Recent Patterns of International Trade

Changing Trade Patterns

- 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

- 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

- 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
Low-income	Low-income	0.8	3.2	2.4	0.8	3.2	2.4
GDP/capita of $800 (2000)	Middle-income	4.5	11.6	7.1	6.0	17.1	11.1
	China and India	1.1	8.3	7.2	1.8	10.7	8.9
	High-income	20.0	31.8	11.8	15.1	23.0	7.9
	World	26.3	55.0	28.6	23.7	54.0	30.4
Middle-income	Low-income	0.7	2.1	1.4	0.5	1.4	0.9
GDP/capita of $800-10,000 (2000)	Middle-income	5.3	15.6	10.3	5.3	15.6	10.3
	China and India	2.2	7.5	5.3	2.4	7.4	5.0
	High-income	16.9	29.6	12.7	18.6	26.0	7.4
	World	25.1	54.8	29.9	26.8	50.4	23.6

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Region	Trade Partner	1994	2008	% Change	1994	2008	% Change
China, India	Low-income	0.8	2.7	1.9	0.5	2.1	1.6
GDP/capita of $800 (2000)	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	Low-income	0.3	0.7	0.4	0.5	1.0	0.5
GDP/capita of $10-33,000 (2000)	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

- 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

- 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

- **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

- 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

- 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

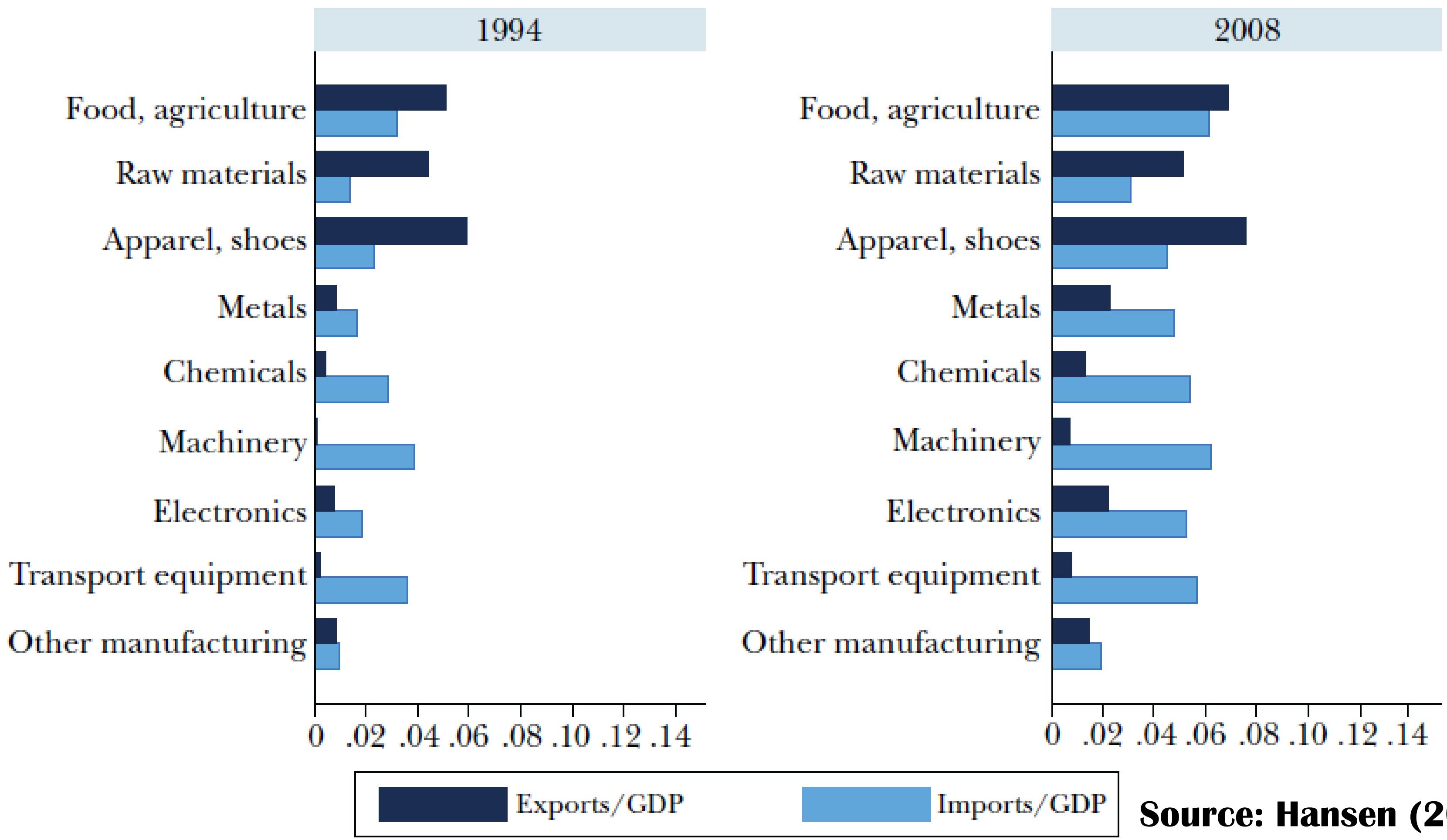
b) China and India: positive net exports in three labor-intensive sectors: apparel, shoes and electronics, and other manufactures

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

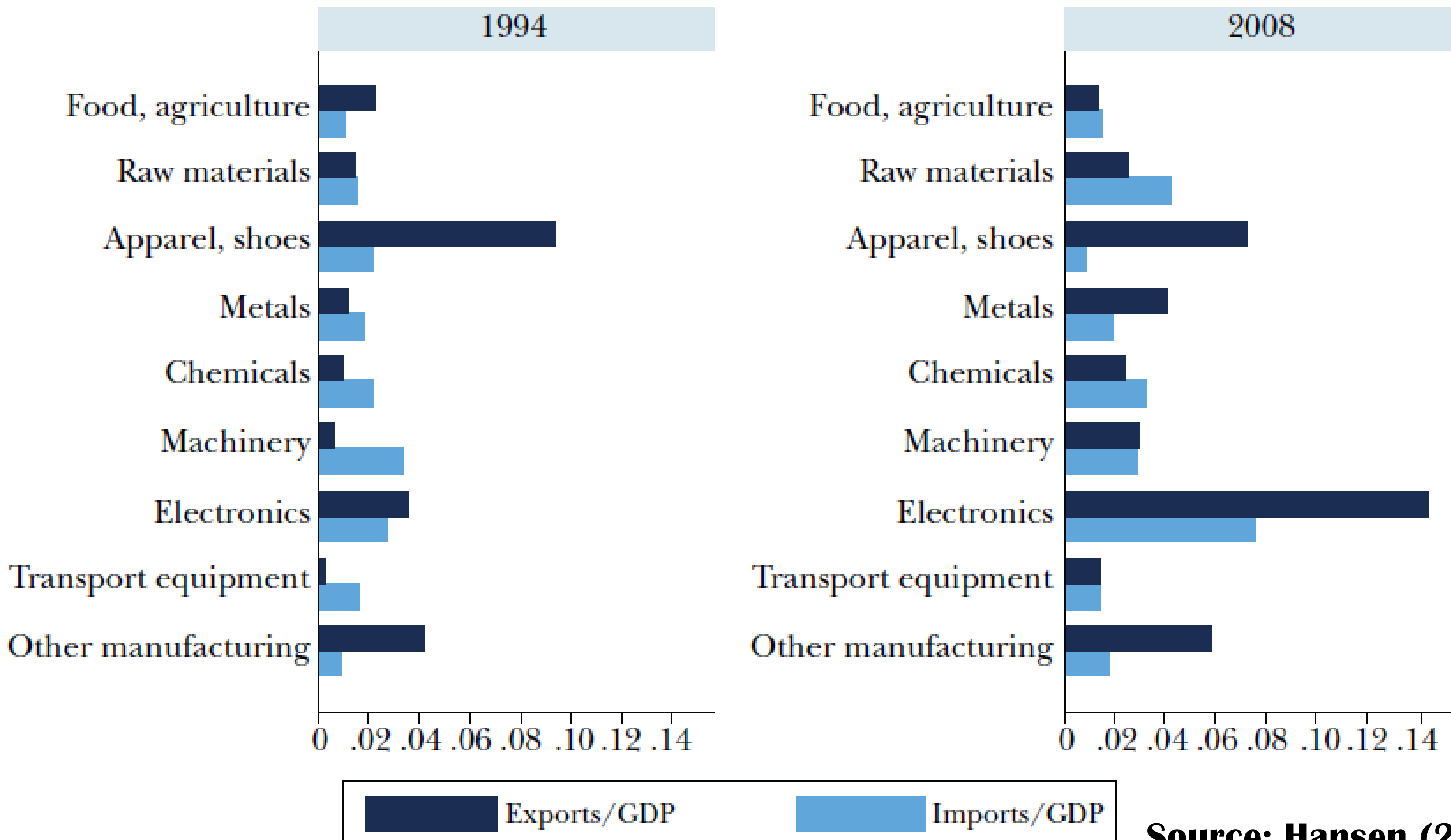
A: Low-income countries



Source: Hansen (2012)

Sector Trade Shares of GDP

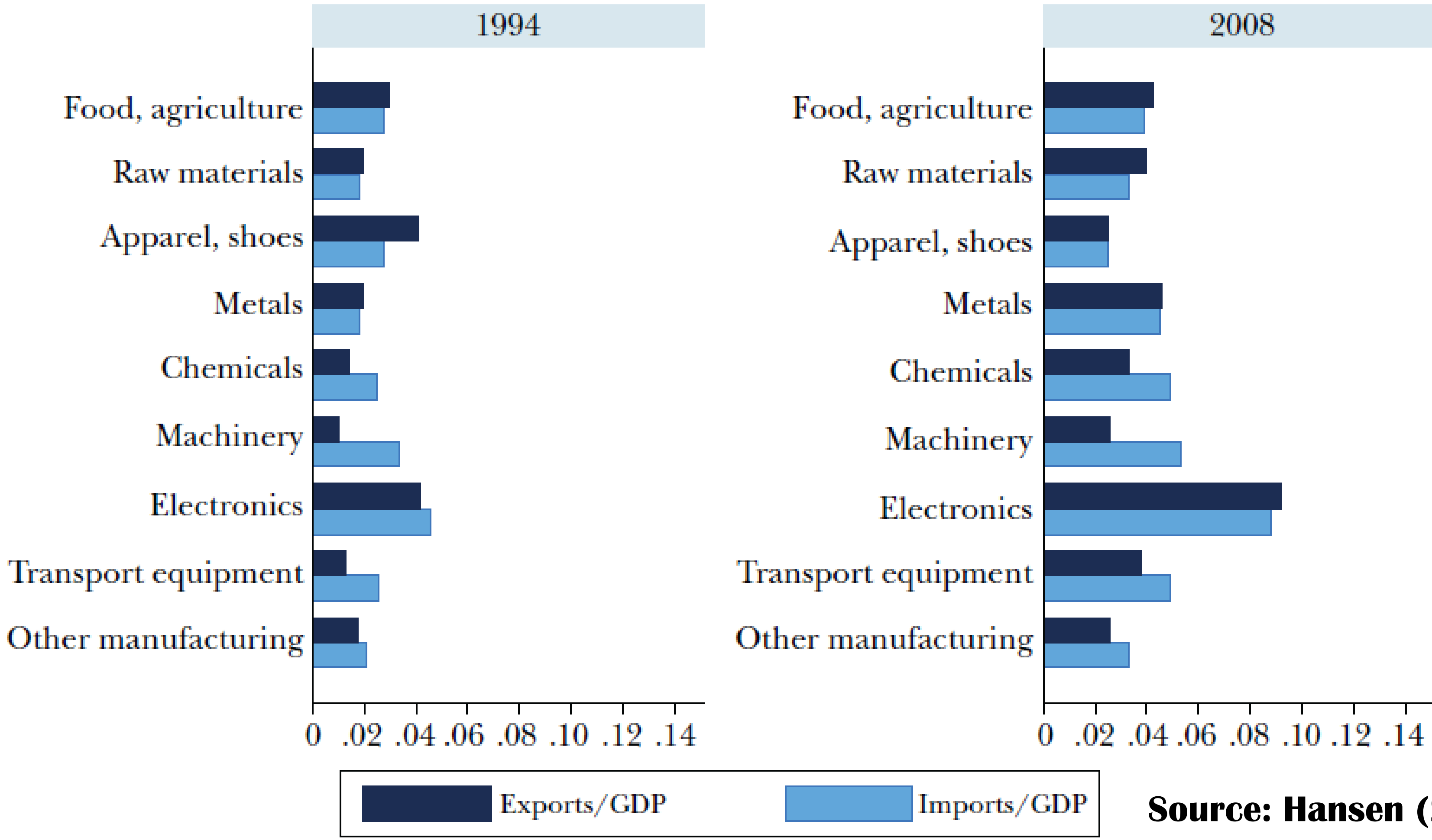
B: China and India



Source: Hansen (2012)

Sector Trade Shares of GDP

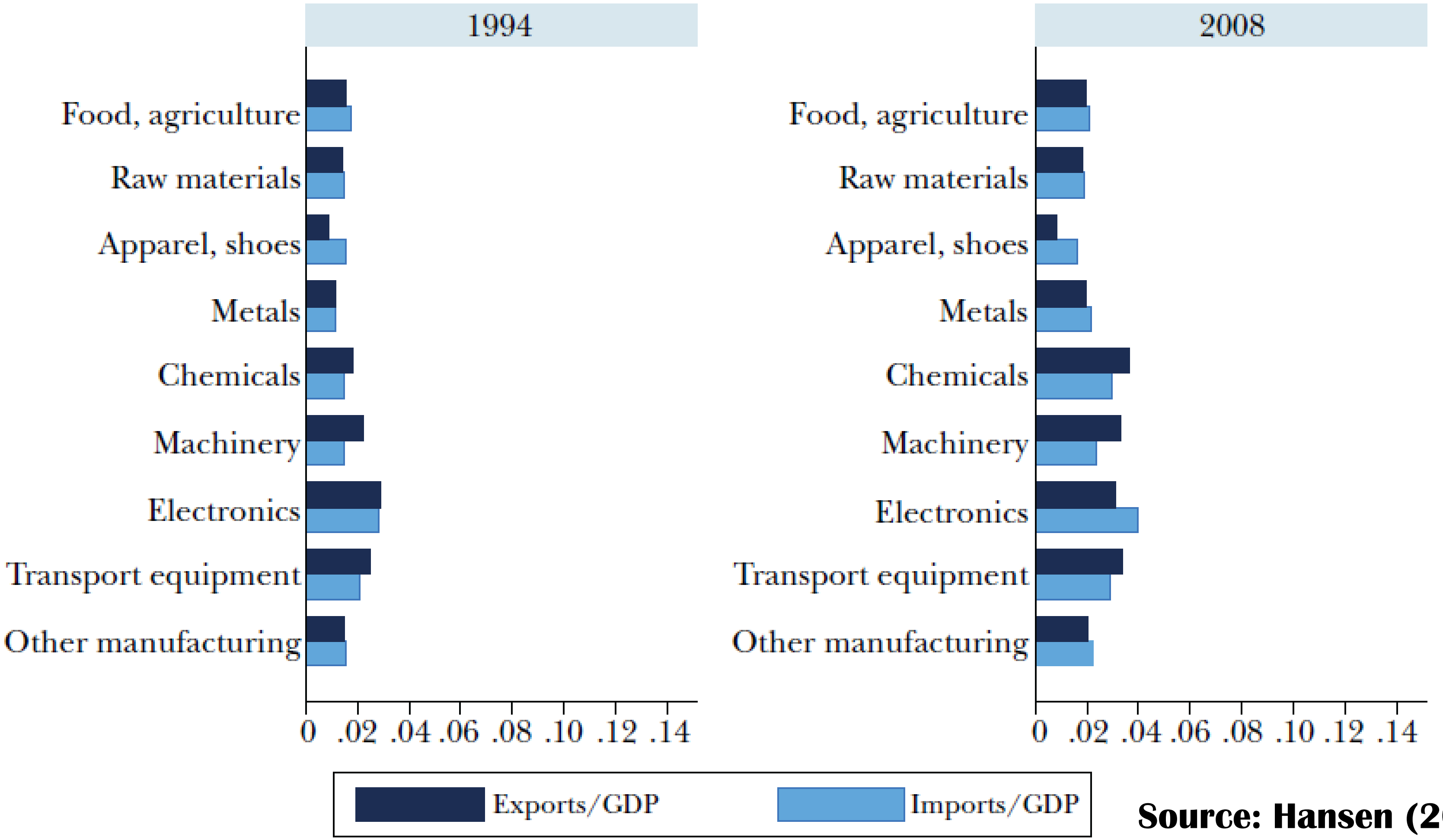
C: Middle-income countries



Source: Hansen (2012)

Sector Trade Shares of GDP

D: High-income countries



Source: Hansen (2012)

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

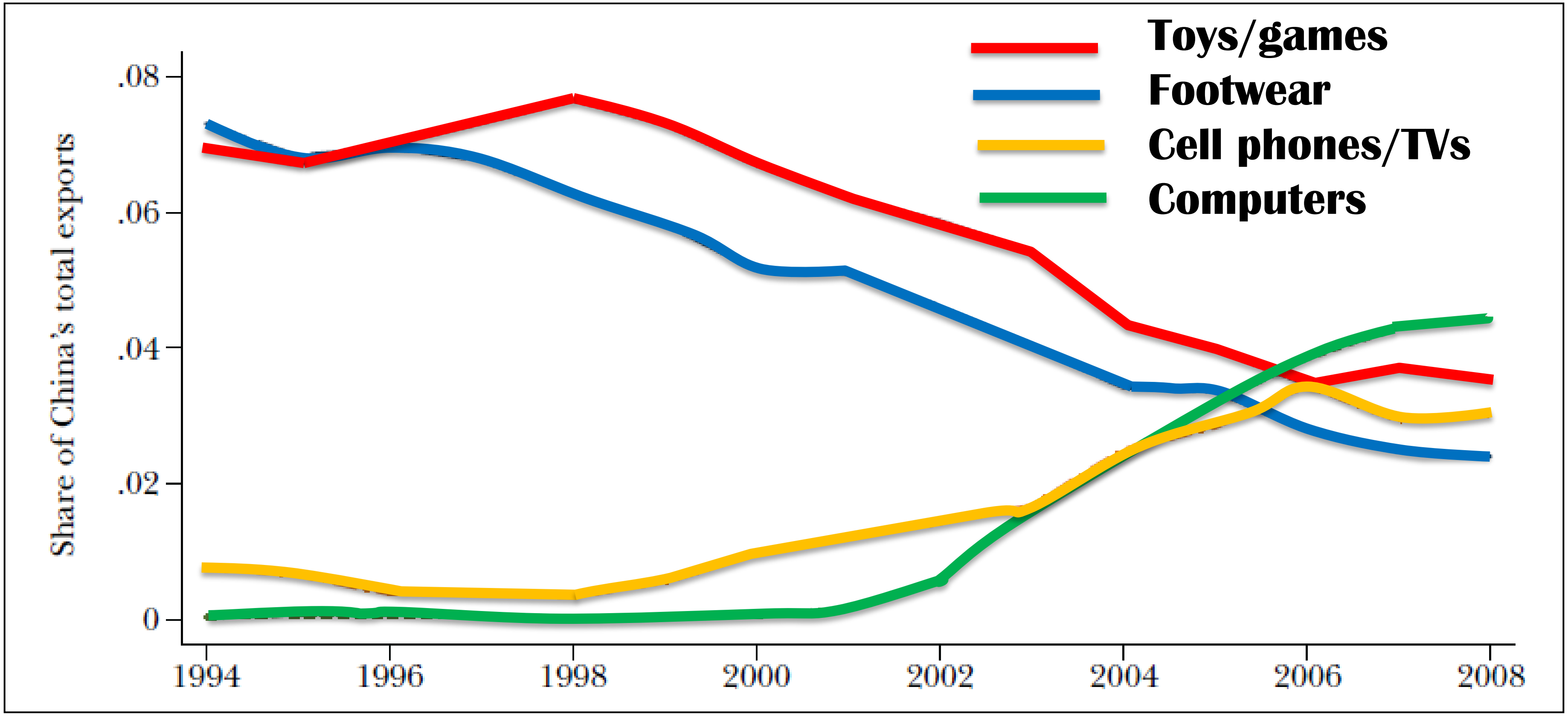
- 50% of middle-income export growth to low-/middle-income countries, except automobiles
- China and India accounted for more than 25% of exports of raw materials and electronics from middle-income countries – reflects need for iron ore, copper, other minerals, and deepening of production networks
- 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 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

- 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