

Meeting the China Challenge to Manufacturing in Mexico

Factors Influencing Competition
between Mexico and China in the
U.S. Market for Manufactured Goods

Meeting the China Challenge to Manufacturing in Mexico

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America Latina y el Caribe y China:
Condiciones y retos en el siglo XXI

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How serious is the China challenge to manufacturing in North America?

- Some claim that China has been responsible for the downturn in the U.S. manufacturing employment because of:
 - Undervaluation of the yuan
 - Low labor costs
 - Unfair trade practices
 - Dumping and export subsidies
 - Patent infringement
 - Blocking foreign access to the Chinese market

U.S. losing market share to Asia

- Post WWII Japan became a low-cost supplier to the U.S. market in the 1950s and 60s
- Replaced by the Four Tigers in the 1970s, 80s
 - Korea, Taiwan, Hong Kong, Singapore

1990s:

MFN for China

As wages increased in the Tigers, companies in Taiwan and Hong Kong shifted labor-intensive operations to Mainland China

Faced with competition from Asia, many U.S. companies:

- Sourced labor-intensive inputs from Asia
- Imported the lower-end of their product lines
- Sent manufacturing specifications to Asia
- Invested in joint ventures in China to supply markets in Asia
- Instructed U.S. parts suppliers to shift production to China to supply assembly plants there

Other U.S. companies responded by

Use of assembly plants in Mexico, which:

- Lowers North American manufacturing costs.
- Maintains NA market shares vs. low-cost imports.
- Provides a regional market for components and other industrial inputs originating in the United States.
 - 40% of all inputs used in export-oriented manufacturing in Mexico originates in the U.S.
 - Only 4% of the value of U.S. imports from China consists of U.S.-origin components & materials.

China moves up the value chain

- China opens to FDI in 1990s
- FDI rushes in to supply to local markets
- Export performance requirements
- Joint venture requirements
- Transfer of technology improves quality
- Undervalued currency and low labor costs
- Trade surpluses finance new infrastructure

China Challenge to Mexico

- As companies in China improved quality, diversified export portfolios, and moved up the technology chain . . .
- Some companies with operations in Mexico shifted production to China to supply markets there and export back to North America.
- Other companies closed or downsized their North American operations because of competition with China.

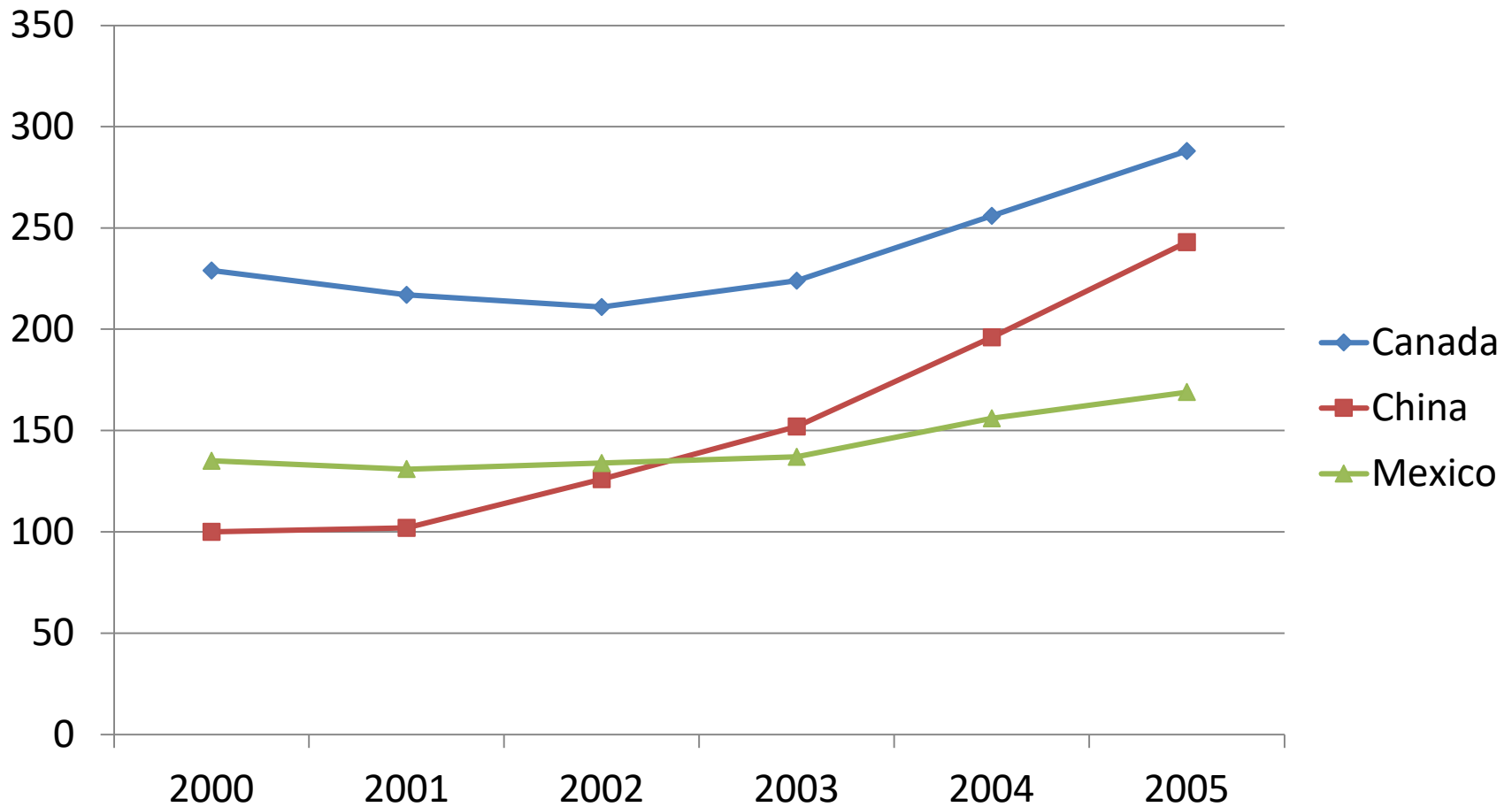
How serious is the China challenge to manufacturing in North America?

- China has been blamed for the loss of U.S. manufacturing jobs in the recessions of 2002 and 2009.
- 2000-02—U.S. producers' shipments fell by 7.5%; 2.5 million manufacturing jobs were lost
- Mexico's maquiladora sector lost 288,000 jobs

Was China to blame?

- Press reports about factories closing in both the United States and Mexico as production shifted to China often closed with predictions of the demise of manufacturing in North America.
- Several bills were introduced in the U.S. Congress designed to mitigate the “unfair” competition with China.

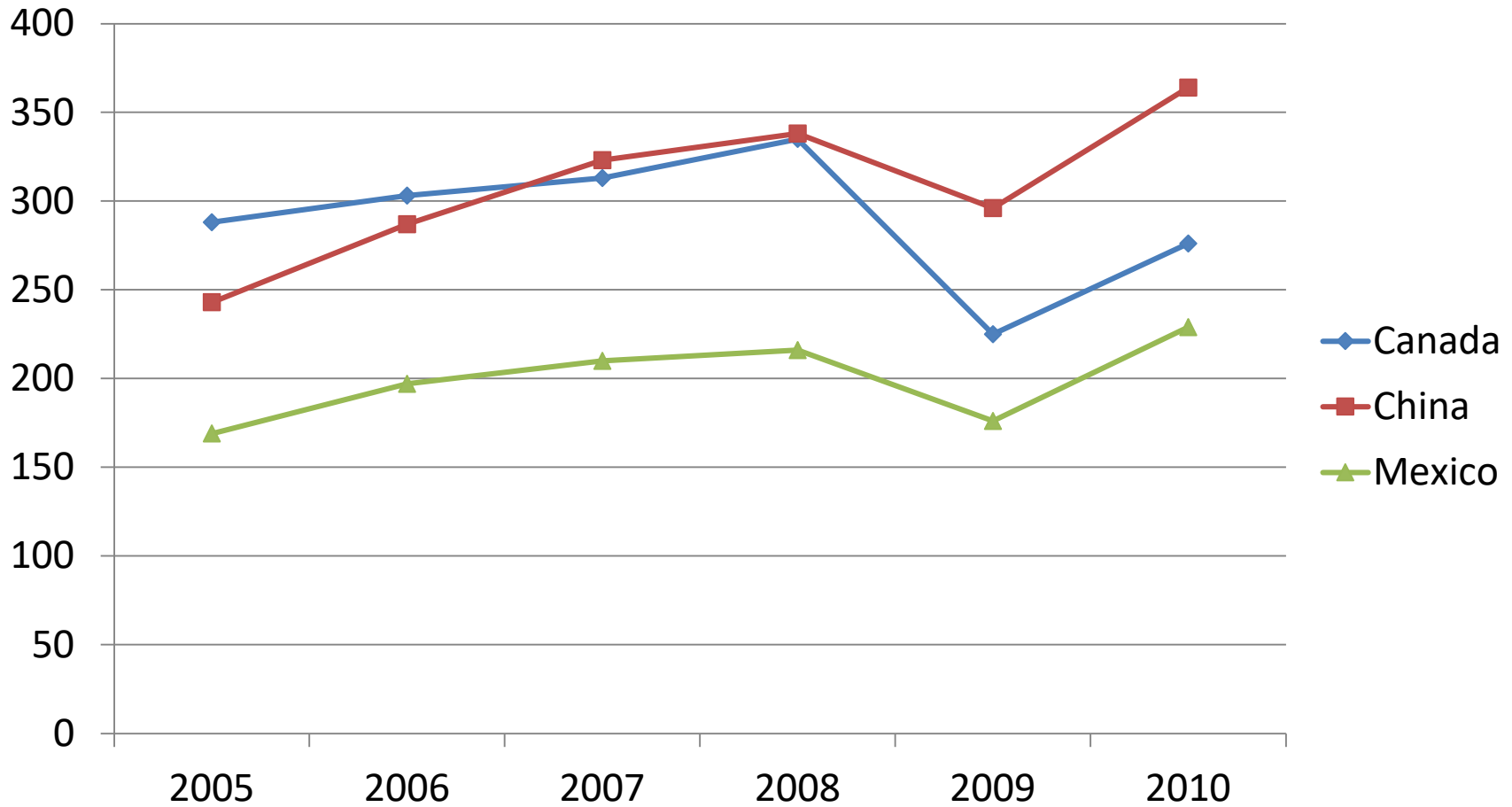
U.S. imports from NAFTA partners and China, 2000-2005 (billion dollars)



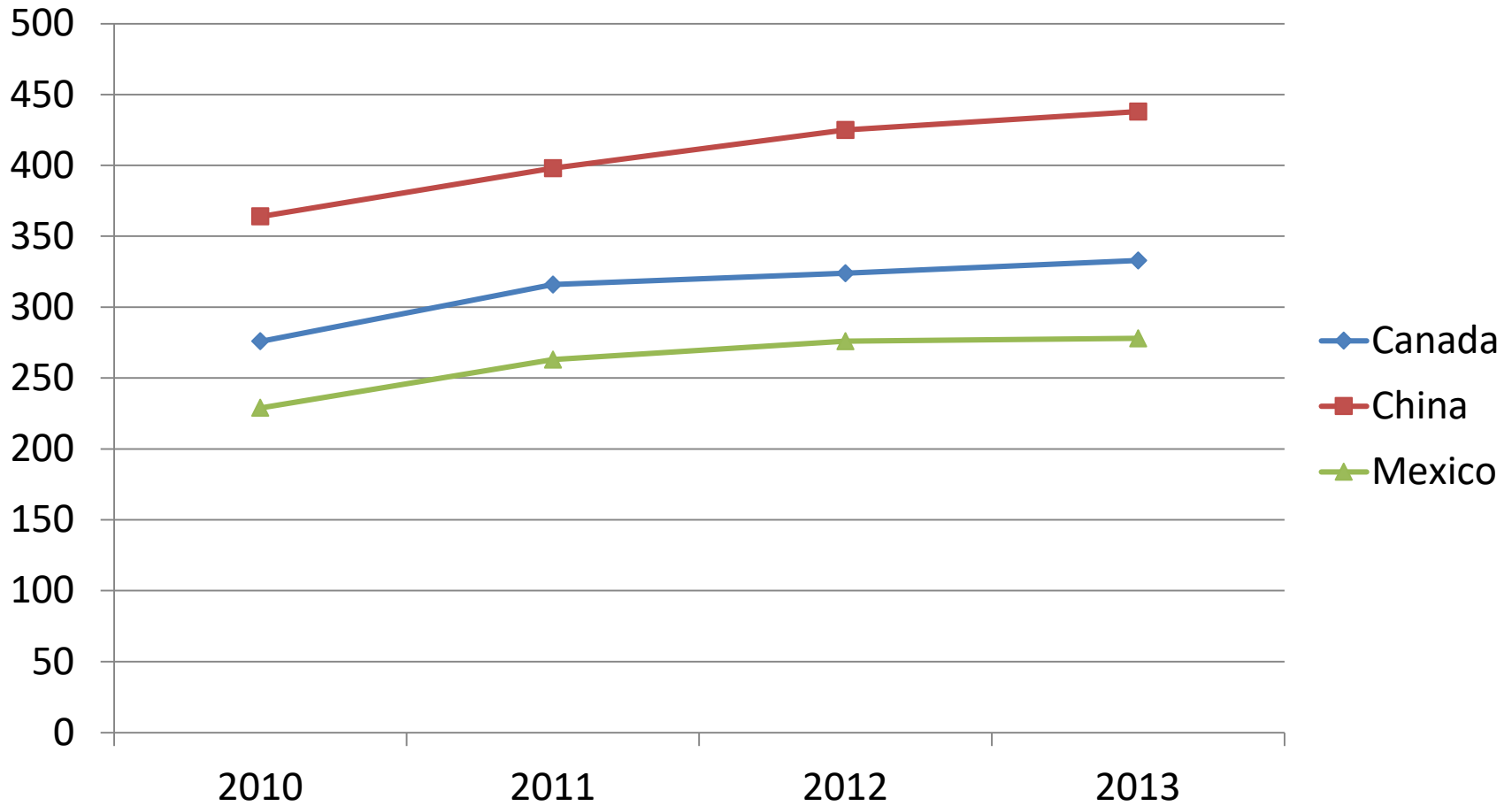
Trends during 2000-2005

- China's share of U.S. imports increased from 8.3% to 14.6%
 - From \$100 billion to \$243 billion
- Mexico's share of U.S. imports slipped from 11.2% to 10.2%
 - From \$135 billion to \$169 billion

U.S. imports from NAFTA partners and China, 2005-2010 (billion dollars)



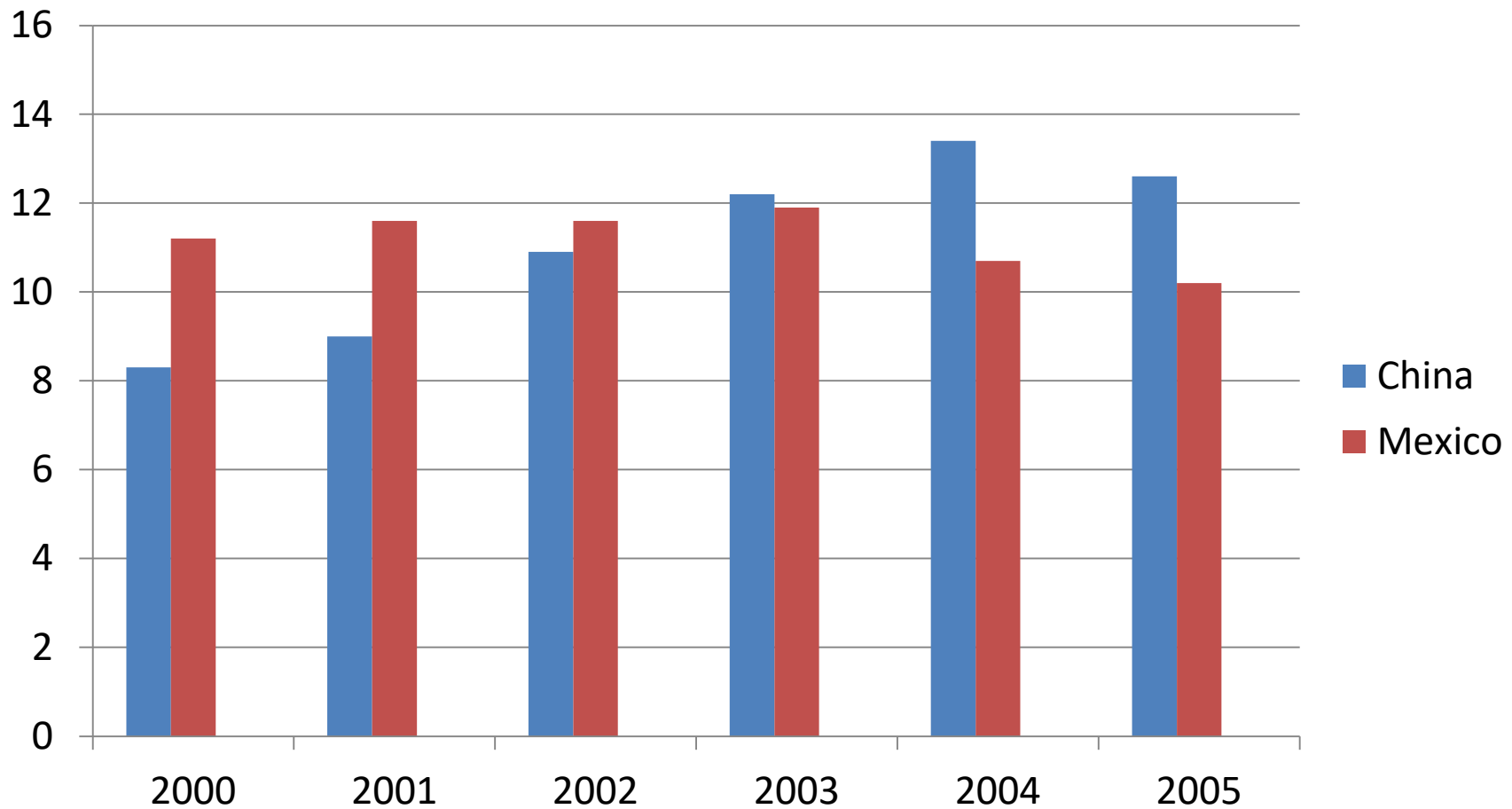
U.S. imports from NAFTA partners and China, 2010-2013 (billion dollars)



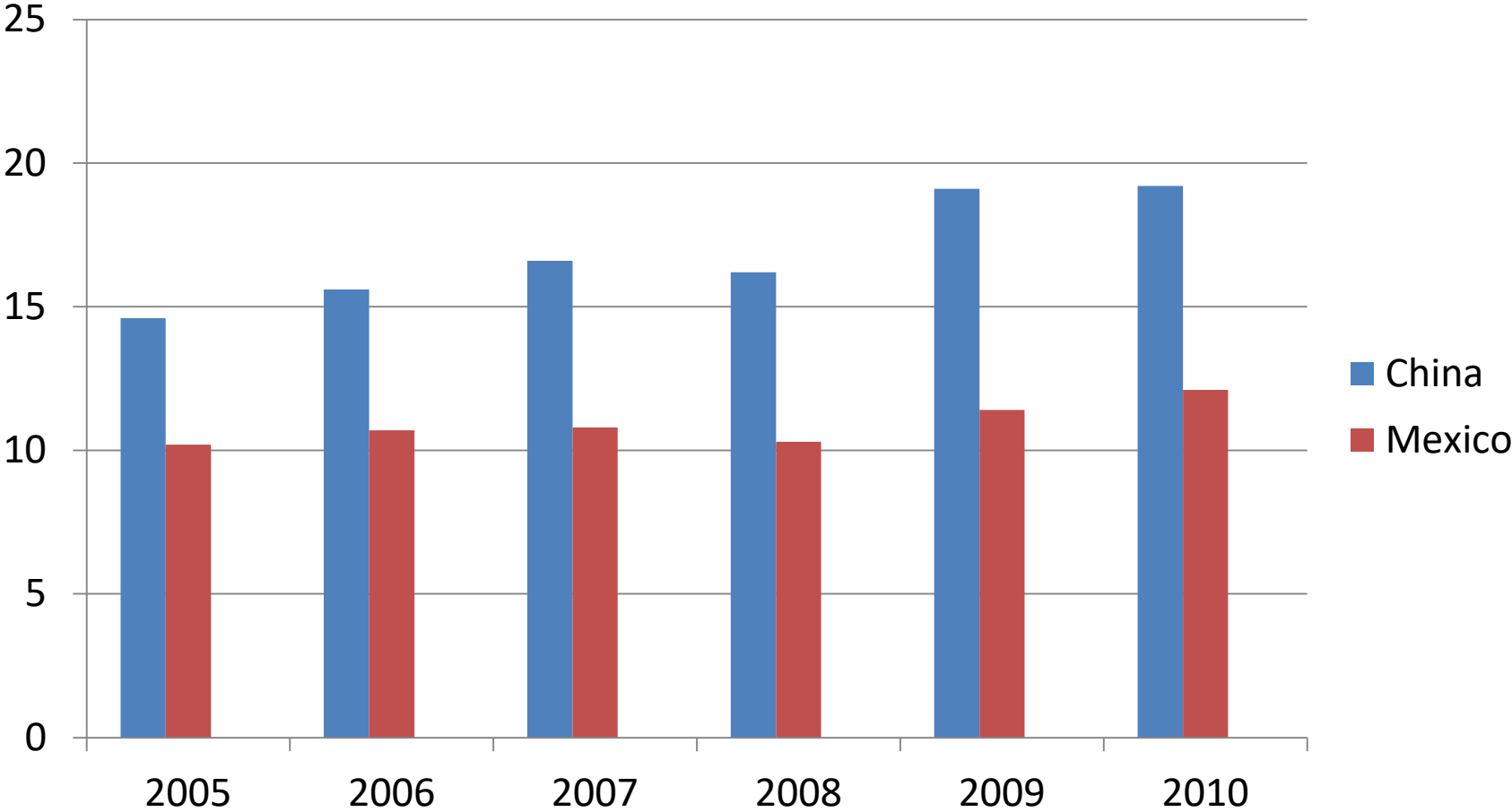
Trends during 2005-2013

- China's share of U.S. imports increased from 14.6% to 19.6%
 - From \$243 billion to \$438 billion
- Mexico's share of U.S. imports advanced from 10.2% to 12.4%
 - From \$169 billion to \$278 billion

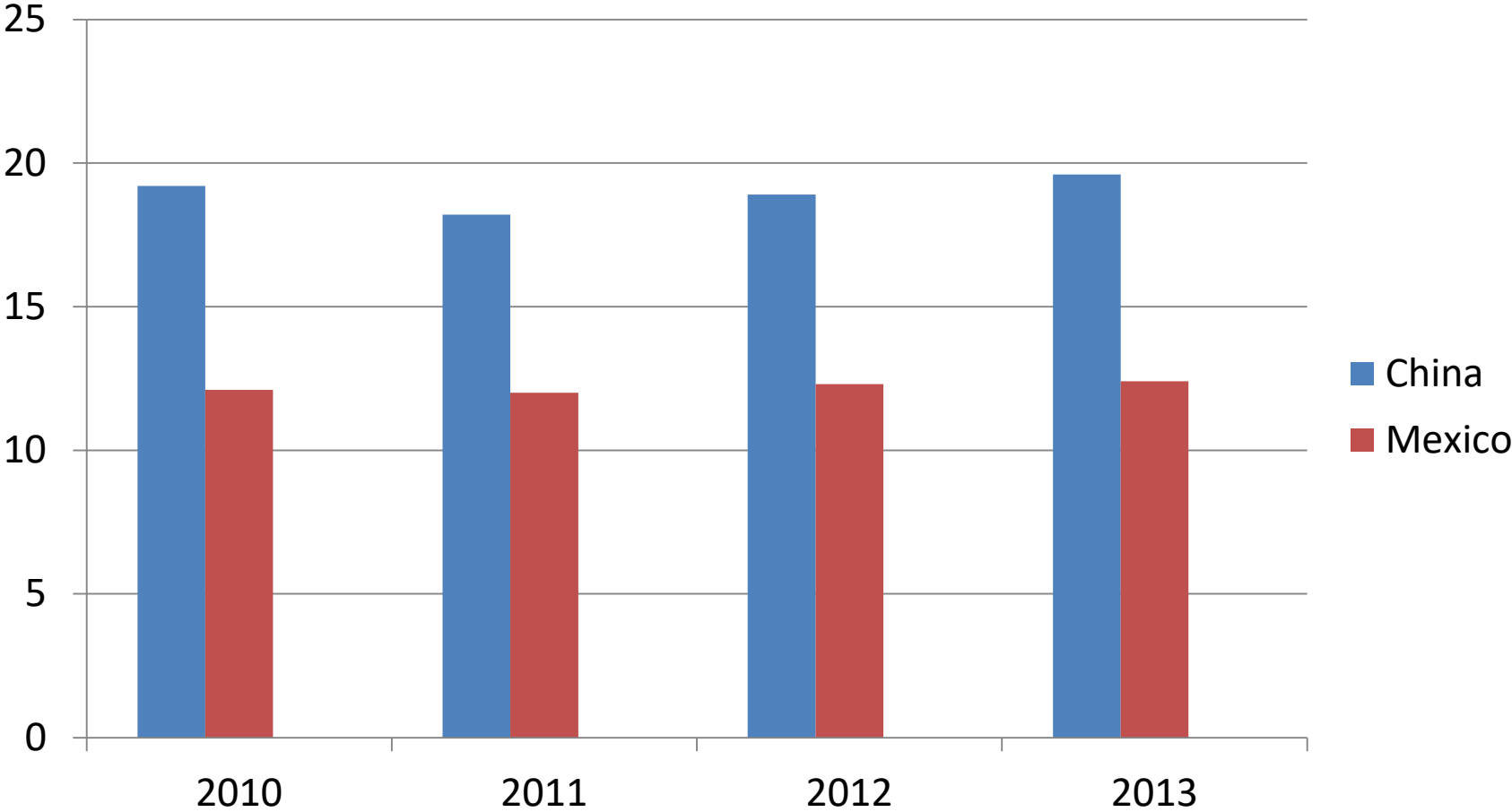
Ratio of imports from China and Mexico to total U.S. imports, 2000-05



Ratio of imports from China and Mexico to total U.S. imports, 2005-10



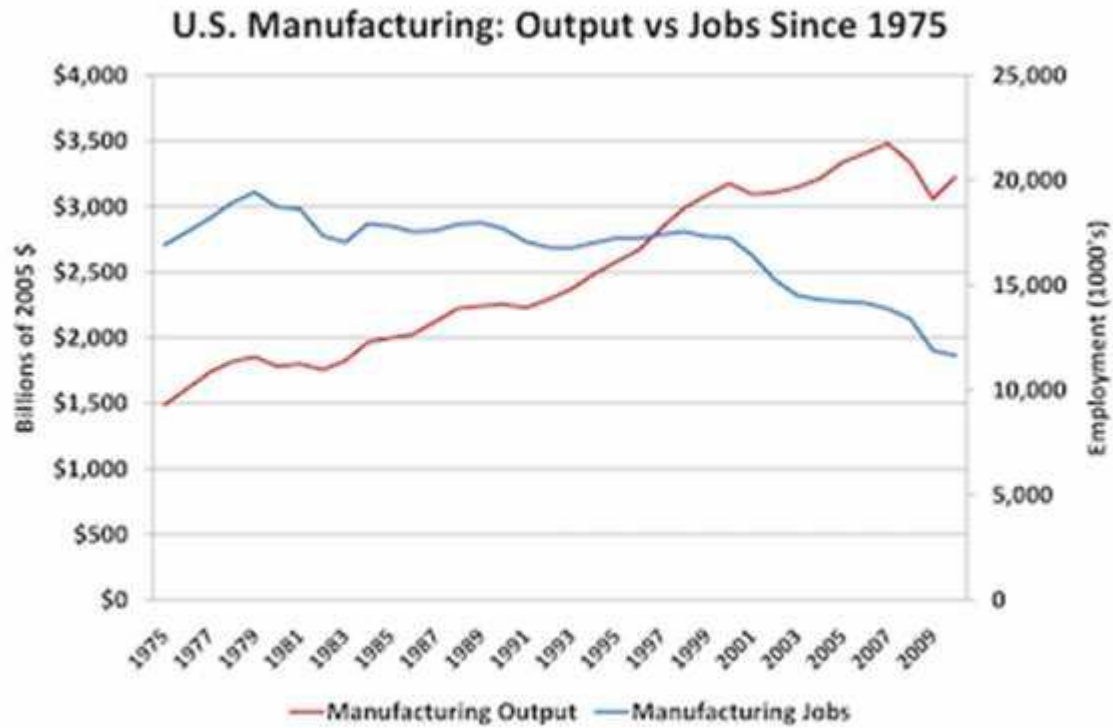
Ratio of imports from China and Mexico to total U.S. imports, 2010-13



China and U.S. Job Losses

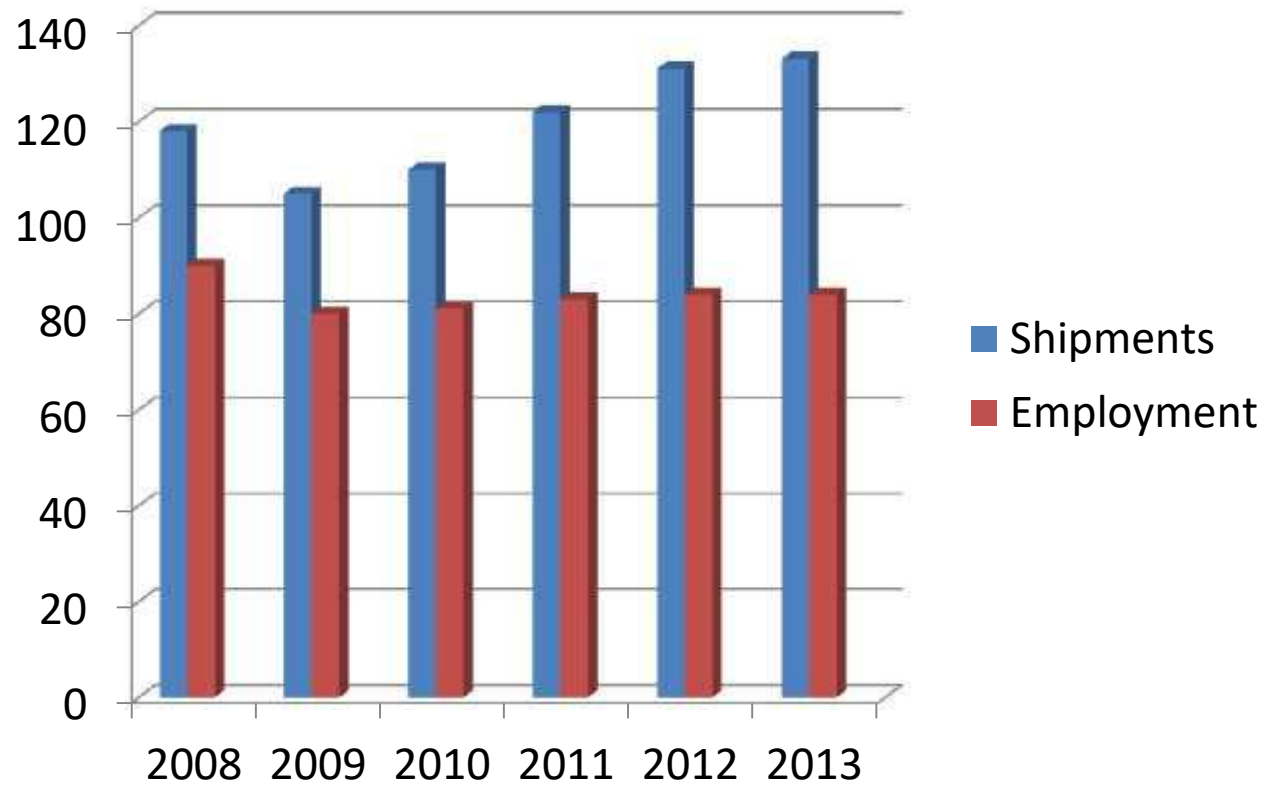
- Competition with imports from China was a minor cause of North American job losses during 2000-13.
- Using 2004 as a base year, manufacturers' shipments climbed 33 percent by 2013 while manufacturing employment fell by 16 percent.
- By far, the most important cause of losses in U.S. manufacturing employment was improvements in manufacturing and labor productivity.

Figure 1.



Source: Federal Reserve, Bureau of Labor Statistics
Produced by: Veronique de Rugy, Mercatus Center at George Mason University

U.S. Manufacturers' Shipments and Employment, 2008-13 (2004=100)



Keys to the Competitiveness of Mexican Manufacturing - 1

- Proximity of Mexican assembly plants to partner companies on the U.S. side of the border that
 - Supply the assembly plants with industrial inputs
 - Further process Mexican-made subassemblies
 - Market final goods

Keys to the Competitiveness of Mexican Manufacturing - 2

- Emergence of Manufacturing Clusters
 - Autos
 - Auto parts
 - Aircraft
 - Electronics/Electrical
 - Household appliances
 - Precision metal working

Leading U.S. imports from Mexico and China in 2013: Shares of total

MEXICO		CHINA	
Product	Share of total -- %	Product	Share of total -- %
Autos and parts	28	Computers	12
Crude petroleum	11	Telephone equip	12
Agricultural goods	7	Textiles/apparel	10
Computers	5	Furniture	6
TVs/monitors	5	Toys and games	5
Telephone equip	3	Footwear	4
Medical goods	2	TVs/monitors	2
Textiles/apparel	2	Leather goods	2
Furniture/lamps	2	Agricultural goods	2
All other	35	All other	45

Composition of U.S. imports of autos & parts from Mexico, 2013

Product category	Value (billion dollars)
Passenger cars	20.4
Trucks for transporting goods	15.4
Tractors for hauling trailers	5.3
Internal combustion engines	2.9
Parts for I/C engines	2.4
Wiring harnesses	8.4
Parts for motor vehicle seats	5.0
Other motor vehicle parts	<u>16.8</u>
Total	76.6

How does Mexico compete with China?

- Lower transportation costs
- Less time from manufacturers to market
- Easier communication and supervision of production
- Greater flexibility for changes in production
- More transparent government regulations
- Better protection of intellectual property

Mexico is most competitive with China in products with the following characteristics--1:

- High ratio of weight to value
 - Motor vehicles
 - Large screen televisions
 - Major household appliances
- Quality (rather than price) sensitive
 - Medical goods
 - Process control instruments
 - Precision metal working

Mexico is most competitive with China in products with the following characteristics—2:

- Products that are inputs for industries that require:
 - Just-in-time delivery
 - Customized production
 - Frequent design changes
 - Protection of intellectual property

Sectors for which both Mexico and China are competitive

- Computer equipment
 - China-laptops; Mexico-hard drives
- Telecommunications equipment
 - China-cell phones; Mexico-Switch gear
- Television equipment
 - China-computer monitors; Mexico-flat screens
- Household appliances
 - China-counter-top appliances
 - Mexico-major appliances (kitchen & laundry)

Why do consumers think everything is made in China?

- For analytical purposes, the USITC monitors trade in 250 categories.
- In 25 categories, China accounted for 65% of total U.S. imports in 2011 and Mexico, 9%.
- In the remaining 225 categories, which accounted for 88% of U.S. imports in 2011, imports from Mexico exceeded imports from China, 12.4% of total compared with 12.0%.

Figure 3. Shares of 25 labor-intensive U.S. import categories (\$255 billion) accounted for by China (65%) and Mexico (9%).

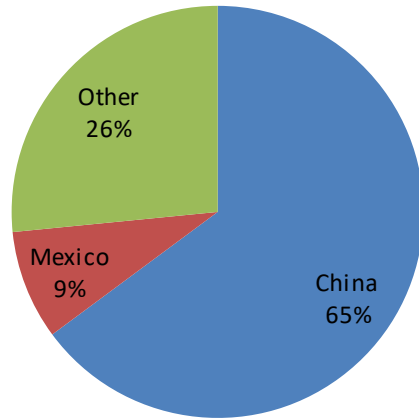
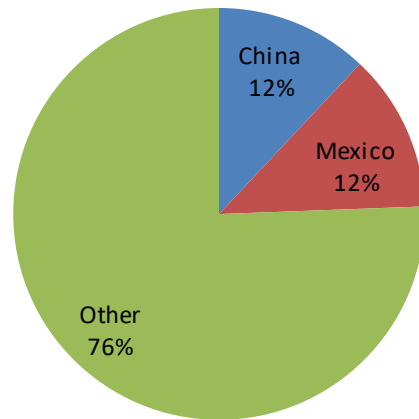


Figure 4. Shares of 225 other U.S. import categories (\$1.9 trillion) accounted for by China (12%) and Mexico (12%), 2011.



Categories for which China supplied over 67% of total U.S. imports in 2011

Category	China's share (percent)	Mexico's share (percent)
Umbrellas	94.5	0.3
Toys and games	85.4	2.3
Costume jewelry	79.0	0.5
Table flatware	77.8	0.3
Luggage and handbags	75.2	0.7
Footwear	73.9	1.6
Brooms and brushes	71.2	6.4
Ceramic household goods	69.2	2.4
Portable electric tools	68.6	19.6
Sporting goods	68.5	2.9
Cooking & kitchenware	67.6	1.9
Lamps & lighting fittings	67.2	16.1

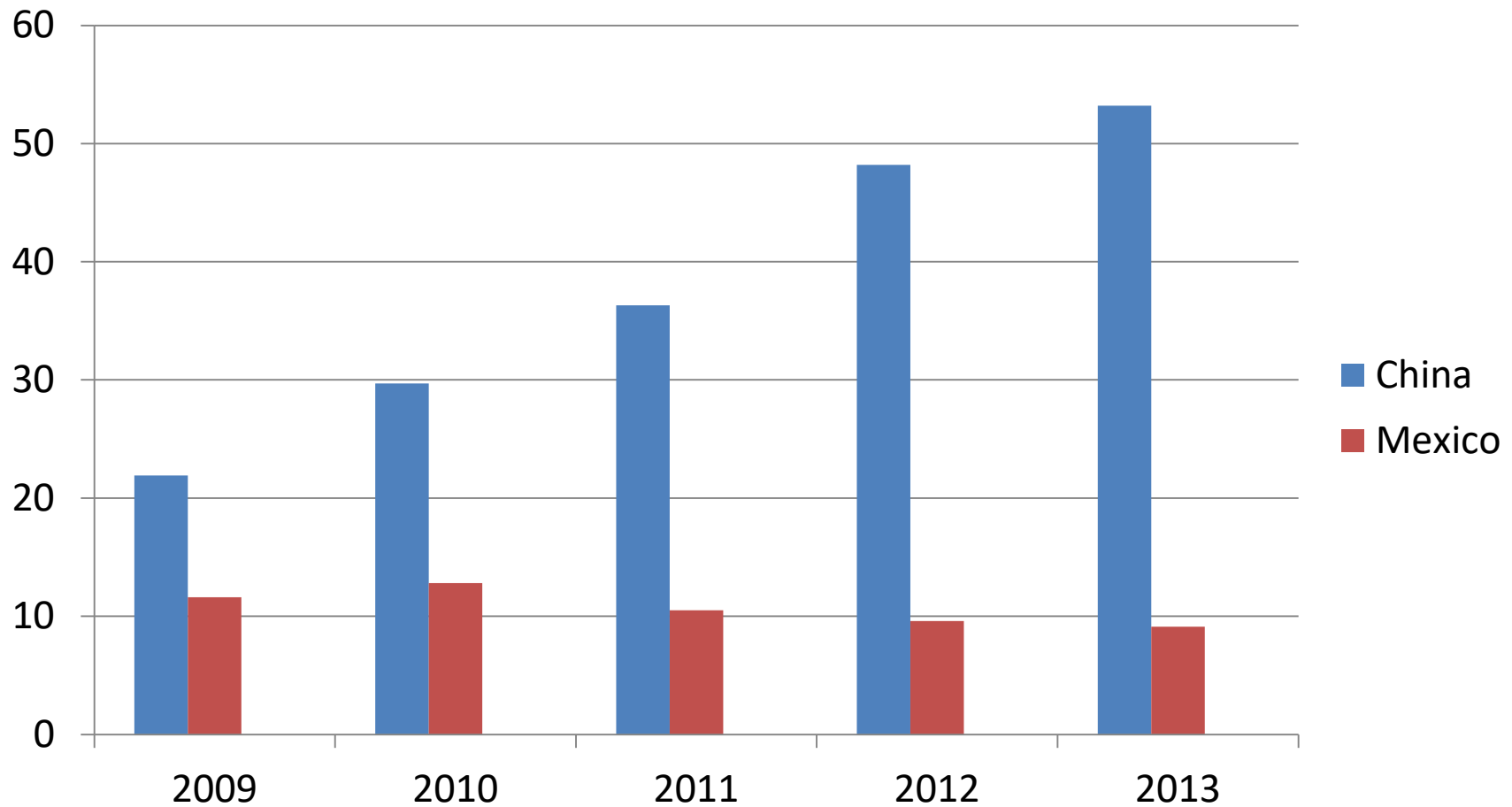
Computers: U.S. imports from China and Mexico, 2009-13

Billion dollars



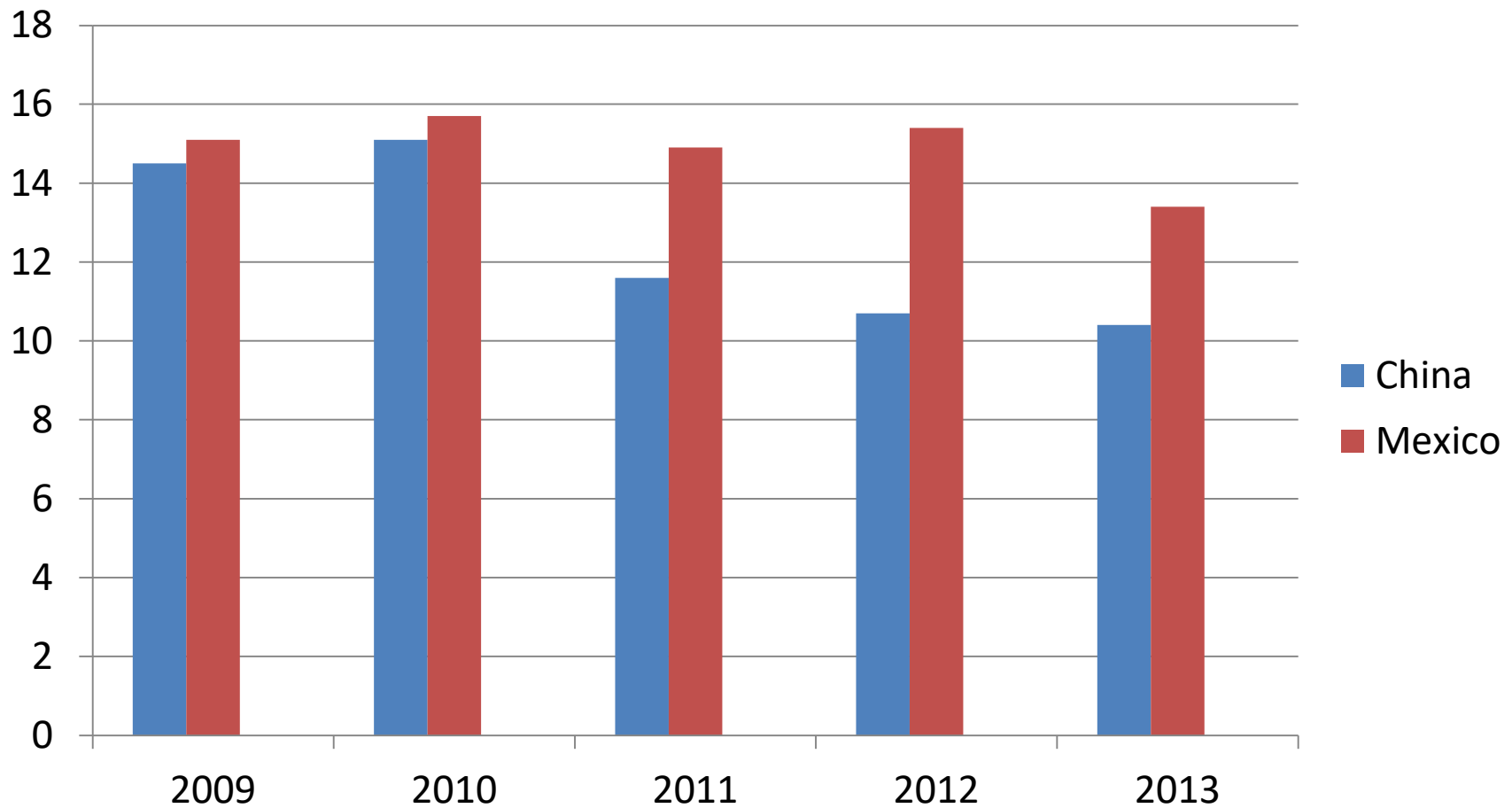
Telephone equipment: U.S. imports from China and Mexico, 2009-13

Billion dollars

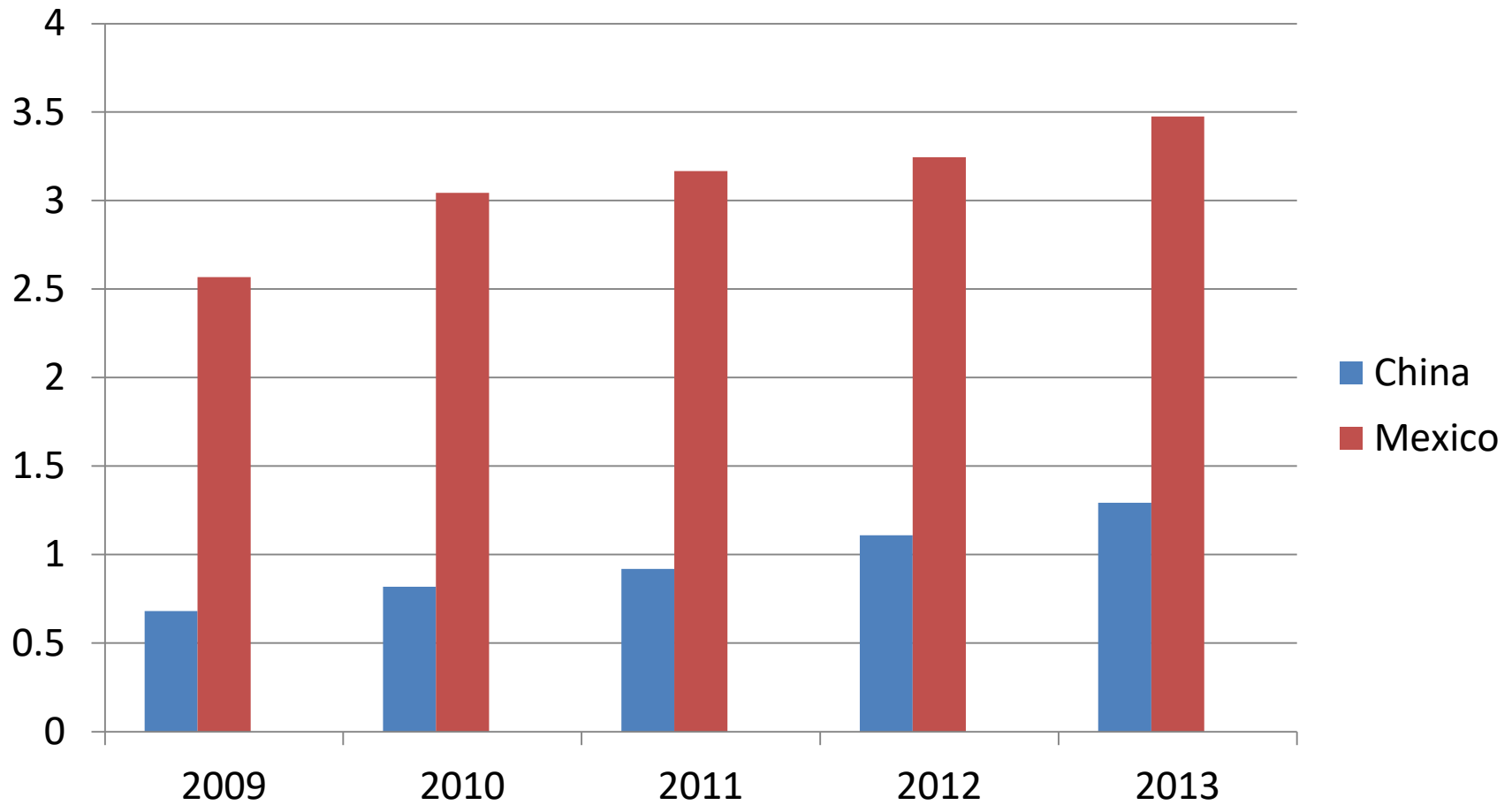


Televisions and monitors: U.S. imports from China and Mexico, 2009-13

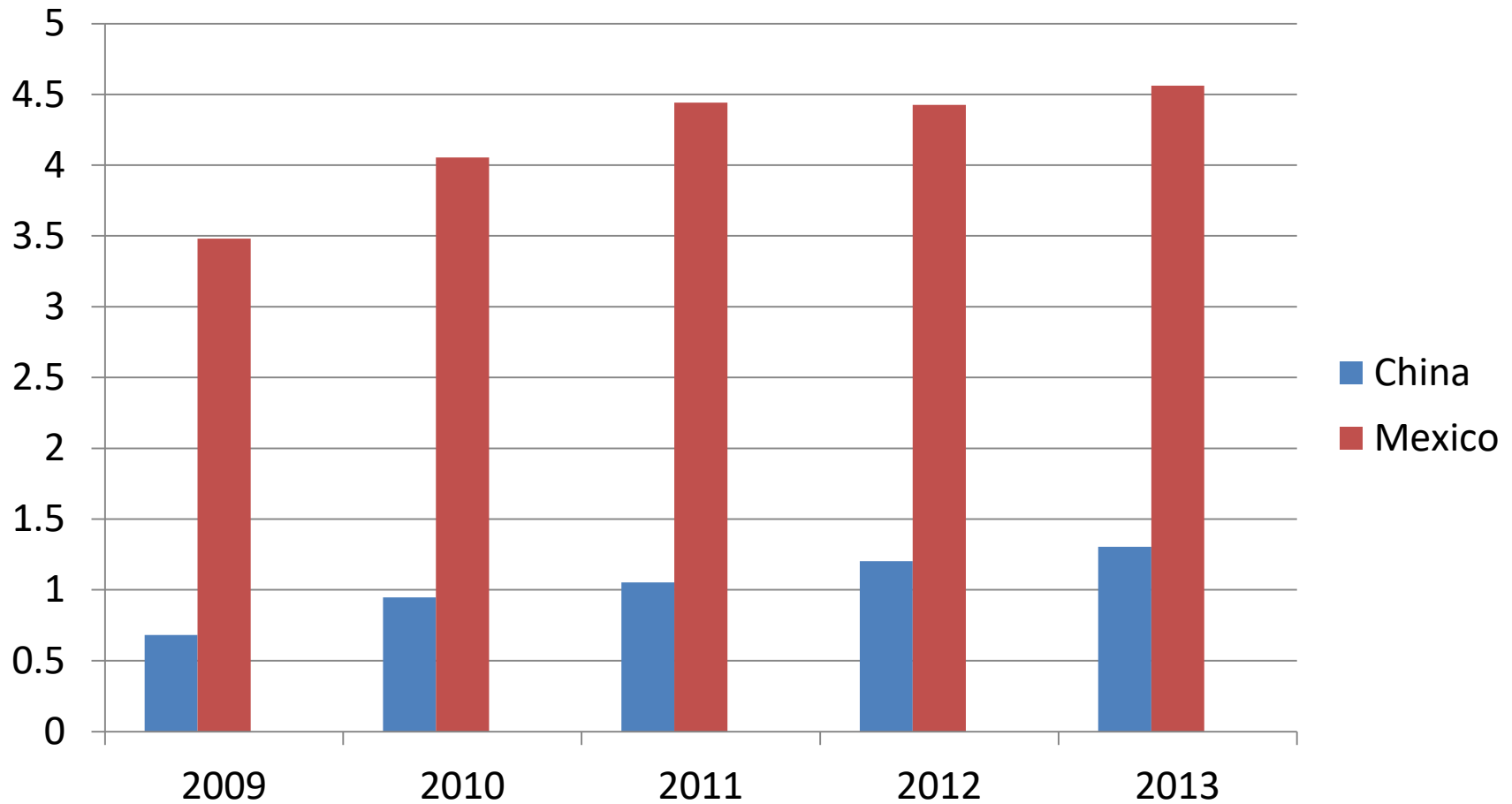
Billion dollars



Refrigerators: U.S. imports from China and Mexico, 2009-13



Medical goods: U.S. imports from China and Mexico, 2009-13



Future competition between China & Mexico in the U.S. market

- Several factors are increasing the costs of importing from China
 - Rising value of the yuan
 - Rising labor costs in the industrialized coastal regions of China
 - Rising costs of imported inputs used in assembly
 - Growth of demand by China's middle class
 - Increasing costs to ship finished good to North America

Future Mexico/China competition

- The production of many labor-intensive goods for which China has been the dominant supplier is moving to other suppliers in Asia, such as Vietnam, Cambodia, and Indonesia.
- Companies may shift some of their sourcing for higher value-added products from China to Mexico