

# **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

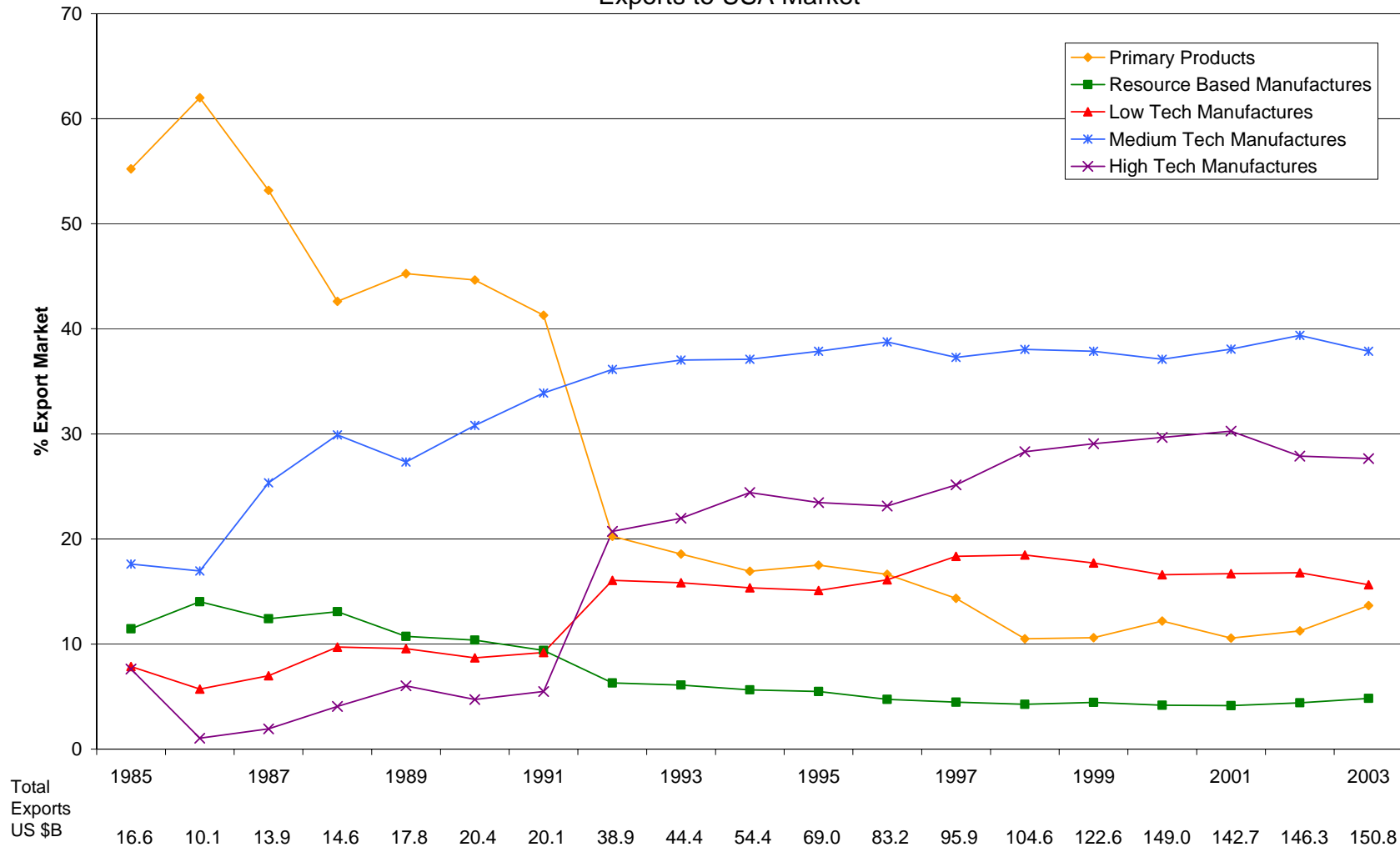
# **Comparing Industrial Upgrading Trajectories: Mexico vs. China**

# 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**

**Mexico**  
Exports to USA Market

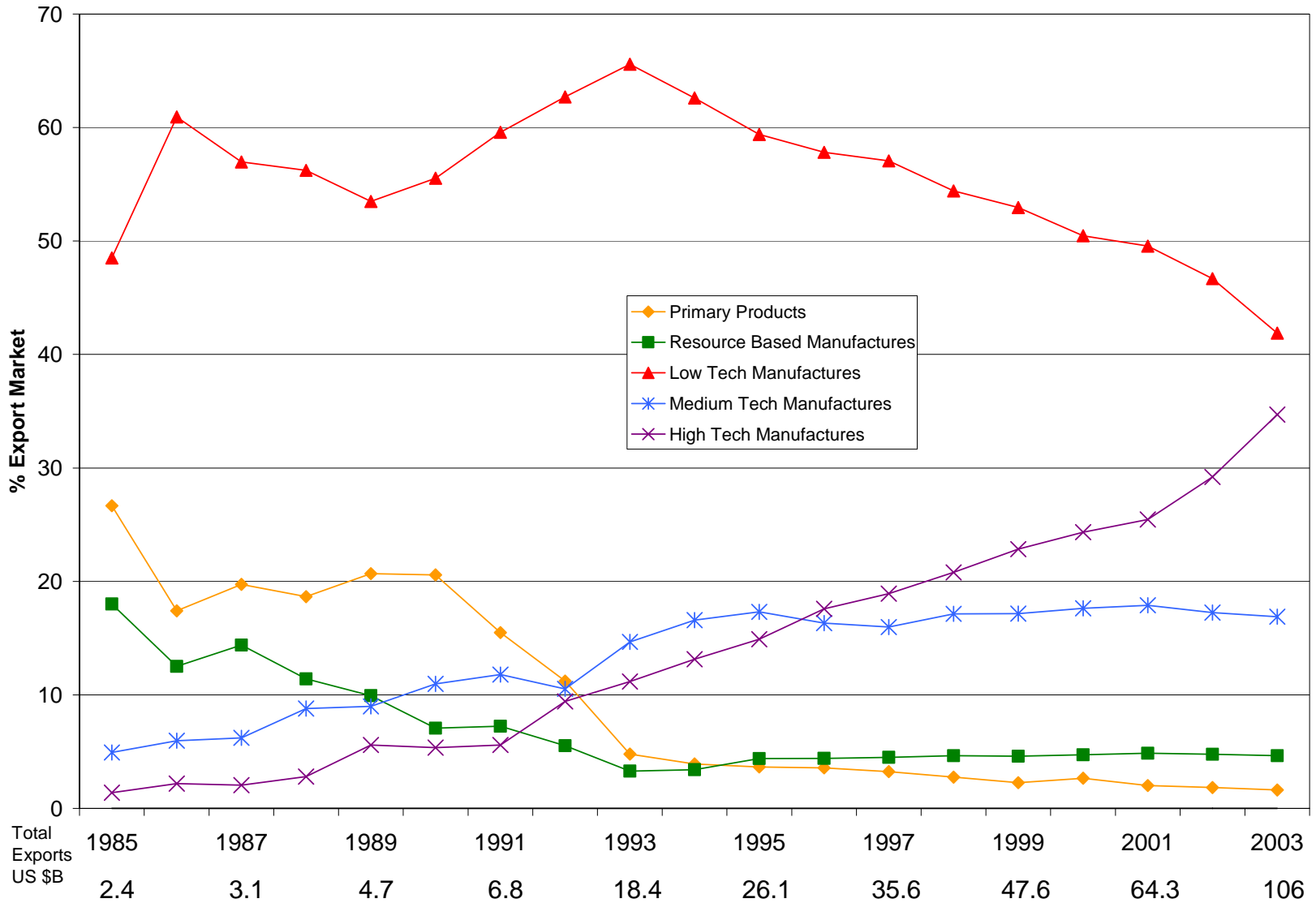


Source: World Trade Analyzer.

# 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- Furniture 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

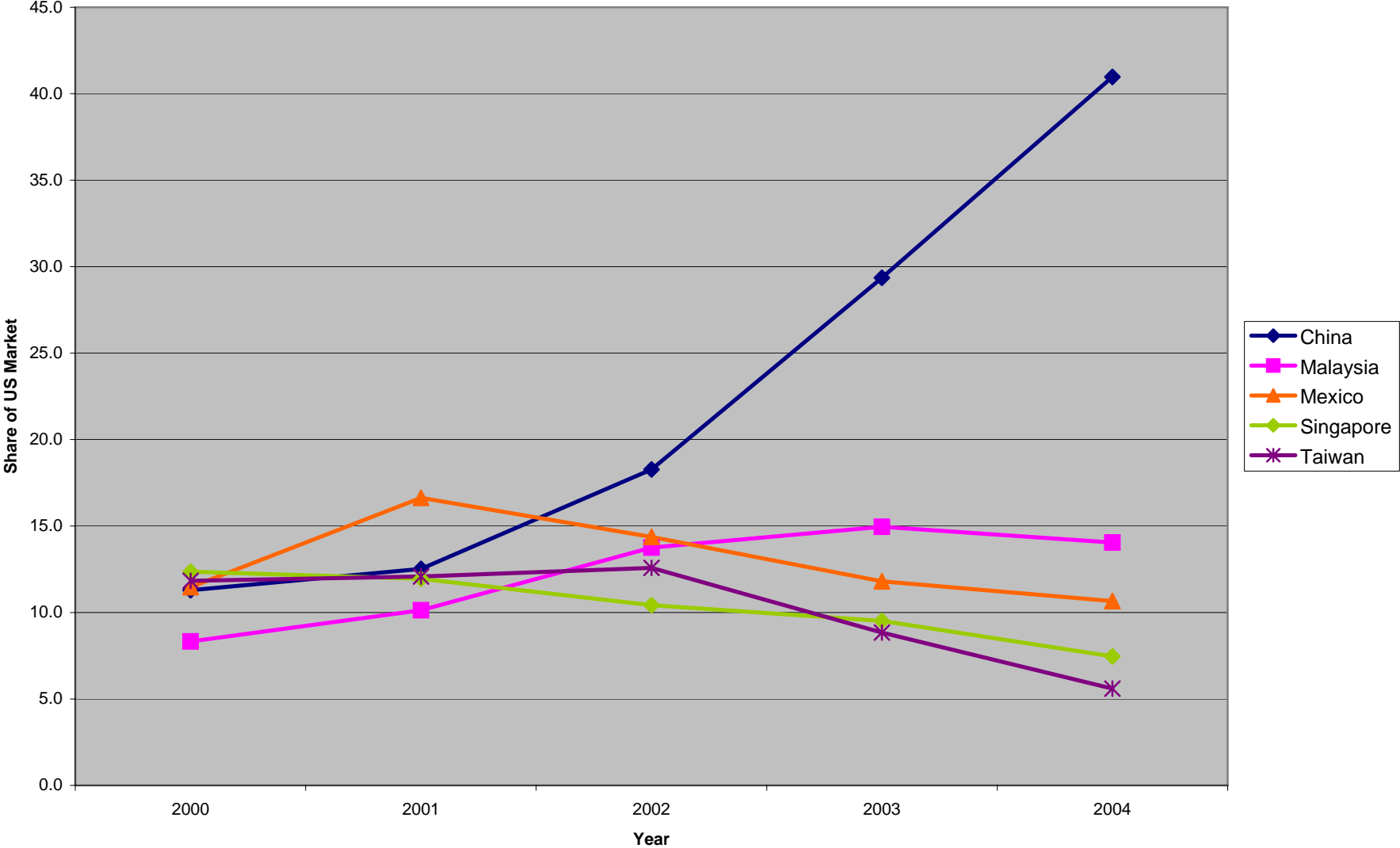
Source: United States International Trade Commission and US Department of Commerce

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

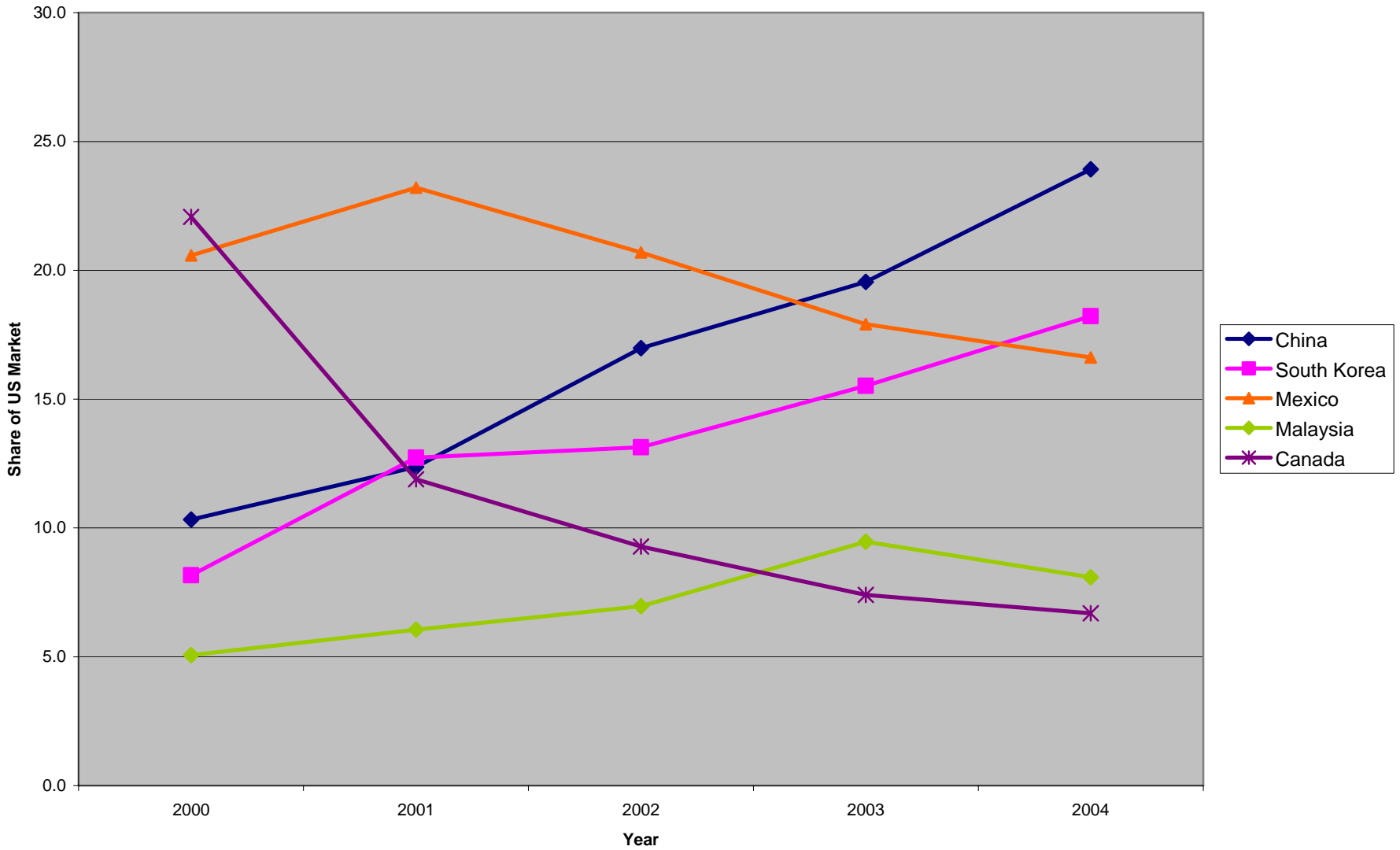
SITC category	Product		2000		2005		Change in Market Share 2000-2005
			Value (billions)	Share of US market	Value (billions)	Share of US market	
752	Automatic Data Processing Machines and Units	Mexico	6.4	11.5	5.7	8.9	-2.6 35.8
		China	6.3	11.3	29.9	47.1	
		US Total	55.9		63.5		
764	Telecommunications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

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

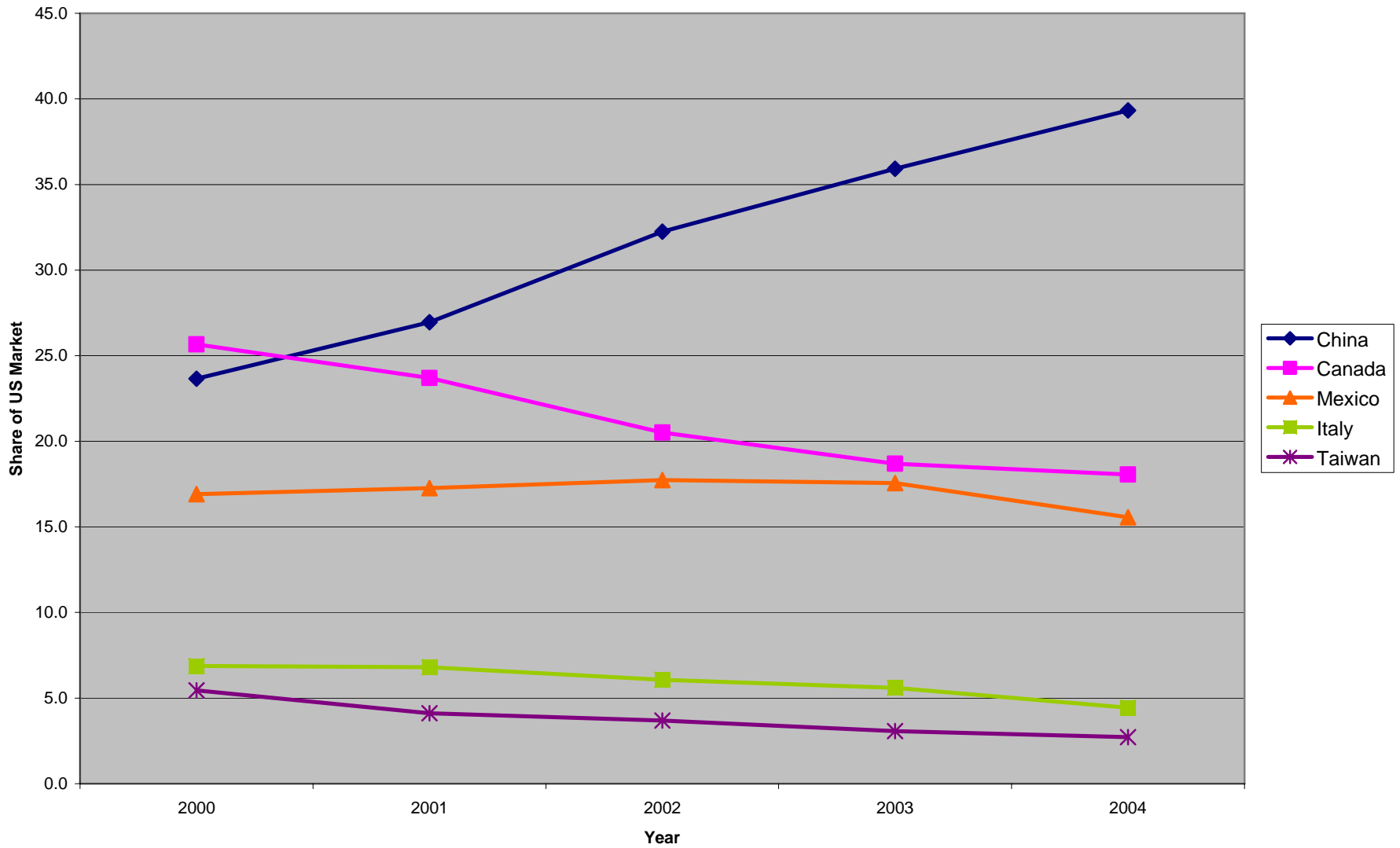
Main Competitors in the US Market for Automatic Data Processing Machines and Units (SITC 752)



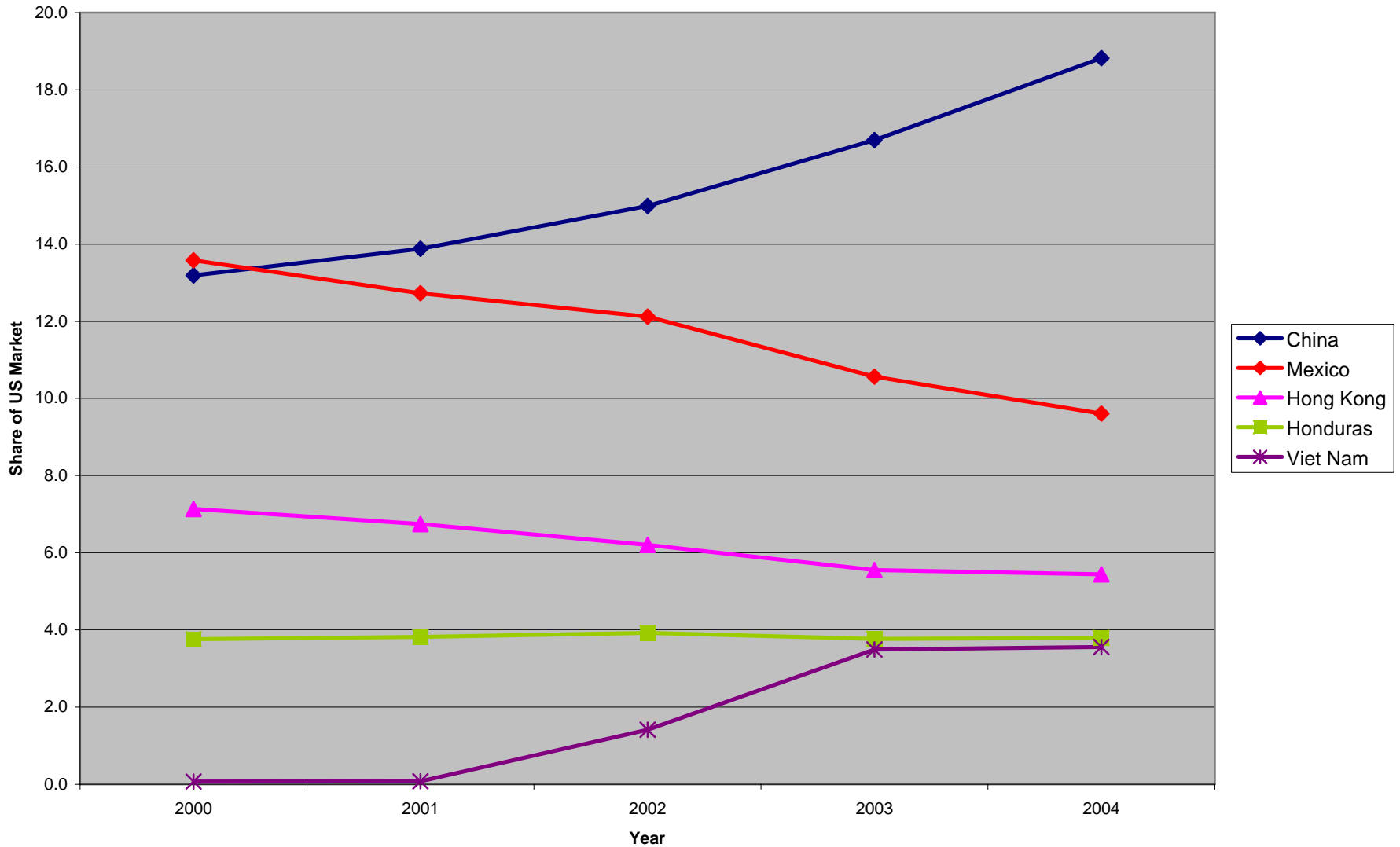
Main Competitors in the US Market for Telecommunications Equipments and Parts (SITC 764)



Main Competitors in the US Markets for Furniture and Parts (SITC 821)



Main Competitors in the US Market for Articles of Apparel and Clothing (SITC 84)



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

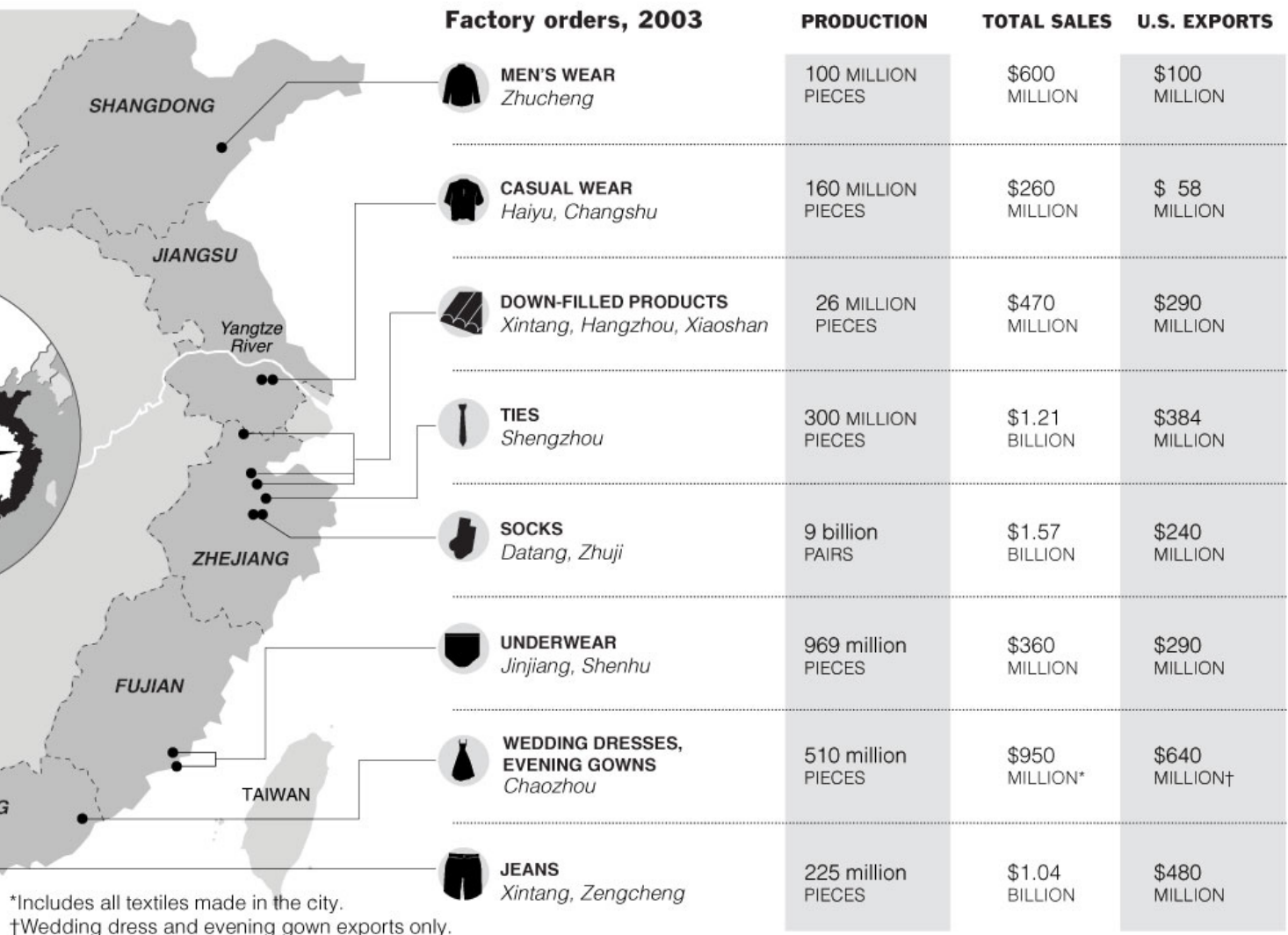
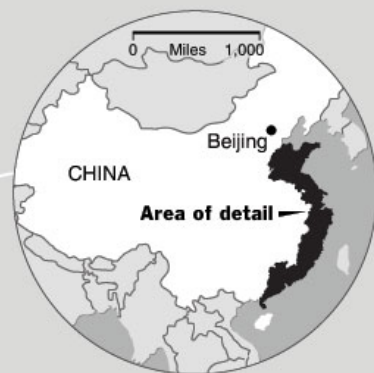
- China is a lower-cost producer overall (labor costs lower, but not transport & tariffs)
- China has huge scale economies
- China has a coherent and multidimensional upgrading strategy – diversify and add high value activities
- China is using direct foreign investment to promote “fast learning” in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



# China's Supply Chain Cities in Apparel

## Made in China, Shipped Worldwide

The factory towns on the coast of China manufacture clothing to keep America's closets full, making everything to wear from head to toe.



\*Includes all textiles made in the city.  
†Wedding dress and evening gown exports only.

Sources: China National Textile Council; Shenhu Underwear Association; Datang Town Government

# How can Mexico compete with China?

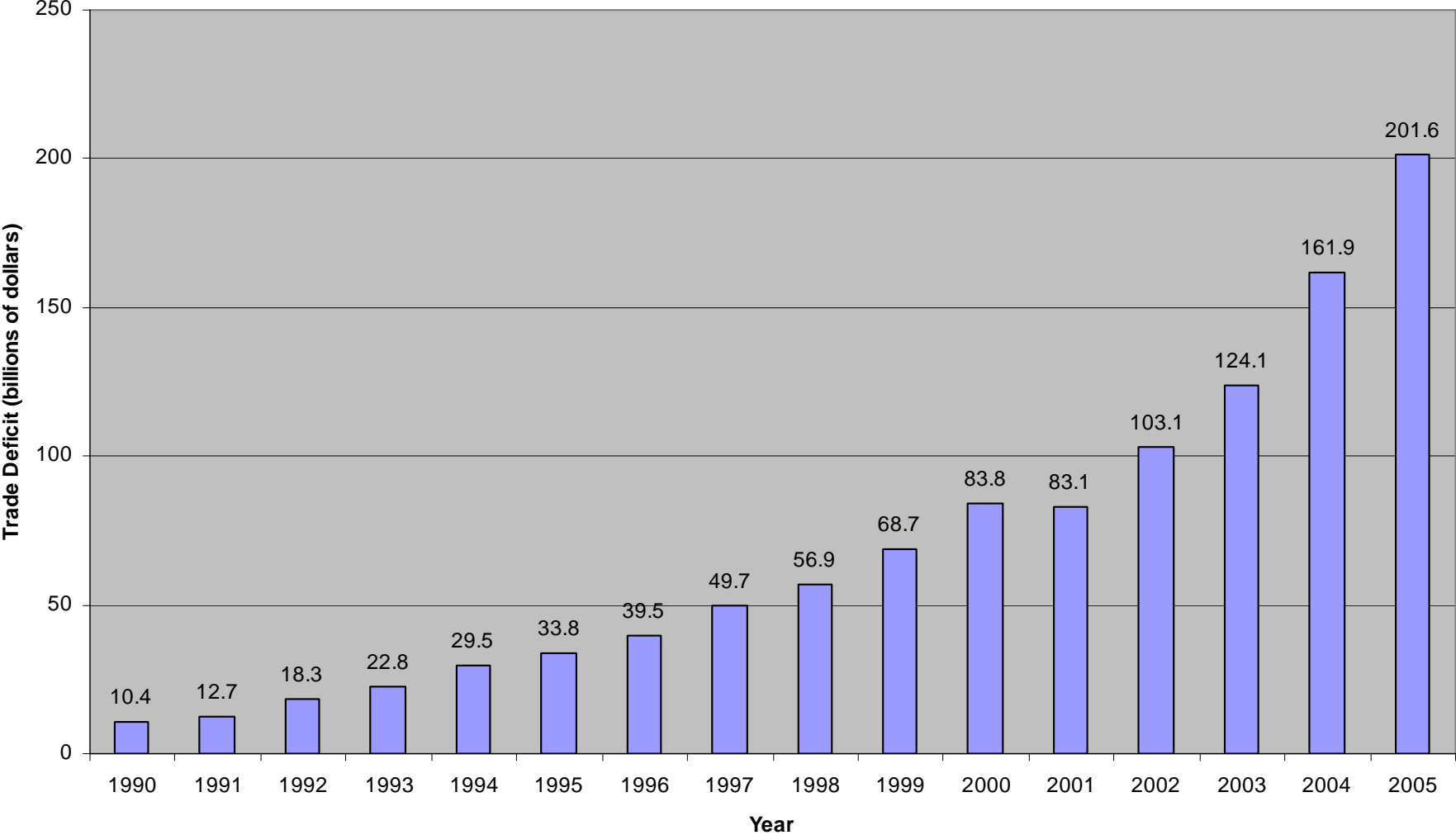
- Take advantage of proximity to U.S. market (e.g., quicker time to market; large & heavy goods; made-to-order customized products)
- Eliminate comparative disadvantages (bureaucracy; low productivity; poor utilities & transport infrastructure; education)
- Move into high-value activities within GVCs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

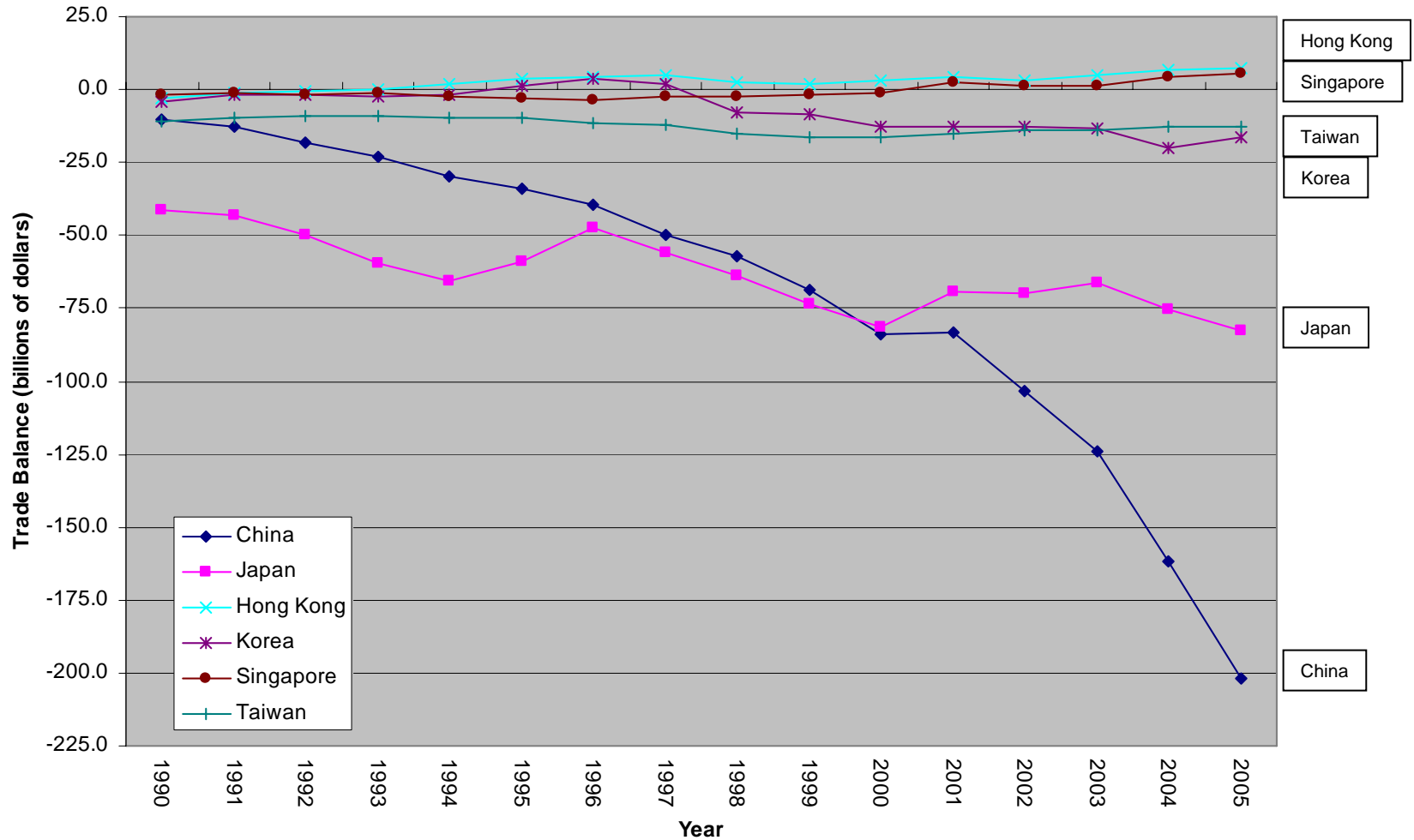


Source: U.S. Census Bureau, Foreign Trade Division; U.S. Department of Commerce, Bureau of Economic Analysis

# 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
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(in billions of \$)

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

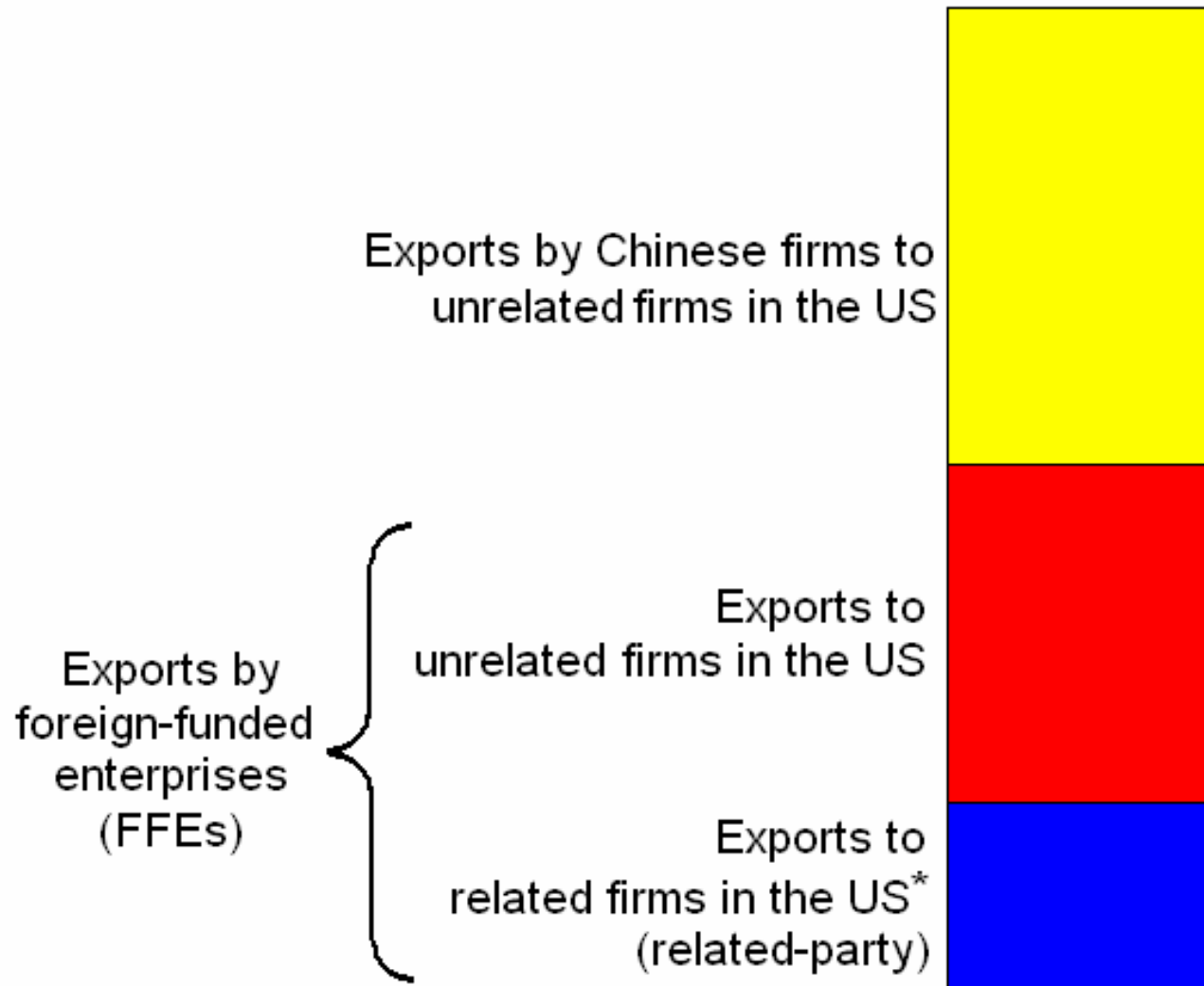
# US Trade Deficits with Asia

- 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

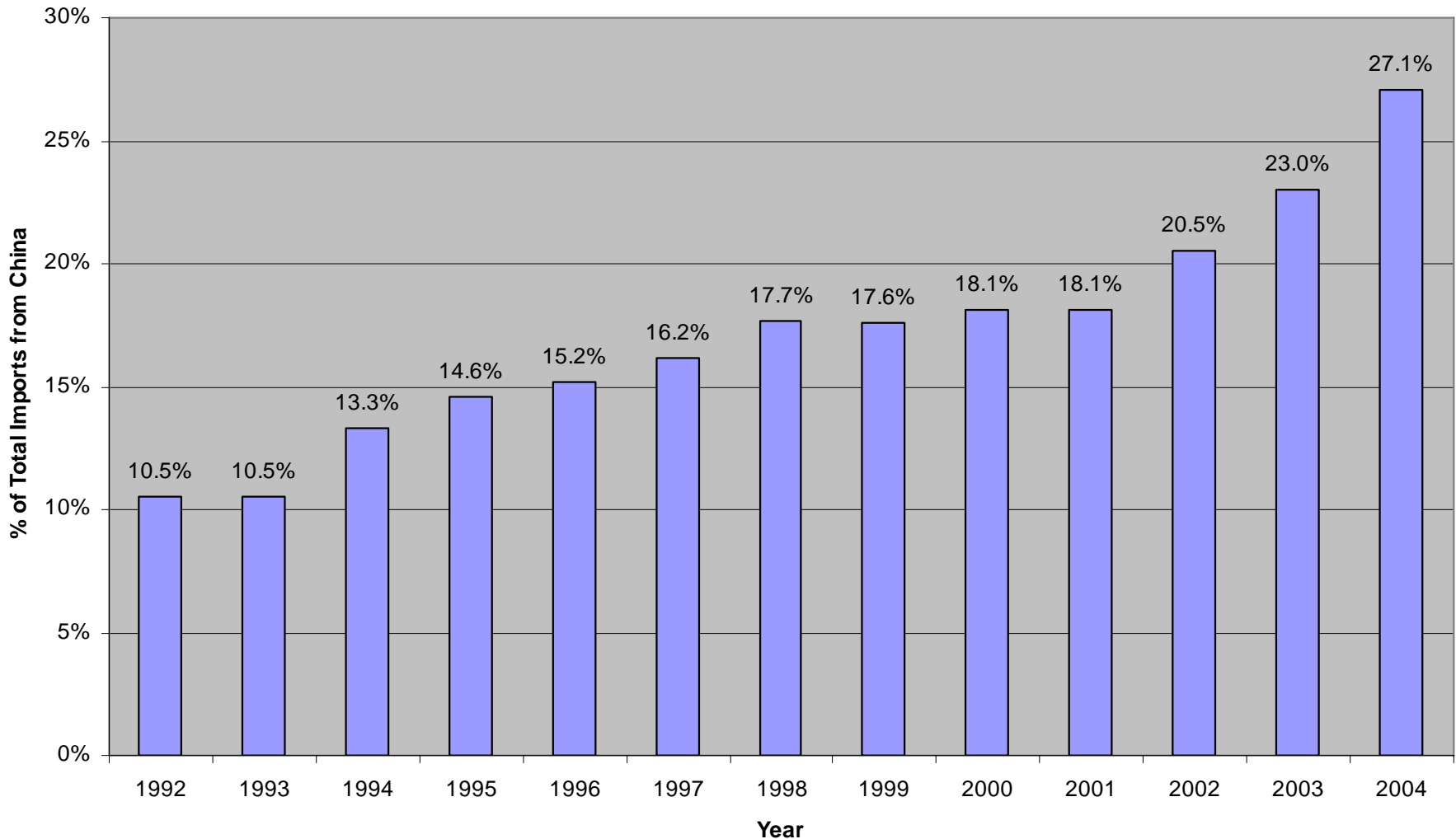


# Decomposing China's Export Trade: Role of Foreign Firms

# Figure 3: China's Exports to the US



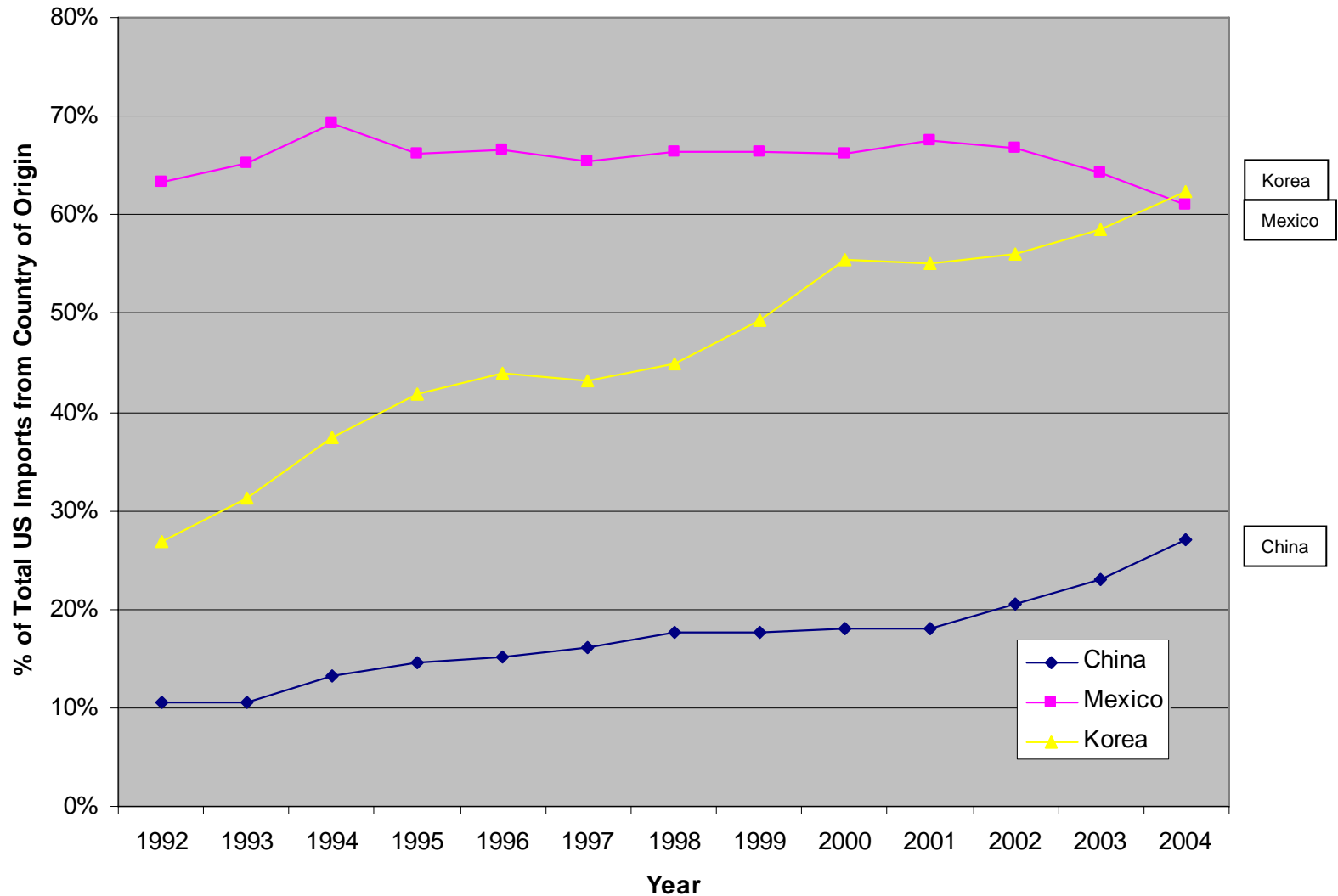
# Figure 4: US Related-Party Imports from China, 1992-2004



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

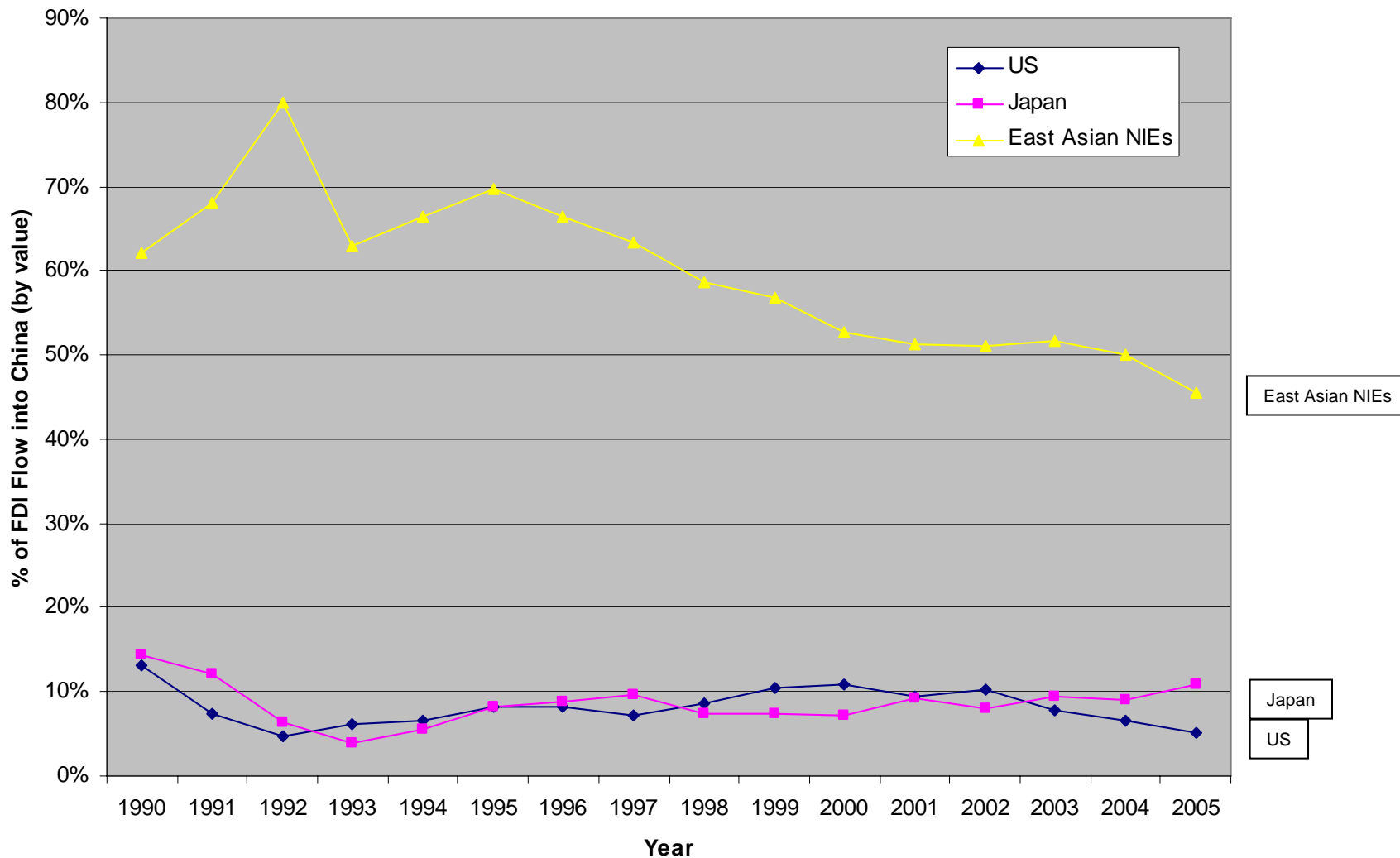


Source: U.S. Census Bureau, Related-Party Trade Statistics. 1992-1998 numbers re-calculated using overall import data from Trade Stats Express and percentages from Census Bureau.

# 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%)

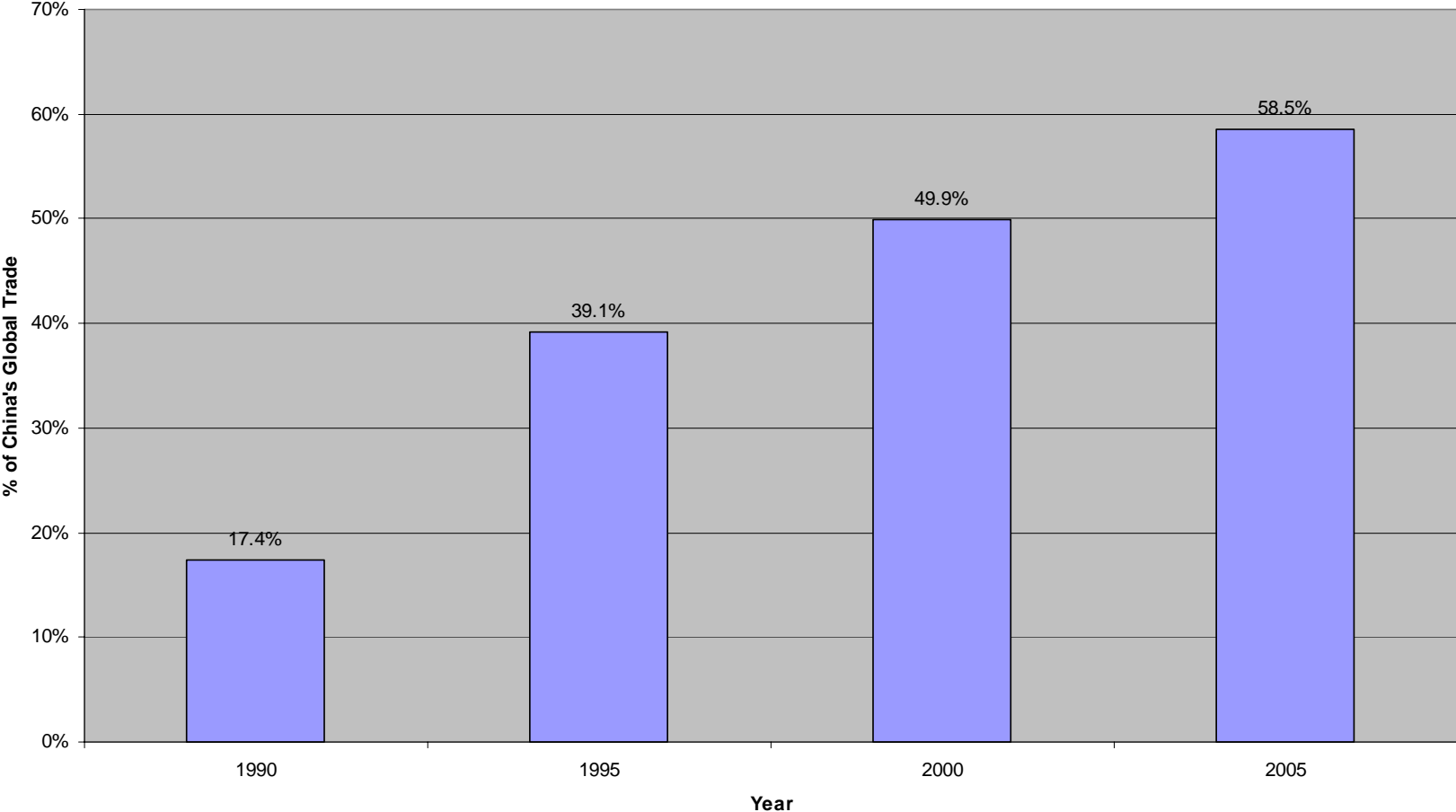
# Figure 6: FDI Flows into China by Country of Origin, 1990-2005



<b>TOTAL FDI</b>	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 Trade, 1990-2005

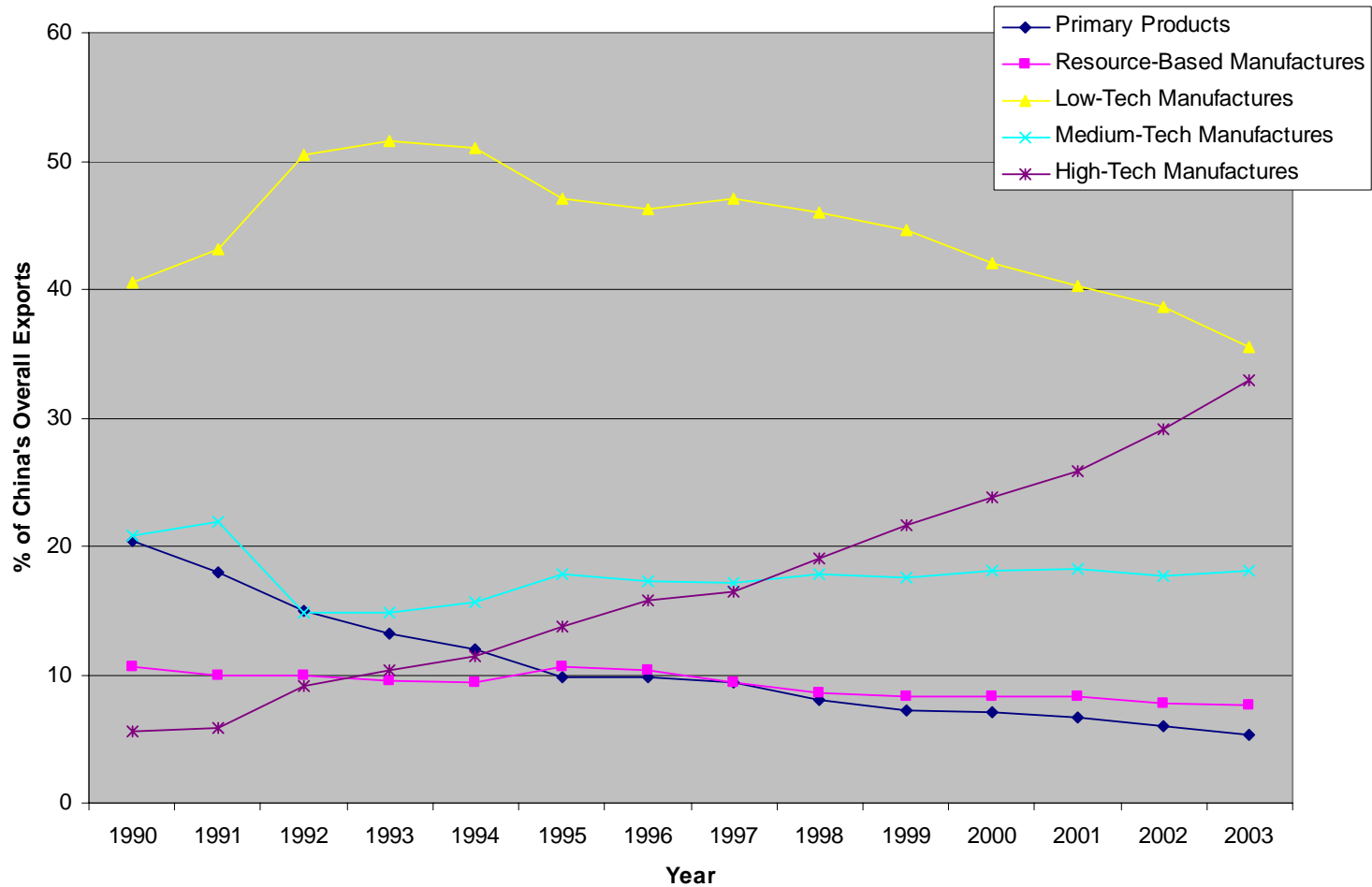


China's Total Trade	115.4	280.8	474.3	1422.1
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(in billions of \$)

Source: Chinese Ministry of Commerce, Foreign Investment Management Office

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



<b>TOTAL EXPORTS</b>	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

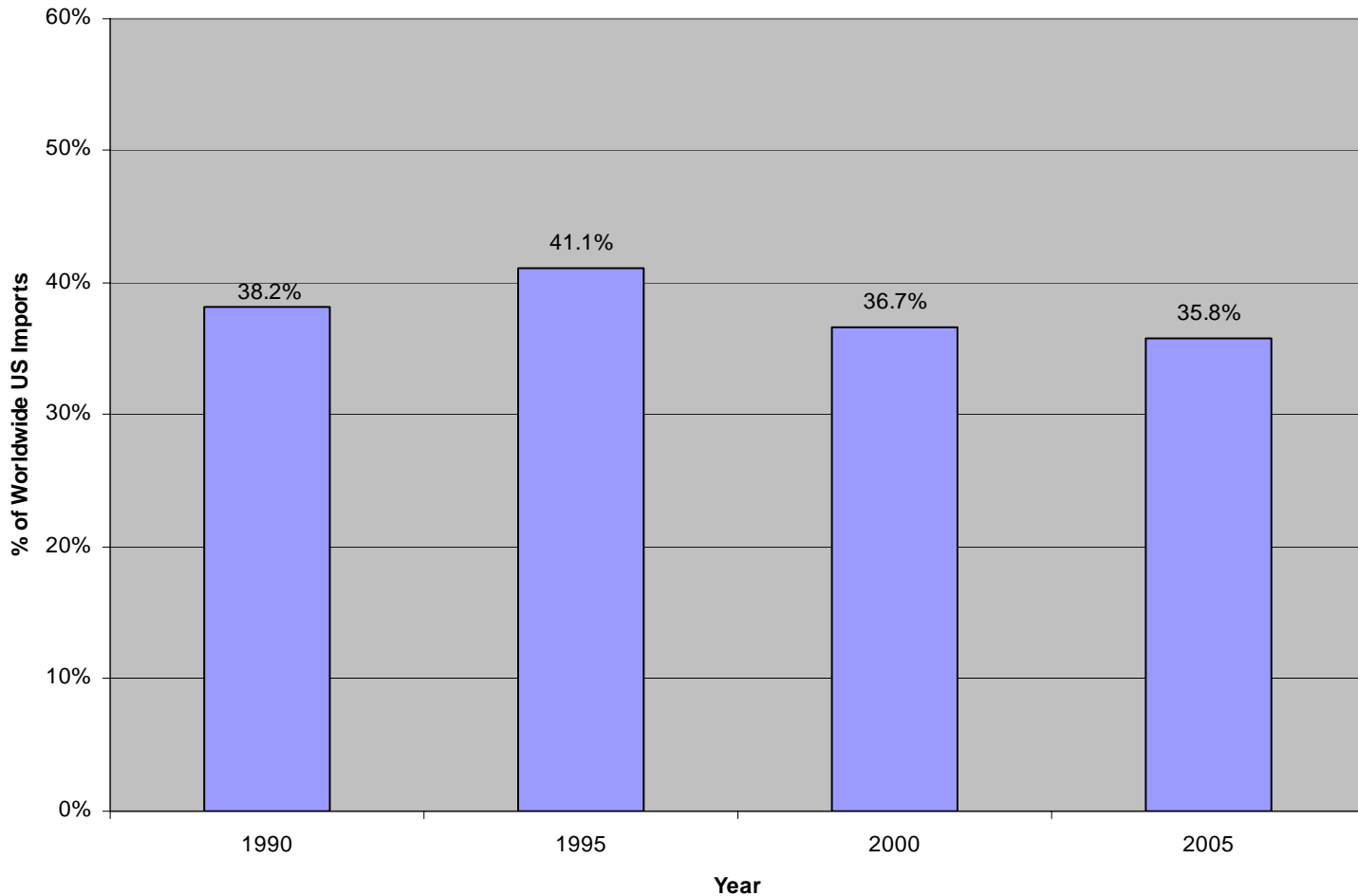
- China the third largest recipient of worldwide FDI
  - World's largest recipients: US (\$96b), United Kingdom (\$79b), China (\$61b) (*UNCTAD, 2005*)
  - Largest contributors of China's FDI are in Asia, including the East Asian NIEs (45.5%) and Japan (10.8%) (*2005 Chinese statistics*)
- China's foreign-funded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

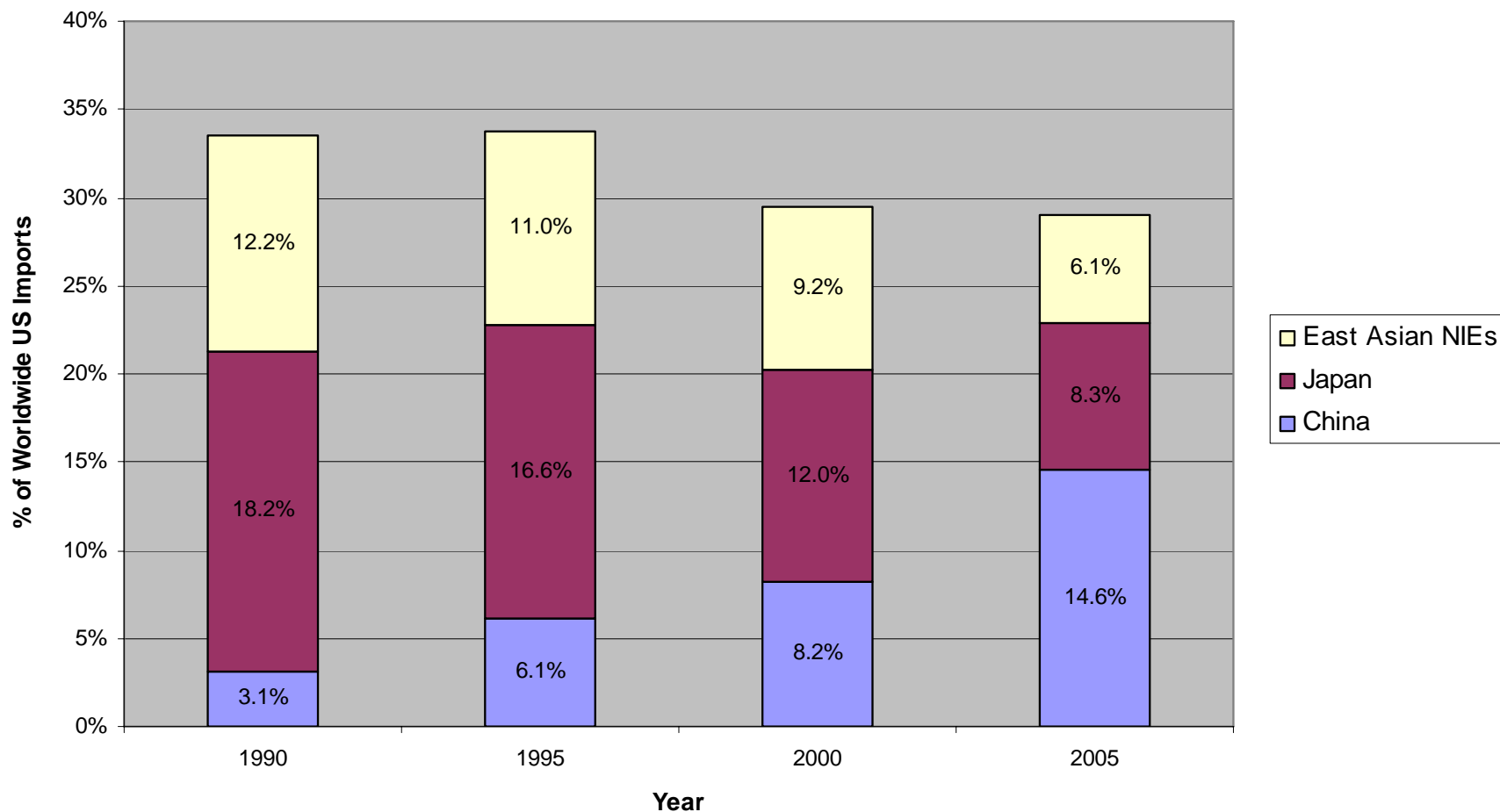


189.2	305.4	446.4	598.0
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(in billions of \$)

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
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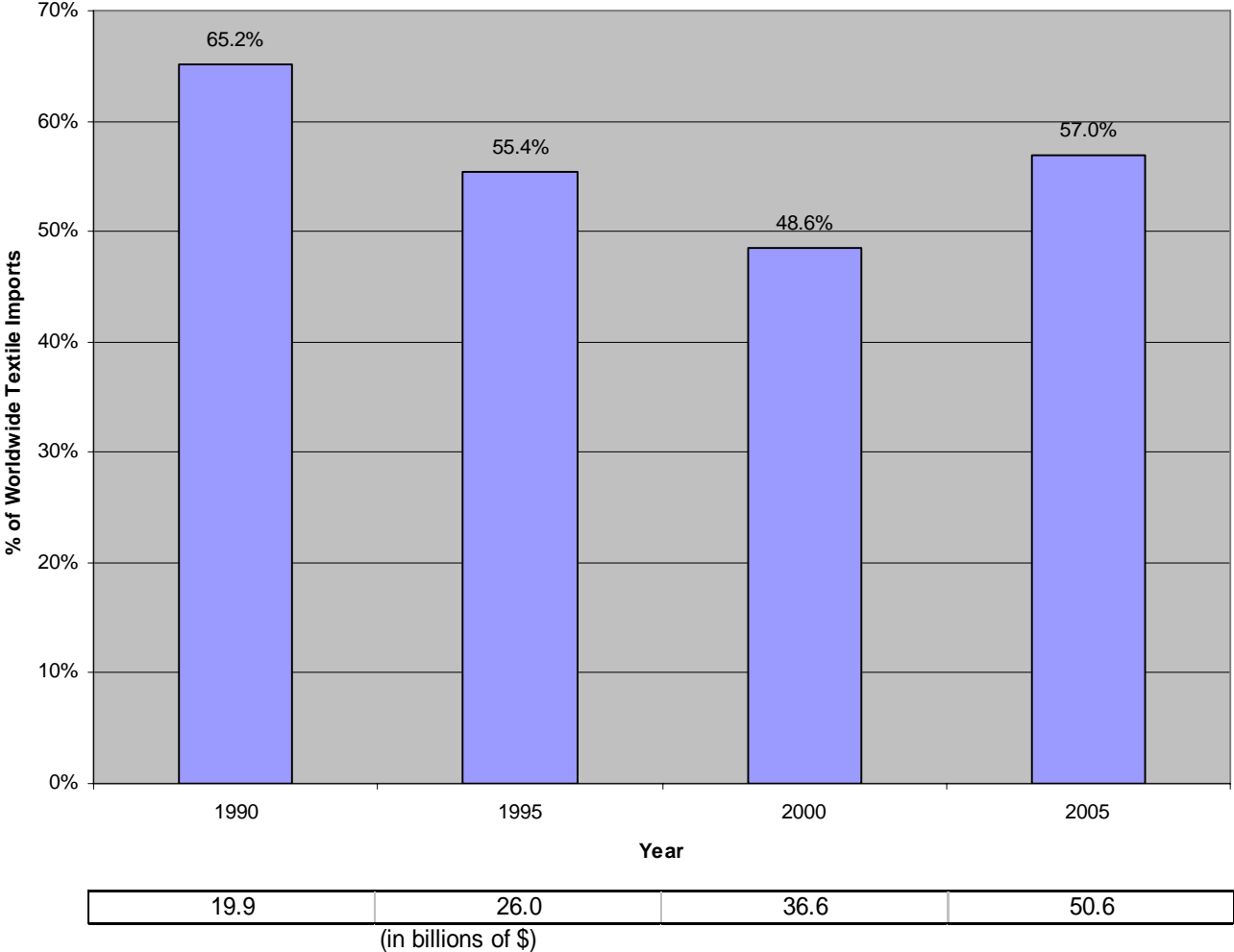
(in billions of \$)

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

# US Textile Imports from Asia

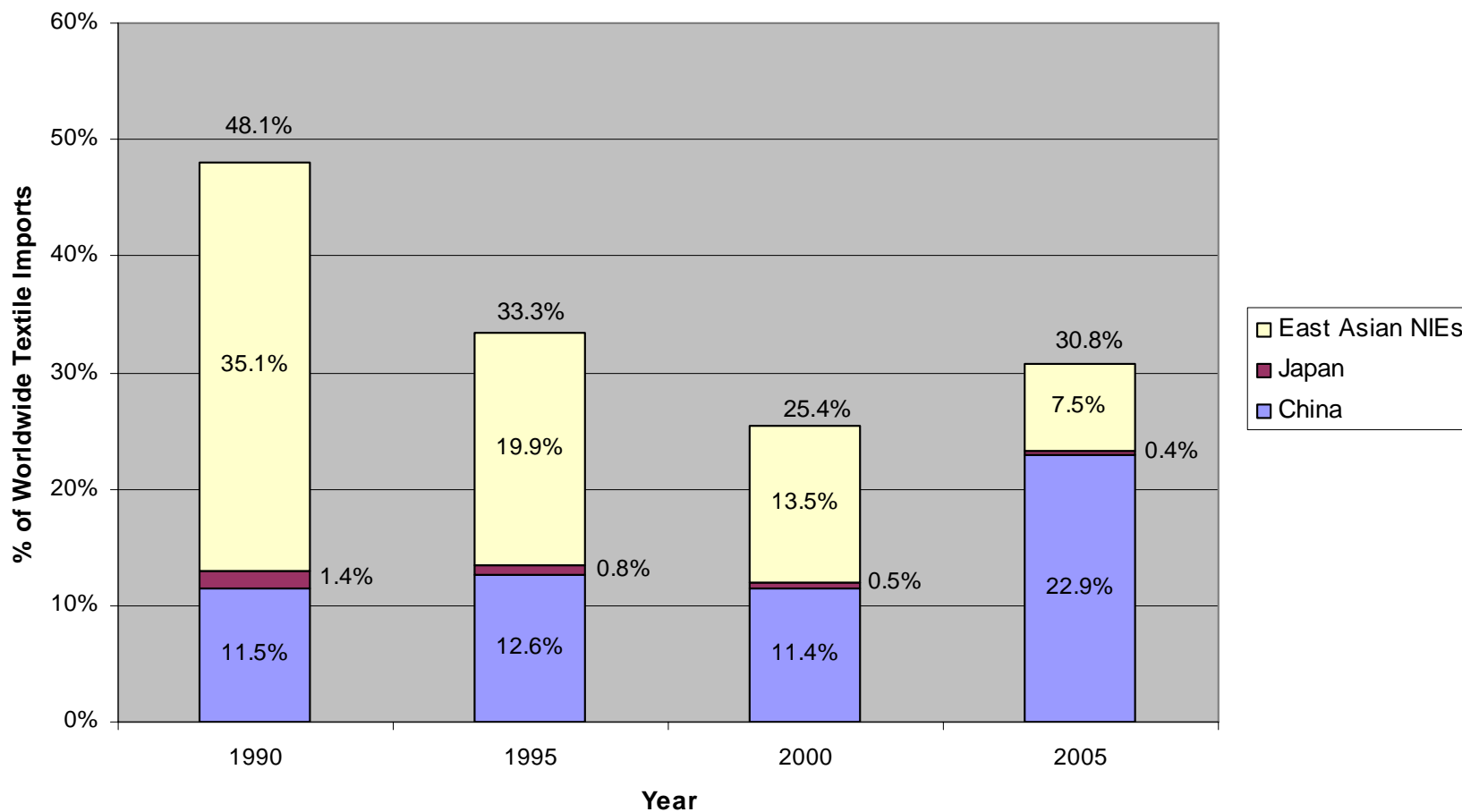
- Textile imports from Asia have declined since 1990.
  - 1990s: Textile imports from Asia fell, as NAFTA causes shift to Mexico.
  - Since 2000: Imports have risen slightly, with China's WTO accession and the phase-out of MFA.
- Composition of imports has shifted: firms have shifted production of textiles 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 \$)				

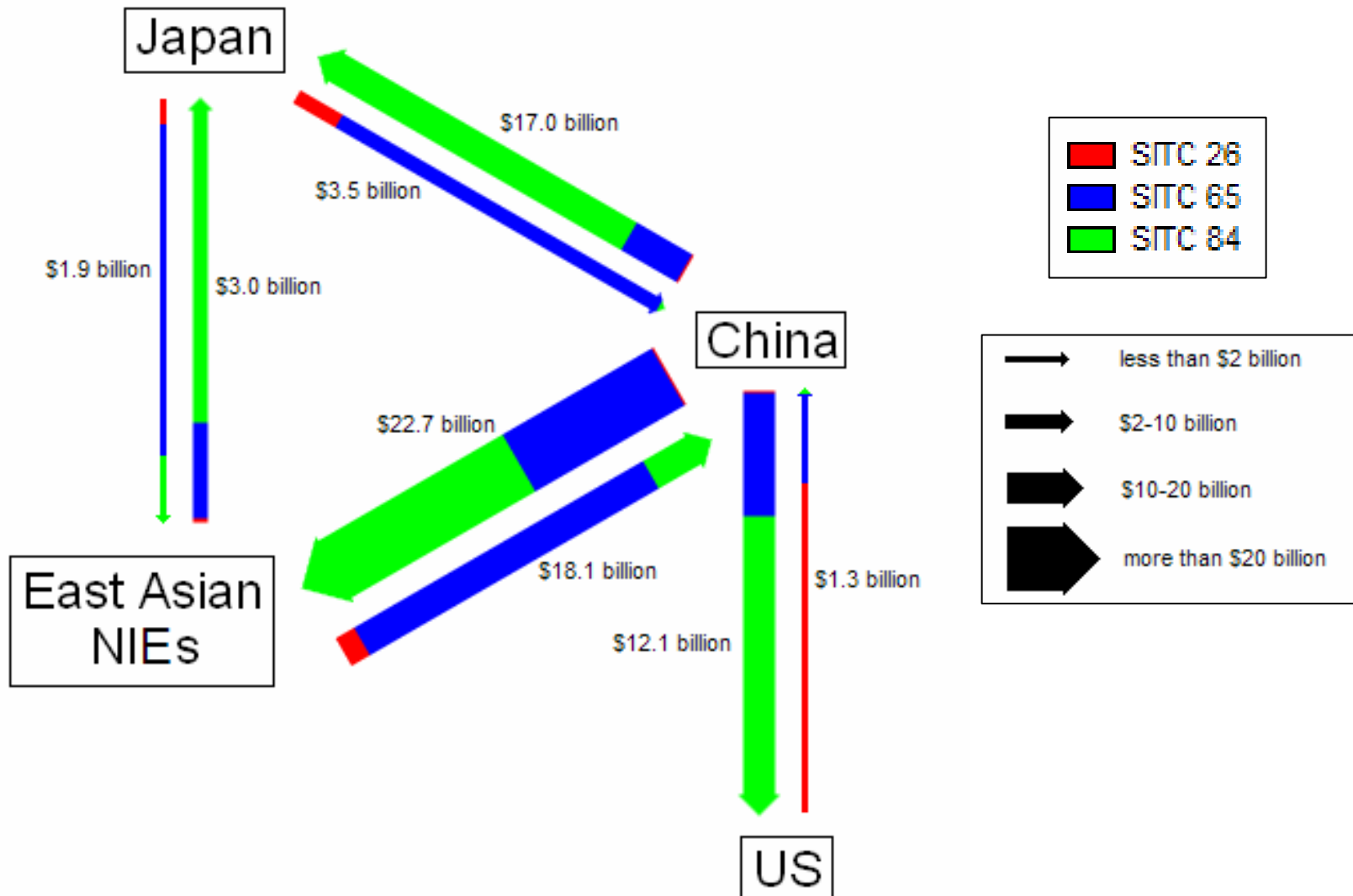
Source: U.S. Department of Commerce, Trade Stats Express.



# 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 largest developing economies (China, India) and among 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!