Patterns of International Trade

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International Commerce and the World Economy

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From 1950s to 1980s, trade dominated by flows between high-income countries – latter accounted for most of global GDP, and developing countries maintained high trade barriers

Trade between US, Canada, Western Europe and Japan usually referred to as North-North trade

Moving to world where South-South commerce (trade between developing countries), and North-South commerce (trade between developed and developing countries), overtaking North-North trade

High-income economies accounted for 80% of world trade in 1985, falling to 55% by 2018
Emerging Economies and Trade

- Following financial crisis, sharp divide in economic performance of high-income vs. emerging economies.
- US, EU and Japan slow to recover, while emerging economies such as China fueled initial global recovery.
- Rise of lower and middle-income countries two decades in making:
  - China’s transition accelerated in 1990s.
  - India’s growth surge started after its 1991 reforms.
- Huge global export shock: 1992-2008 average annual growth rate in exports - China (18%) and India (14%).
- Growth rate in Chinese exports fell to 6% over 2008-18 as it restructures its economy.
Emerging Economies and Trade

- 15 middle-income countries* had annual growth rate in exports of 8% for 1992-2008
- During same period, low and middle-income countries saw share of global exports increase from 21 to 43%
- South-South trade driven by:
  - urbanization and industrialization in China and India creating demand for raw materials
  - lengthening of global production networks has resulted in increasing trade in parts and components
- Growth in North-South trade has rekindled interest in orthodox theories of international trade

* Brazil, Korea, Mexico, Russia, Argentina, Turkey, Indonesia, Poland, South Africa, Thailand, Egypt, Colombia, Malaysia, the Philippines, and Chile
South–South Trade

- South-South trade accounted for 52% of emerging economy exports in 2018
- Key explanation put for growth in South-South trade is expansion of multistage global production networks
- Offshoring of production allows firms to fragment manufacturing across borders by locating specific production stages in countries with lowest cost
- Consequently, gross trade flows (total exports) may overstate net trade flows (exports minus intermediates), i.e., expansion of South-South trade is partly statistical artifact
- While double-counting is part of story, there is evidence of increased specialization by emerging economies for global markets
North–South Trade

- In 1980s and 1990s, due to dominance of high-income countries in global trade, orthodox models of trade went out of fashion

- Specifically could not explain observed *intra-industry trade* among high-income countries, i.e., two-way trade in similar products between similar countries, e.g. the French export cars and import German cars

- Changed in past decade where growth in countries such as China and India suggest differences in technology/resources are strong motivations for trade

- Hanson (2012) suggests there has been return to notion of *comparative advantage*
Following Hanson (2012), non-oil exports can be grouped into nine categories:

i. agriculture and food (land-intensive)

ii. minerals/other raw materials (mineral-intensive)

iii. apparel, footwear, and textiles (labor-intensive)

iv. metals/metal products (capital-intensive)

v. chemicals (capital-intensive)

vi. machinery (capital-intensive)

vii. electronics/electrical machinery (labor-intensive)

viii. transportation equipment (capital-intensive)

ix. other manufactures (labor-intensive)
International Specialization

International specialization follows perceived patterns of *comparative advantage*

a) **Low-income countries**: positive net exports in three resource or labor-intensive sectors: agriculture, raw materials, and apparel and shoes

b) **China and India**: positive net exports in three labor-intensive sectors: apparel and shoes, electronics, and other manufactures

c) **Middle-income countries**: negative net exports in three capital-intensive sectors: chemicals, machinery, and transportation equipment

d) **High-income countries**: positive net exports in three capital-intensive sectors: chemicals, machinery, and transportation equipment
Trade Patterns

- Growing South-South trade along lines of comparative advantage, i.e., resource-poor emerging economies importing from resource-rich emerging economies

For low-income countries 70% of agricultural export growth and 73% of raw materials growth due to shipments to low-/middle-income countries

- Low-income countries send most of their output of clothing and shoes to high-income countries

- Middle-income countries export diverse set of goods: agriculture (Argentina and Brazil); metals (Russia, Korea, South Africa, and Chile); electronics (Korea, Malaysia, Thailand, and Philippines); transportation equipment (Korea, Mexico, Poland, and Turkey)
Trade Patterns

- 50% of middle-income export growth to low-/middle-income countries, except automobiles
- China and India accounted for more than 25% of exports of raw materials and electronics from middle-income countries – reflects need for iron ore, copper, other minerals, and deepening of production networks
- China and India distinct among low-/middle-income countries for being reliant on high-income markets to absorb their exports
- High-income countries absorbed over 70% of China’s export growth in apparel, footwear, and other manufactures, and over 55% in electronics (China) and metals (India)
Dynamics in Specialization

- Middle-income countries moved from specializing in apparel and footwear in 1994 to electronics by 2008

- Consistent with middle-income countries accumulating human and physical capital pushing them out of labor-intensive into more capital-intensive goods

- Low-income countries such as Vietnam and Bangladesh are filling space vacated by middle-income countries in apparel

- 2008-18 average annual growth rate of exports for Vietnam (14.6%) and Bangladesh (9.8%)

- Large changes in specialization have also occurred in countries such as China (see figure)
Dynamics in Specialization

China’s Top Export Products

Source: Hansen (2012)
Dynamics in Specialization

- China not just switching from assembling shoes to assembling computers, but manufacturing more technologically advanced goods and accounting for more value-added, e.g., Huawei (mobile phones) and Lenovo (laptops)

- Some doubt China’s export strength in electronics is due to comparative advantage, but rather to industrial policy (Rodrik, 2006) – but Hanson (2012) argues stock of human capital would indicate specialization is not unwarranted

- China has increased supply of educated labor, attracted investment by multinational firms, and improved transport and communications – it likely has increasing comparative advantage in electronics
Major US-China Trade Issues

- Tensions have risen over Chinese trade and economic policies – key reason behind US-China trade war:
  - Extensive network of industrial policies that protect domestic sectors/firms – especially state-owned enterprises (SOEs)
  - Failure to provide protection for intellectual property rights (IPRs) and forced technology transfer
  - Has not met all obligations since accession to World Trade Organization (WTO)
  - Government-directed financial policies promoting high savings (low private consumption) and investment (creating excess capacity)
Current Economic Outlook

- Over past year, broad-based slowdown in global economy in terms of industrial production and trade

- Driven by:
  - Downturn in auto production and sales
  - Weak business confidence due to US-China trade war
  - Slowdown in Chinese economy

- Slowdown in industrial production has fed into decline in trade growth
Industrial Production and Trade

Source: IMF, October 2019
Contribution to Global Imports

Source: IMF, October 2019
Global Risks Skewed to Downside

- Risks to global economy:
  - Disruptions to trade/supply chains
  - Declines in risk appetite/flight to safe assets
  - Political uncertainty and conflict

- IMF forecasts that if US-China trade war continues, cost to global economy of $700 billion by end of 2020

- Both US and China affected by ratcheting up of trade war

- General view: reduce trade tensions and return to solving issues via multilateral system, i.e., WTO
Impact on Real US GDP

Figure 3

(% Deviation from 2017 base)


-0.00
-0.10
-0.20
-0.30
-0.40
-0.50
-0.60
-0.70

Tariffs at April 2019
Tariffs announced August 2019
Confidence effect
Market reaction
Productivity effect

Source: IMF, October 2019
Impact on Real Chinese GDP

Figure 4

0.00
-0.50
-1.00
-1.50
-2.00
-2.50


Tariffs at April 2019
Tariffs at May 2019
Tariffs announced August 2019
Confidence effect
Market reaction
Productivity effect

Source: IMF, October 2019