦ Outflows
- ✦ Inflows (micro/macro)
- ✦ Deregulation of K mkts
 - 1980s: \$190bn daily trades
 - 1995: \$1.2trn daily, 2,5 times world GDP
 - 2007: \$5trn daily, 11 times
 - 2013: \$5trn daily, compared with \$50bn in g+s trade

Economist, "Taming the beast", Special report on the world economy, 9 Oct 2008, p. 3-7.



International Factor Mobility, continued ...

- Investment by China and debt owed to China



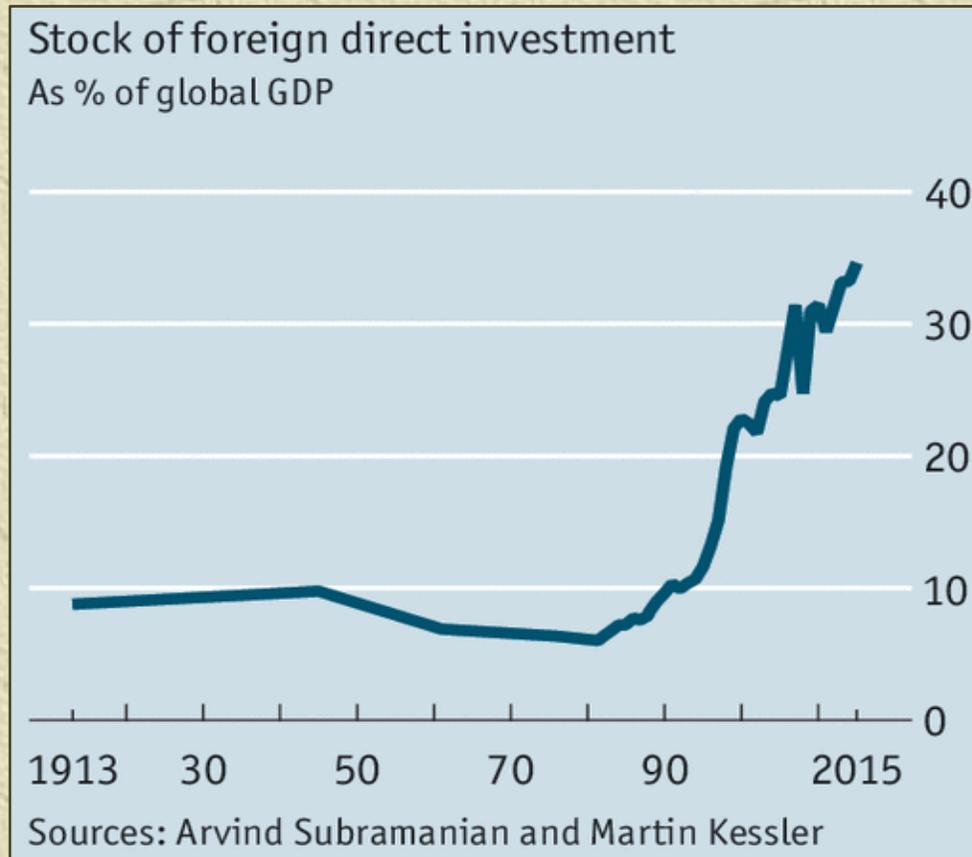
In Nov 2019, the US, Japan and Australia announced an alternative to BRI called “Blue Dot Network” to fund infrastructure projects in the developing world. As with World Bank funds, the financial muscle behind this is tiny in comparison. BRI holds the most promise of meeting gaps in global infrastructure investment despite the debt issues it raises.

Economist, “The Belt and Road Initiative: Break Time”, 6 Jun 2020, p. 43-4; *Fin Times*, “African debt to China drains poor nations”, 27 Oct 2020, p. 4.

International Factor Mobility, continued ...

◆ Other issues

- FDI and multinational corporations



In the 1990s, MNCs were global firms run by global managers and owned by global shareholders, selling global products to global customers. They obsessed with internationalising their customers, production, capital and management. Firms went global “vertically” – relocating production and the sourcing of raw mats, and “horizontally” – selling into new mkts. They bought out rivals, courted customers and opened factories wherever an opportunity arose.

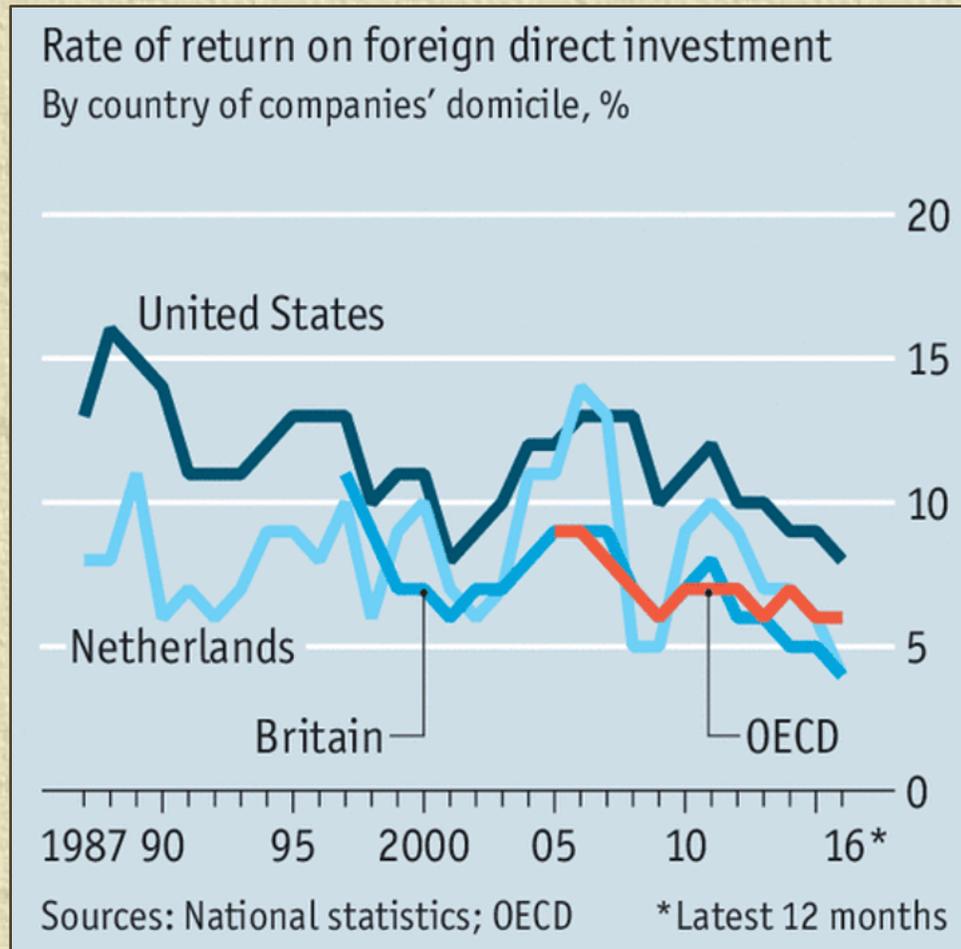
85% of global stock of MNC investment was created after 1990.

Various stages of manufacture were separable across borders and more of the process handled by MNCs each with a link in the global supply chain.

Economist, “Retreat of the global company”, Briefing on Multinationals, 28 Jan 2017, p. 14-17; and “The world as a single machine”, Survey of manufacturing, 20 Jun 1998, p. 3-5.

International Factor Mobility, continued ...

- FDI and MNCs' returns



From 2014-17, half of all big MNCs saw return on equity fall, many below 10% even in the 3 countries which host the biggest MNCs (US, UK, NL). Only tech giants saw profits increase. Overall, MNCs were no longer achieving superior performance.

MNCs have high overheads. Complex supply chains can tie up inventory; sprawling organizations are hard to run. Free flow of info means competitors can catch up in tech and know-how more easily.

International Factor Mobility, continued ...

✦ Mobile foreign K

◆ Implication for wages (case of US):

- Do foreign firms pay a wage premium over domestic firms?
 - ◆ 25% pay premium
 - ◆ Move from one US firm to another leaves wage unchanged
 - ◆ Move from a US firm to a foreign firm sees 7% ↑ wage
- Foreign firm wage premium
 - ◆ Favors skilled labor: adjusting for skills, age, firm, industry and location, the bottom 10% saw no pay premium at all
 - ◆ Richer home countries pay bigger premium to US workers



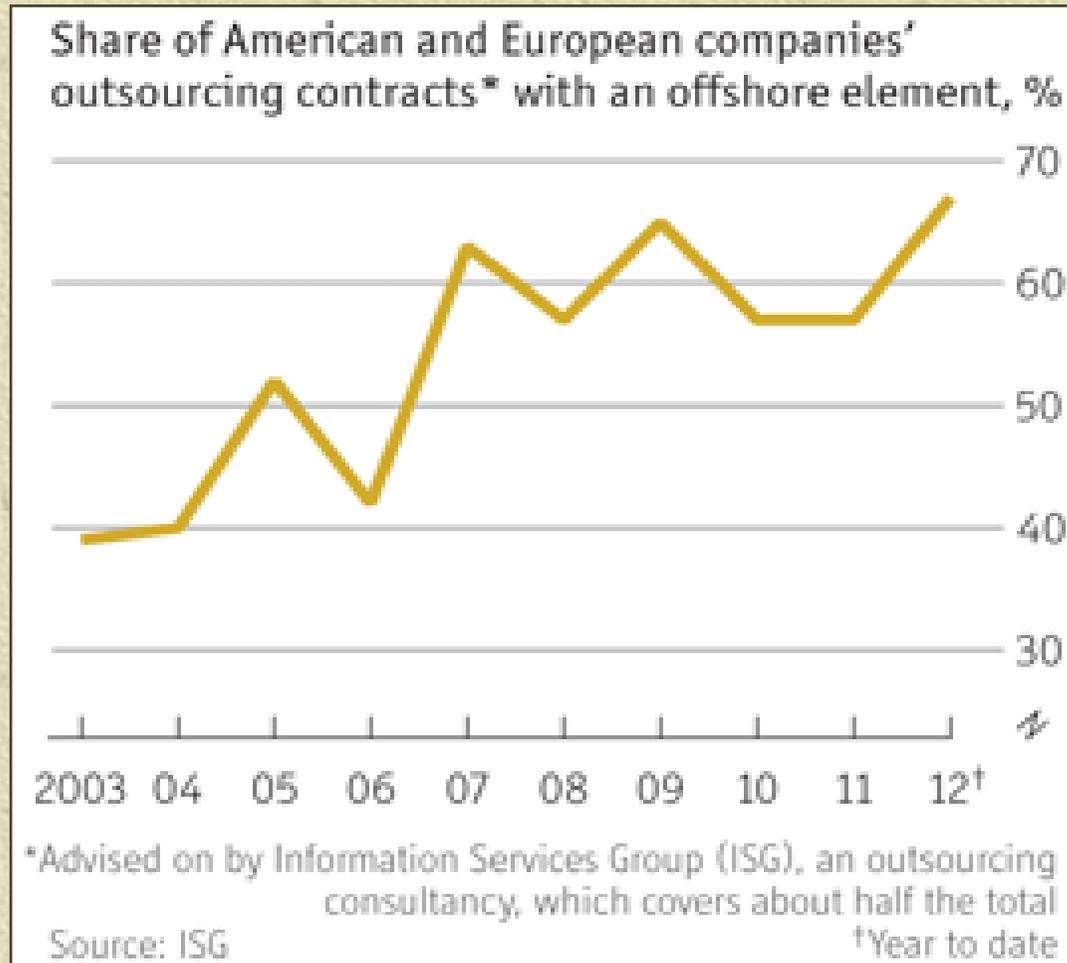
International Factor Mobility, continued ...

◆ Globalization of supply chains

- Production of traded goods is “unbundling”
 - ◆ Design and production of an intermediate good no longer happens in a single firm/factory or even in the same city
 - ◆ Transport and communications tech allows firms to spread production globally and provide trade in services across sub-sectors
 - ◆ Global tensions and rivalries
 - ◆ Share of trade in parts and components increased from 22% to 29% between 1980 and 2000 (↑ IIT in parts)
- 2005: trade in intermediate goods made up 56% of goods and 73% of services of mature economies (↑ IIT in services)

International Factor Mobility, continued ...

◆ Internationalization involving K and L



Outsourcing:

when a firm reduces costs by transferring work to outside suppliers (another firm whether or not in the same country)

Offshoring:

Relocating a business process (some work) from the home market to another country (by same firm)

Economist, “Home or abroad?: Herd instinct”, Special report on outsourcing and offshoring, 19 Jan 2013, p. 9

International Factor Mobility, continued ...

10.4 Reasons for factor mobility

	International L-mobility	International K-mobility
Types of int'l labor / capital	<p>Skilled L: mgmt; professional; trained</p> <p>Unskilled L: less trained, educated</p> <p>L in ag, services or manu sectors</p> <p>Permanent vs temp /seasonal labor</p>	<p>Borrowing / lending (loans, deposits)</p> <p>Foreign direct and portfolio investment</p> <p>Tech transfer; intellectual property; where does K-flow? Multinational corporations</p>
Economic motivations	<p>L moves where wages higher, land is cheap, work in services sectors, resource sectors (seasonal ag or tourism); to work with im/mobile K; L hired without crossing border (outsource)</p>	<p>K moves to where returns are greatest, to decrease risk and diversify portfolio; K moves to a natural resource or to provide non-traded service; when L is immobile and abundant; to avoid regs, policy, taxes</p>
Background factors; regulations and constraints	<p>History and geography (cultural links, language); brain drain vs remittances;</p> <p>L stds, regs, policy, immigration law;</p> <p>Do stricter regs → ↑ illegal L migrants?</p>	<p>Foreign control over sensitive sectors;</p> <p>Conditions on foreign K (tech transfer);</p> <p>K controls, balance of payments issues;</p> <p>foreign debt; banking regs / stability</p>
Trends and opportunities (tech + policy)	<p>North demographics: ↑ age, Y; ↓ pop grow; L scarcity; ↑ S+D for services</p> <p>Tech: ↓ transport / communication costs</p>	<p>↑ K-mobility is an interplay of re-reg and tech; internet banking; int'l finance; laws allowing foreign participation</p>
Net effect on jobs, wages, Q, trade and SW	<p>Uncertain net effect on W, Y, wage gap; migrants take/make jobs; complement or substitute local L; pay tax and collect benefits; brain drain vs remittances</p>	<p>K-inflows and L-prodvty; K flows can either complement/substitute for trade; K-immobility to certain sectors; K flows and multinational firms vs small firms</p>