Chinese Economy and International Exposure

Lecture 2 China's International Trade

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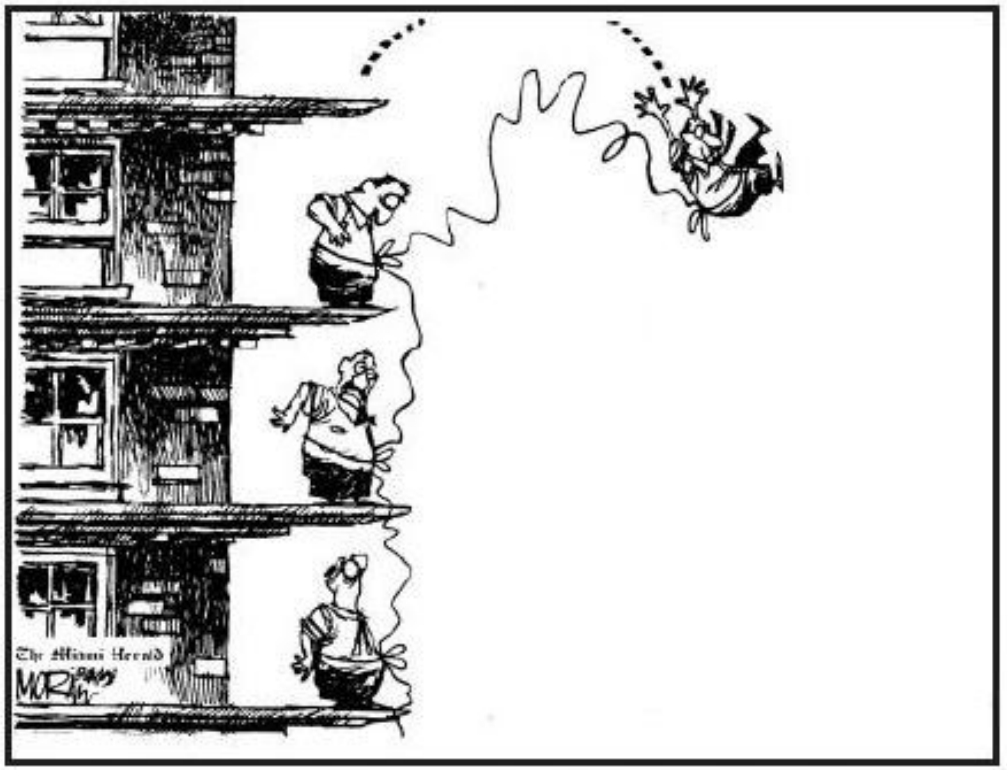
Unpacking Globalisation

Time and space compression

Interdependence



- **Globalization 1.0 – 1492~1800**
  - Christopher Columbus (1492)
  - Led by national-states, powered by wind

- **Globalization 2.0 – 1800~2000**
  - Led by Multinational companies, powered by steam engines

- **Globalization 3.0 – 2000~**
  - Led by individuals, powered by internet

"The world is flat" **(Friedman, 2005)**

Three Eras of Globalisation

	Size of the World	Drivers & Features
Globalisation 1.0 (1492-1800)	**Size L – Size M**	Power driven Globalisation States and governments led Globalisation
Globalisation 2.0 (1800-2000)	**Size M – Size S**	Multinational companies driven Globalisation motivated by falling: 1) transportation costs 2) telecommunication costs
Globalisation 3.0 (2000-...)	**Size S – Size XS**	Individuals driven Globalisation (empowered by ICT) Increasingly non-Western Speed and breadth

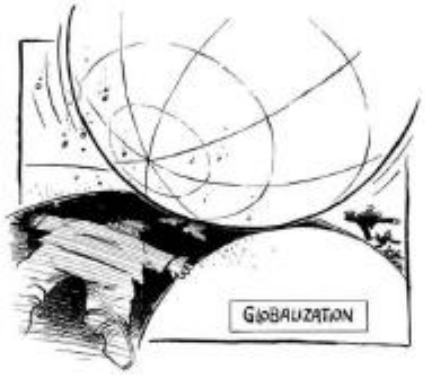
In the "Flat World" Era…

- **Economic power shift: From developed countries to Emerging economies**
  - Production power
  - Financial power
  - Innovation power
- **Increasing uncertainty & risks: from static to high velocity**
- **Fragmentation: physical separation of different parts of a production process**
- **MNCs: Vertical integration to vertical disaggregation**
  - Vertical integration (do it alone, focus on everything)
  - Vertical disaggregation (specialization and fragmentation)

Various views on globalisation

Globalization is meant to signify integration and unity – yet it has proved to be extremely polarizing

Globalists



Anti-globalists

Transformationalists

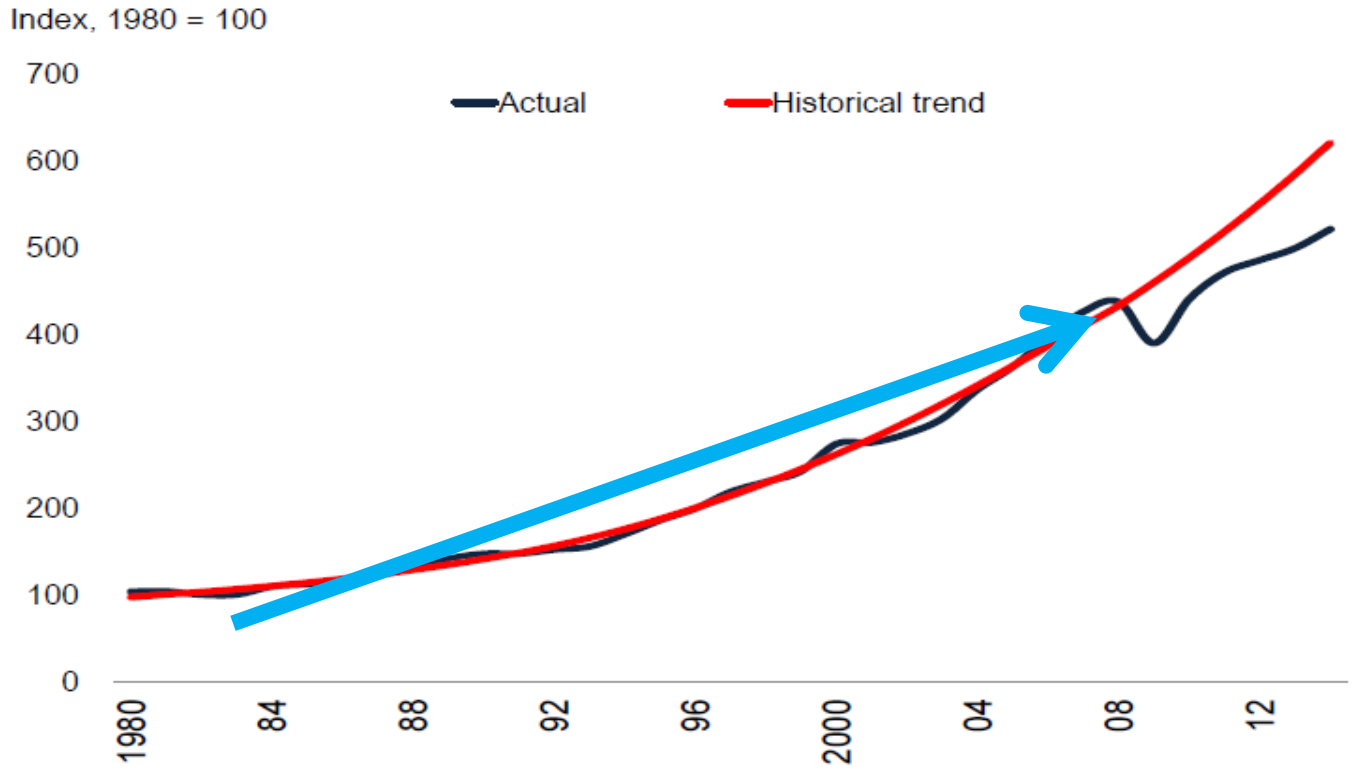
Post-globalists

Two most important economic activities in the era of globalization

- International trade
- Foreign direct investment

International trade

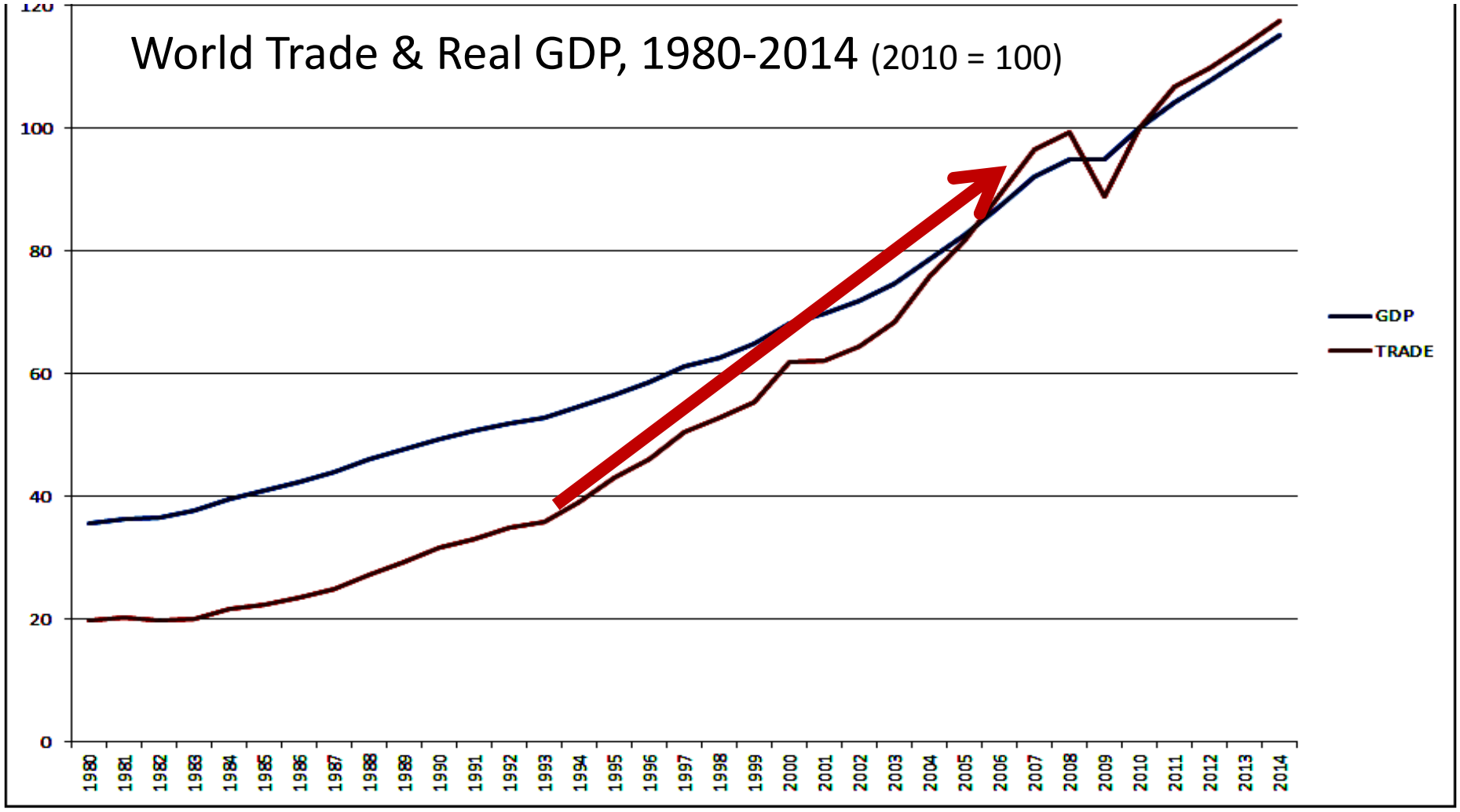
Growth in trade was rapid during most of the post-war period.



Source: World Bank.
Note: World trade refers to total world imports. The historical trend is computed over the 1970-2014 period, smoothed using a Hodrick-Prescott filter.

International trade

Trade grew about twice as rapidly as **GDP**.



Why do nations trade?

Question 1

- International trade is far more complex than domestic trade. Why do nations go through the trouble of trading internationally?
  - Economic gains
  - Win-win deal

International trade allows for the acquisition of raw materials and goods at favorable prices.

Question 2&3

- Why are there gains from trade?
  - Resource-based view: Some firms in one nation generate exports that are valuable, unique, and hard to imitate that firms from other nations find it beneficial to import.
- How do nations benefit from such gains?
  - Institution-based view: Different rules governing trade are designed to determine how such gains are shared (or not shared). Institutions can either limit or facilitate trade.

Basic concepts of international trade

International trade:

- Exchange of raw materials and manufactured goods (and services) across national borders

Two directions of international trade:

- Export: To sell abroad
- Import: To buy from abroad

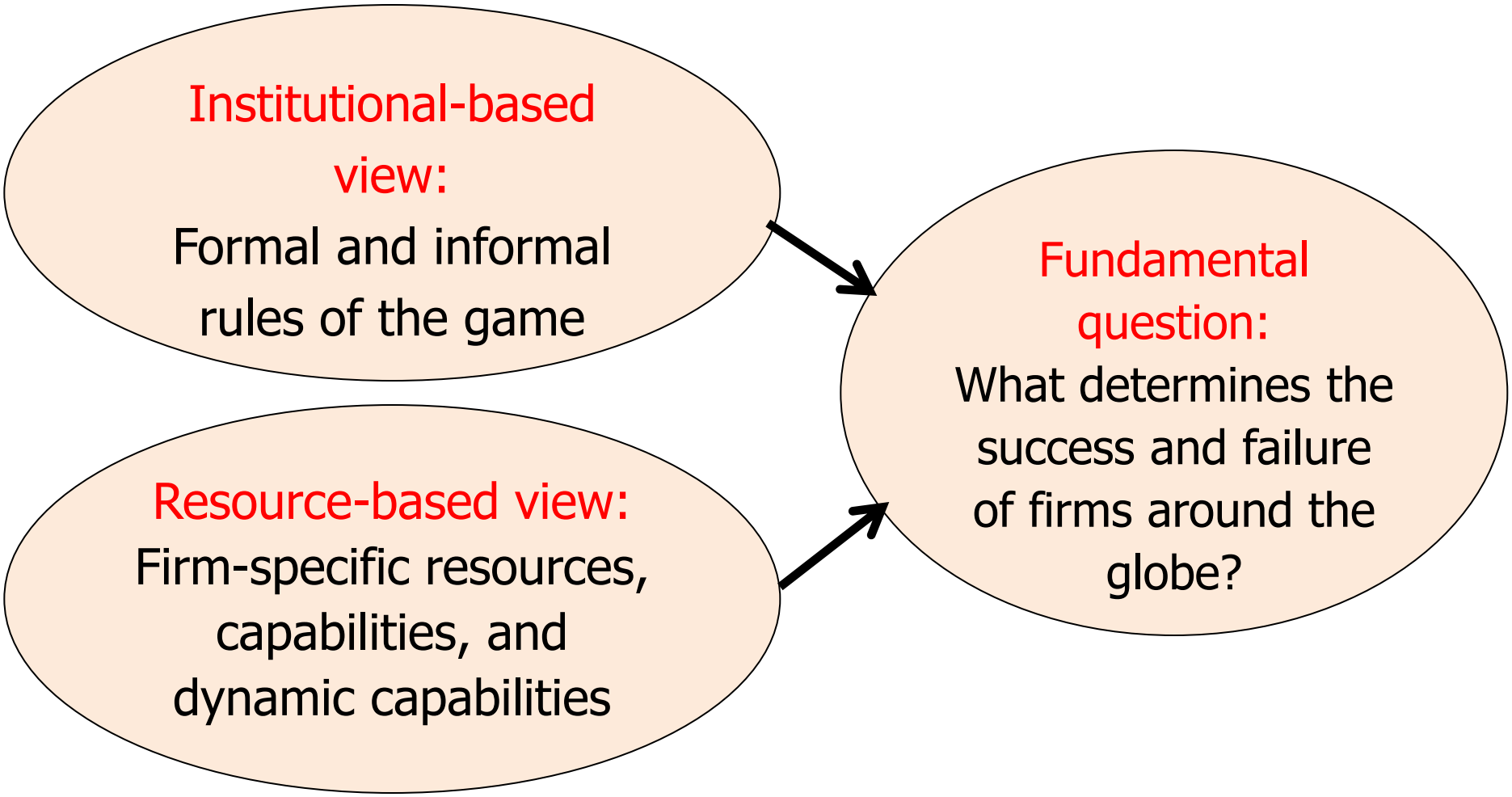
Two components of international trade:

- Merchandise trade: Tangible products being bought and sold
- Service trade: Intangible services being bought and sold

- Trade surplus: An economic condition in which a nation exports more than it imports
- Trade deficit: An economic condition in which a nation imports more than it exports
- Balance of trade: The country level trade surplus or deficit

Framework and theories of international trade

IB Framework



An Institution-Based View

- An institution-based view suggests that the success and failure of firms are enabled and constrained by institutions (external environment).
- Doing business around the globe requires intimate knowledge about both formal and informal rules that govern competition in various countries as an institutional framework (rules of the game).

Degree of formality (North, 1990, 2005)	**Examples**	**Supportive pillars** (Scott, 1995)
Formal institutions	laws	Regulatory (coercive)
	Regulations	
	Rules	
Informal institutions	Norms	Normative
	Cultures	Cognitive
	Ethics	

Three pillars of institutions

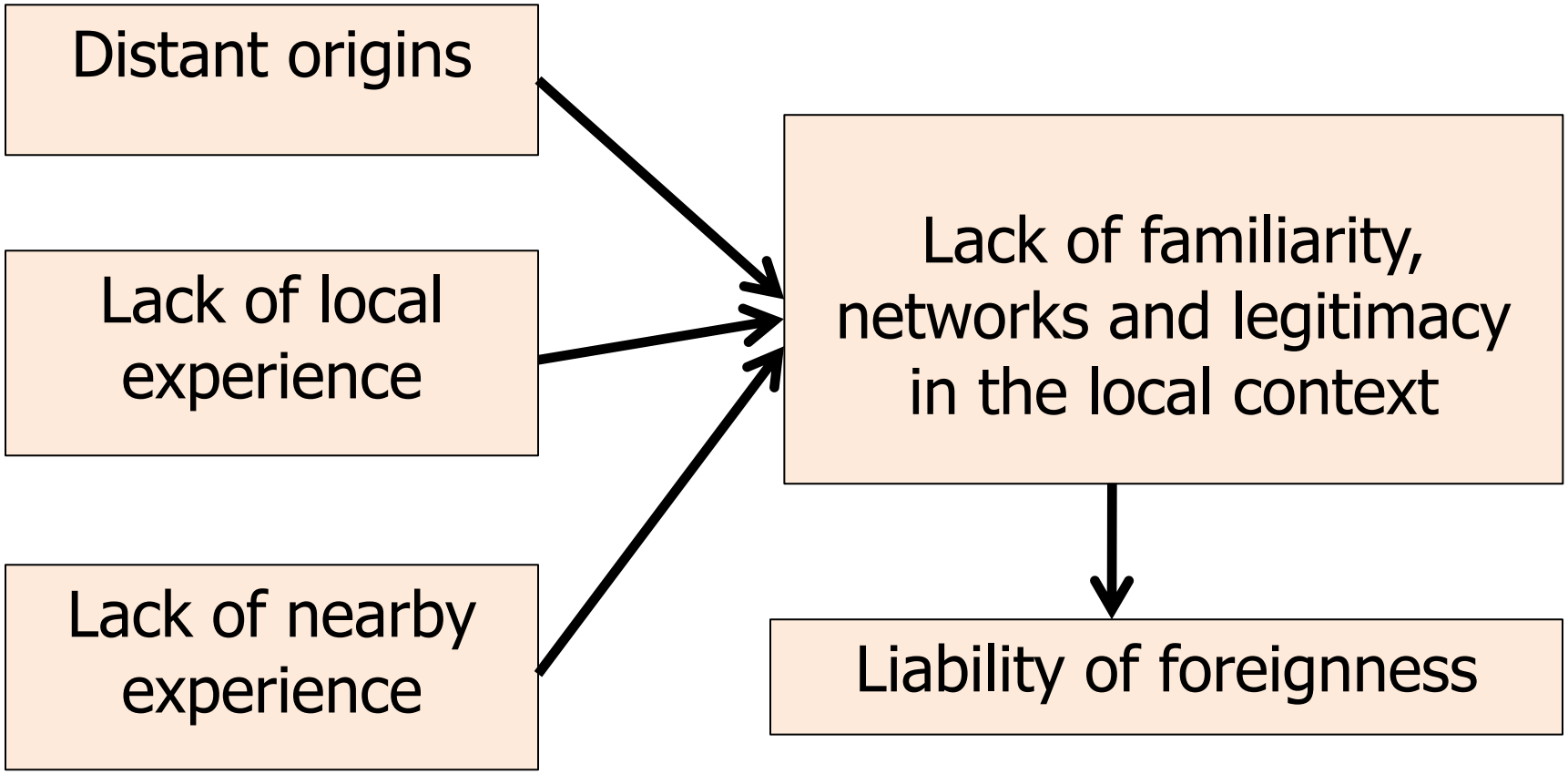
- Regulatory pillar: The coercive power of governments exercised through laws, regulations and rules.
- Normative pillar: The mechanisms through which norms influence individual and firm behavior.
- Cognitive pillar: The internalized, taken-for-granted values and beliefs that guide individual and firm behavior.

An Institution-Based View

- Formal and informal institutional forces stem primarily from
  - Home countries;
  - Host countries;
  - International and regional organizations (e.g. WTO, IMF)

A Resource-Based View

- An resource-based view suggests that the success and failure of firms are determined by a firm's internal resources and capabilities (internal environment).



Theories of International Trade

- Theories of international trade provide one of the oldest, richest, and most influential bodies of economic literature.
- Classical trade theories:
  - explain national economy conditions - country advantages - that enable such exchange to happen
- New trade theories:
  - explain links among natural country advantages, government action, and industry characteristics that enable such exchange to happen
- Implications for International Business

Classical Trade Theories

- Mercantilism (pre-18th century)
  - Takes an us-versus-them view of trade
  - Other country's gain is our country's loss
- Free Trade theories
  - Absolute Advantage (Adam Smith, 1776)
  - Comparative Advantage (David Ricardo, 1817)
  - Specialization of production and free flow of goods benefit all trading partners' economies
- Free Trade refined
  - Factor endowment theory (Heckscher-Ohlin, 1919)
  - Leontief paradox (Leontief, 1953)

New Trade Theories

- International product life cycle (Ray Vernon, 1966)
- Strategic trade theory
- National Competitive Advantage (Porter, 1990)

Mercantilism

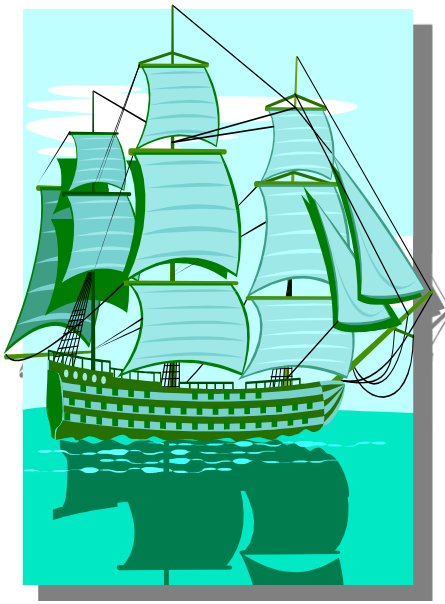
- Prevailed in 1500 - 1800
- A nation's wealth depends on accumulated treasure
- Gold and silver are the currency of trade.
- International trade is "Zero-sum game"
  - The wealth of the world is fixed and a nation that exports more than it imports would enjoy net inflows and become richer
- A nation should have a trade surplus.
  - Maximize exports through subsidies.
  - Minimize imports through tariffs

David Hume - 1752

- Increased exports leads to inflation and higher prices.
- Increased imports lead to lower prices.
- Result: Country A sells less because of high prices and Country B sells more because of lower prices.
- In the long run, no one can keep a trade surplus.

Mercantilism

- The oldest theory in international trade;
- Direct intellectual ancestor of modern-day protectionism
  - Governments should actively protect domestic industries from imports and vigorously promote exports
- Flaw: “Zero-sum game”.



Theory of Absolute Advantage

- Adam Smith: *Wealth of Nations (*1776).
- A country
  - Has absolute advantage when it produce more of a product with the same amount of input than another country
  - Should Produce only goods where they are most efficient, trade for those where you are not efficient.
  - Trade between countries is, therefore, beneficial.
- In the aggregate, the “invisible hand ” of the free market should determine the scale and scope of economic activities. Mercantilist policies reduce the wealth of a nation in the long run, by trying to be self-sufficient and to inefficiently produce a wide range of goods.

Theory of Absolute Advantage

- Smith's greatest insights:
  - By specializing in the production of goods for which each has an absolute advantage, both can produce more;
  - Both can benefit more by trading.
  - Trade between countries is, therefore, beneficial.
  - International trade is not a zero-sum game as mercantilism suggests. Instead, it's a win-win game.

Theory of Absolute Advantage and the Gains from Trade

Resources Required to Produce 1 Ton of Cocoa and Rice

	Cocoa	Rice
Brazil	10	20
China	40	10

Production and Consumption without Trade

Brazil	10.0	5.0
China	2.5	10.0
Total production	12.5	15.0

Production with Specialization

Brazil	20	0
China	0	20
Total production	20	20

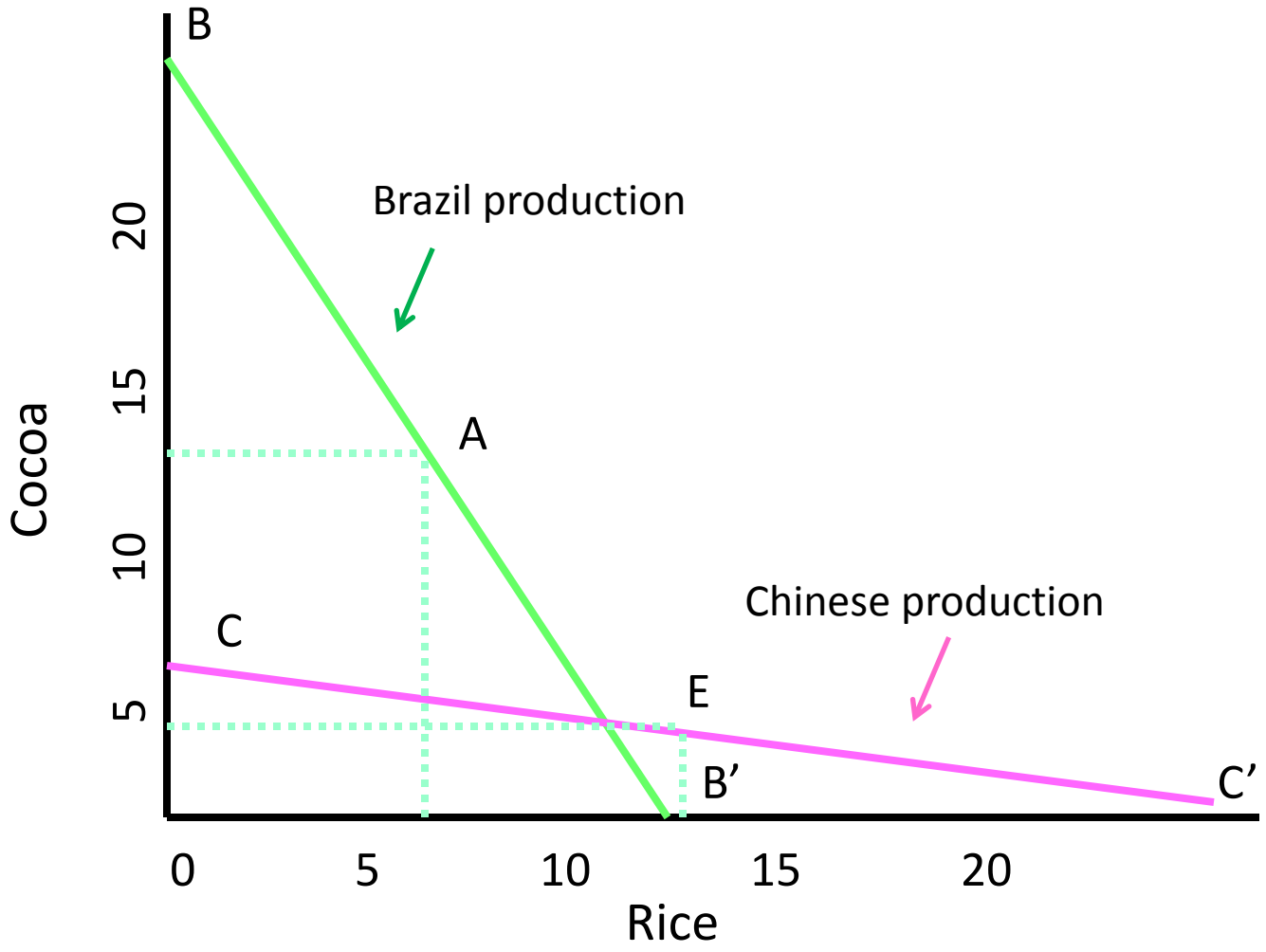
Consumption after Brazil Trades 6T of Cocoa for 6T Chinese Rice

Brazil	14.0	6.0
China	6.0	14.0

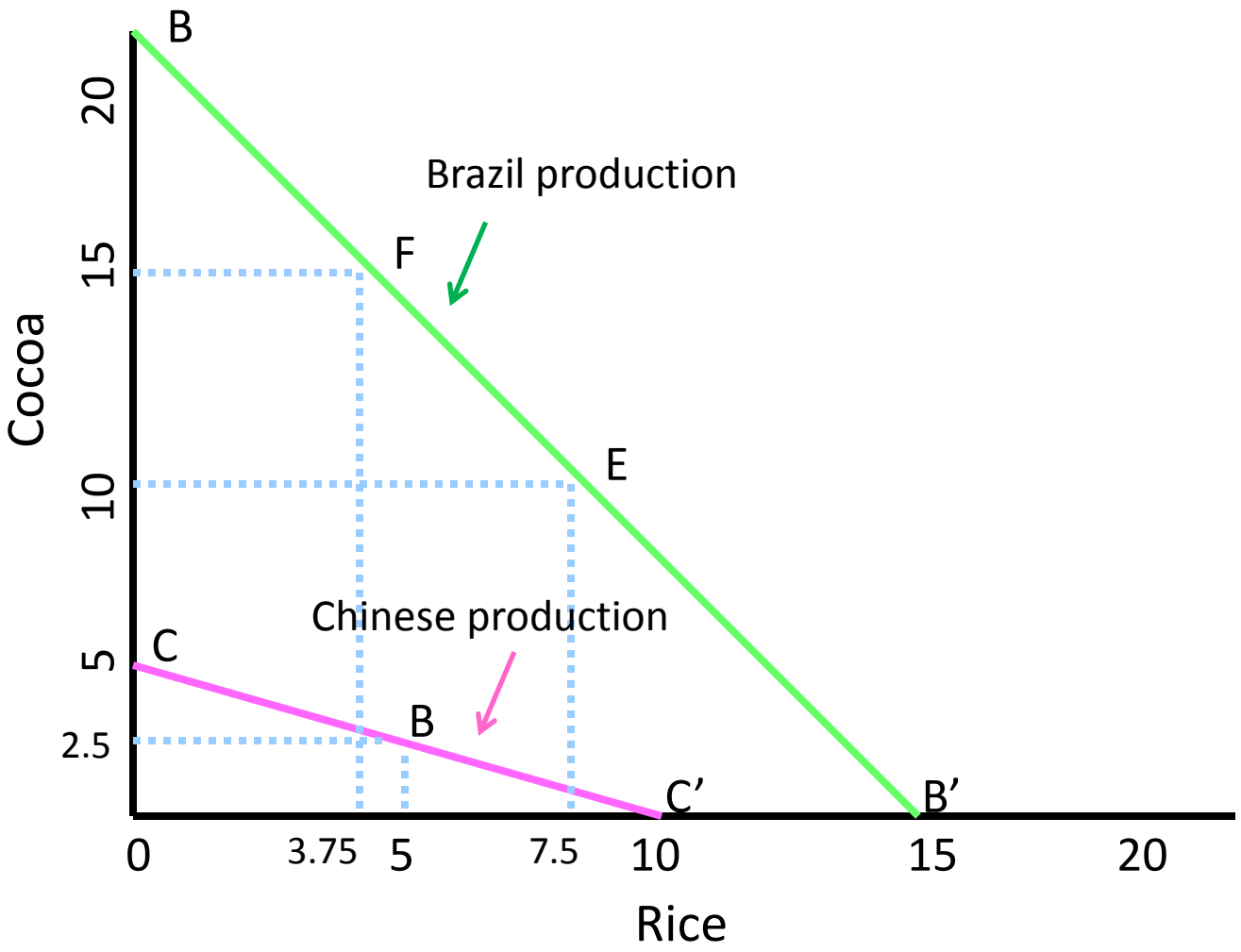
Increase in Consumption as a Result of Specialization and Trade

Brazil	4.0	1.0
China	3.5	4.0

Theory of Absolute Advantage



The Theory of Comparative Advantage



Comparative Advantage and the Gains from Trade

Resources Required to Produce 1 Ton of Cocoa and Rice

	Cocoa	Rice
Brazil	10	13.33
China	40	20

Production and Consumption without Trade

Brazil	10.0	7.5
China	2.5	5.0
Total production	12.5	12.5

Production with Specialization

Brazil	15	3.75
China	0.0	10.0
Total production	15	13.75

Consumption after Brazil Trades 4T of Cocoa for 4T Chinese Rice

Brazil	11	7.75
China	4	6

Increase in Consumption as a Result of Specialization and Trade

Brazil	1.0	0.25
China	1.5	1.0

Theory of Comparative Advantage

- David Ricardo: *Principles of Political Economy (*1817).
- A country should specialize in the production of those goods in which it is relatively more productive... even if it has absolute advantage in all goods it produces
- Efficiency of resource utilization leads to more productivity.
- Extends free trade argument
- International trade is a "positive-sum game".

Absolute advantage vs. comparative advantage

- Comparative advantage is far more realistic and useful when applied in the real world
  - It's easy to identify an absolute advantage in a highly simplified, two-country world, but how can each country decide what to specialize in when there are over 200 countries in the world?

Absolute advantage vs. comparative advantage

- Where do absolute and comparative advantages come from?
  - Productivity
  - Absolute advantage is a special case of comparative advantage
- What leads to such productivity differences?
  - Factor endowments: the extent to which different countries possess various factors of production such as labor, land, and technology

Factor endowments theory (Heckscher-Ohlin theory)

- Differences in factor endowments not on differences in productivity determine patterns of trade
- Nations will develop comparative advantages based on their locally abundant factors, such as plentiful labor supply in China and innovative commercialization of basic research in the United States.

Eli Filip Heckscher

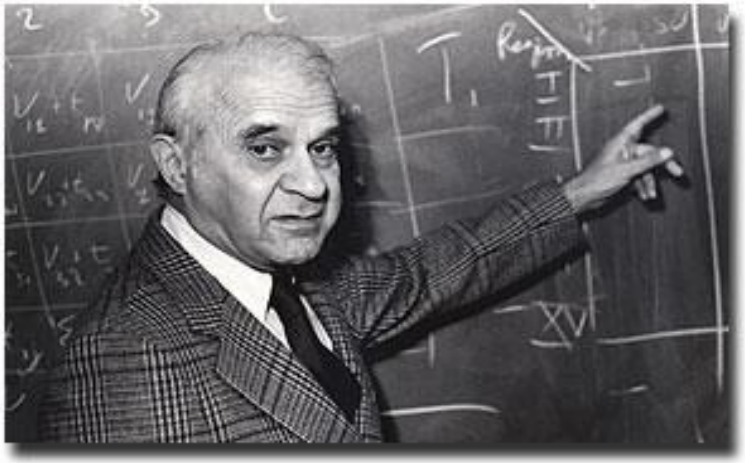
（1879-1952）

Beltil Gotthard Ohlin

（1899-1979）

Leontief paradox

- US has relatively more abundant capital yet imports goods more capital intensive than those it exports
- Explanation(?):
  - US has special advantage on producing new products made with innovative technologies
  - These may be less capital intensive till they reach mass-production state



Leontief（1906-1999）

Classic Theory Conclusion

- Free Trade expands the world "pie" for goods/services

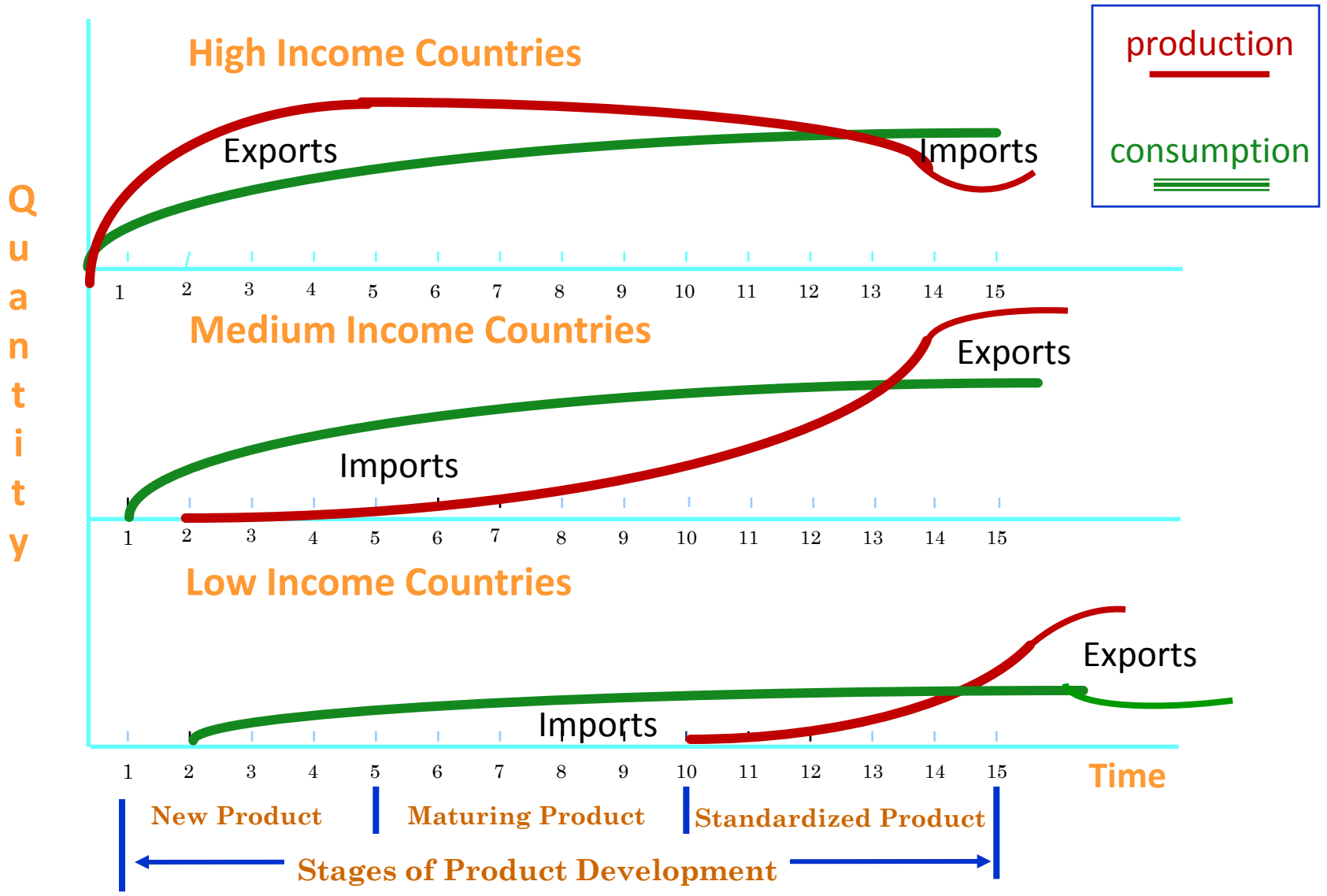
Theory Limitations:

- Static
- Simple world (two countries, two products)
- resources immobile across countries
- no transportation costs: Transportation costs may decline with specialization
- no price differences in resources: Prices in different countries can be (are) effected by exchange rates.
- constant returns to scale
- each country has a fixed stock of resources and no efficiency gains in resource use from trade

Product Life-Cycle Theory

- Raymond Vernon (1966), article in the *Quarterly Journal of Economics.*
- Most new products conceived / produced in the US in 20th century
- As products mature, both location of sales and optimal production changes.
- Affects the direction and flow of imports and exports.
- Globalization and integration of the economy makes this theory less valid.

International Product Trade Cycle Model



Product Life-Cycle Theory

- The first *dynamic* theory to account for changes in the patterns of trade over time.
- Limitations:
  - It assumes that the United States will always be the lead innovation nation for new products. This may be increasingly invalid.
  - It assumes a stage-by-stage migration of production , taking at least several years, if not decades. However, an increasing number of firms now launch new products such as iPods simultaneously around the globe.

Strategic Trade Theory

- Except for mercantilism, none of the above theories say anything about the role of governments.
- Since Adam Smith, government intervention is usually regarded as destroying value and distorting free trade.
- But government intervention is extensive and is not going away.
- Can government intervention add value?

Strategic Trade Theory

- Began to be recognized in the 1970s.
- Strategic intervention by governments in certain industries can enhance their odds for international success.
- What are these industries?
  - Typically, requires industries with high, fixed costs.
  - World demand will support few competitors.
  - Competitors may emerge because “they got there first”.
    - first-mover advantage: advantages that first entrant enjoy and do not share with late entrants

The case of commercial aircraft industry

- Founded in 1915 by William Boeing
- Strengthened by large military orders during World War II
- Largest commercial airplane manufacturer.
- In the jumbo jet segment, first mover advantage associated with 400-seat 747, launched in the late 1960s.

The case of commercial aircraft industry

- Established 1967
- Western Europe buying 25% of aircraft ,but selling only 10%.
- France, Germany, Great Britain and Spain
- In four decades, Airbus has risen from scratch to splitting the global market 50-50 with Boeing.

The case of commercial aircraft industry

- How do European governments help Airbus?
- Segment of super jumbo aircraft, which is larger than Boeing 747.
- The demand in the next 20 years is only about 400-500 aircraft and a firm needs to sell at least 300 just to break even. Only one firm can be supported profitably.

The case of commercial aircraft industry

Panel A Without government subsidy (outcome = Airbus, Boeing)

Airbus \ Boeing	Enter	Don't enter
Enter	**Cell 1** **- $ 5 billion, - $ 5 billion,**	**Cell 2** **$ 20 billion, 0**
Don't enter	Cell 3 0, $ 20 billion,	Cell 4 0,0

Panel B With $ 10 billion subsidy from European governments (outcome = Airbus, Boeing)

Airbus \ Boeing	Enter	Don't enter
Enter	**Cell 1** **$ 5 billion, - $ 5 billion,**	**Cell 2** **$ 30 billion, 0**
Don't enter	Cell 3 0, $ 20 billion,	Cell 4 0,0

Strategic Trade Theory

- Strategic theorists do not advocate a mercantilist policy to promote all industries.
- They propose to help only a few strategically important industries, such as those centered on clean energy like electric cars and batteries.
- Limitations:
  - What if governments are not sophisticated and objective enough to such intervention?
  - Many industries may claim that they are strategically important.

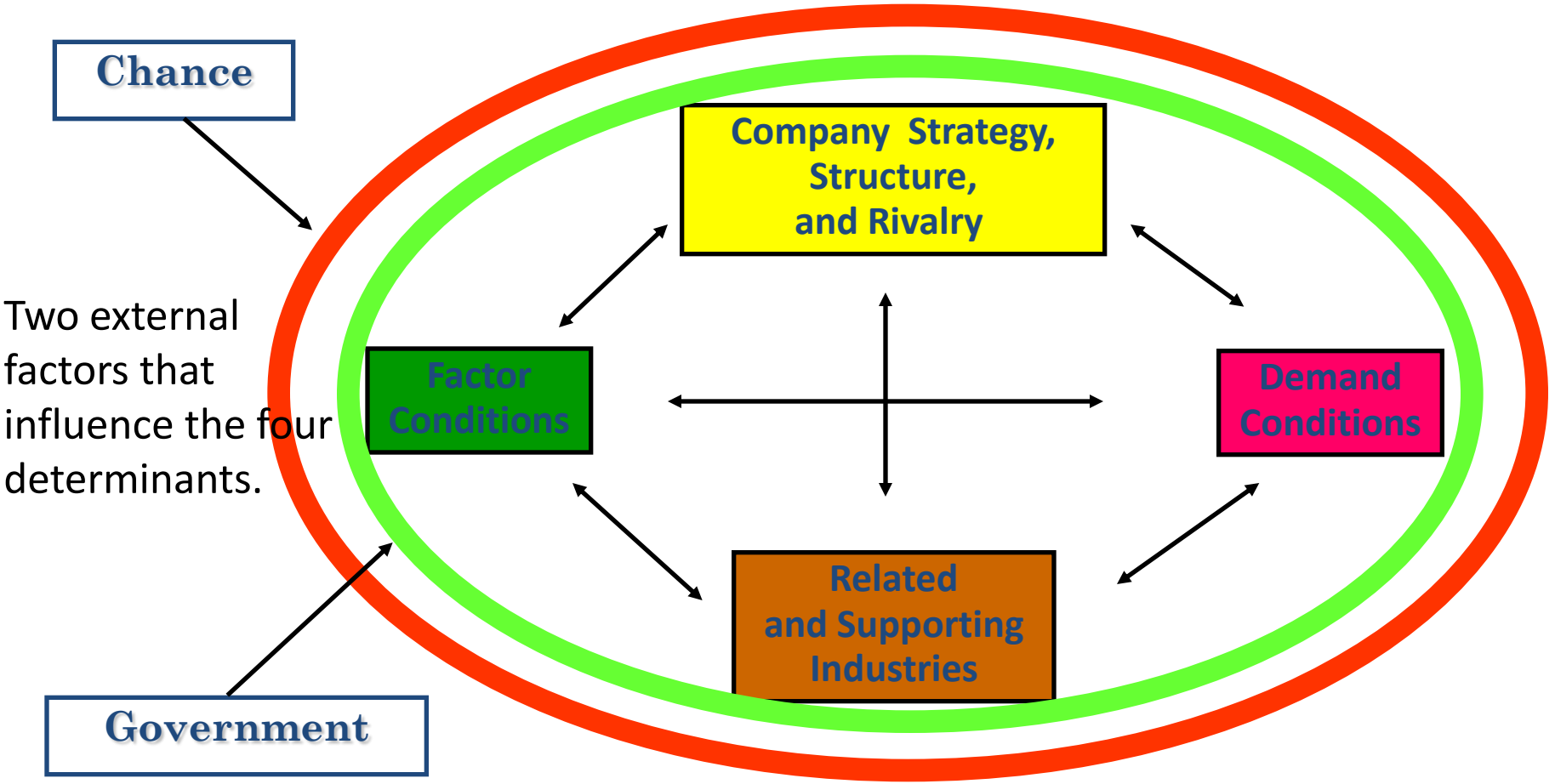
National Competitive Advantage/Diamond theory

- Michael Porter (Harvard Business School, 1990)*The Competitive Advantage of Nations.*
- Looked at 100 industries in 10 nations.
  - Thought existing theories didn't go far enough.
- Question: "Why does a nation achieve international success in a particular industry?"

National Competitive Advantage

- Factor endowments
  - land, labor, capital, workforce, infrastructure (some factors can be created...)
- Demand conditions
  - large, sophisticated domestic consumer base: offers an innovation friendly environment and a testing ground
- Related and supporting industries
  - local suppliers cluster around producers and add to innovation
- Firm strategy, structure, rivalry
  - competition good, national governments can create conditions which facilitate and nurture such conditions

Porter's Diamond
Determinants of National Competitive Advantage



Two external factors that influence the four determinants.

Source: Michael Porter, *The Competitive Advantage of Nations*

National Competitive Advantage

- The first multilevel theory to connect firms, industries and nations.
- Home country may ‘sound’ good, but
  - Company can rely on the host country.
  - Neighboring countries can too.

Implications for Business

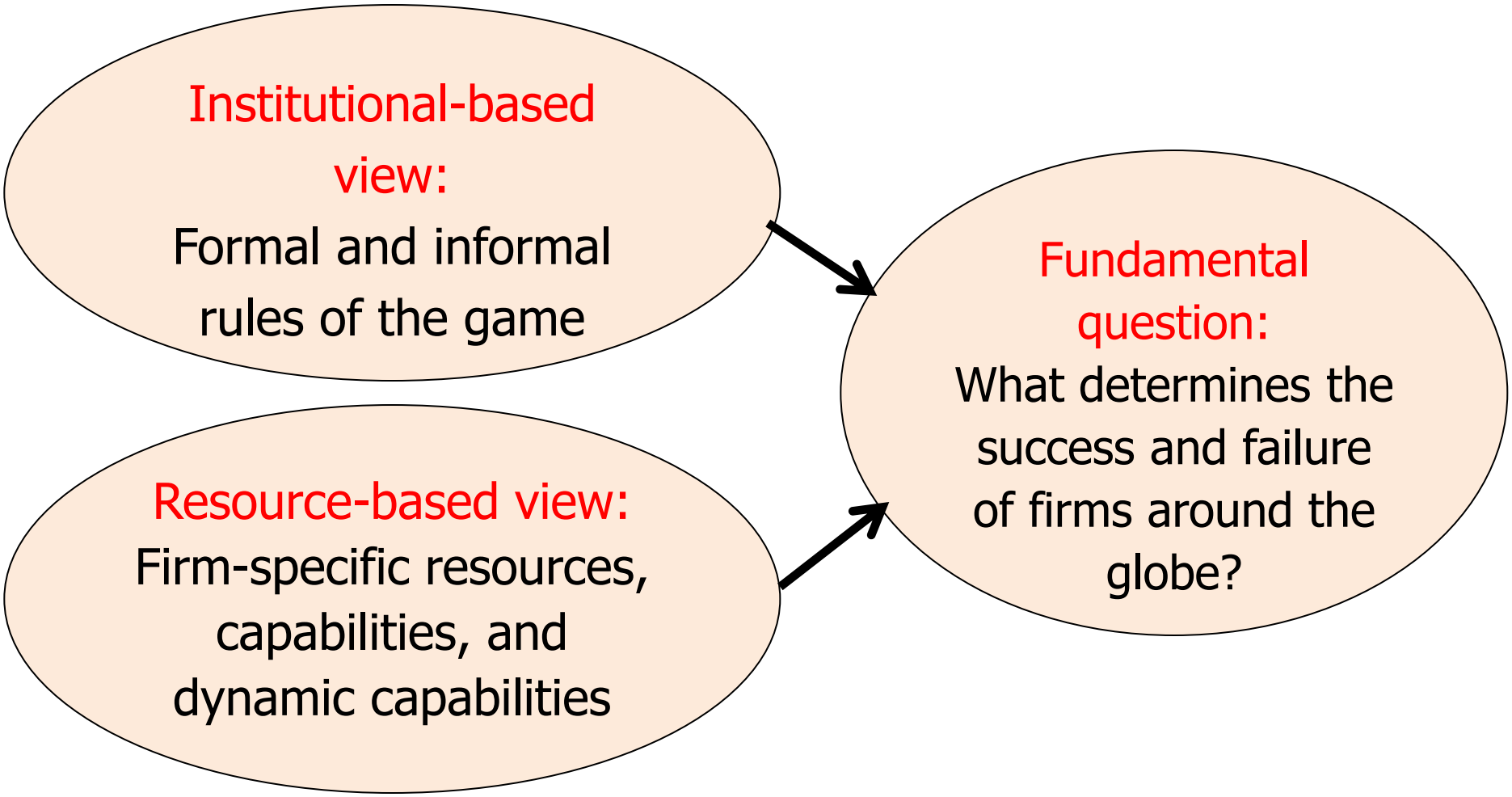
- Location implications: makes sense to disperse production activities to countries where they can be performed most efficiently.
- First-mover implications: It pays to invest substantial financial resources in building a first-mover, or early-mover, advantage.
- Policy implications: promoting free trade is generally in the best interests of the home-country, although not always in the best interests of the firm. Even though, many firms promote open markets.

China’s international trade

Questions

- How does international trade contribute to China's economic growth and prosperity?
- Why are Chinese merchandise so competitive in the world?

By using IB framework



China's case

- Why does the rest of world buy so many made-in-China products?
  - Resource-based view: Chinese exporters deliver value, are rare, and possess hard-to-imitate attributes.
- How do China benefits from such gains?
  - Institution-based view: China's international trade strategy and policy, such as accession to WTO, free trade agreements (FTAs), etc.

China's Free Trade Agreements

17 FTAs, 24 countries/regions

- China-Maldives FTA
- China-Georgia FTA
- China-Australia FTA
- China-Korea FTA
- China-Switzerland FTA
- China-Iceland FTA
- China-Costa Rica FTA
- China-Peru FTA
- China-Singapore FTA
- China-New Zealand FTA
- China-Chile FTA
- China-Pakistan FTA
- China-ASEAN FTA
- Mainland and Hong Kong Closer Economic and Partnership Arrangement
- Mainland and Macau Closer Economic and Partnership Arrangement
- China-ASEAN FTA Upgrade
- China-Chile FTA Upgrade

China's Free Trade Agreements under Negotiation

- Regional Comprehensive Economic Partnership, RCEP
- China-GCC(Gulf Cooperation Council) FTA
- China-Japan-Korea FTA
- China-Sri Lanka FTA
- China-Israel FTA
- China-Norway FTA
- China-Pakistan FTA second phase
- China-Singapore FTA Upgrade
- China-New Zealand FTA Upgrade
- China-Mauritius FTA
- China-Moldova FTA
- China-Panama FTA
- China-Korea FTA second phase
- China-Palestine FTA

China's Free Trade Agreements under Consideration

- China-Colombia FTA Joint Feasibility Study
- China-Fiji FTA Joint Feasibility Study
- China-NePal FTA Joint Feasibility Study
- China-Papua New Guinea FTA Joint Feasibility Study
- China-Canada FTA Joint Feasibility Study
- China-Bengal FTA Joint Feasibility Study
- China-Mongolia FTA Joint Feasibility Study
- China-Peru FTA Upgrade Joint Feasibility Study
- China-Switzerland FTA Upgrade Joint Feasibility Study

Preferential Trade Agreement

- Asia-Pacific Trade Agreement

Reference:

1. China FTA Network

http://fta.mofcom.gov.cn/english/index.shtml

2. World Trade Report 2015, Speeding up trade: Benefits and challenges of the WTO Trade Facilitation Agreement

Made in China 2025

- Announced in 2015
- One of several recently announced projects aiming at increasing the competitiveness of Chinese industries, fostering Chinese brands, boosting innovation, and reducing China's reliance on foreign technology by making China a major global manufacturer of various technologies.

By using international trade theories

- Mercantilism (pre-18th century)
- Absolute Advantage (Adam Smith, 1776)
- Comparative Advantage (David Ricardo, 1817)
- International product life cycle (Ray Vernon, 1966)
- Strategic trade theory
- National Competitive Advantage (Porter, 1990)

Questions

- Why does China's service trade suffer from a huge deficit?

Top 10 exporters of goods	World share
China	11.7%
USA	8.4%
Germany	7.7%
Japan	3.8%
Netherlands	3.6%
France	3.1%
South Korea	3.0%
UK	2.9%
China Hong Kong	2.8%
Russia	2.8%

Top 10 importers of goods	World share
USA	12.3%
China	10.3%
Germany	6.3%
Japan	4.4%
France	3.6%
UK	3.5%
China Hong Kong	3.3%
Netherlands	3.1%
South Korea	2.7%
Italy	2.5%

Top 10 exporters of services	World share
USA	14.3%
UK	6.3%
Germany	6.2%
France	5.1%
China	4.4%
India	3.2%
Netherlands	3.2%
Japan	3.1%
Spain	3.1%
China Hong Kong	2.9%

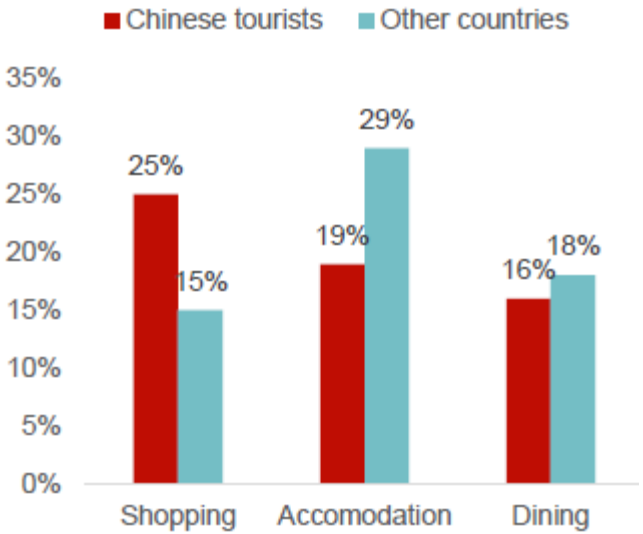
Top 10 importers of services	World share
USA	9.8%
China	7.5%
Germany	7.2%
France	4.3%
UK	4.0%
Japan	3.7%
Singapore	2.9%
Netherlands	2.9%
India	2.8%
Russia	2.8%

China’s merchandise trade vs. service trade

- China enjoys the world’s second largest merchandise trade surplus ($ 259 billion, behind Germany with $ 264 billion) ,
- But suffers from the world’s biggest deficit in service trade ($ 124 billion).
- What is China’s leading contributor to service trade deficit?

China’s merchandise trade vs. service trade

- China’s leading contributor to service trade deficit is tourists
  - 1/10 international tourists are Chinese;
  - They spend more and focus more on shopping;
  - In 2013 Chinese outbound tourists spent $ 129 billion, followed by American tourists who spent $ 86 billion;
  - The average Chinese tourists indulges him/herself with $ 1,130 tax-free purchases vs. $ 494 by the Russian tourists



Outbound tourists expenditure of China and other countries