International Trade and Offshore Production:

Tracking China's Shifting Role in the Global Economy

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Main Topics

1. International competitiveness via exports: China vs. Mexico
2. “Made in China” doesn’t tell the whole story
3. Role of foreign firms in China’s export trade
4. Intra-regional trade and indirect exports
5. The real story of China’s export success: regional & global, not bilateral

Analytical Tools and Concepts

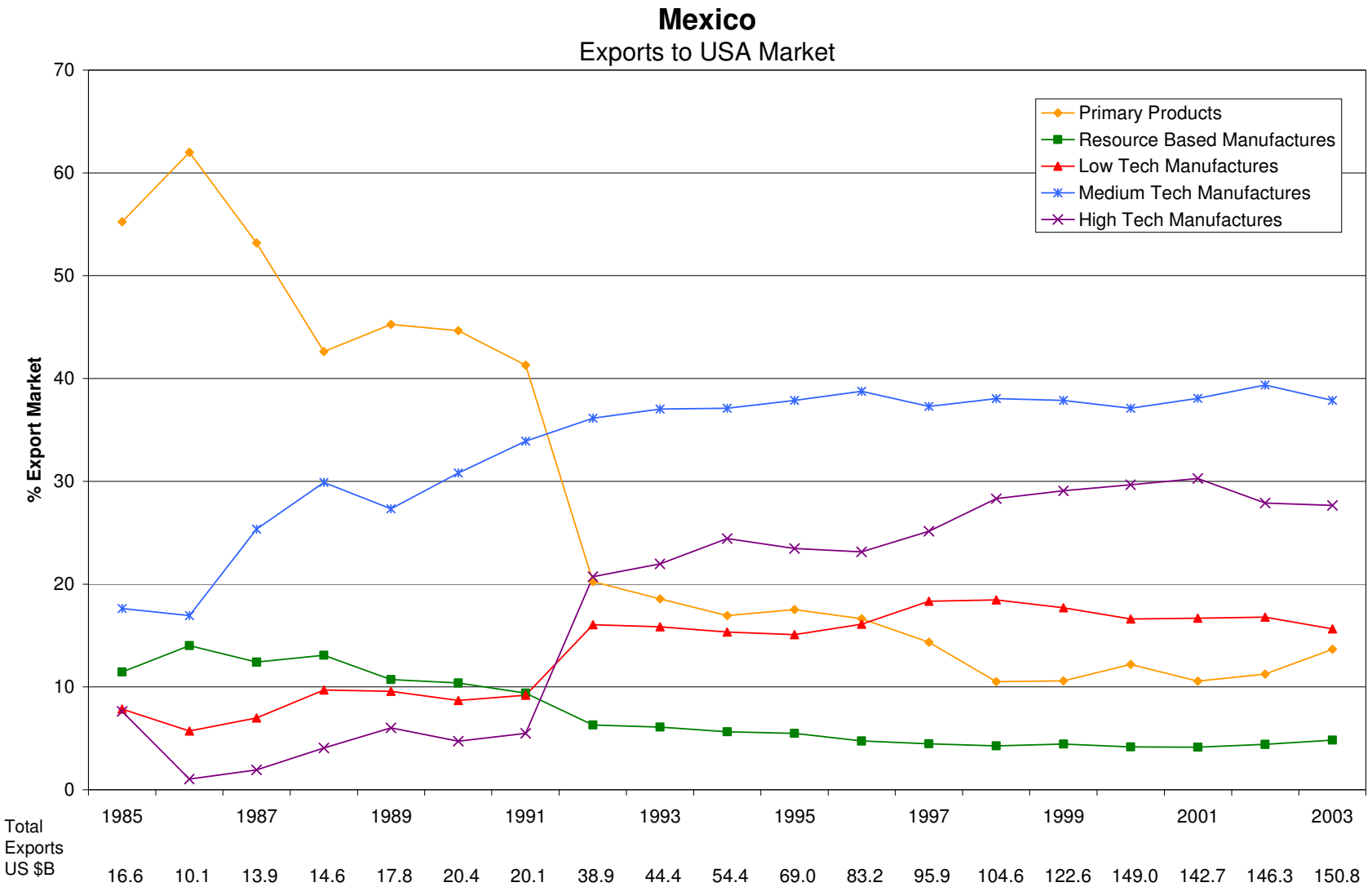
- Global value chains
- International trade and production networks
- Intra-firm (or related-party trade) by MNCs
- Industrial upgrading
- International competitiveness
- Development strategies

Comparing Industrial Upgrading Trajectories: Mexico vs. China

Mexico's Industrialization since 1985

- Export oriented (mainly to U.S. market)
- Highly diversified
- Shifting emphasis from primary product exports & intermediate goods to manufactures
- Within manufacturing, medium-tech and high-tech exports are displacing low-tech exports

Graph 1: Composition of Mexico's Exports to the U.S. Market, 1985-2003

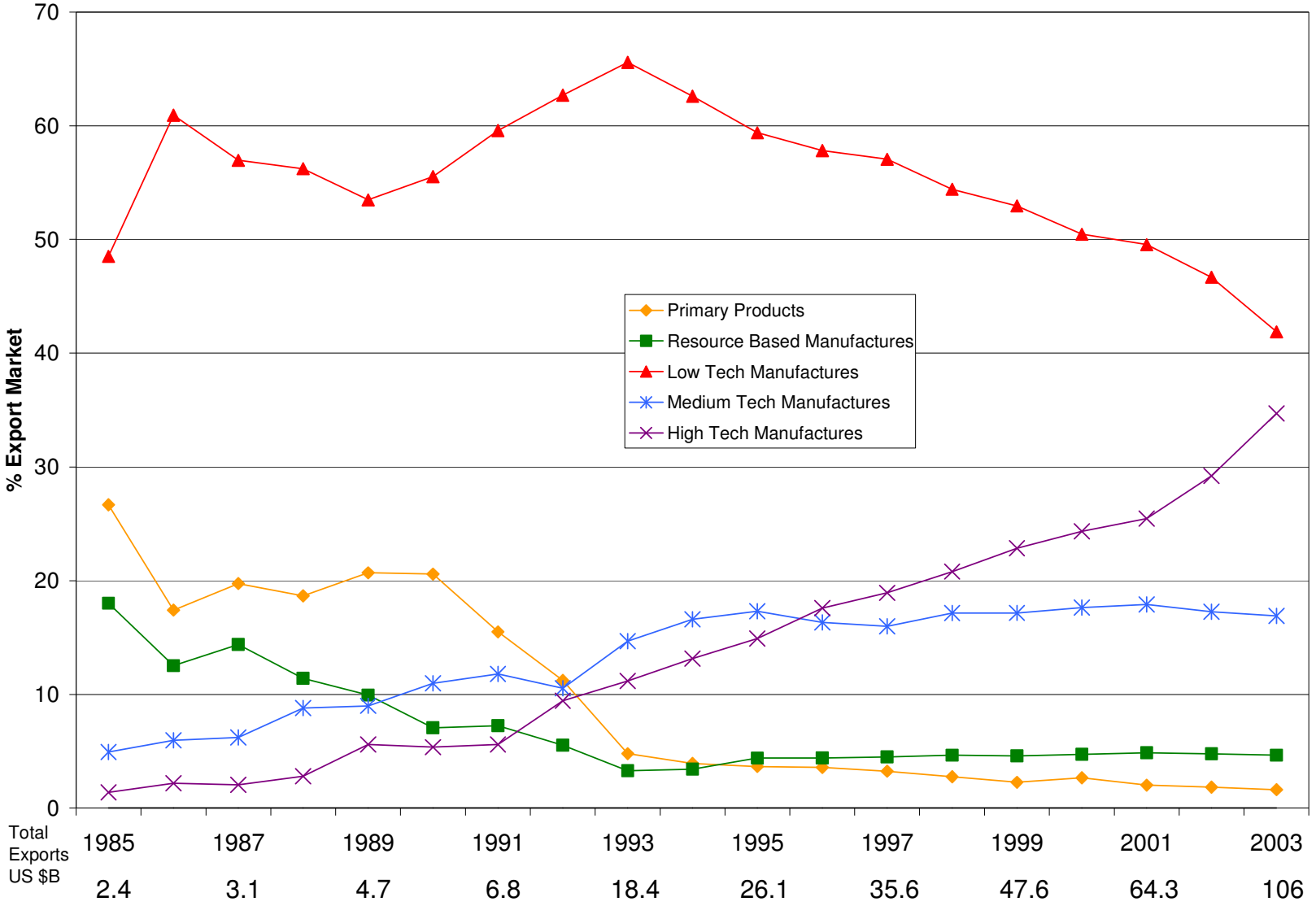


Source: World Trade Analyzer.

China's Industrialization since 1995

- Sustained & diversified export dynamism
- Decline of low-tech manufactured exports
- Increase in medium-tech and high technology manufactured exports
- China's science & education policy emphasizes high-tech parks & ICTs
- Business services weak outside of big firms

Graph 2: Composition of China's Exports to the U.S. Market, 1985-2003



Source: World Trade Analyzer.

Mexico vs. China

- Head-to-head competition in U.S. market
- China is world's leading exporter of many manufactures, esp. consumer goods
- China and Mexico are typically among the top three exporters to the U.S. market in many product categories
- China is moving ahead of Mexico with dominant market shares in the United States, especially in 2000-2005 period

Table 1. Top 50 US Imports in which Mexico and/or China hold 20% or more of the US market, 2004

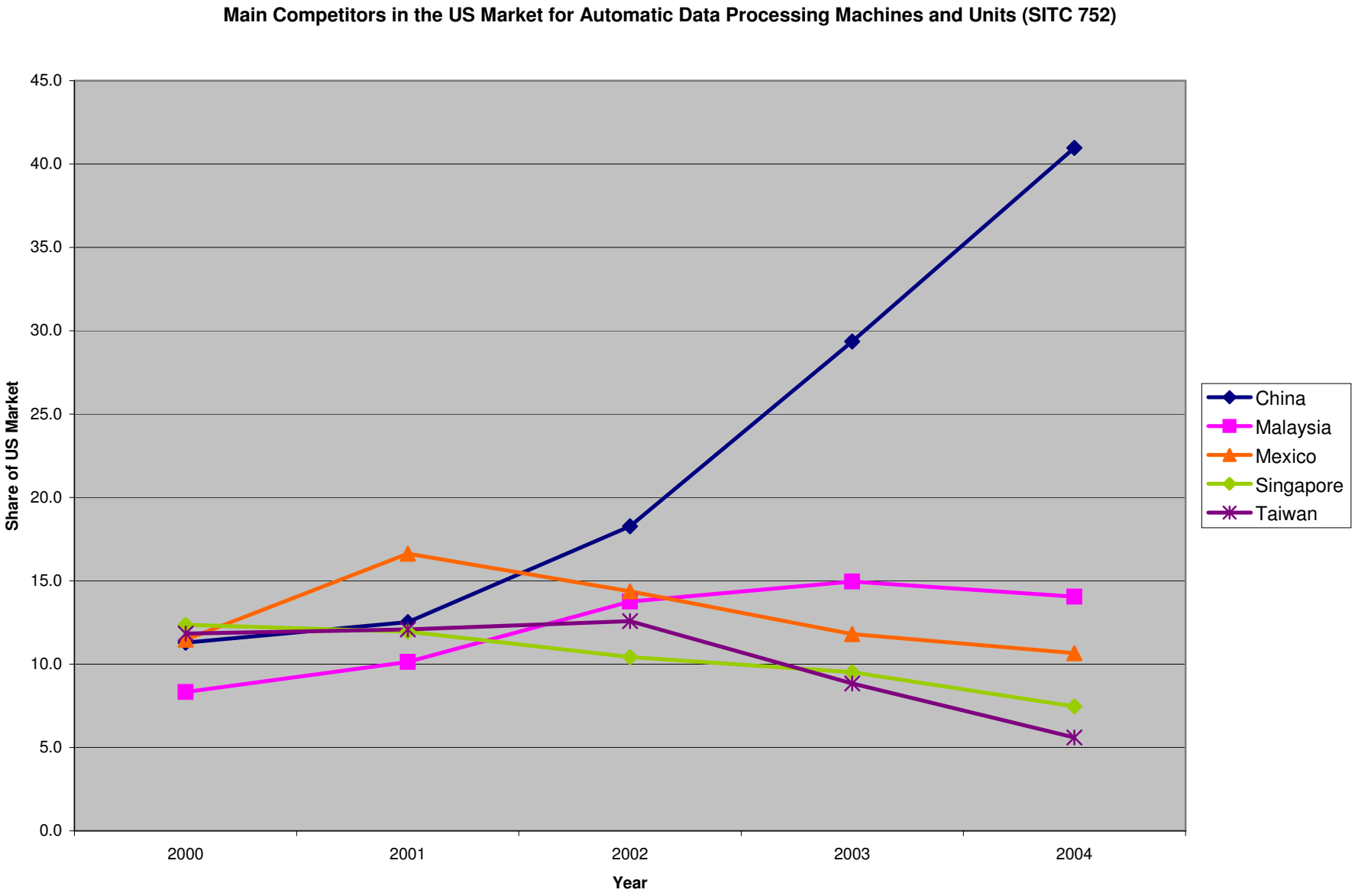
Mexico			China		
Product (SITC categories)	% Market Share in USA	Change in Market Share 2000-2004	Product (SITC categories)	% Market Share in USA	Change in Market Share 2000-2004
773- Equipment for distributing electricity	58.8	-2.0	894- Baby carriages, toys, games and sporting goods	78.2	13.6
761- Television receivers	46.2	-17.3	851- Footwear	68.8	6.9
782- Motor vehicles for transport of goods/materials	40.4	8.8	848- Apparel and clothing of other than textile	53.0	44.8
716- Rotating electric plant and parts	32.9	0.0	763- Sound or television recorders or reproducers	49.8	22.3
772- Electronic app. such as switches, relays, fuses	29.2	4.7	775- Household type equipment	46.0	8.8
762- Radio broadcast receivers	25.3	-0.2	752- Automatic data processing machines & units	41.0	29.7
778- Electrical machinery and apparatus	21.2	2.8	762- Radio broadcast receivers	40.3	4.9
713- Internal combustion piston engines & parts	21.1	4.1	821- Furtniture and parts thereof	39.3	15.7
771- Electric power machinery and parts	20.9	-4.0	658- Made-up articles of textile materials	39.0	14.8
872- Instruments and appliances for medical or veterinary purposes	20.5	0.3	893- Articles of plastics	36.1	5.2
			899- Miscellaneous Manufactured Articles	32.8	-10.0
			771- Electric power machinery and parts	31.1	9.3
			759- Parts and accessories of automatic data processing machines	31.1	19.6
			699- Manufactures of metal	24.2	10.5
			764- Telecommunications equipments & parts	23.9	13.6
			898- Musical instruments and parts	22.0	13.5
			842- Women's apparel of woven textiles	21.4	5.6
			778- Electrical machinery and apparatus	21.1	9.2

Source: United States International Trade Commission and US Department of Commerce

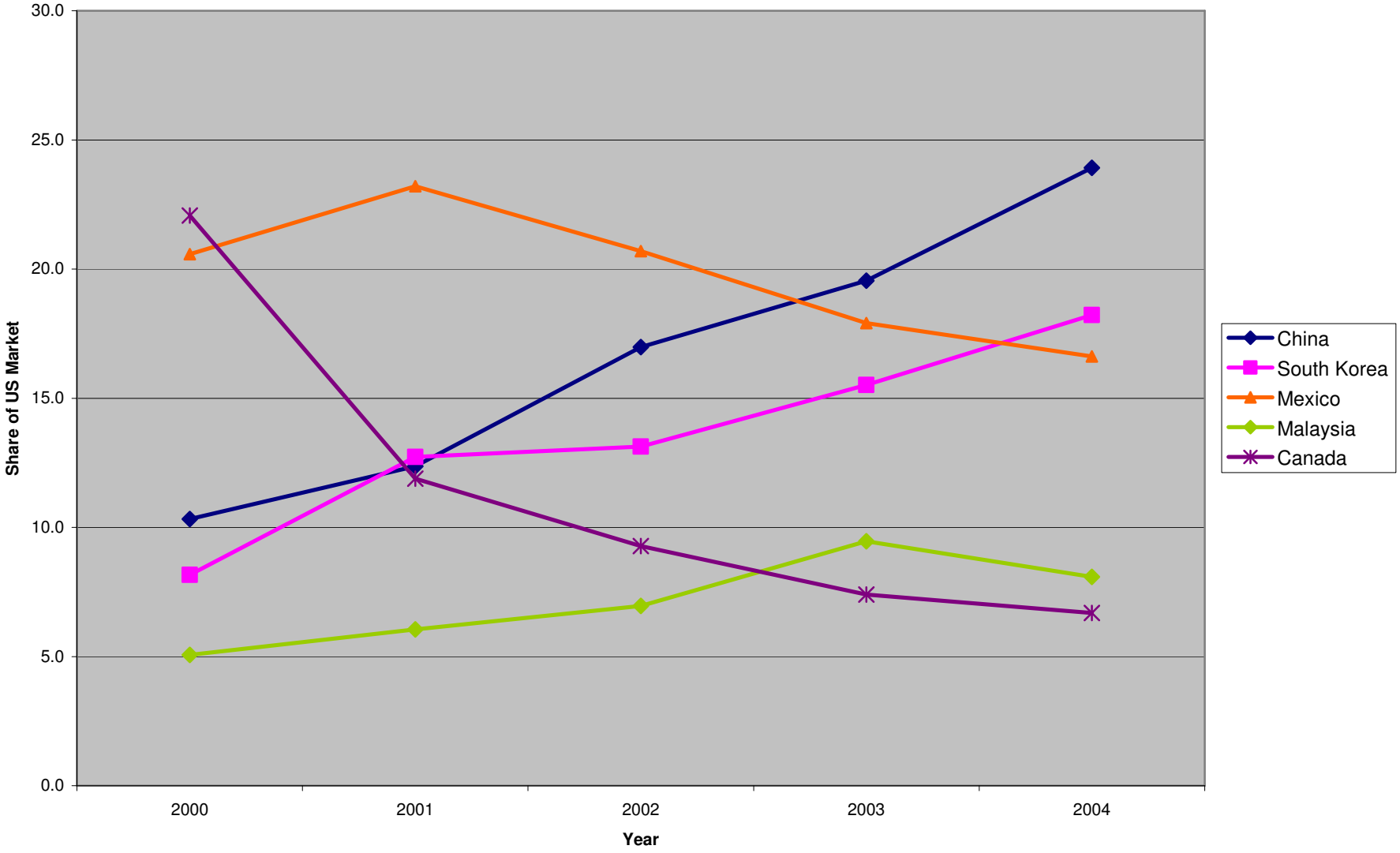
Table 2. Mexico's and China's Competing Exports to the United States, 2000-2005

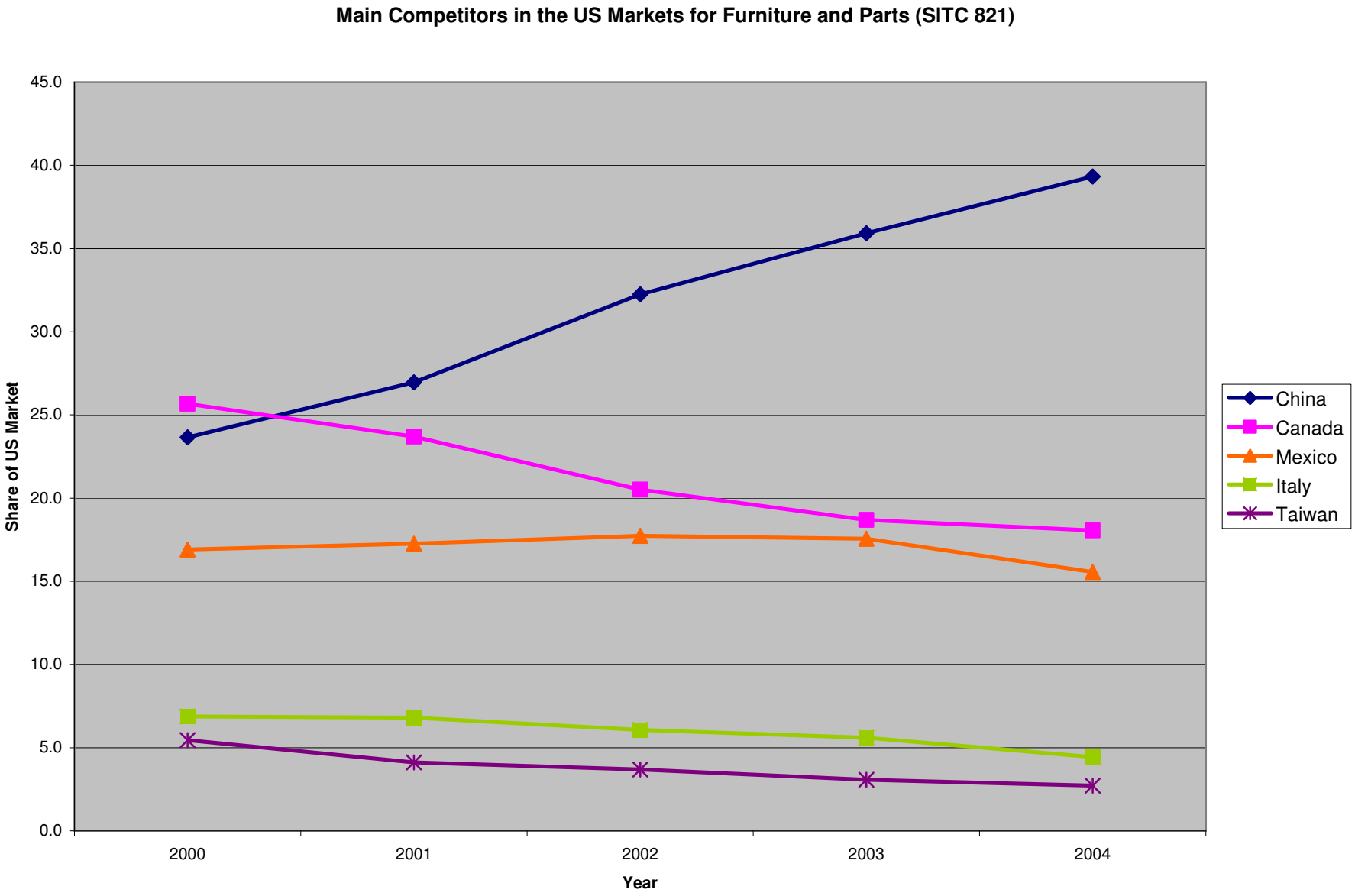
SITC category	Product		2000 Value (billions)	2000 Share of US market	2005 Value (billions)	2005 Share of US market	Change in Market Share 2000-2005
752	Automatic Data Processing Machines and Units	Mexico	6.4	11.5	5.7	8.9	-2.6
		China	6.3	11.3	29.9	47.1	35.8
		US Total	55.9		63.5		
764	Telecommunications Equipments and Parts	Mexico	9.1	20.6	7.7	12.7	-7.9
		China	4.6	10.3	17.5	28.9	18.6
		US Total	44.3		60.6		
778	Electrical Machinery and Apparatus	Mexico	3.1	18.3	4.4	21.8	3.5
		China	2.0	11.9	4.4	22.1	10.2
		US Total	17.1		20.0		
784	Auto Parts and Accessories	Mexico	4.6	16.3	7.9	18.6	2.3
		China	0.4	1.5	2.0	4.7	3.2
		US Total	28.4		42.3		
821	Furniture	Mexico	3.2	16.9	4.3	7.1	-9.8
		China	4.5	23.6	13.2	21.7	-1.9
		US Total	18.9		60.6		
84	Articles of Apparel and Clothing	Mexico	8.7	13.6	6.3	8.3	-5.3
		China	8.5	13.2	19.9	26.1	12.9
		US Total	64.3		76.4		

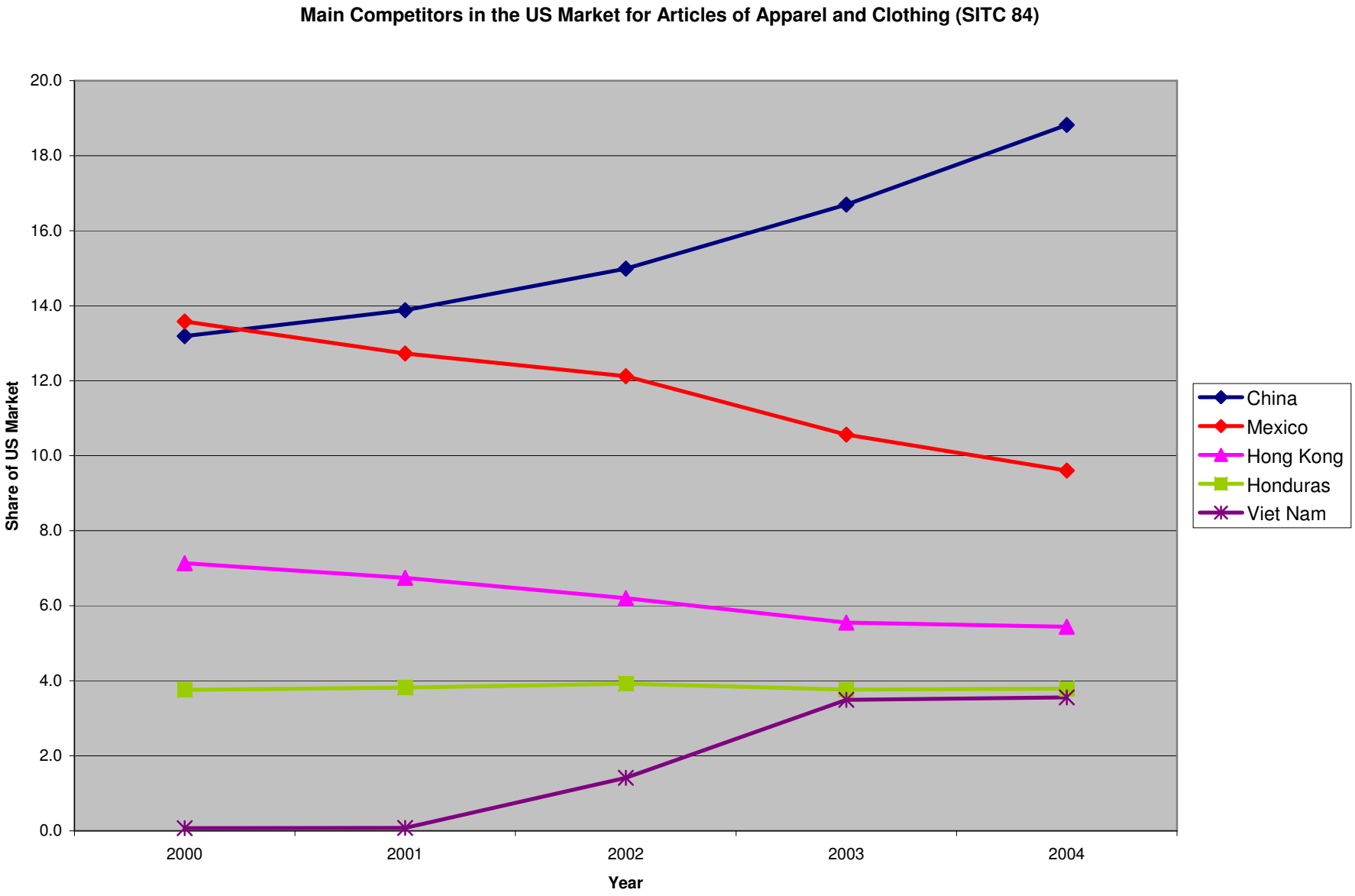
Source: USITC as of March 3, 2006: http://dataweb.usitc.gov/


Main Competitors in the US Market for Automatic Data Processing Machines and Units (SITC 752)
Share of US Market
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
2000
2001
2002
2003
2004
Year
China
Malaysia
Mexico
Singapore
Taiwan

Main Competitors in the US Market for Telecommunications Equipments and Parts (SITC 764)



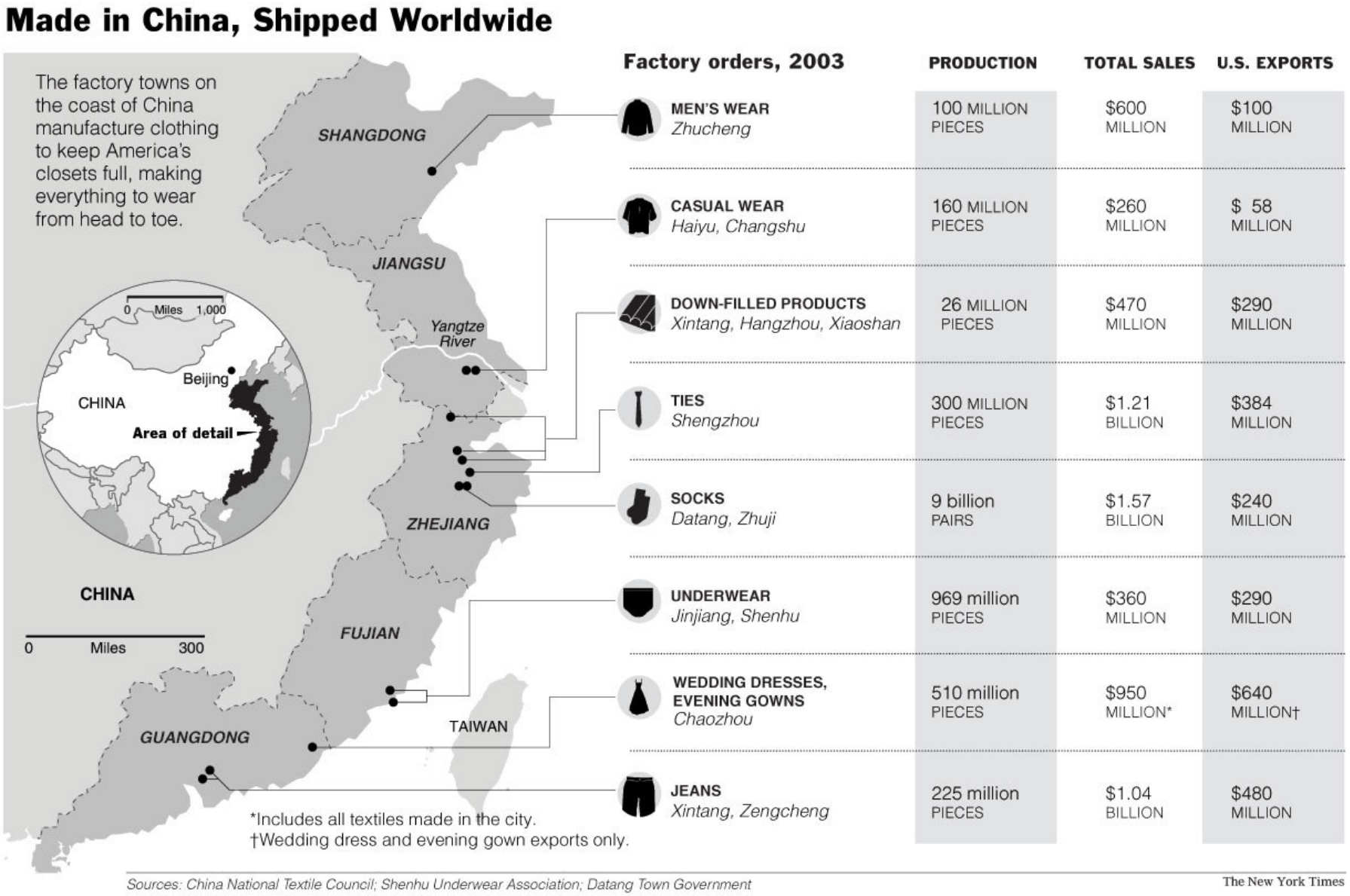

Main Competitors in the US Markets for Furniture and Parts (SITC 821)
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Share of US Market
2000
2001
2002
2003
2004
Year
China
Canada
Mexico
Italy
Taiwan


Main Competitors in the US Market for Articles of Apparel and Clothing (SITC 84)
Share of US Market
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2000
2001
2002
2003
2004
Year
China
Mexico
Hong Kong
Honduras
Viet Nam

Why is China gaining U.S. market share over Mexico?

- China is a lower-cost producer overall (labor costs lower, but not transport & tariffs)
- China has huge scale economies
- China has a coherent and multidimensional upgrading strategy – diversify and add high value activities
- China is using direct foreign investment to promote "fast learning" in new industries
- China uses access to its domestic market to attract TNCs and promote knowledge spillovers

China's Supply Chain Cities in Apparel



Source: David Barboza, "In roaring China, sweaters are west of socks city," *New York Times*, Dec. 24, 2004.

How can Mexico compete with China?

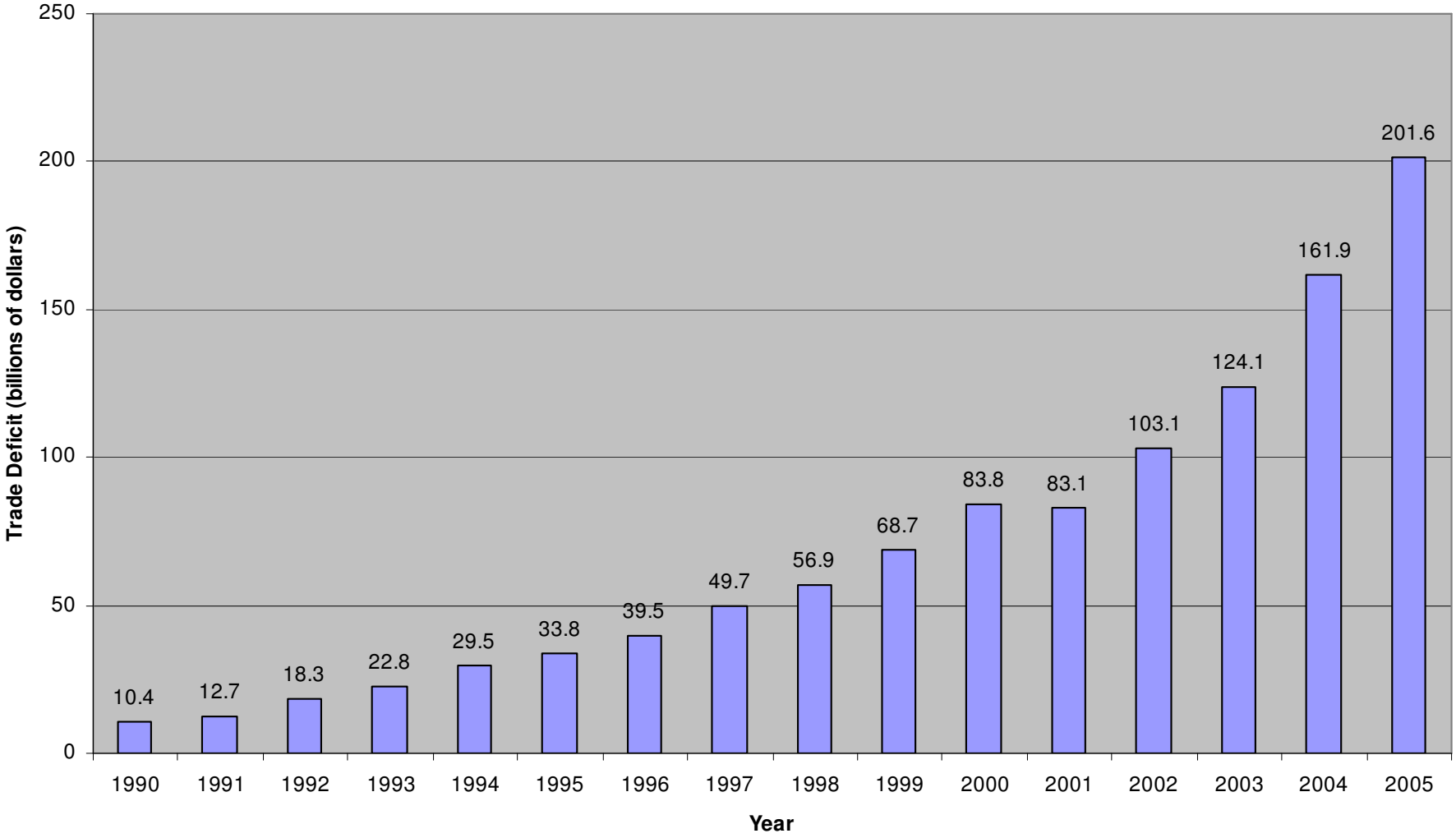
- Take advantage of proximity to U.S. market (e.g., quicker time to market; large & heavy goods; made-to-order customized products)
- Eliminate comparative disadvantages (bureaucracy; low productivity; poor utilities & transport infrastructure; education)
- Move into high-value activities within GVCs (e.g., R&D, design, engineering, business services)
- Use domestic market as an asset

“Made in China” Doesn’t Tell the Whole Story

“Made in China”?

- Regardless of product labels… do “made in China” product labels tell the whole story? Are these products truly made by Chinese firms?
- A closer examination of trade statistics shows a complex picture.
  - *Intrafirm trade* between branches of multinational companies constitutes a large part of China’s exports.
  - China plays a central role in evolving *intraregional trade networks* in East Asia.

Figure 1: US Annual Trade Deficit with China, 1990-2005

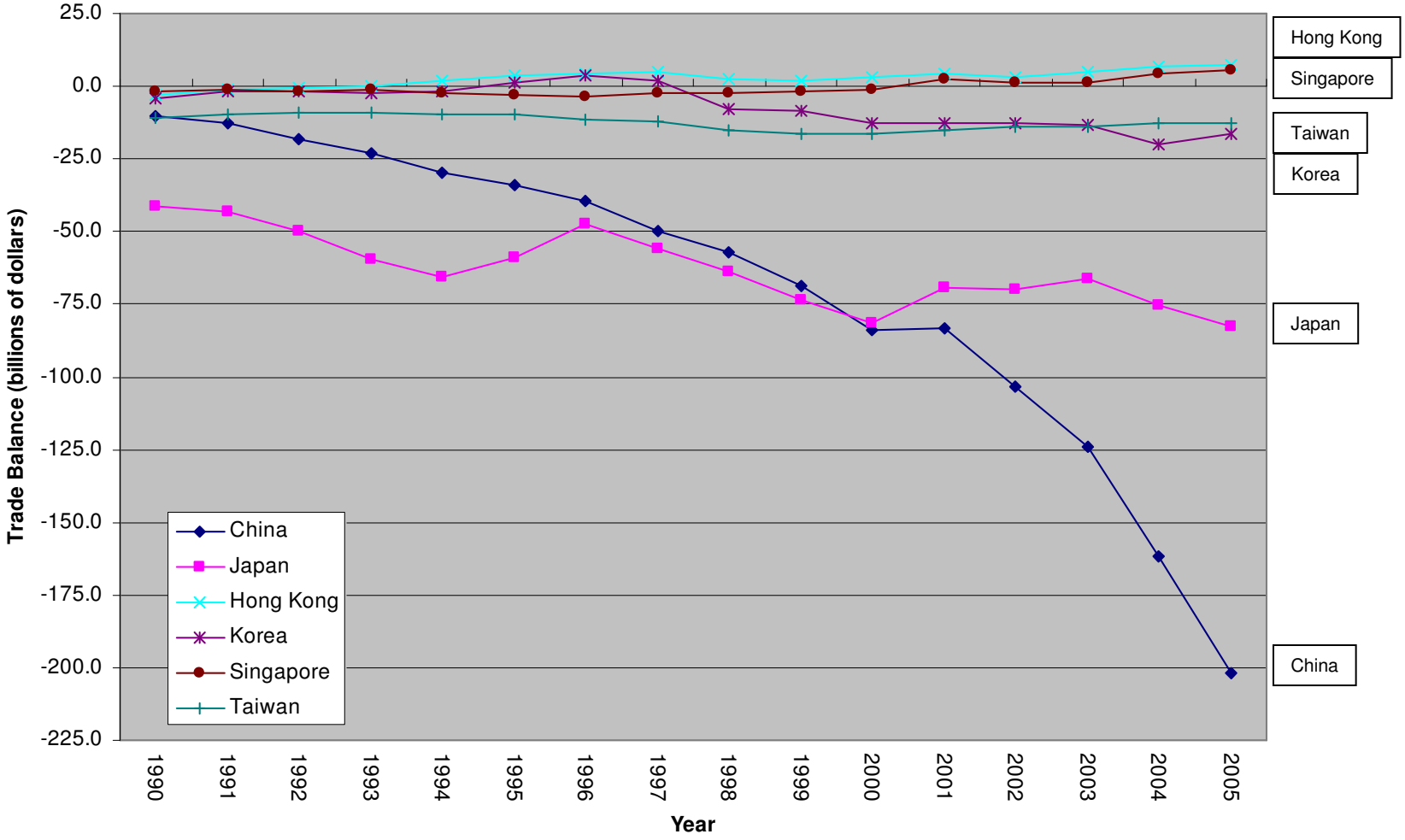


Source: U.S. Census Bureau, Foreign Trade Division; U.S. Department of Commerce, Bureau of Economic Analysis

China and the US Trade Deficit

- China accounts for more than a quarter of the US trade deficit ($201.6 billion in 2005)
  - Largest trade deficit for the US with any country in 2005
  - Largest deficit in history for the US with any country
- China's surplus has prompted a strong response from Congress, the public, and the media
  - "The trade deficit is a crisis waiting to happen. We can't continue to borrow $650 billion from the rest of the world to finance our consumption." - Robert E. Scott, Senior International Economist, Economic Policy Institute
  - "These exploding trade deficit numbers…are a sign of weakness. They indicate a slow bleeding at the wrists economically for the United States." - Sen. Charles Schumer (D-NY), 10 February 2006
- *Is this a China problem?*

Figure 2: US Annual Trade Balance with Selected Asian Countries, 1990-2005



US Trade Balance with World	-80.9	-31.1	-39.2	-70.3	-98.5	-96.4	-104.1	-108.3	-165.0	-263.4	-378.3	-362.7	-421.2	-494.8	-617.6	-766.8

(in billions of $)

Source: U.S. Census Bureau, Foreign Trade Division; U.S. Department of Commerce, Bureau of Economic Analysis

US Trade Deficits with Asia

- From 1990-2005, US ran major deficits with China (1990: $10b; 2005: $202b) and Japan (1990: $41b; 2005: $83b)
- US trade deficits with East Asian NIEs either remained steady (Taiwan, Korea) or improved (Hong Kong, Singapore)
  - Reason: Rise of China shifted US imports from East Asian NIEs to China

Decomposing China's Export Trade: Role of Foreign Firms

Figure 3: China's Exports to the US

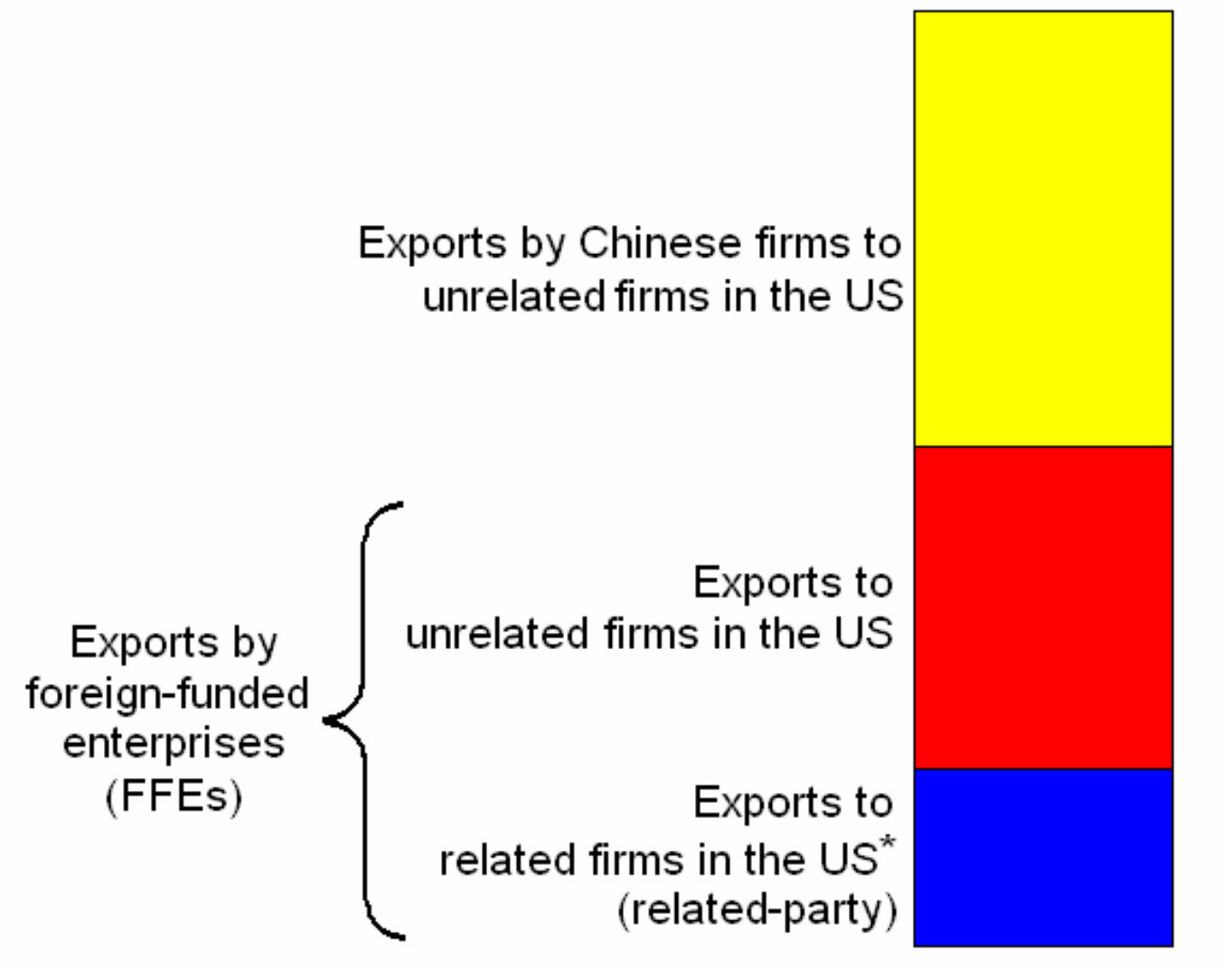
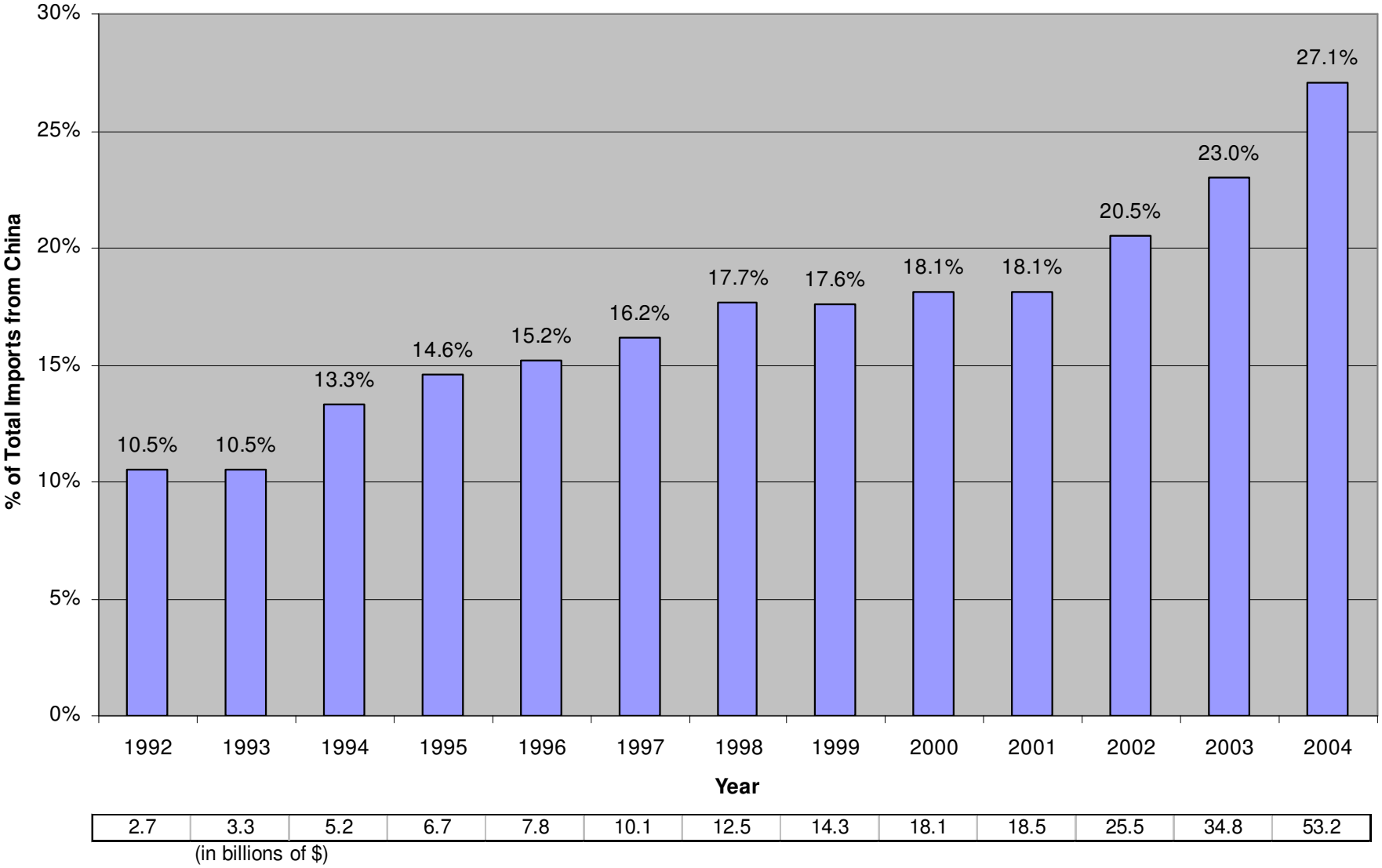


Figure 4: US Related-Party Imports from China, 1992-2004

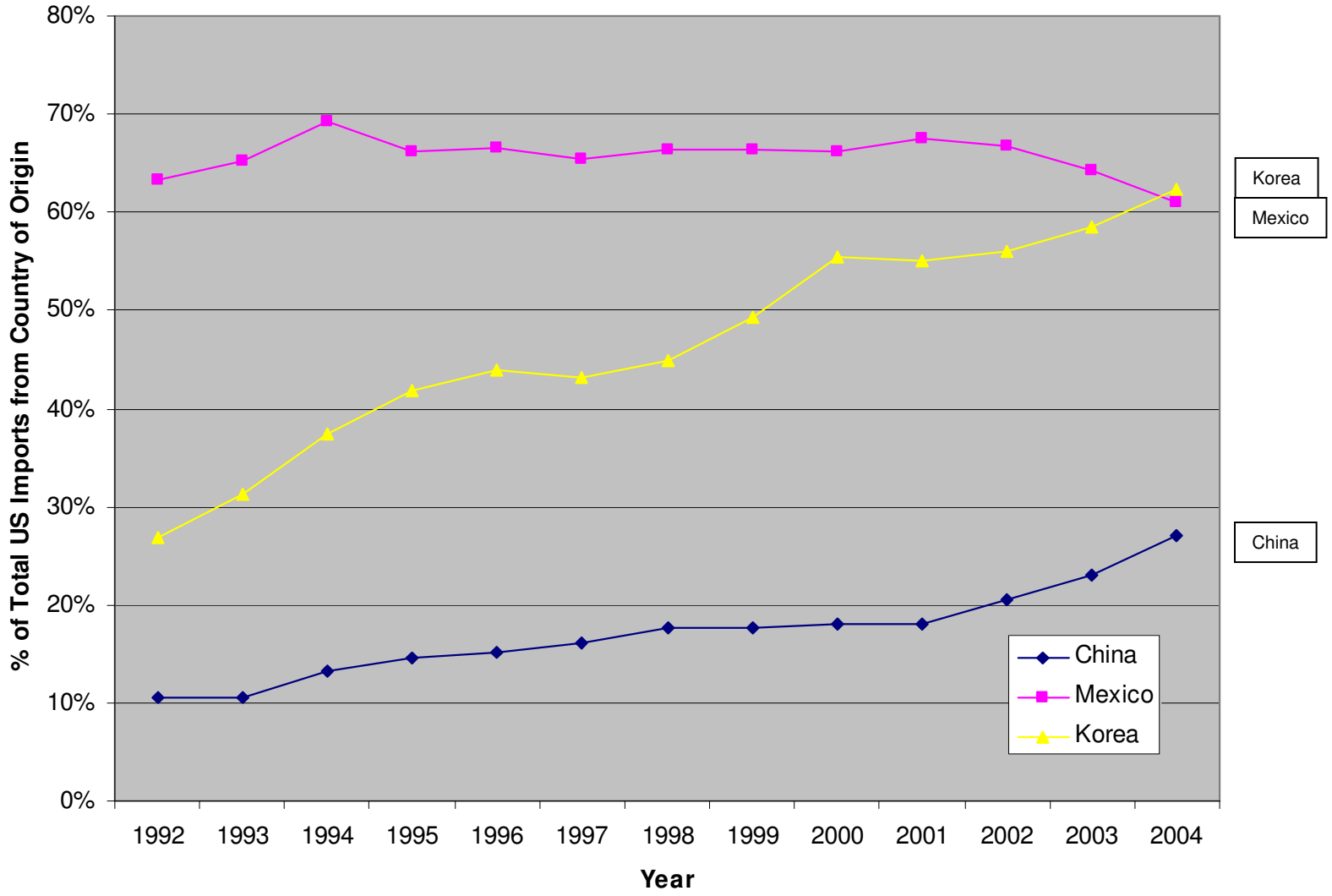


2.7	3.3	5.2	6.7	7.8	10.1	12.5	14.3	18.1	18.5	25.5	34.8	53.2

(in billions of $)

Source: U.S. Census Bureau, Related-Party Trade Statistics. 1992-1998 numbers re-calculated using overall import data from Trade Stats Express and percentages from above. China's related-party exports to the US would include trade between parents and affiliates of all nationalities.

Figure 5: US Related-Party Imports from Selected Countries, 1992-2004

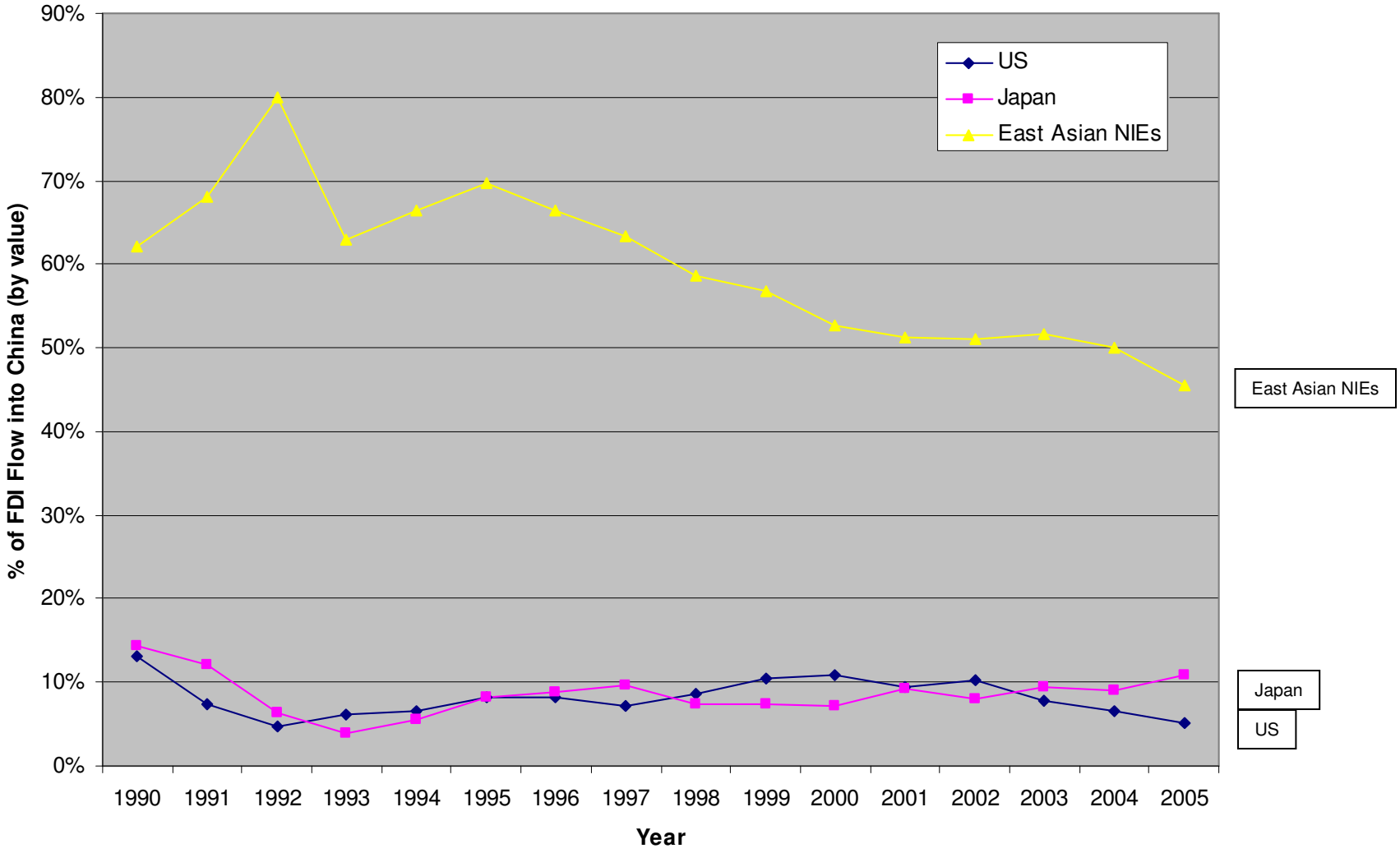


Source: U.S. Census Bureau, Related-Party Trade Statistics. 1992-1998 numbers re-calculated using overall import data from Trade Stats Express and percentages from Census Bureau.

Trends in related-party trade

- Increasing dramatically in China & Korea
  - Korea: 26.8% to 62.3%
    - Sector diversification
    - Rising capital intensity
    - Technological innovation
    - Increasing R&D investment
  - China: 10.5% to 27.1%
    - Sector diversification
    - Growing FDI
    - China's accession to the WTO
    - Increasing R&D investment
- Holding steady in Mexico (around 65%)

Figure 6: FDI Flows into China by Country of Origin, 1990-2005

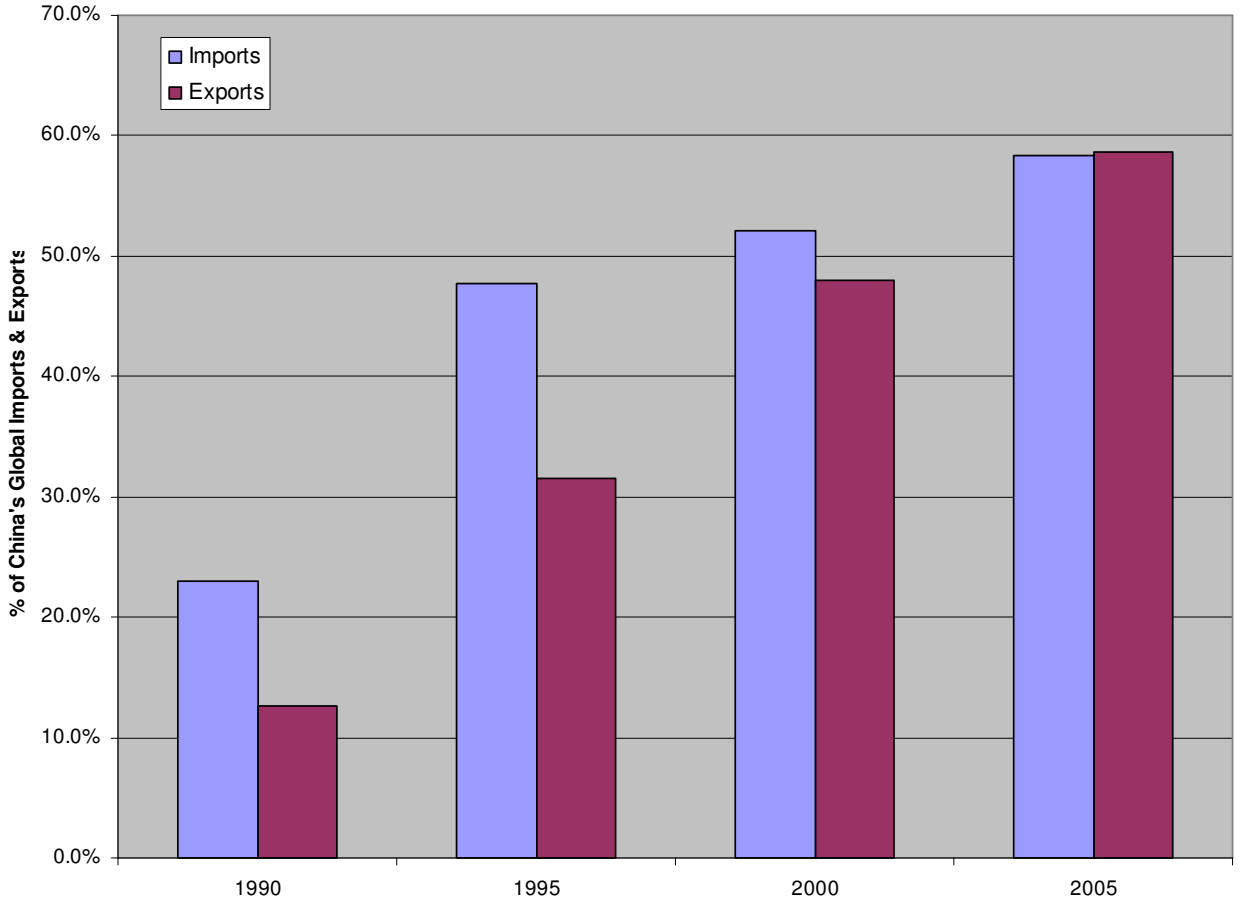


TOTAL FDI	3.5	4.4	11.0	33.8	37.5	37.5	41.7	45.3	45.5	40.3	40.7	46.9	52.7	53.5	60.6	60.3

(in trillions of $)

Source: Chinese Ministry of Commerce, Foreign Investment Management Office

Figure 7: Foreign-Funded Enterprise (FFE) Share of China's Global Imports & Exports, 1990-2005

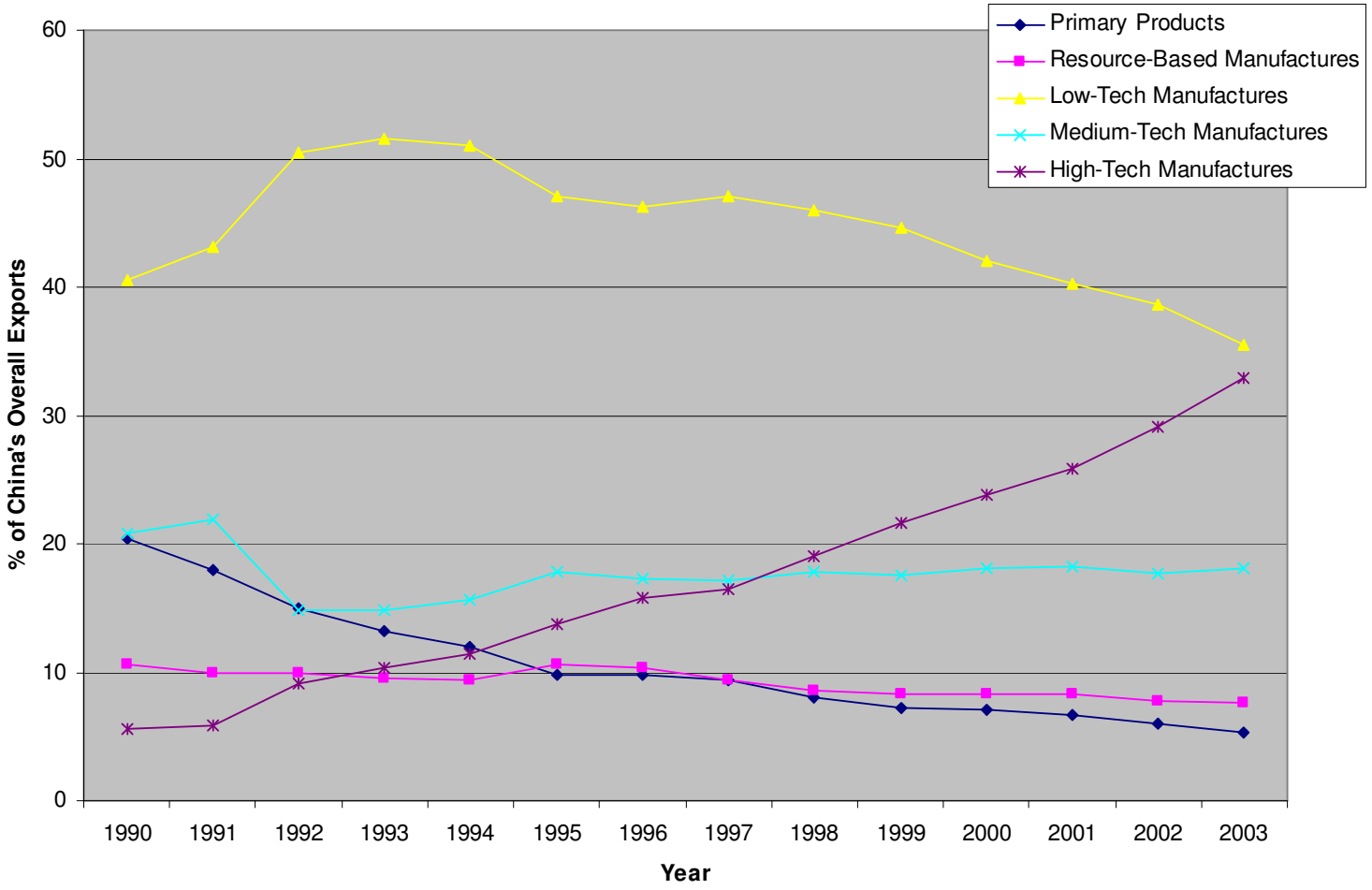


Total Imports	53.3	132.1	225.1	762.0
Total Exports	62.1	148.8	249.2	660.1

(in billions of $)

Source: Chinese Ministry of Commerce, Foreign Investment Management Office

Figure 8: China's Exports to World Markets by Technology-Based Product Classification, 1990-2003



TOTAL EXPORTS	64.9	74.5	88.6	95.5	121.5	150.1	157.5	189.5	193.8	210.1	267.7	295.1	354.0	476.6

(in billions of $)

Source: World Trade Analyzer. Classifications are from the work of Oxford professor Sanjaya Lall.

Foreign Capital in China's Exports

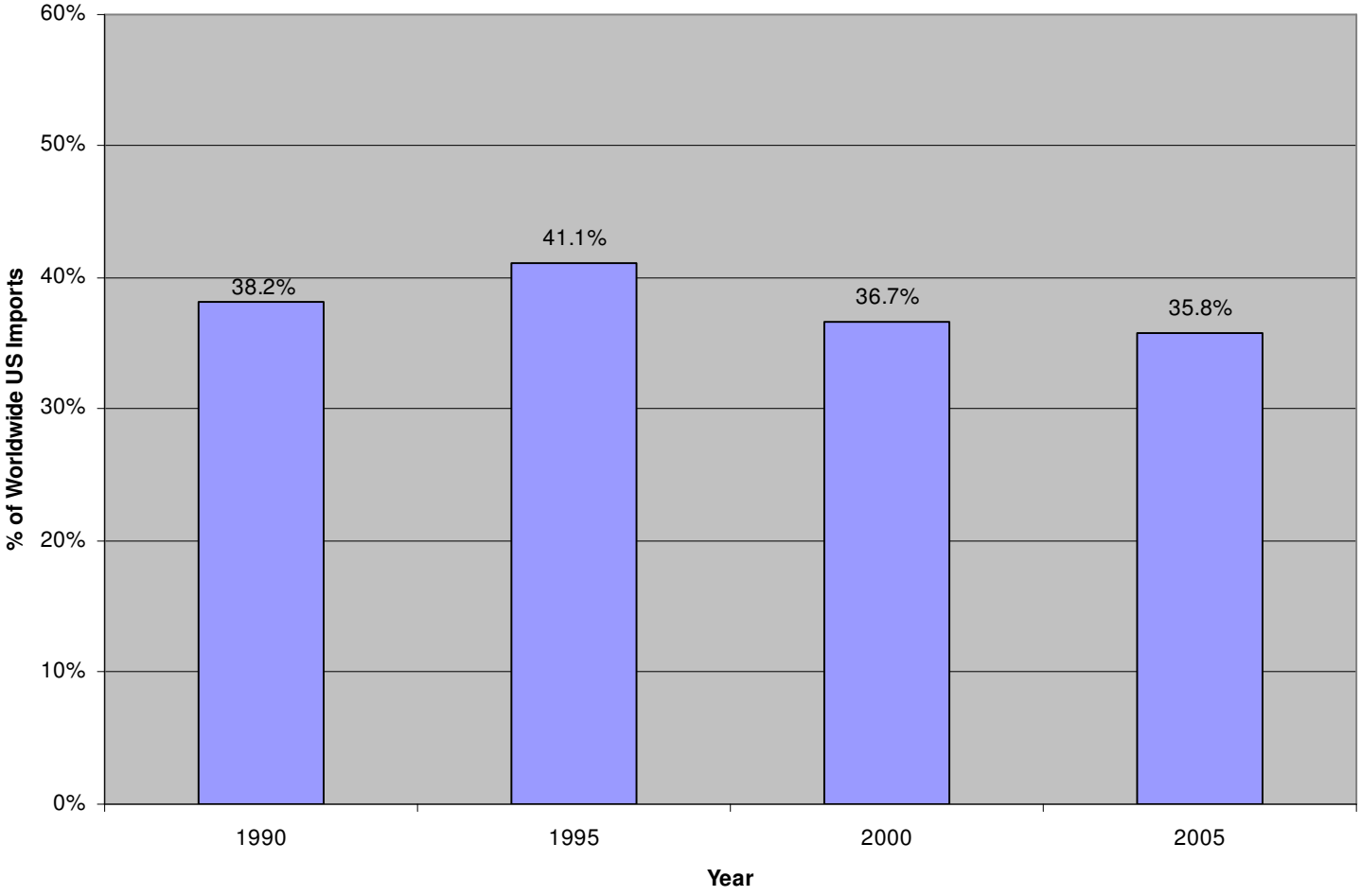
- China the third largest recipient of worldwide FDI
  - World's largest recipients: US ($96b), United Kingdom ($79b), China ($61b) *(UNCTAD, 2005)*
  - Largest contributors of China's FDI are in Asia, including the East Asian NIEs (45.5%) and Japan (10.8%) *(2005 Chinese statistics)*
- China's foreign-funded enterprises (FFEs), in turn, drive China's export trade.
- *Sector diversification* is promoting FDI and FFEs
  - China is pushing for exports in higher-tech products, thus promoting intrafirm trade and pushing China up the value chain.

Intra-regional Trade Networks: China's Changing Role in Asian Exports to the US

US Imports from Asia

- Despite fears of the “rise of China,” the share of US overall imports from Asia has declined slightly from 1990 (38.2%) to 2005 (35.8%).
- Composition of imports has shifted with the rise of new global production networks.
  - Firms shift production of goods from Japan and the East Asian NIEs to China.
  - Trade balances have shifted, with some worsening (China, Japan) while others have improved (Hong Kong, Singapore)

Figure 9: US Imports from Asia, 1990-2005

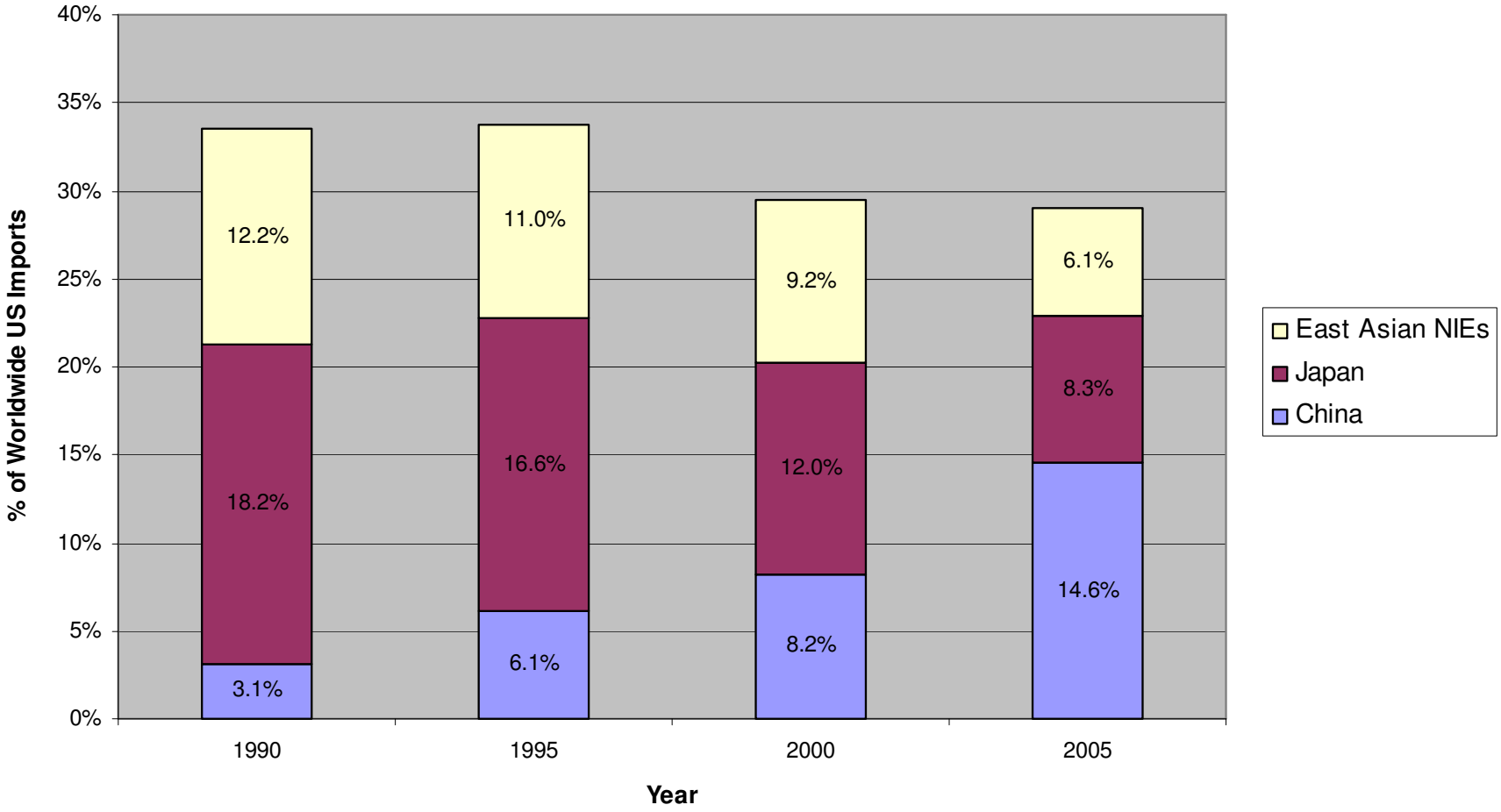


189.2	305.4	446.4	598.0

(in billions of $)

Source: U.S. Department of Commerce, Trade Stats Express. Asia here includes Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, China, East Timor, Hong Kong, India, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Laos, Macau, Malaysia, Maldives, Mongolia, Myanmar, Nepal, North Korea, Pakistan, Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Tajikistan, Thailand, Turkmenistan, Uzbekistan, Vietnam.

Figure 10: US Imports from China, Japan, and the East Asian NIEs, 1990-2005



Import Total from China/Japan/NIEs	166.1	251.1	358.1	484.2

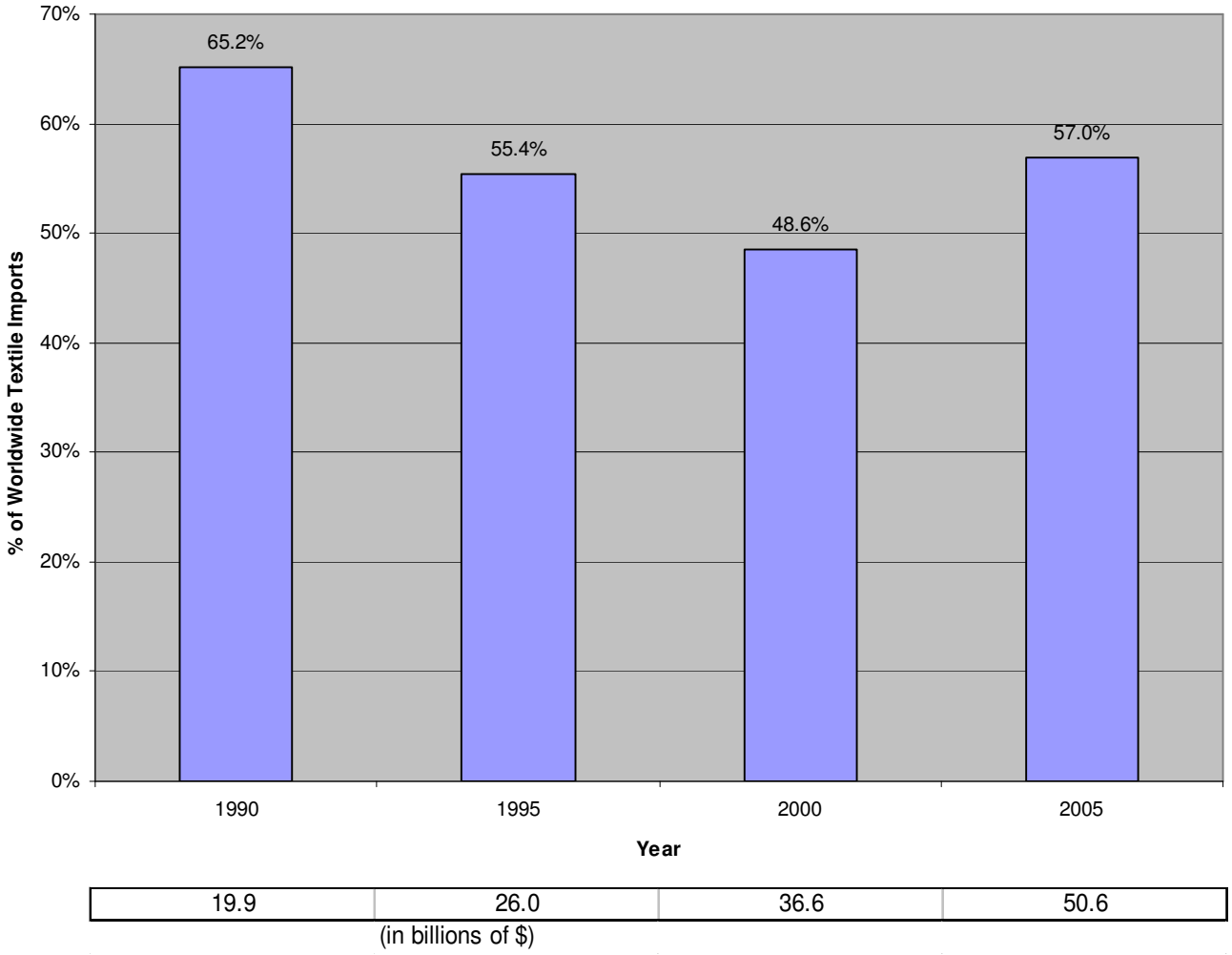
(in billions of $)

Source: U.S. Department of Commerce, Trade Stats Express.

US Textile Imports from Asia

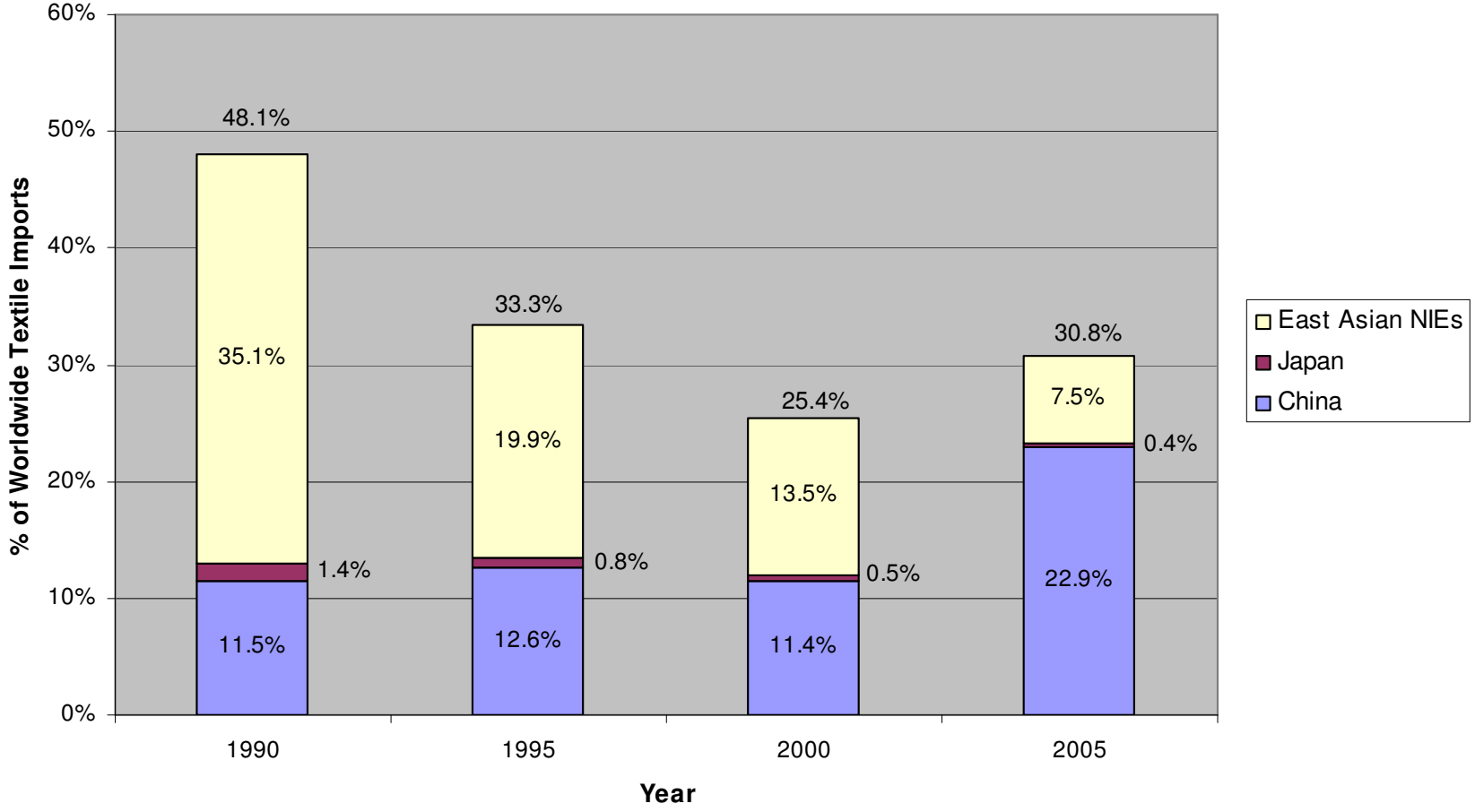
- Textile imports from Asia have declined since 1990.
  - 1990s: Textile imports from Asia fell, as NAFTA causes shift to Mexico.
  - Since 2000: Imports have risen slightly, with China's WTO accession and the phase-out of MFA.
- Composition of imports has shifted: firms have shifted production of textiles and fibers from Japan and the East Asian NIEs to China
  - China rapidly assuming a dominant role in textile production chains
  - East Asian NIEs sharply contracting

Figure 11: US Textile Imports from Asia, 1990-2005 (SITC 26, 65, 84)



Source: U.S. Department of Commerce, Trade Stats Express. Asia here includes Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, China, East Timor, Hong Kong, India, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Laos, Macau, Malaysia, Maldives, Mongolia, Myanmar, Nepal, North Korea, Pakistan, Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Tajikistan, Thailand, Turkmenistan, Uzbekistan, Vietnam.

Figure 12: US Textile Imports from China, Japan & the East Asian NIEs, 1990-2005 (SITC Codes 26, 65, 84)



Import Total from China/Japan/NIEs	14.7	15.6	19.1	27.4

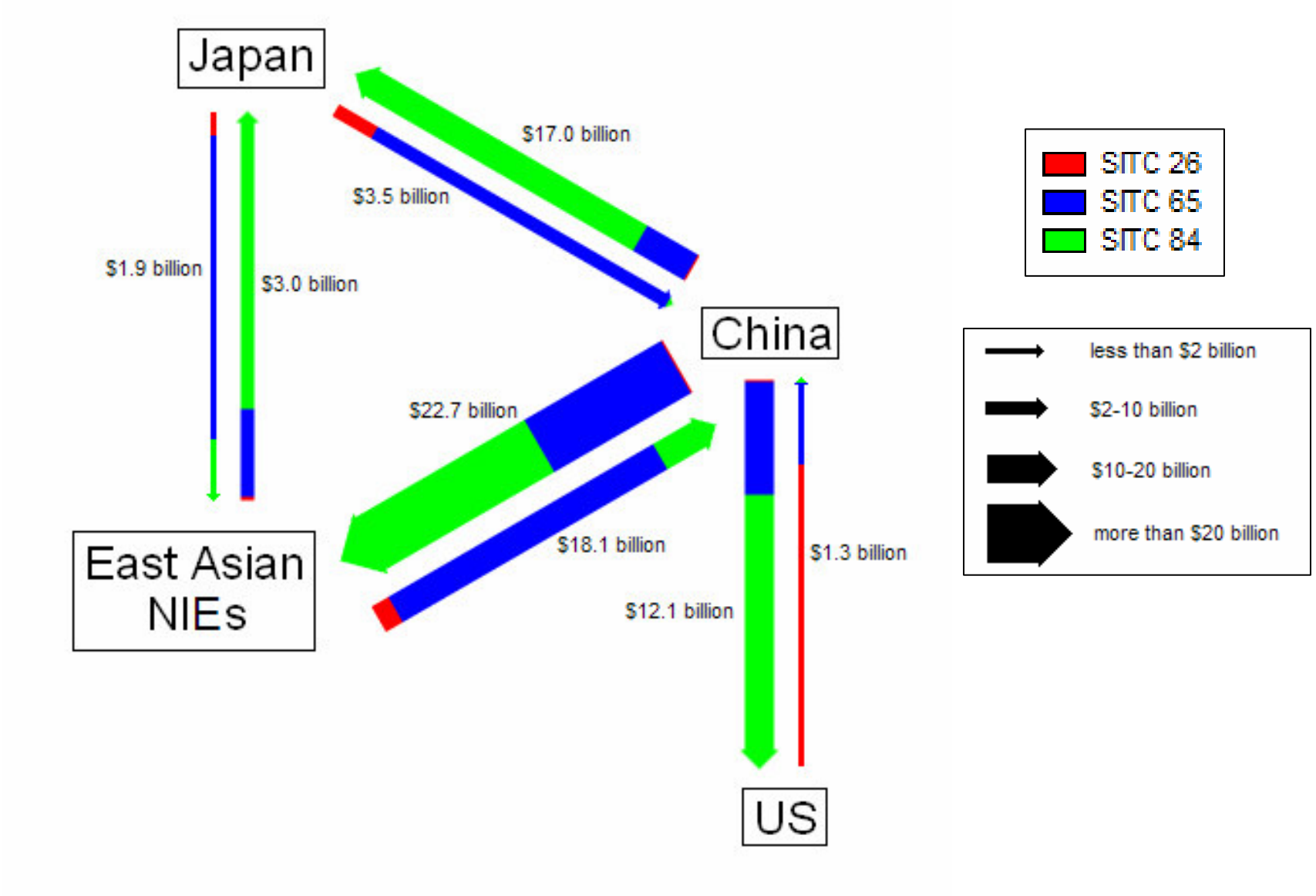
(in billions of $)

Source: U.S. Department of Commerce, Trade Stats Express.

Intra-regional Textile Trade Networks

- Bilateral trade in textiles masks emerging regional trade networks.
- China is now the hub in Asia's regional production networks.
  - China as a growing export production center for SITC 84 (Apparel)
  - China is importing SITC 26 (Textile fibers) and 65 (Textiles for Apparel) from East Asia in significant numbers
- Thus, China's exports to the US include indirect exports from Japan and the East Asian NIEs.

Figure 13: China's Place in Asian Textile Trade Networks, 2003 (SITC 26, 65, 84)



China's Trade Impact Is Global, and Not Simply a Race to the Bottom

- Analyzing the US's bilateral trade with China must situate China within emerging intraregional trade networks.
- Foreign firms play a key role in China's strategy of export diversification
- China is pioneering new forms of industrial organization – supply chain cities, not clusters
- High-value activities are receiving most attention (R&D, design, science & engineering education, brands)

Broad Conclusions

- There is a globalization paradox
  - The dramatic expansion of production capabilities reflected in global outsourcing creates heightened anxieties in both developed and developing countries regarding sustainable development
- The global economy is concentrated at the top and fragmented at the bottom
  - Thus, the real opportunities to move up in value chains are concentrated in a small number of developing economies

- Global consolidation is increasing among the largest developing economies (China, India) and among the largest firms & factories
- Development strategies need both vision and balance
  - Exports and domestic markets can be complementary
  - Industrial policies are being implemented at subnational level
  - Regional markets supplement national ones, and can reduce the pressures from global competition

Thank you
for your attention!