International Resource Movements & MNCs

Review "LECTURE TENTATIVE SCHEDULE"

See file "Syllabus (Factor movement)"

Introduction

- International trade and productive resource movements (IPRM) **– substitute/complement for each other, but, different economic effects.**
- Costs and benefits of International resource movements.
- Why MNCs exist and how they affect on economies involved?

Preview

International movements of productive factors relate to:

- International capital mobility (International investment)
- International labor mobility (labor migration)
- Transactions of multinational firms involving direct ownership of foreign firms

Key Terms

- Portfolio investment
- Direct investment
- Horizontal integration
- Vertical integration
- Risk diversification
- Multinational corporation
- Transfer pricing
- Brain drain

International Productive Resource Movements

- IPRMs are politically sensitive and often restricted by:
  – Restrictions on financial asset flows (less common today in Europe and U.S.)
  – Restrictions on immigration
  – Restrictions on the activities of multinational corporations

International Productive Resource Movements

- Issues studied
  - What are the main productive forces?
  - What are the main causes of international resource movement?
  - What are the effects of the international resource movement?
  - Who conducts the international resource movement? (the main players?)

1.International Investment

1.1.Definitions

– *Investment* is the use (by investors) of an amount of assets such as capital, technology, land...in a specific economic activity to create one or several products for society in order to gain profit.
  - *Investment means the use of capital in the form of tangible or intangible assets for the purposes of forming assets by investors to carry out investment activities in accordance with the provisions of this law and other provisions of relevant laws. (Art.3, Law on Investment in Vietnam, 2005)*

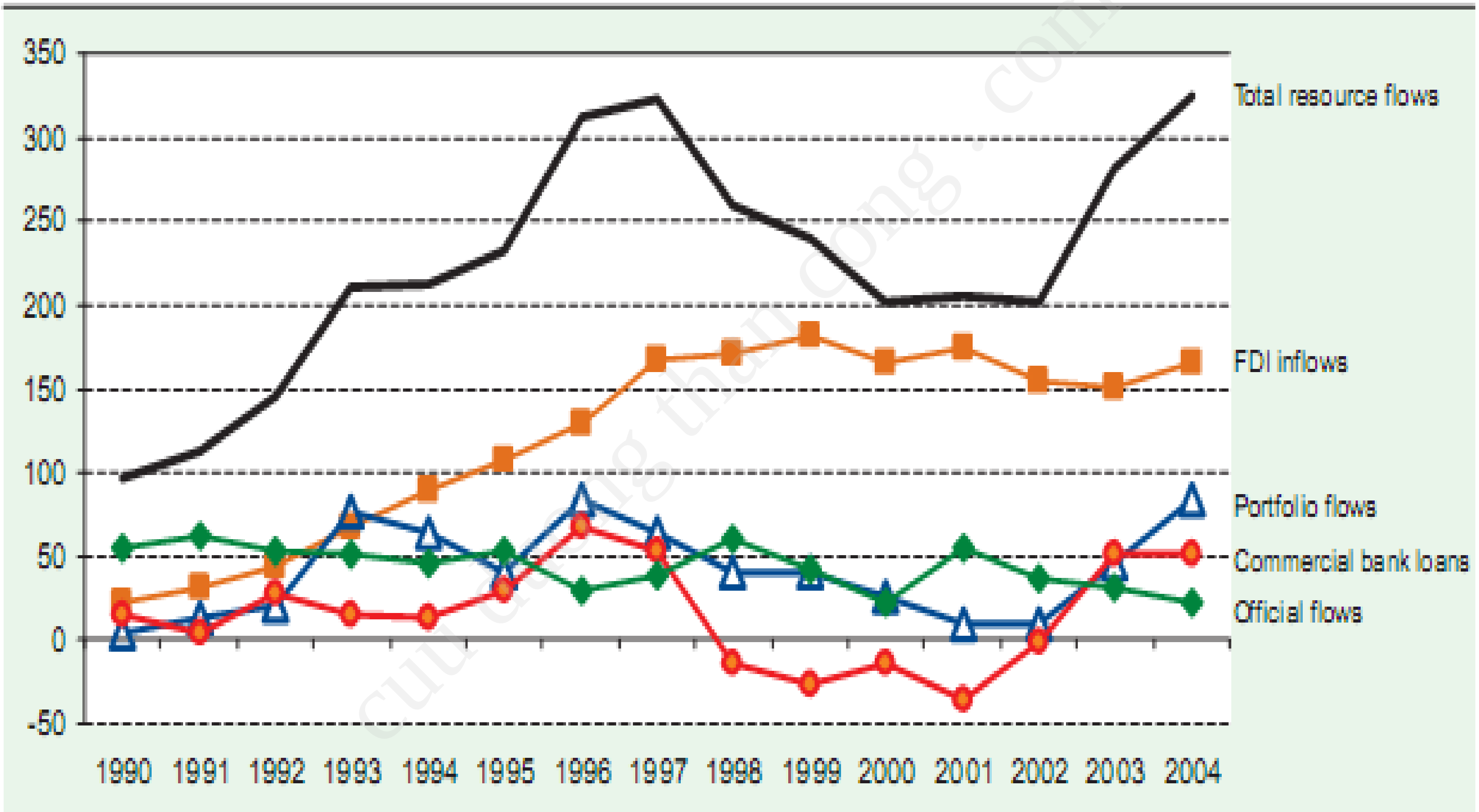
– *International investment* is a cross-border transfer by an investor of tangible or intangible assets in terms of capital, technology, management skills ... to run business so as to gain high profit on global scale.

– *Investors* may be individuals, organizations or state bodies.

1.2. Characteristics

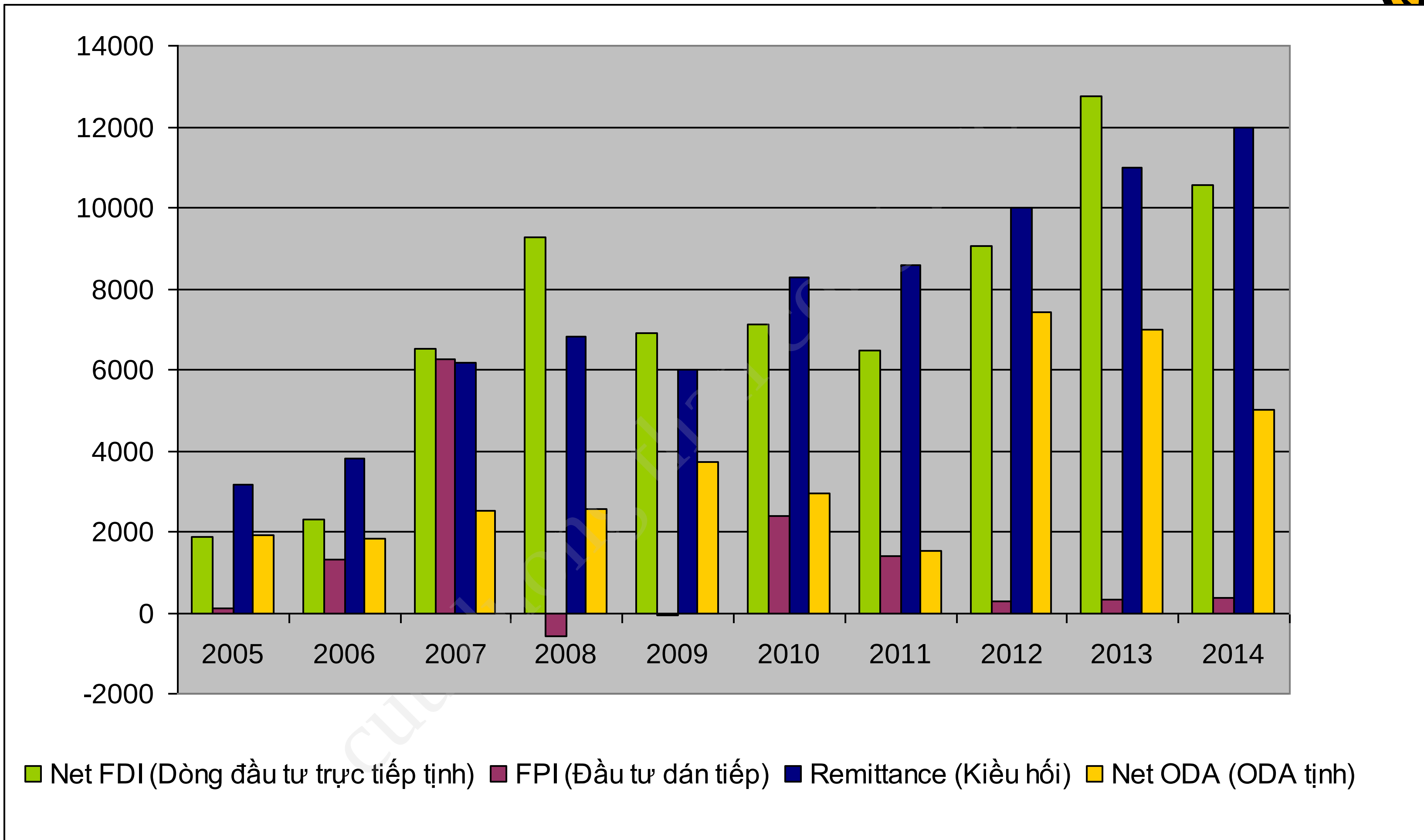
- **Characteristics**
  - Profitability
  - Risk
- **Foreign vs domestic investment:**
  - Investors: foreigners (nationality, language…)
  - Capital moves across the national boundary (policy, legal system, custom, transportation…)
  - Foreign exchanges are involved

International capital flow to developing countries



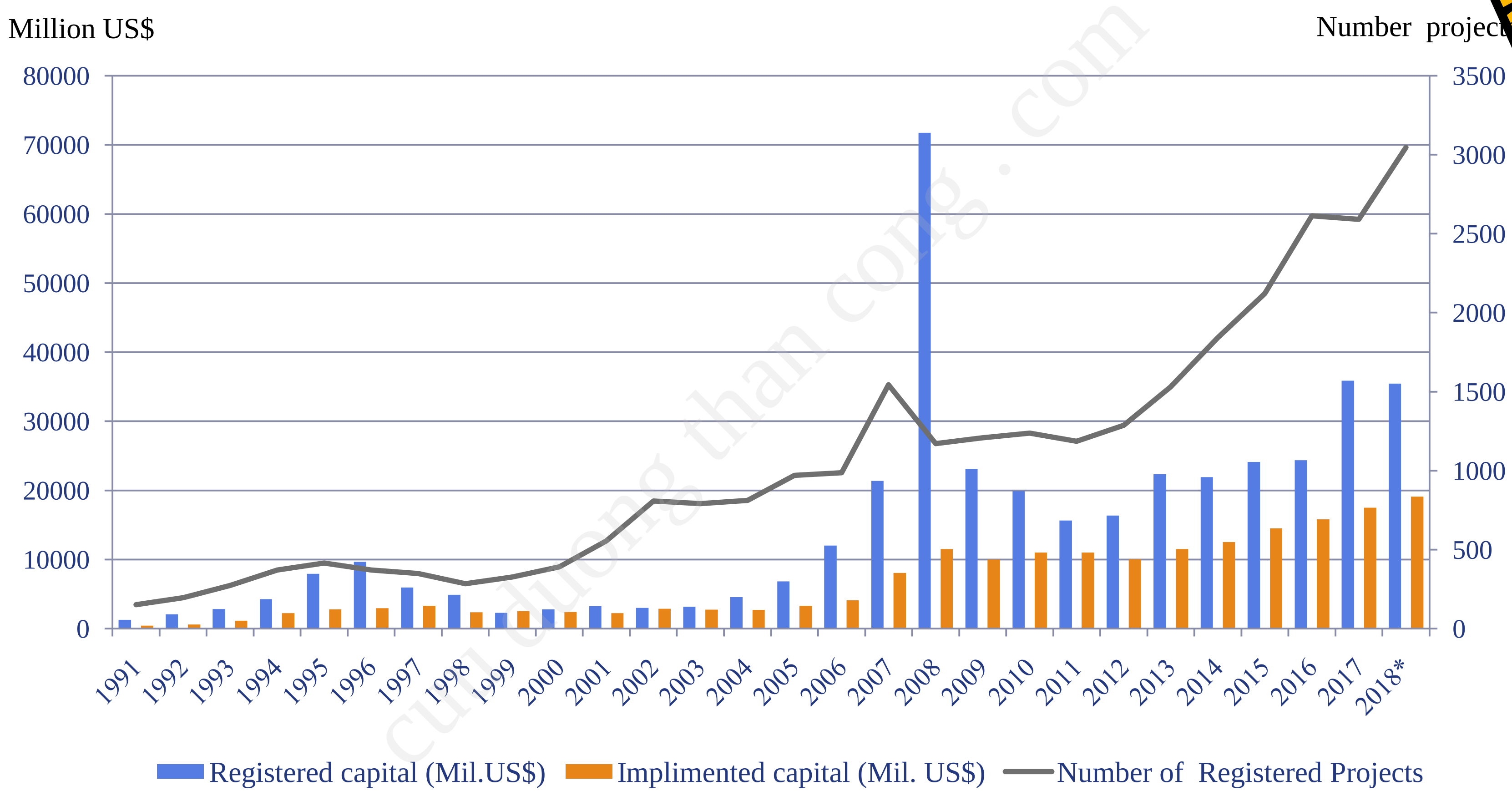
Source: WIR 2005, p.7

Foreign capital inflow to Vietnam, 2005-2014 (million US$)



Nguồn: ADB and MPI, 2015.

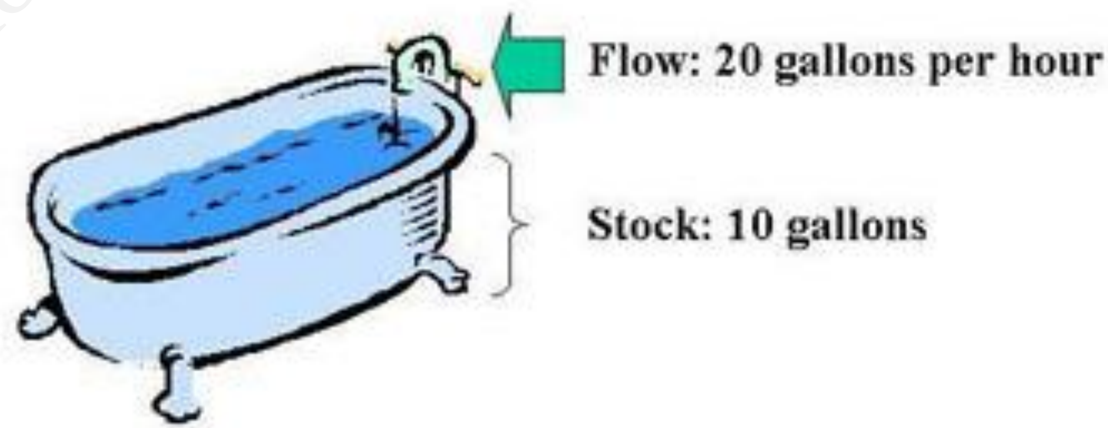
Annual FDI inflows in Vietnam, 1991 -2018*



Source: Vietnam's General Statistics Office and Foreign Investment Agency of MPI (2018)
* By 20 Dec. 2018

Calculating Investment

- Calculations of FDI and FPI are typically measured as either a "flow," or as "stock,“
- Flow is referring to the amount of investment made in a specific period (one year)
- Stock is measuring the total accumulated investment at the end of a given point of time (end of that year).



1.3. Forms of International Investment

– ***Foreign Portfolio Investment (FPI) (or*** financial investment): financial assets (bonds, stocks), denominated in a national currency; not involve in management; short term;
– ***Foreign Direct Investment (FDI):*** real investment in factories, capital goods, land and inventories where both capital and management are involved and the investors retains control over use of invested capital; medium &long term

FPI is changeable to FDI, and vice versa when the investors increase/decrease their ratio of voting shares in the relevant firms.

How to distinguish FDI from PFI ???

Example: FPI vs. FDI

John Yamashita's Investment	Hungry Dragon Toys' Investment
John Yamashita - a Japanese citizen, purchases one hundred shares of stock in General Motors (GM). • John now owns part of a U.S. corporation, the shares of which are part of his personal investment .	**Hungry Dragon Toys - a Chinese company, is sitting on a lot of cash**. • The company's board of directors decides to take some of that money and purchase Cooperative Chemical, a plastics company in New Jersey.
•John is eligible to receive dividend payments from GM, participate in shareholder decisions, or sell the stock for a profit/loss.	Hungry Dragon, a foreign investor, now owns a U.S. subsidiary company.
•John's share of GM is very minor, and his chief concern is not the long-term profitability of the company but the short-term value of his stock.	Hungry Dragon's ownership of Cooperative Chemical is substantial and more likely to be long term.
•He might therefore sell his share quickly if the share price goes up or down significantly.	Hungry Dragon is unlikely to sell if the U.S. economy faces a temporary downturn.

1.3.1. Portfolio investment.

FPI motives: An Example – Risk divertsification theory

Return (%)	Stock A	Stock B
Lowest	20	10
Highest	40	50
Average Rate	30	30

- Risk differences between stocks, but the same average rate of return.

- Change in stock yields are inversely correlated overtime

➔ *holding both stocks can give investors an average yield of 30% at lower risk. This also explains two-way flow of capital.*

The basic motives of FPI

- To earn higher returns abroad.
- To reduce risks to account for the two-way capital flows.

1.3.2. Foreign Direct Investment

- FDI occurs when a firm invests directly in facilities to produce and/or market a product in a foreign country.
- Ownership: at least 10% (US's Law)
  - Buy a firm in a foreign country.
  - Create a 'Greenfield' operation overseas
  - Create a subsidiary abroad.
- Have significant control and influence on managerial decisions of the operation overseas.
- *Flow*: Amount of FDI over a period of time (one year).
- *Stock*: Total accumulated value of foreign owned assets at a given point of time.

1.3.2. Foreign Direct Investment

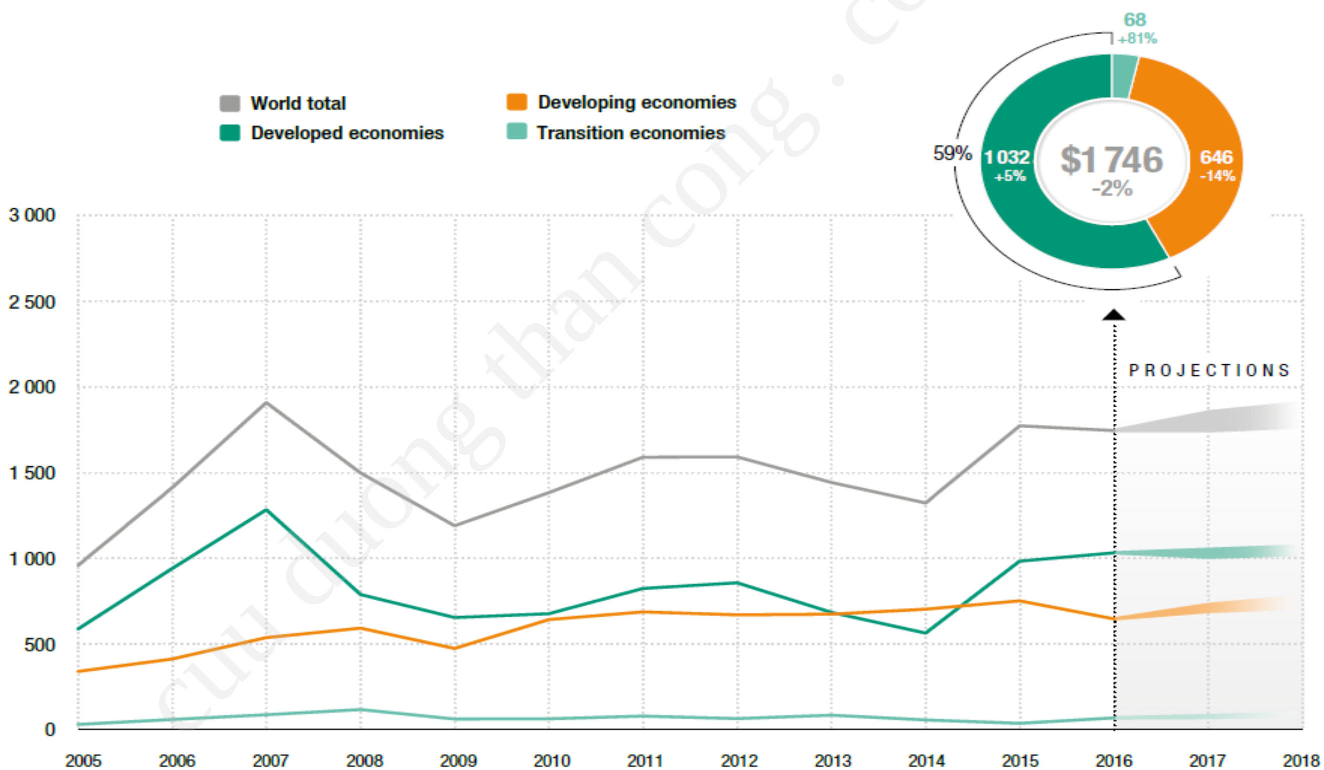
FDI motives

1.3.2. Foreign Direct Investment

Modes of entry

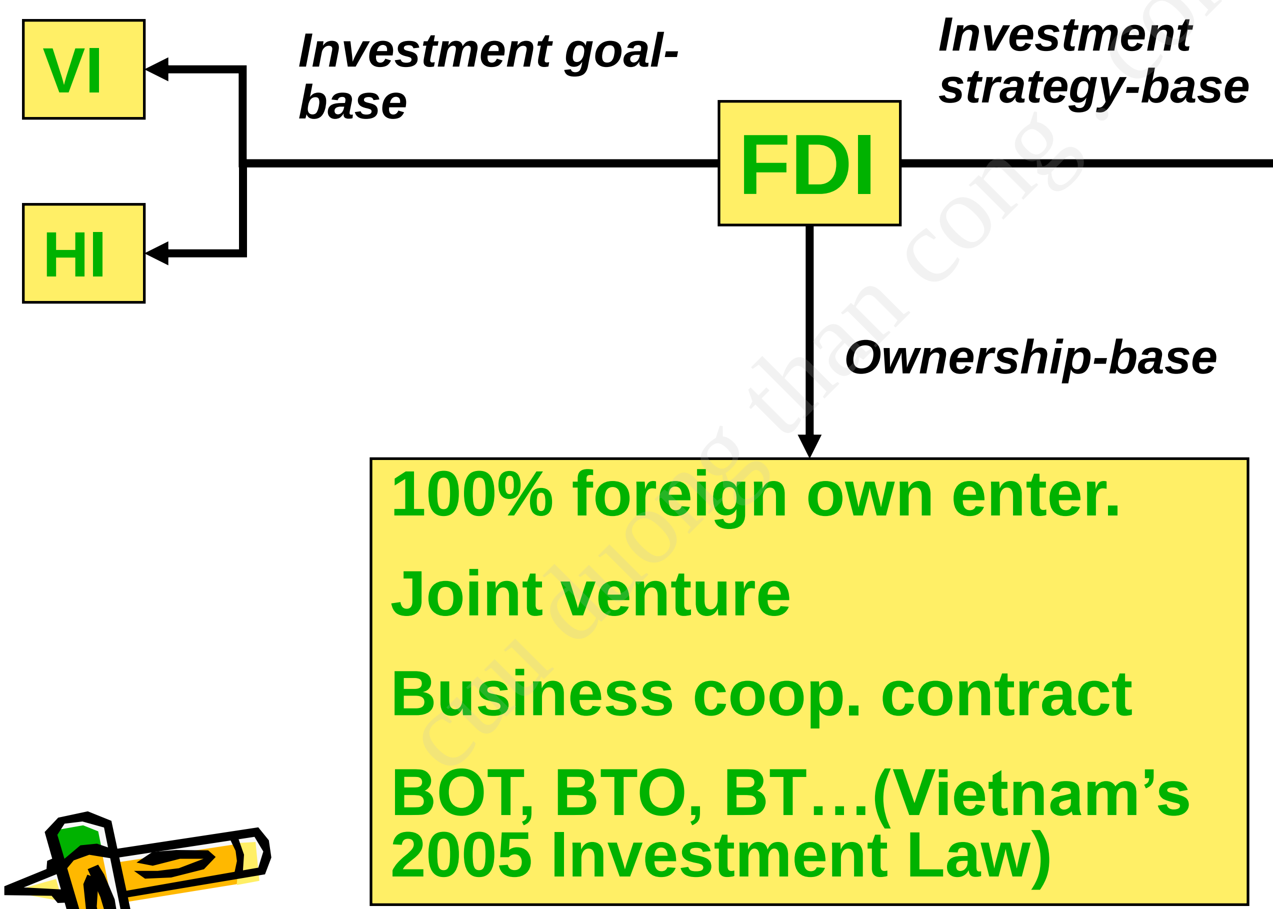
- Purchase (acquisition) of /merger with existing assets (Cross-border M&A)
  - Quick entry, local market know-how, local financing may be possible, eliminate competitor, buying problems
- New investment (Greenfield Investment – GI)
  - No local entity exists or is available for sale, local financial incentives may encourage, no inherited problems, long lead time to generation of sales or other desired outcome
- Participation in an international joint-venture
  - Shared ownership with local and/or other non-local partner

FDI inflow: Global and by group of economies, 2005-2016, and projection, 2017-2018 (Billions of US$)



Source: World Investment Report 2017, p. 2.

FORMs OF FDI


VI
HI
Investment goal-base
FDI
Investment strategy-base
GI
M&A
Ownership-base
100% foreign own enter.
Joint venture
Business coop. contract
BOT, BTO, BT…(Vietnam's 2005 Investment Law)

1.3.2. Foreign Direct Investment

Forms of FDI classified by goal

- Horizontal integration FDI
- Vertical integration FDI

1.3.2. Foreign Direct Investment

Horizontal Direct Investment

- ***Horizontal FDI*** consists of MNE's investments that duplicate facilities and operation in several countries.
- FDI in the same industry abroad as company operates at home.

→ *Relates to international production*

Horizontal Direct Investment

- HI’s goals: to avoid tariff barriers, reduce production cost, gain market share, prolong product-life cycle.

Process A Canada

Process A US

Process A Mexico

HDI, When and Why?

- Transportation too costly?
- Most cited: Market Imperfections (Internalization Theory)
  - Impediments to the free flow of products between nations.
  - Impediments to the sale of know-how.
- Follow the lead of a competitor - strategic rivalry.
- Product Life Cycle - however, does not explain when it's profitable to invest abroad.
- Location specific advantages (natural resources).

Vertical Investment (VI)

VI's goals: to production specialization on international scale; each production stage to be carried out in certain destinations/countries with the highest comparative advantage.

Stage A
Canada

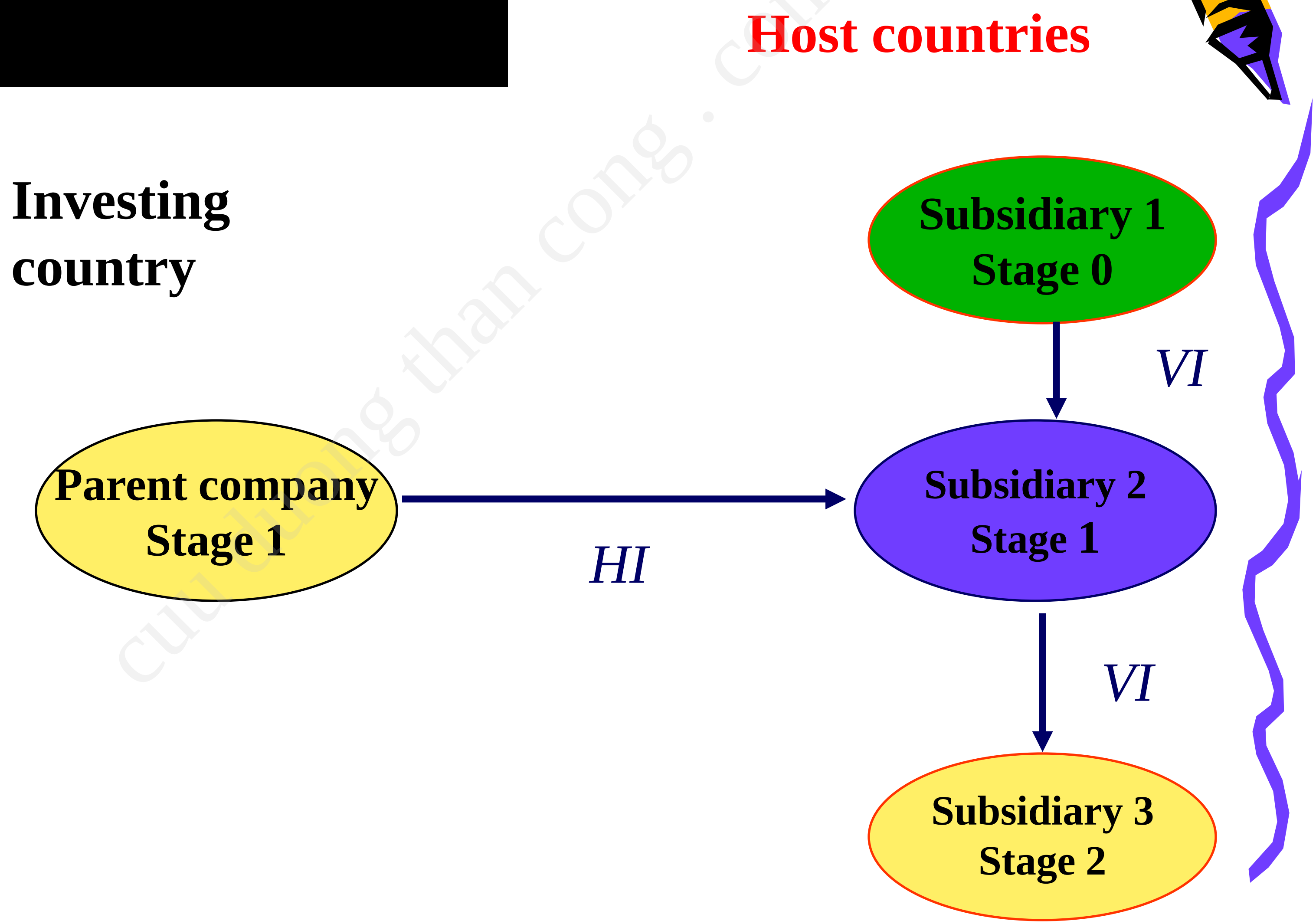
Stage B
US

Stage C
Mexico

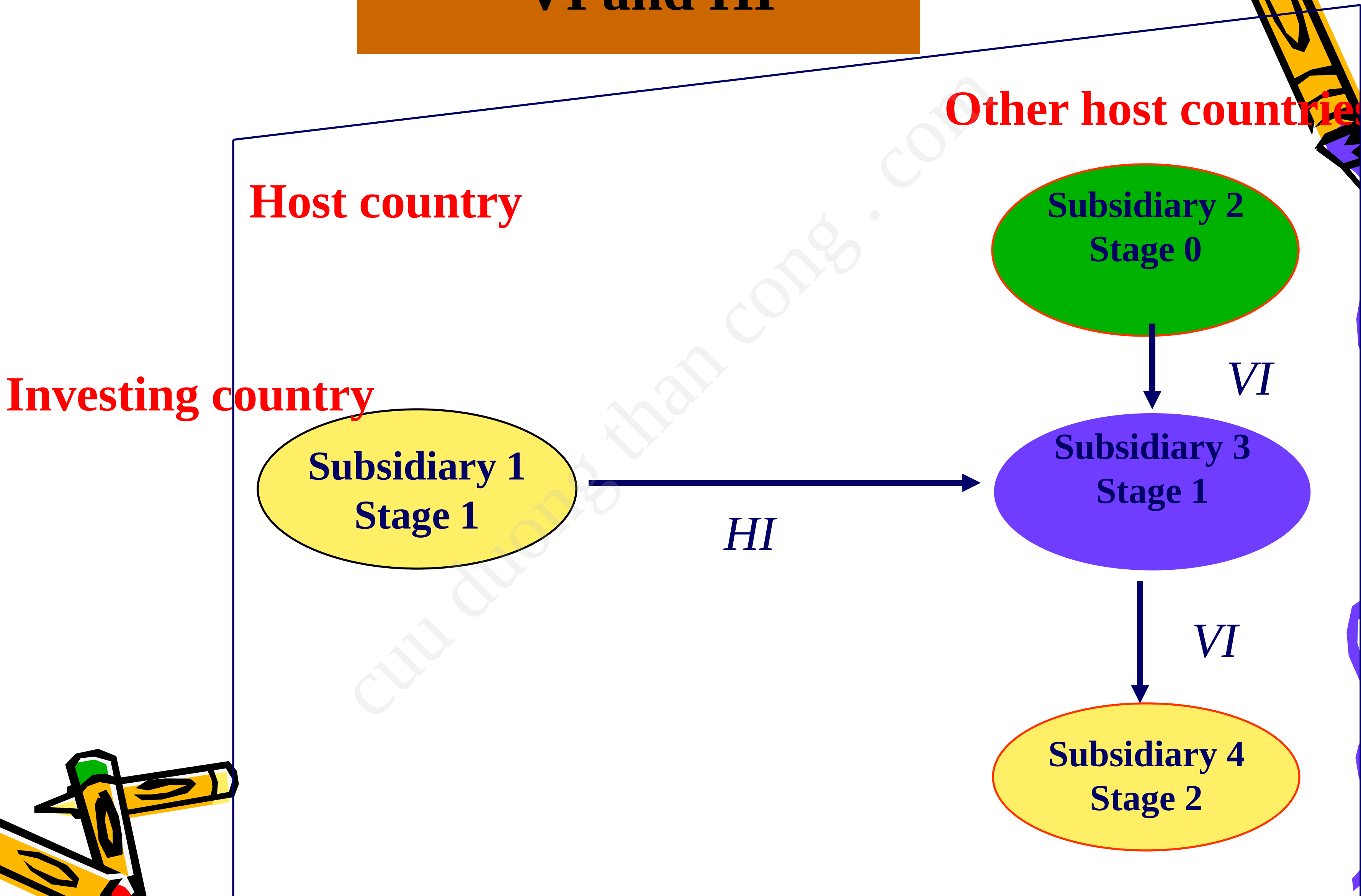
Vertical Direct Investment

- Vertical FDI implies that an MNE owns facilities that fit into different stages of the supply chain.
  - ***Backward*** - investments in industry that provides inputs for the firm's domestic production (typically extractive industries).
  - ***Forward*** - investment in an industry that utilizes the outputs from a firm's domestic production (typically sales and distribution).
- *=> Vertical FDI relates to supply chains and deepens International specialization of production*

HI and VI


Host countries
Investing country
Subsidiary 1
Stage 0
VI
Parent company
Stage 1
HI
Subsidiary 2
Stage 1
VI
Subsidiary 3
Stage 2

VI and HI



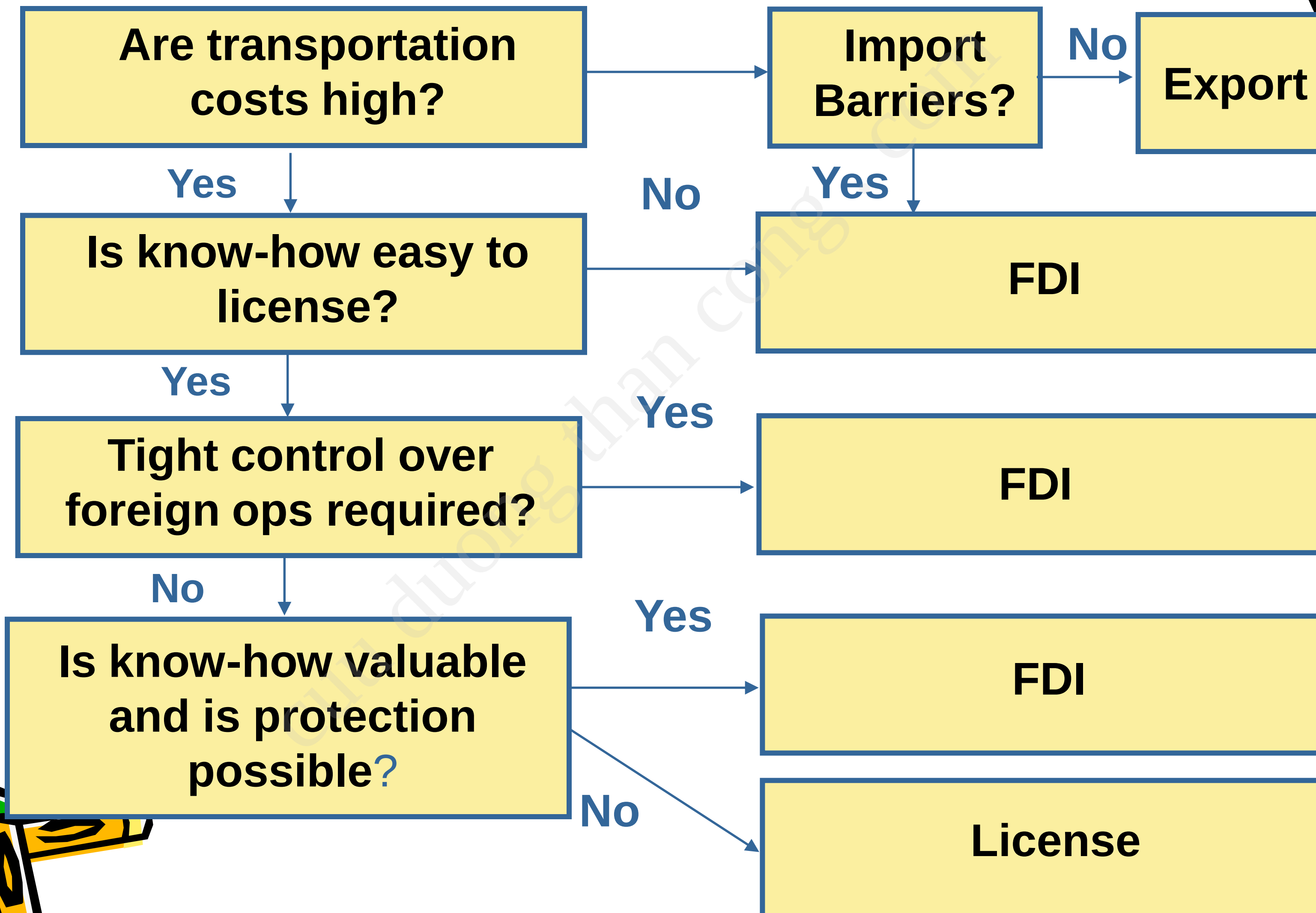
Other host countries
Host country
Investing country
Subsidiary 2
Stage 0
VI
Subsidiary 1
Stage 1
HI
Subsidiary 3
Stage 1
VI
Subsidiary 4
Stage 2

VDI, When and Why?

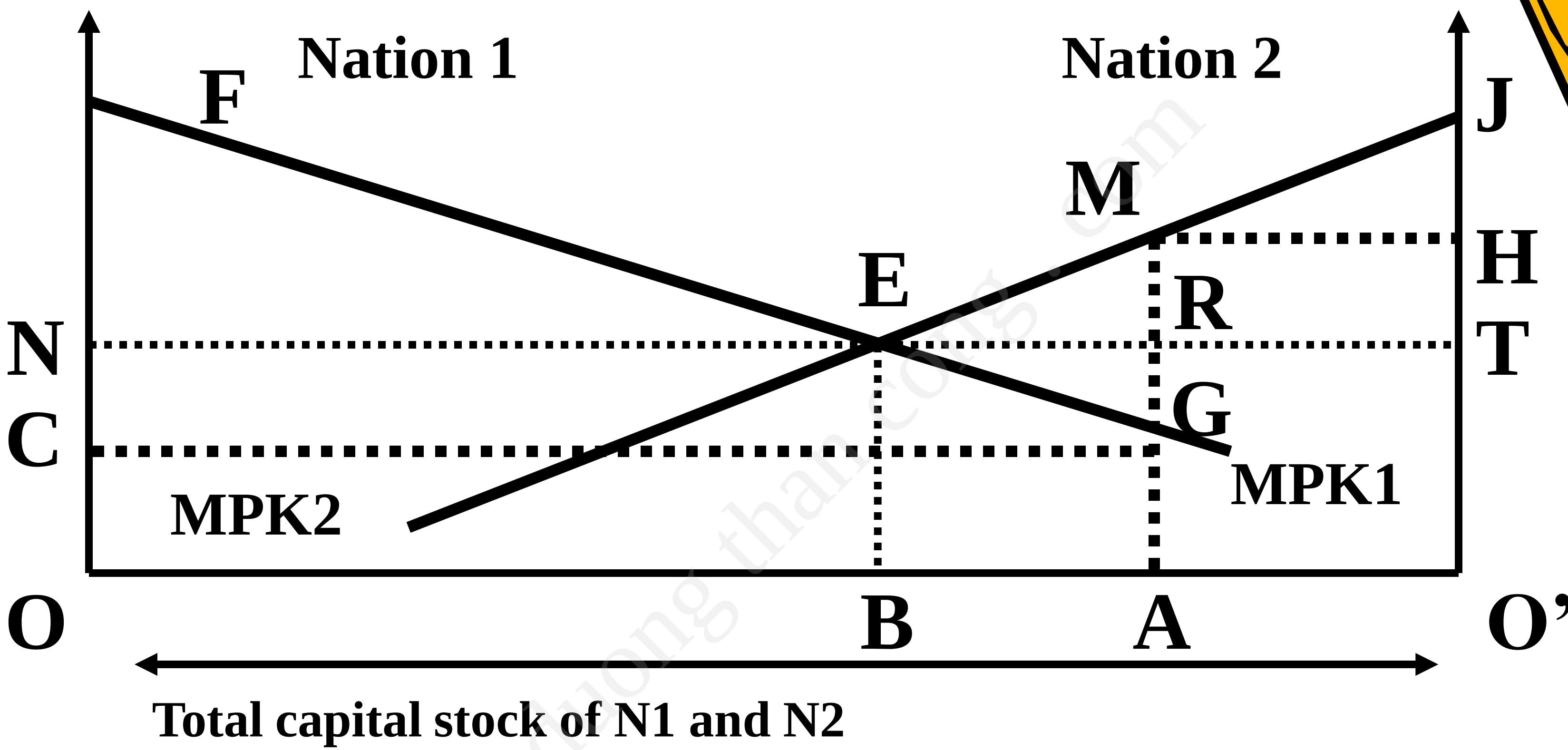
- Market power?
  - create entry barriers.
  - erode entry barriers.
- Market imperfections
  - Impediments to the sale of know-how.
  - Investments in specialized assets.

1.3.2. Foreign Direct Investment

Decision Framework for FDI



Welfare effects of International Capital Flows



Of the total capital stock of OO', N1 holds OA and its total output is OFGA, while N2 holds O'A and its total output is O'JMA. The flow of capital from N1 to N2 equilizes the return on capital in two nations at BE. This increases world output by EGM, of which EGR accrues to N1 and ERM to N2. Of the increase in total domestic product of ABEM in N2, ABER goes to foreign investors leaving ERM as the net gain in domestic income in N2.

Assumptions of H-O Theory

- 2x2x2 model
- Same technology
- X is L-intensive and Y is K-intensive
- Constant returns to scale
- Incomplete specialization
- Equal tastes
- Perfect competition
- Internal factor mobility
- No transportation costs
- All resources are fully employed
- Exports equal imports.

1.3.3. *Welfare effect of international capital flow (ICF)*

Before capital movement

Nation I

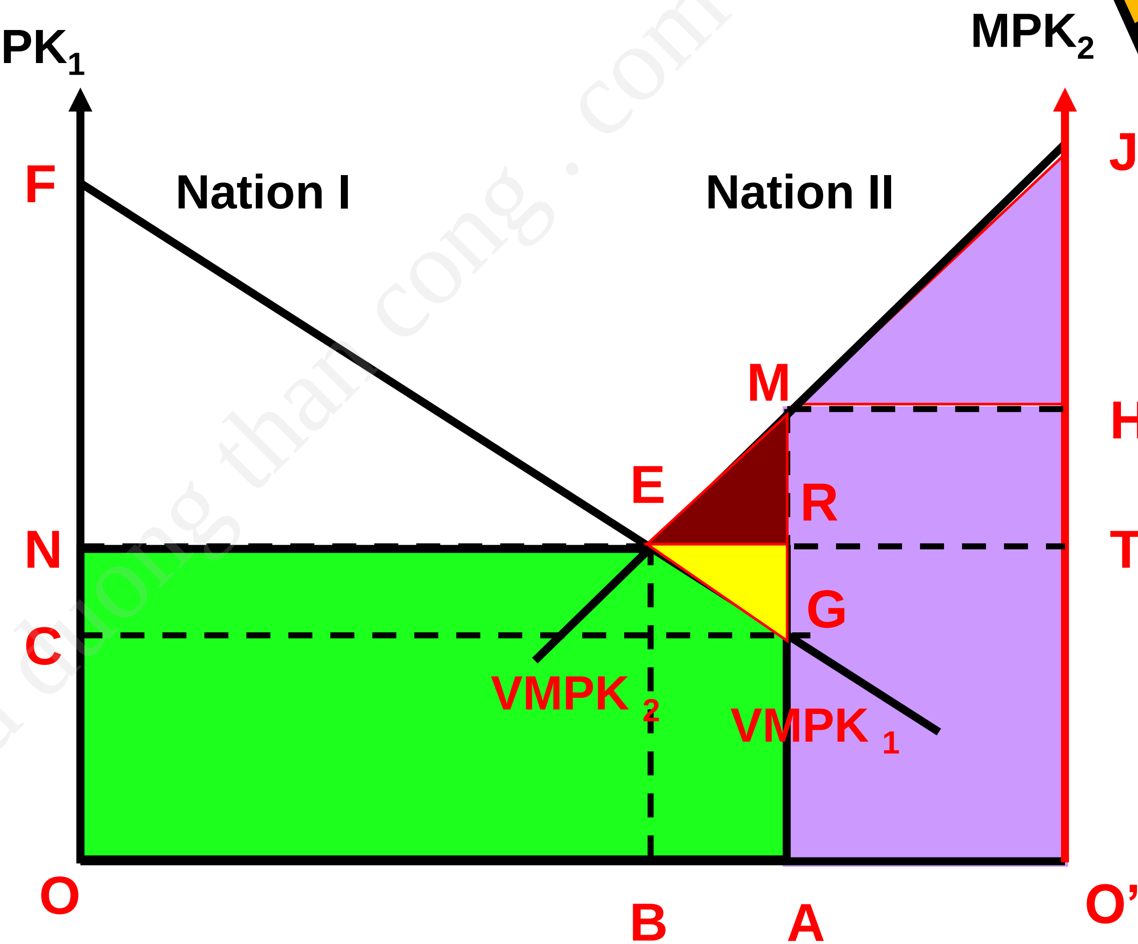
-Total cap stock: OA

- Yield on capital: OC
- Total product: OFGA
  - Capital owners: OCGA
  - Other owners: CFG

Nation II

-Total cap stock : O'A

- Yield on capital: O'H
- Total product: O'JMA
  - Capital owners: O'HMA
  - Other owners: HJM

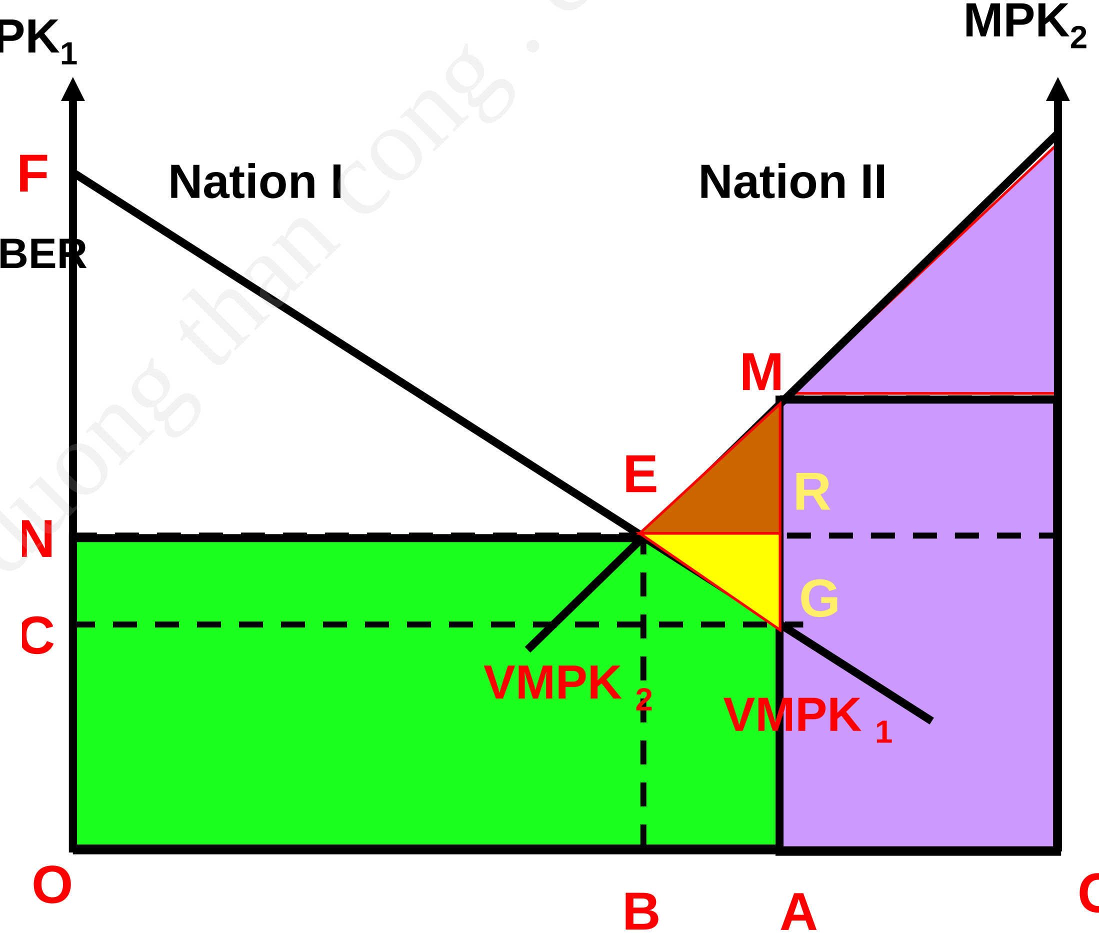


O'H > OC ➔ trabsfer of AB of capital is transferred from Nation I to Nation 2 equalizes return on capital in two nations at BE (ON=O'T).

1.3.3.1. Welfare effects of ICF on Investing Nation (N1- home country)

When the capital movement occurs

- Total capital stock: OA
  - -AB is investing abroad
- Int rate: ON
- Total output: OFERA
  - domestic output: OFEB
  - Return on investment: ABER



Total product before and after ICF

- Increase in total product: ERG
  - Gain of cap owners: CNRG
  - Loss of others: CNEG

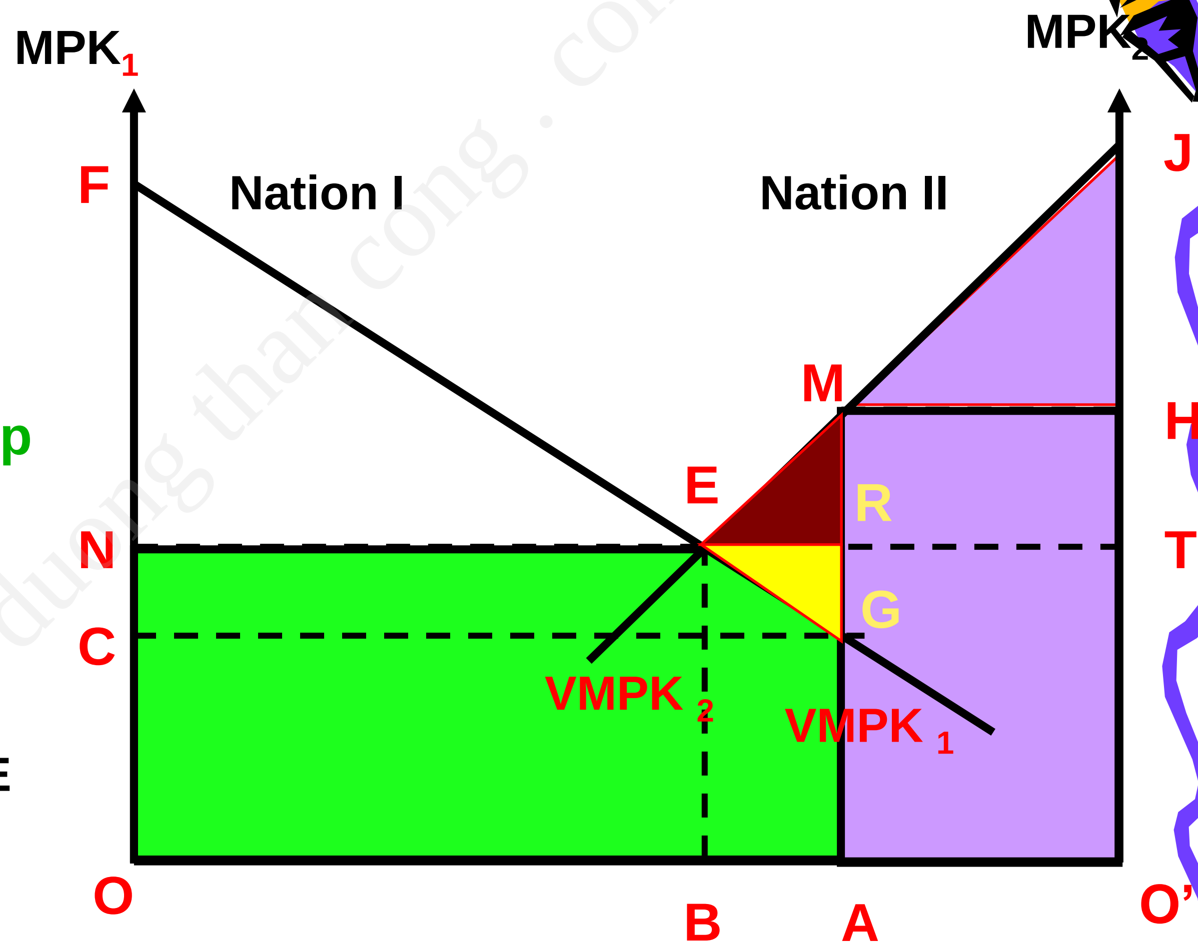
1.3.3.2. Welfare effects of ICF on receiving Nation (N2- Host nation)

With the cap mov

-Total capital stock : O'B

AB is investment from Nation I

- Yield on capital: O'T
- Total product: O'JEB
    - repartriation to NI: ABER
    - Remaining: O'JERA



Compare with before cap mov

- Increase in output: ERM
    - loss of cap owners: THMR
    - Gain of others: THME

➔ *World's output increase by EGM*

Discusion

- Other effects of international capital movement?

1.3.3.3.Other effects on home and host countries

- Redistribution of domestic income from labor to capital owners.
- Affecting the balance of payments of the investing and host country
- Affecting the terms of trade by influencing the output and the volume of trade of both relating parties.
- Affecting tax collection in home and host countries because of different tax rates .
- Affecting the investing country's technological lead and the host country's control over its economy and ability to conduct its own independent economic policy.

2. Multinational Corporations

- **Mutinational Corporations** (MNCs) or transnational corporations (TNCs) are firms that own, control or manage production facilities in several countries.
- *John Dunning & Sarianna (2008, p.3):* MNC/TNC is an enterprise that engages in FDI and owns or in some way , controls value-added activities in more than one country.
- Business analysists distinguish between MNC and TNC as that: MNC is enterprise that governs a group of largely independent multi-domestic foreign subsidiaries, each of which produces goods and services mainly for the local market, while TNC is an enterprise that treat their affiliates as an important part of a regionally or globally coordinated network of asset-creating and asset-exploiting activities.

(John Dunning & Sarianna, 2008, p.3)

Concerns about shifting production abroad

- corporations in wealthier countries are shutting down their higher cost domestic manufacturing operations and sending them overseas to developing countries ….. result in a switch by corporations from domestic production toward a greater reliance on imports, and to cause higher unemployment domestically
- foreign entities may be taking control of resources that are critical to a nation's identity or even security. Fears about foreign control can be particularly serious in developing countries, although even wealthy. *(Ex. In the 1980s, many Americans became worried about foreign investment into the United States. The sale of prominent American landmarks such as Rockefeller Center in New York City to a group of Japanese investors made many Americans believe that they were losing ownership of their own economy).*

World's 500 top TNCs by Country, 2012

Rank	No. of count.	Country	No. of TNCs	Rank	No. of count.	Country	No. of TNCs
1	1	U.S.	132	**10**	1	Canada	11
2	1	China	73	**11**	2	Australia; Italy	9
3	1	Japan	68	**12**	3	Brazil; India; Spain	8
4	1	France	32	**13**	1	Russia	7
5	1	Germany	32	**14**	1	Taiwan	6
6	1	Britain	26	**15**	2	Belgium; Sweden	4
7	1	Switzerland	15	**16**	1	Mexico	3
8	1	South Korea	13	**17**	3	Ireland; Luxemburg; Singapore	2
9	1	Netherlands	12	**18**	14	Austria; Britain; Netherlands; Colombia; Denmark; Finaland; Hungary; Malaysia; Norway; Poland; Saudi Arabia; Thailand; Turkey; United Arab Emirates; Venezuela	1
		Total			***37 countries***		***500 TNCs***

Source: http://money.cnn.com/magazines/fortune/global500/2012/countries/Australia.html

World's top 10 TNCs, 2012

Rank ▼	Company	Revenues ($ millions)	Profits ($ millions)
1	Royal Dutch Shell	484,489	30,918
2	Exxon Mobil	452,926	41,060
3	Wal-Mart Stores	446,950	15,699
4	BP	386,463	25,700
5	Sinopec Group	375,214	9,453
6	China National Petroleum	352,338	16,317
7	State Grid	259,142	5,678
8	Chevron	245,621	26,895
9	ConocoPhillips	237,272	12,436
10	Toyota Motor	235,364	3,591

Source: http://money.cnn.com/magazines/fortune/global500/2012/countries/.html

2. Multinational Corporations MNCs

2.1. Reasons for Existence of MNCs

2.2.Problems in Home Country

Example of MNC’s effect on home’s tax base and tax revenue (Salvatore, 2007, p. 432)

	Home country	Host country	Total (%)
Corporate profit tax rate (%)	50	40	
Before tax risk- adjusted	16	20	
In case the MNC earns 20% profit abroad			
Taxed abroad (%)		8	
Repatriated profit 12%; tax rate at Home is (50%-40%)	1.2		
MNC's Total paid tax (%)			**9.2**
MNC's Total profit after			**10.8**
In case the MNC earns 16% profit at home			
Taxed at 50%	**8**		**8**
MNC's Total profit after			**8**

2.4.Theory of Multinational Corporations (OLI paradigm)

- Why are multinational corporations created?, and why do they can undertake direct foreign investment?
- We rephrase these questions into those dealing with
  1. **Location**: why is a good produced in two countries rather than in one country and then exported to the second country?
  2. **Ownership**: Conditions based on which the firm can successfully compete with local firms.
  3. **Internalization**: why is production in different locations done by one firm rather that by separate firms?

Theory of Multinational Corporations

- **Location** of production is often determined by
  - the location abundant in necessary factors of production:
    - mining occurs where minerals are;
    - labor intensive production occurs where relatively large pools of labor live.
  - transportation costs and other barriers to trade.
  - **Ownership**: Some firms have a firm specific capital known as knowledge capital: Human capital (managers), patents, technologies, brand, re putation

Theory of Multinational Corporations (cont.)

- **Internalization** occurs because it is more profitable to conduct transactions and production within a single organization than in separate organizations. Reasons for this include:

1. *Technology transfers*: transfer of knowledge or another form of technology may be easier within a single organization than through a market transaction between separate organizations.
    - Patent or property rights may be weak or non-existent.
    - Knowledge may not be easily packaged and sold.

Theory of Multinational Corporations (cont.)

2. *Vertical integration* involves consolidation of different stages of a production process.
   - Vertical integration would involve consolidation of one firm that produces a good which is used as an input for another firm.
   - This may be more efficient than having production operated by separate firms.
   - For example, farms and flour mills consolidate into one organization to make flour may be more efficient than farms and flour mills owned by separate organizations.

Motives for International Labor Migration

- Migration takes place for: Economic Reasons and non-economic Reasons.
- Economics Reasons: prospect of earning higher real wages and income abroad.
- Non-economic Reasons: greater educational and job opportunities for children.
- Costs:
  - Expenditures for transportation and the loss of wages;
  - Other less quantifiable cost:
    - Separation from relatives, friends, and familiar surroundings;
    - Need to learn new customs and often a new language;
    - Risks involved in finding a job, housing, and so on in a new land.
- Benefits:
  - Higher real wages and income can ear abroad
  - Greater educational and job opportunities for the migrants' children

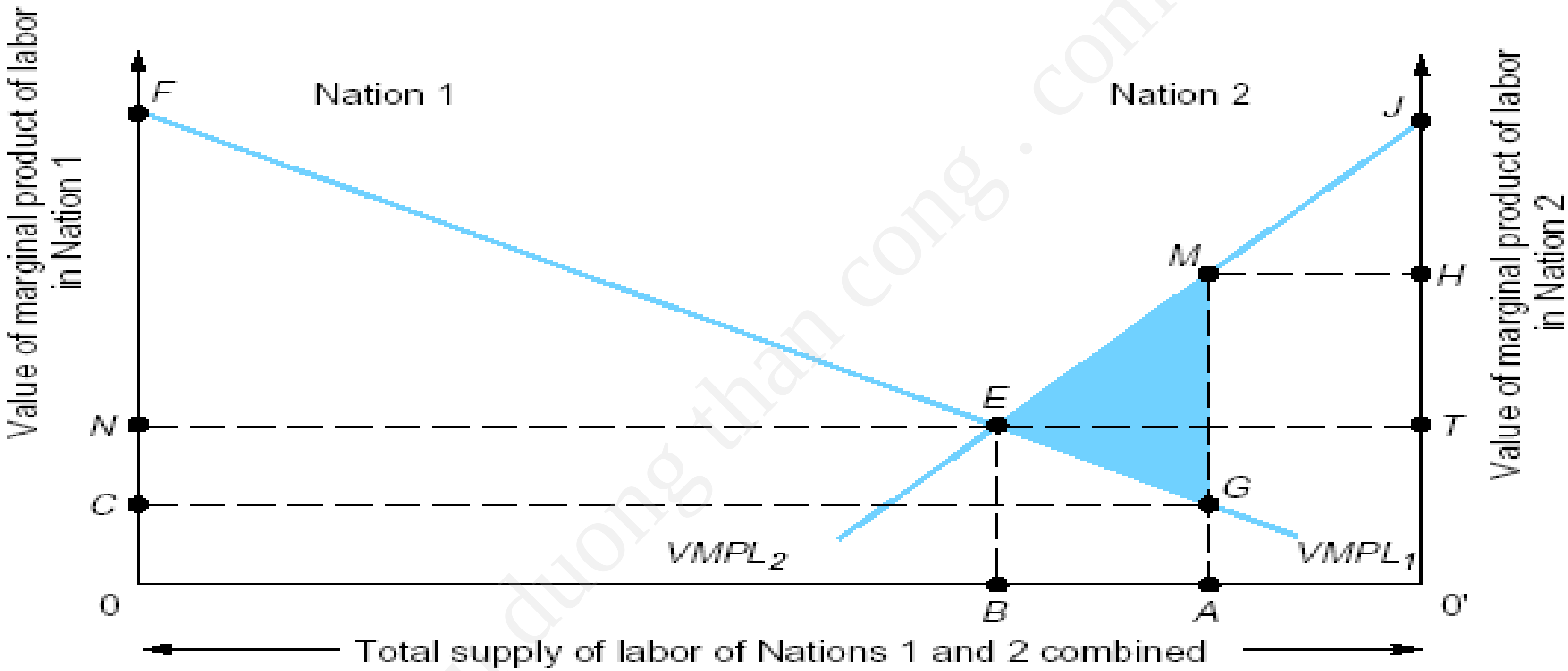
International Labor Mobility (cont.)

- If the domestic country is the labor abundant country and the foreign country is the land abundant country,
  - the marginal product of domestic workers is less and therefore they earn less than those in the foreign country, if technology is the same across countries.
- There is an incentive for domestic workers to move to the foreign country.

International Labor Mobility (cont.)

- Workers in the domestic country have an incentive to move to the foreign country until the real wages between the countries are equal.
  - Emigration from the domestic country raises the real wage of the remaining workers there.
  - It increases the quantity of labor and decreases the real wage in the foreign country.

Welfare Effects of International Labor Migration



Total output and welfare effect of international Labor Migration.
N1 with a supply of labor of OA, and N2 with a supply of labor of O'A; N1 has a real wage rate of OC and total output of OFGA; N2 has a real wage rate of O'H and total output of O'JMA. The migration of AB of labor from N1 to N2 equalizes real wage rate in the two countries at EB .

Welfare effects of Int. Labor Migration

Assumption of the model: all labor are unskilled

In reality: 2 forms

➔ migration of unskilled labor

➔ migration of skilled labor (specialists)

Migration of unskilled labor

For labor importing countries:

1) Countries with small population but abundant in natural resources.

   Ex: Middle Eastern countries: lack of labor in construction industry, services, …

2) Developed countries: shift in economic structure => move of industries (unskilled) labor intensive abroad (FDI). Increase demand on labor in construction industry, services, in some countries => labor in agriculture

3) In NIEs, Malaysia,… the large demand for unskilled labor

Migration of unskilled labor

Unskilled labor of importing countries:

- **Unskilled labor in dev. countries: high wage => tendency to hire foreign labor to decrease the cost**
- **Labor in these countries have the tendency to avoid certain jobs (3 D: Dangerous, Dirty, Difficult)**

  In Japan 3-K: Kiken (nguy hiểm), Kitanai (môi trường làm việc không sạch sẽ), Kitsui (điều kiện lao động khắc nghiệt như nóng nảy, ngột ngạt)

Migration of unskilled labor

For labor exporting countries:

1. Less developed countries (developing countries)

2. The largest labor exporting countries (by quantity and by the ratio of labor – emigrant to total population): Lebanon, El Salvador, Columbia, Pakistan and the Philippines.

(For the Philippines: this country has 8 mill. labor – emigrants accounting for about 10 % of total population. Remittance flows is estimated to have grown by 7.8 per cent annually to reach US21.3 billion in 2010, accounting for 8.9 per cent of the country's GDP)

Migration of unskilled labor

- **3/ Most of labor exporting countries haven't succeeded in strategies of economic development.**

- **4/ In many labor exporting countries the issues concerning labor export were not included in the general strategy of economic development (Ex: labor training; effectiveness of using remittances; technological transfer, … and plan to cease export of labor in the future…**
  - **Malaysia exception?**
    - **20 years ago, Malaysia actively sent labor to advanced countries to take vocational training short course => to work with higher productivity at home => to contribute to a success in implementation of general development strategy**

Migration of unskilled labor

•1/ Unskilled labor exported to dev. countries and NIEs: difficult working environment; labor rights easily violated (labor export has to be organized carefully with commitments of the enterprises using labor and supervision of local authority)

• 2/ Unskilled labor often with low educational and cultural level => difficult to adapt with local social and cultural conditions => disappointed; broke the laws; be heavily exploited…

Migration of skilled labor - Export of specialists

- ➔ For exporting country
- ➔ For receiving country (country of destination)

For country of origin

- **The danger of losing of skilled and professional labor, of whom the countries are already scarce, and the loss of investment on education and training**
  - Temporary migration: Country lose skilled labor but they get the experience and can apply it when they return home
  - The danger of “brain drain”, and its negative effects on the development

Issue: Effectiveness of using labor in the country of origin

"Brain drain"

"Brain drain": Highly skilled workers move to work abroad in order to gain higher income, to compensate educational cost paid by themselves or by their government

- From 1961- to 1983, 700.000 highly skilled labor from developing countries moved to USA, Canada and England ➔ many countries lose high skilled labor at a high ratio.
- Sub-Saharan Africa lose 30% highly skilled labor from 1960 to 1987, mainly to EC
- About 20-40% university graduates in Central American and Careabben chose to work abroad

“Brain drain”

- “Brain drain” caused a substantial damage though difficult to calcualte
  - Center of study of US Congress estimated: in 1971-1972, developing country invested 20,000 USD for each skilled labor migrant
  - “Brain drain” may occur in some countries as skilled labor supply is more than labor market demand
    - In Somali, it is estimated that the graduates were 5 times over demand
    - in 1985, 40% graduates in main cities of Côte d’Ivoire were unemployed
    - In 1988 1,350 South Korean with Ph.D degree working in the US

For receiving country

- **Economic effects of migration is difficult to estimate (many factors: time, profession, type of labor…**
- **Issue: welfare effects of specialization and negative impacts from concentration into one certain factor of production?**
  - **EX: whether migration of typist from country X into the US encourages US citizen working as typists to seek another better job in other fields?**
  - **Whether immigrants as major suppliers of the typists lead to the decrease of wage and to overuse of other services related to this work?**
- **From the view point of the local workers, foreign immigrants are substitutes or complements?**

Discusion

- Other effects of int labor movement?

Discussion

- In what sense are international flows of production resources a substitute for international commodity trade?
- What is meant by portfolio investment? What are the basic motives for international portfolio investment?
- What is FDI? What are the reasons for FDI?
- What are the effects of FDI on the investing and host nations?
- What are the motives for the existence of MNC?
- What are the effects of MNCs on the investing and host nations?
- What are the reasons for labour migration?
- How about Vietnam's labor export?

Thank You!