

# **Recent Patterns of International Trade**



# Changing Trade Patterns

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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**
- ◆ **While high-income economies accounted for 80% of world trade in 1985, will account for less than 50% by middle of current decade**

# Emerging Economies and Trade

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- ◆ **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 have fueled 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%)**

# Emerging Economies and Trade

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- ◆ **15 other 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

# Trade Patterns

## Exports and Imports Relative to GDP by Regional Trading Partner

		Exports to partner relative to regional GDP (%)			Imports from partner relative to regional GDP (%)		
Region	Trade Partner	1994	2008	% Change	1994	2008	% Change
<b>Low-income</b>	<b>Low-income</b>	<b>0.8</b>	<b>3.2</b>	<b>2.4</b>	<b>0.8</b>	<b>3.2</b>	<b>2.4</b>
<b>GDP/capita of \$800 (2000)</b>	<b>Middle-income</b>	<b>4.5</b>	<b>11.6</b>	<b>7.1</b>	<b>6.0</b>	<b>17.1</b>	<b>11.1</b>
	<b>China and India</b>	<b>1.1</b>	<b>8.3</b>	<b>7.2</b>	<b>1.8</b>	<b>10.7</b>	<b>8.9</b>
	<b>High-income</b>	<b>20.0</b>	<b>31.8</b>	<b>11.8</b>	<b>15.1</b>	<b>23.0</b>	<b>7.9</b>
	<b>World</b>	<b>26.3</b>	<b>55.0</b>	<b>28.6</b>	<b>23.7</b>	<b>54.0</b>	<b>30.4</b>
<b>Middle-income</b>	<b>Low-income</b>	<b>0.7</b>	<b>2.1</b>	<b>1.4</b>	<b>0.5</b>	<b>1.4</b>	<b>0.9</b>
<b>GDP/capita of \$800-10,000 (2000)</b>	<b>Middle-income</b>	<b>5.3</b>	<b>15.6</b>	<b>10.3</b>	<b>5.3</b>	<b>15.6</b>	<b>10.3</b>
	<b>China and India</b>	<b>2.2</b>	<b>7.5</b>	<b>5.3</b>	<b>2.4</b>	<b>7.4</b>	<b>5.0</b>
	<b>High-income</b>	<b>16.9</b>	<b>29.6</b>	<b>12.7</b>	<b>18.6</b>	<b>26.0</b>	<b>7.4</b>
	<b>World</b>	<b>25.1</b>	<b>54.8</b>	<b>29.9</b>	<b>26.8</b>	<b>50.4</b>	<b>23.6</b>

# Trade Patterns

## Exports and Imports Relative to GDP by Regional Trading Partner

Region	Trade Partner	Exports to partner relative to regional GDP (%)			Imports from partner relative to regional GDP (%)		
		1994	2008	% Change	1994	2008	% Change
China, India GDP/capita of \$800 (2000)	Low-income	0.8	2.7	1.9	0.5	2.1	1.6
	Middle-income	9.5	15.2	5.7	8.6	15.4	6.8
	China and India	0.1	1.2	1.1	0.1	1.2	1.1
	High-income	14.3	25.3	11.0	9.8	14.1	4.3
	World	24.8	44.4	19.6	19.0	32.7	13.7
High-income GDP/capita of \$10-33,000 (2000)	Low-income	0.3	0.7	0.4	0.5	1.0	0.5
	Middle-income	3.7	6.6	2.9	3.4	7.5	4.1
	China and India	0.5	1.7	1.2	0.7	3.1	2.4
	High-income	12.8	16.9	4.1	12.8	16.9	4.1
	World	17.4	26.0	8.6	17.4	28.6	11.2

Source: Hanson (2012)

# Trade Patterns

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- ◆ **For low and middle-income countries, exports as share of regional GDP has grown sharply, e.g., 26 to 55% (low-income), 25 to 55% (middle-income), and 25 to 55% (China and India) – similarly for imports**
- ◆ **Lower trade growth for high-income countries, e.g., 17 to 26% in case of exports**
- ◆ **Change in trade pattern involves much larger South-South trade flows over period 1994-2008:**
  - **share of exports from low to low and middle-income countries rose from 24 to 42%**
  - **share of exports from middle-income to low and middle-income countries rose from 33 to 46%**

# South-South Trade

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- ◆ **Key explanation put forward 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 statistical artifact**
- ◆ **While double-counting is part of story, there is evidence of increased specialization by emerging economies for global markets**



# North-South Trade

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- ◇ **In 1980s and 1990s, due to dominance of high-income countries in global trade, orthodox models of trade (Ricardian/Heckscher-Ohlin) 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***

# North-South Trade

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- ◇ **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)**

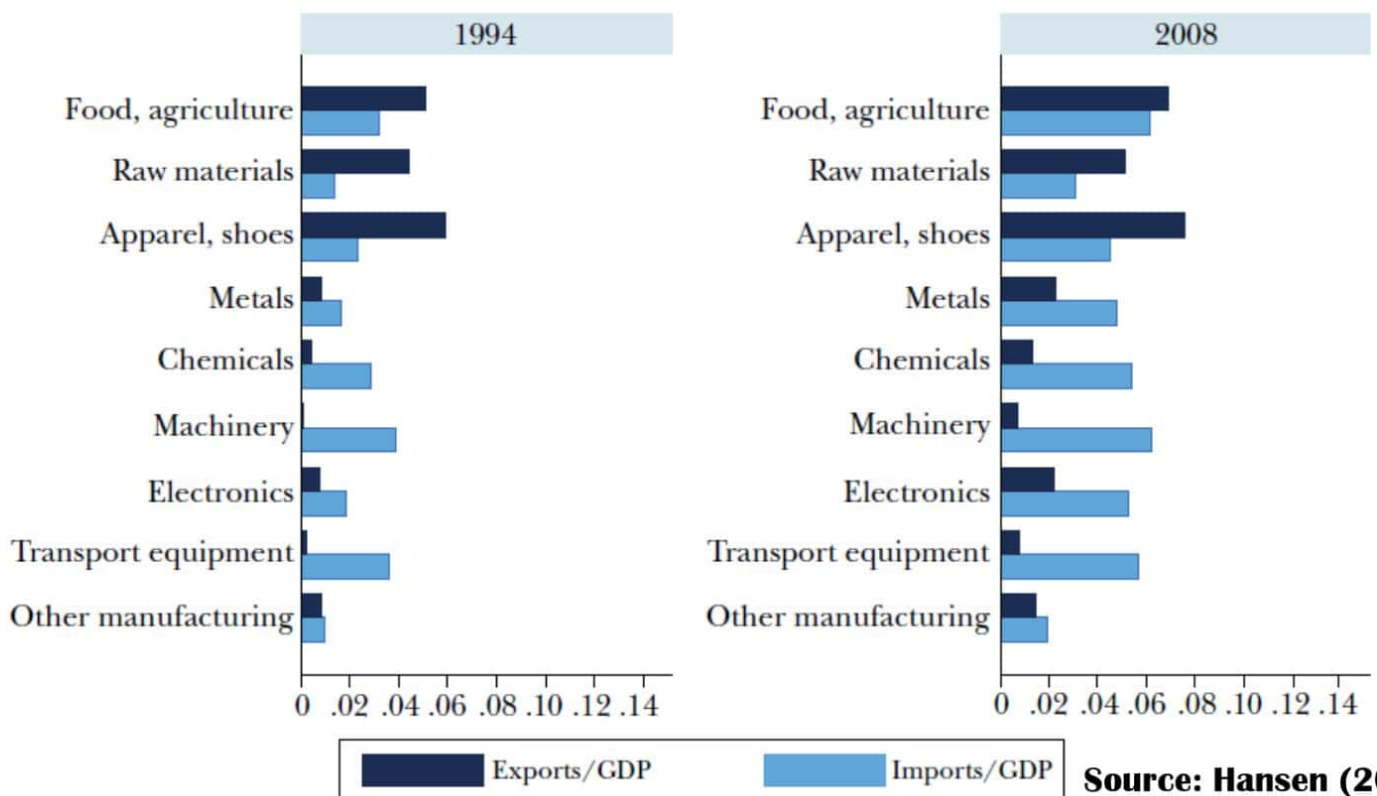
# North-South Trade

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- ◇ **International specialization follows perceived patterns of *comparative advantage* – see figures**
  - 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, shoes and 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**

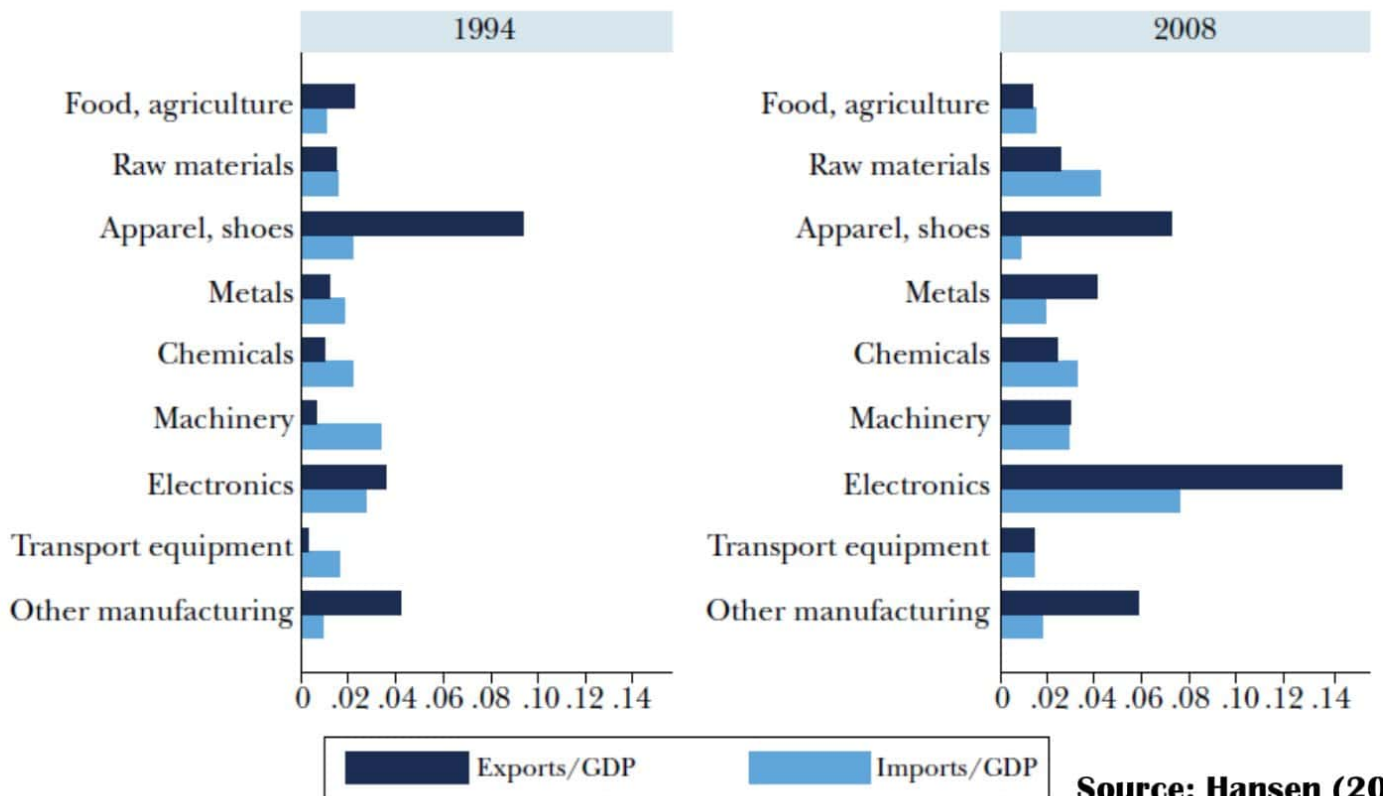
# Sector Trade Shares of GDP

## A: Low-income countries



# Sector Trade Shares of GDP

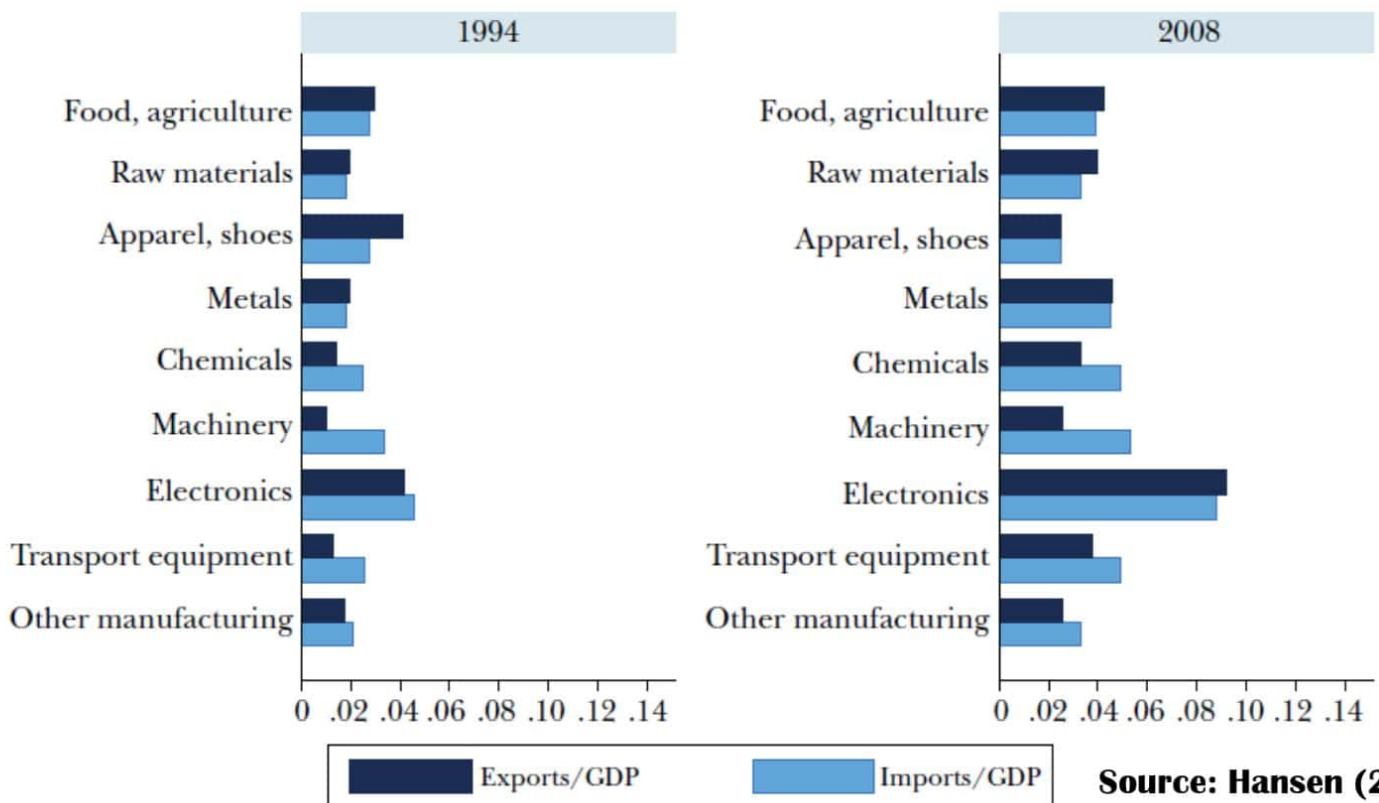
## B: China and India



Source: Hansen (2012)

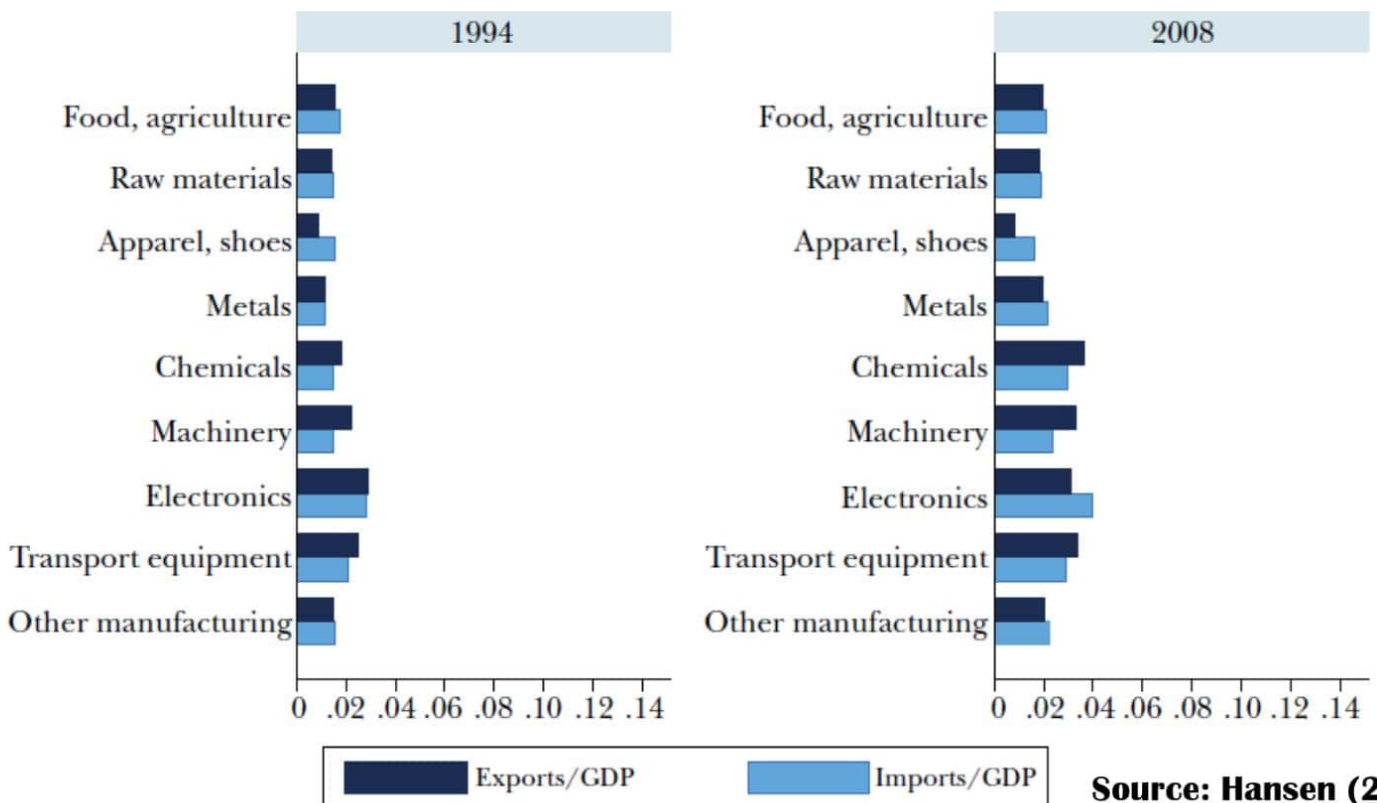
# Sector Trade Shares of GDP

## C: Middle-income countries



# Sector Trade Shares of GDP

## D: High-income countries



# Trade Patterns

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- ◇ **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

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- ◇ **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)**

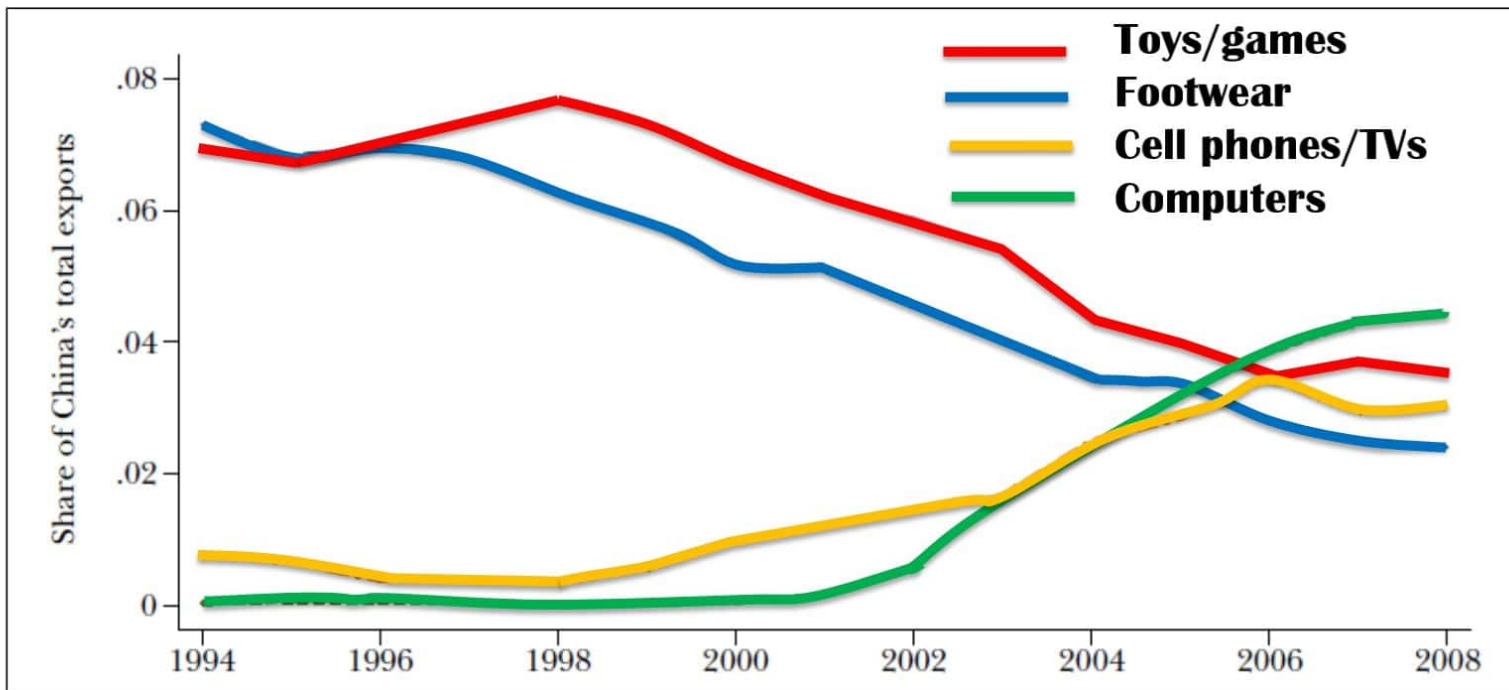
# Dynamics in Specialization

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- ◆ **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 Bangladesh and Vietnam are filling the space vacated by middle-income countries in apparel**
- ◆ **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**

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- ◆ **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**