

Rising IT Production in China: Challenges and Opportunities

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* The views expressed are those of the presenter and are not attributable to the Federal Reserve Bank of San Francisco or the Federal Reserve System.

Issue: China's growing role as a producer of information technology (IT) products.

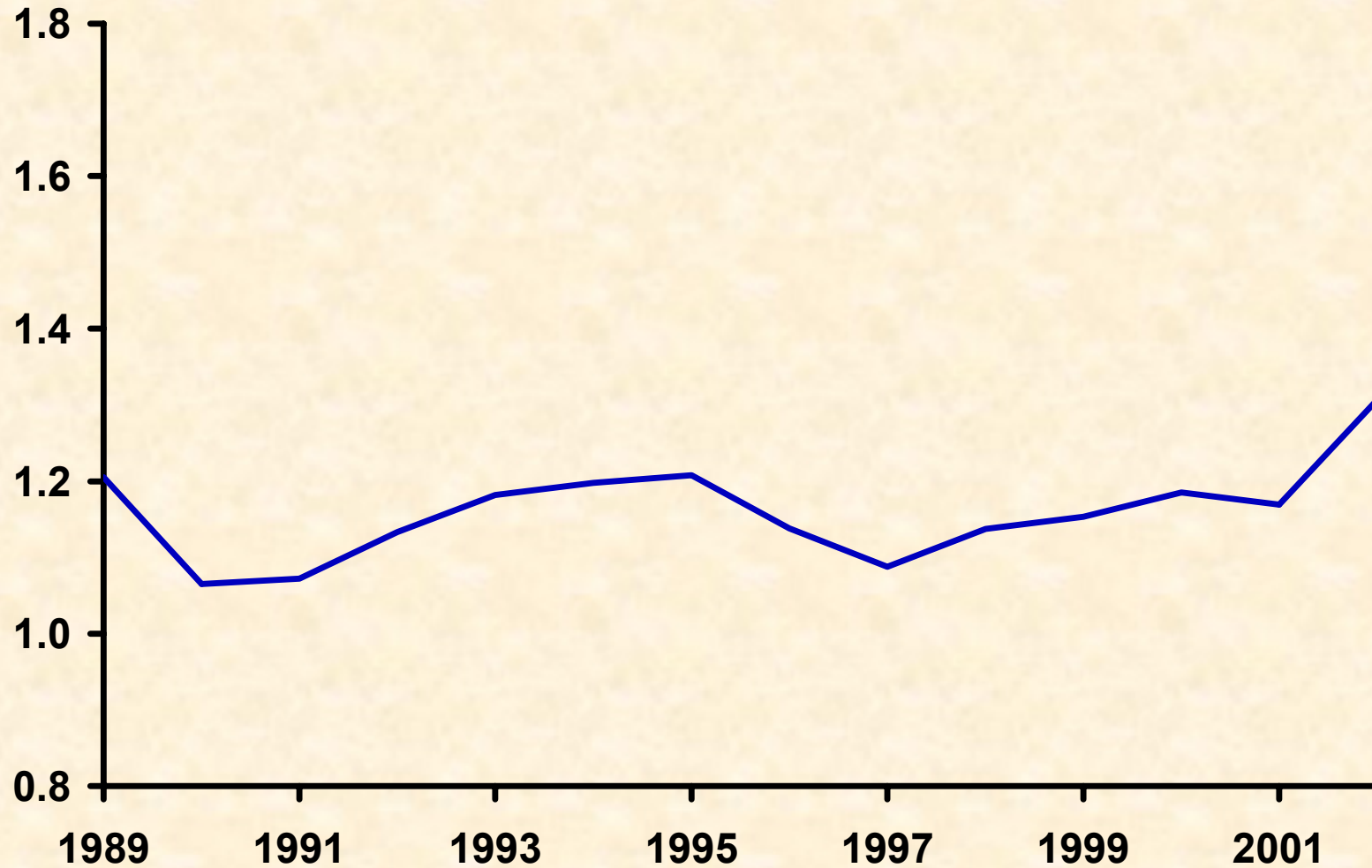
Use U.S. trade data to assess (China, Japan, other East Asia)

Broad IT definition: computer and communications equipment, consumer A/V, instruments

The U.S. IT trade deficit surged in 2002.

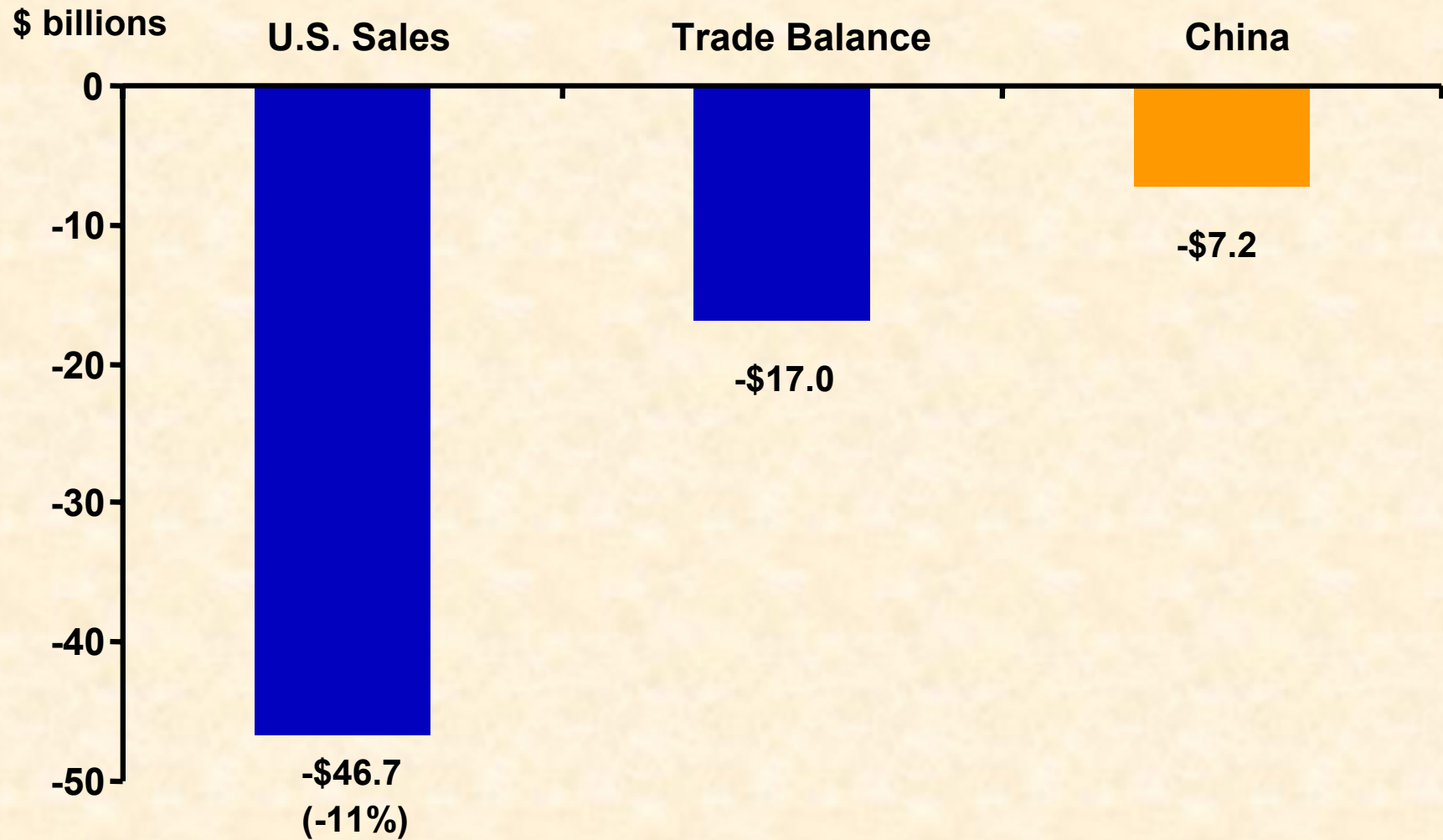
U.S. IT Trade Deficit (ratio)

imports / exports



China accounts for much of this change.

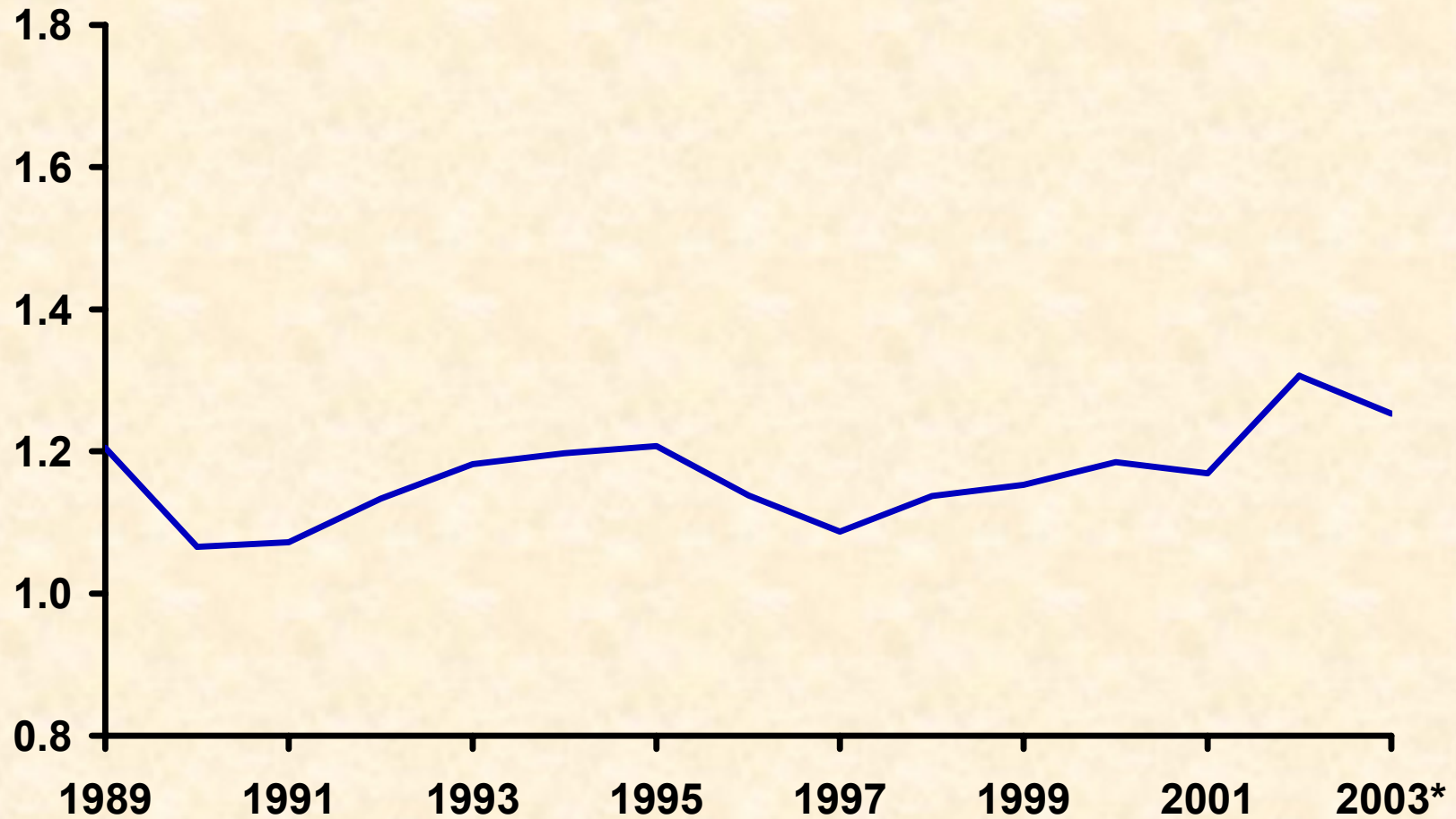
U.S. IT Sales and Trade Balance (2002 change)



But the IT trade deficit has come back down in 2003.

U.S. IT Trade Deficit (ratio)

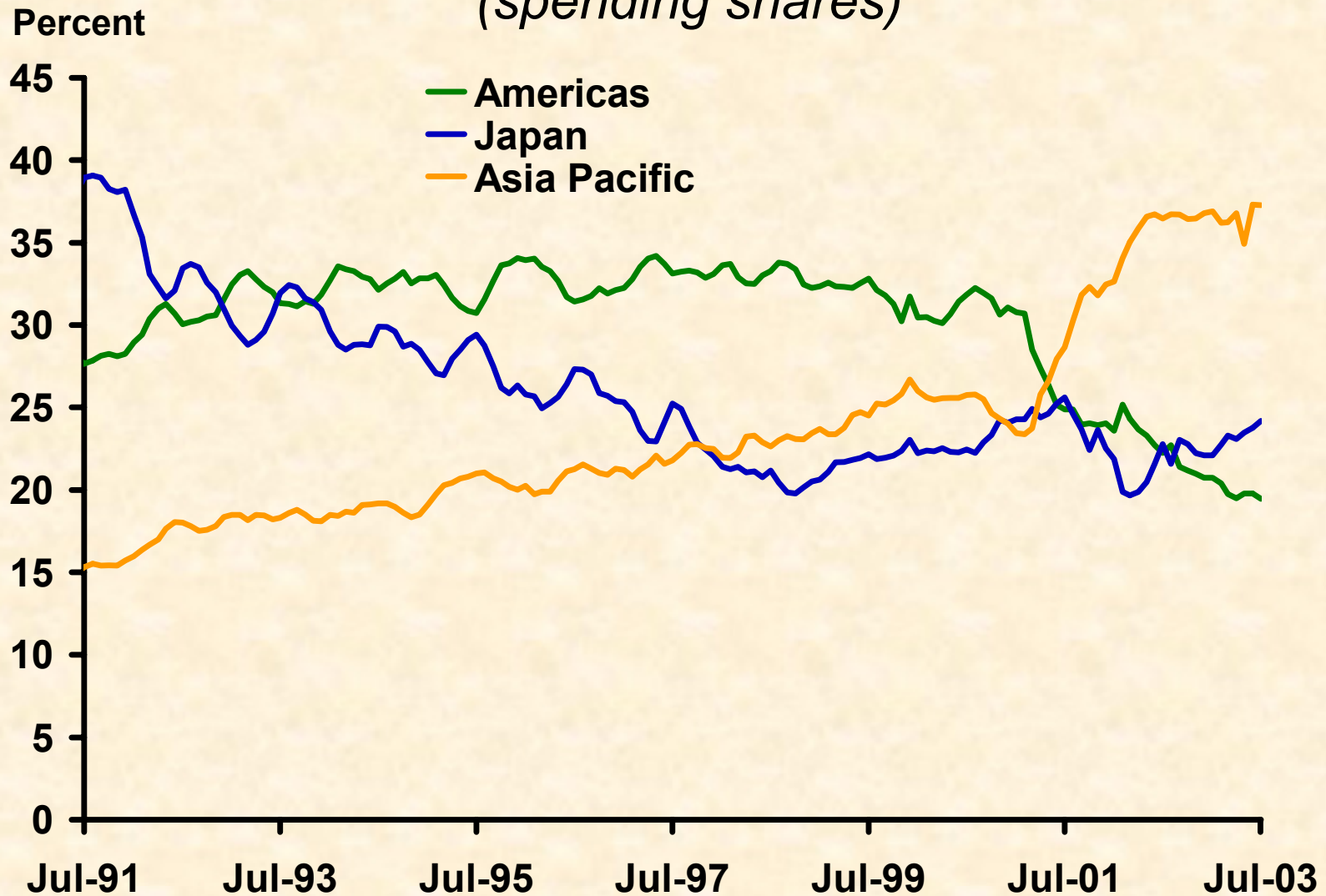
imports / exports



*2003 value estimated based on first half data.

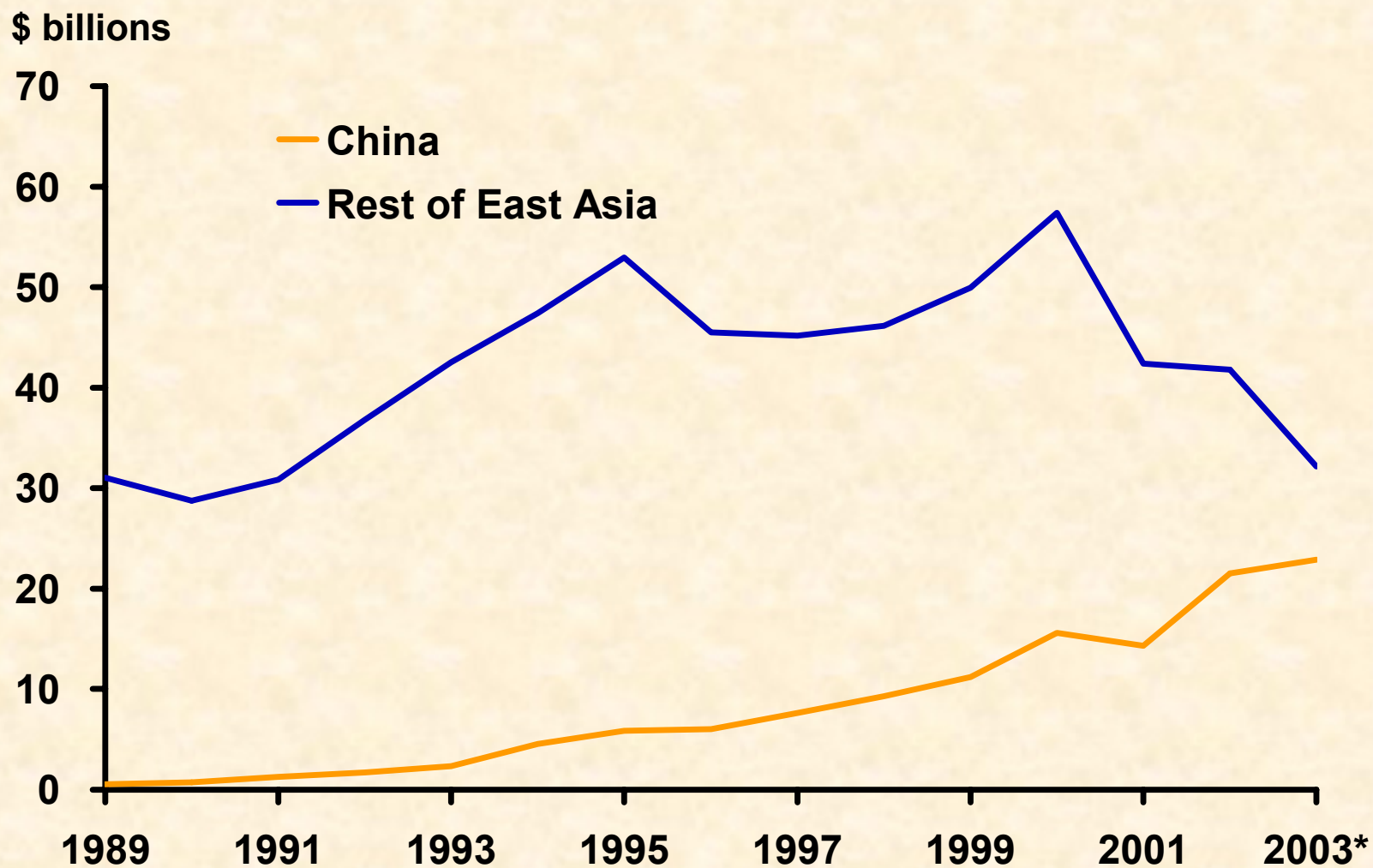
Semiconductor purchases imply shift to China.

Worldwide Semiconductor Purchases (*spending shares*)



China is gaining relative to the rest of E. Asia . . .

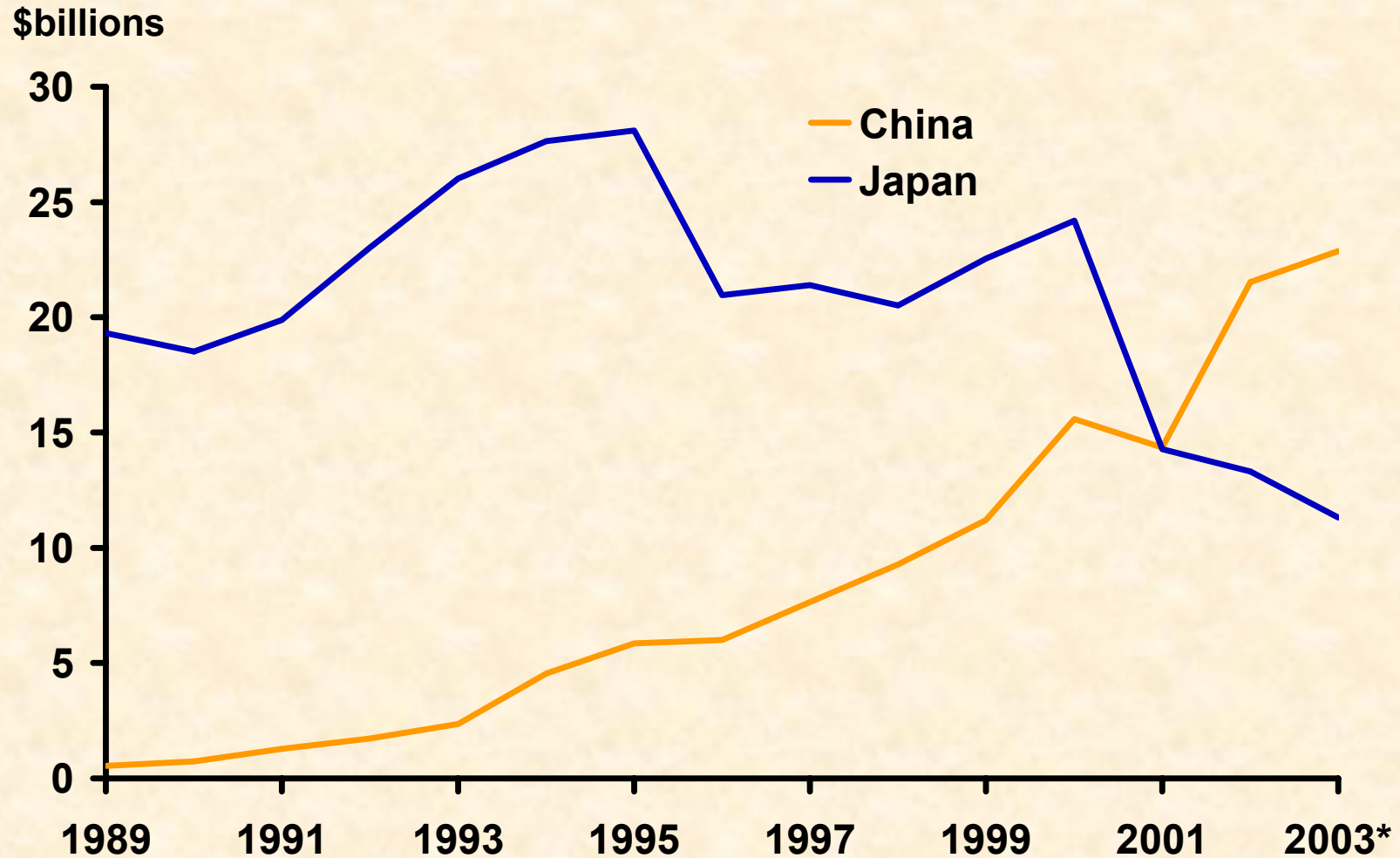
U.S. IT Trade Deficit with East Asia



* 2003 value estimated based on first half data.

. . . and in fact has overtaken Japan.

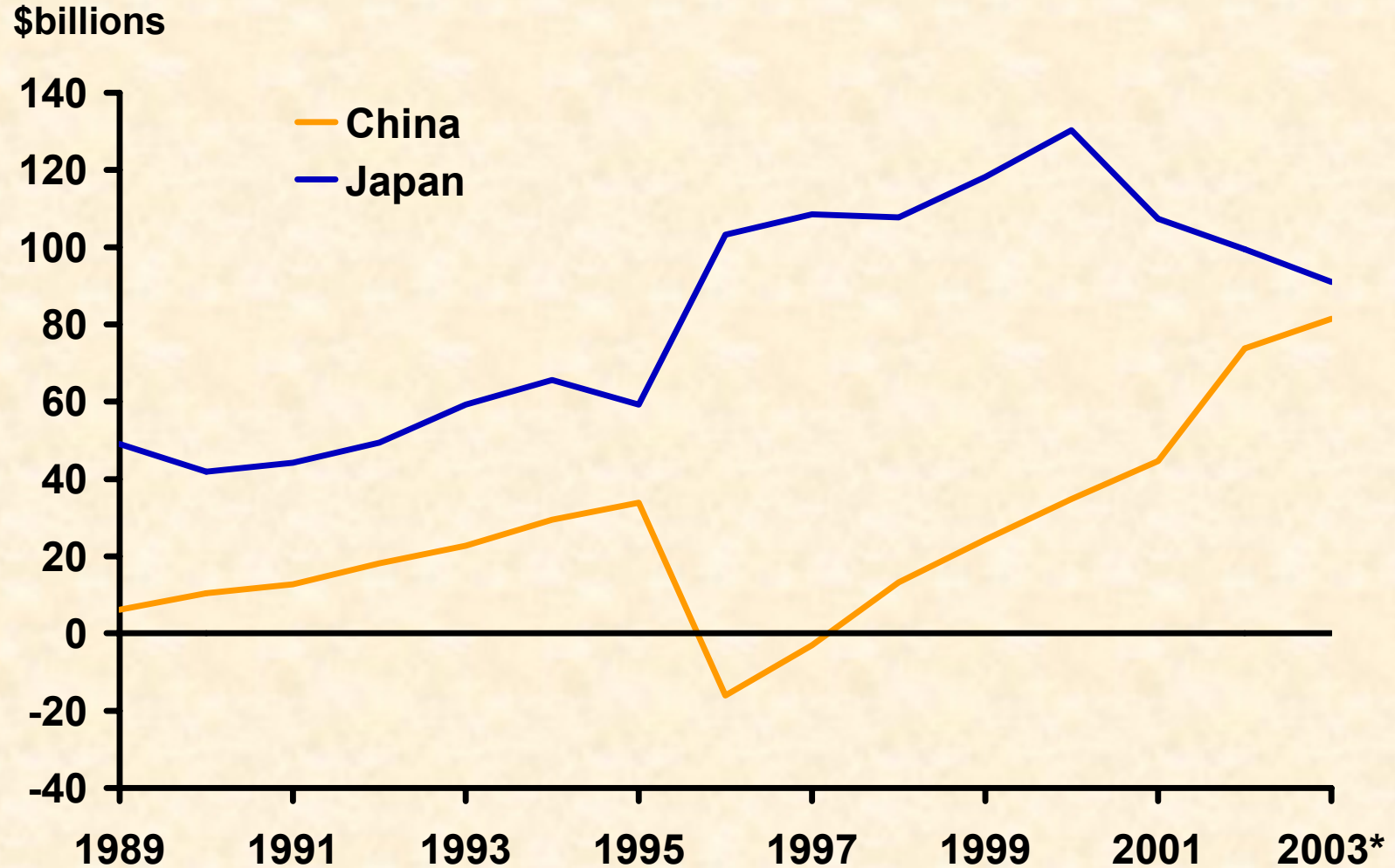
U.S. IT Trade Deficit with China and Japan



*2003 value estimated based on first half data.

The pattern has been similar for general exports.

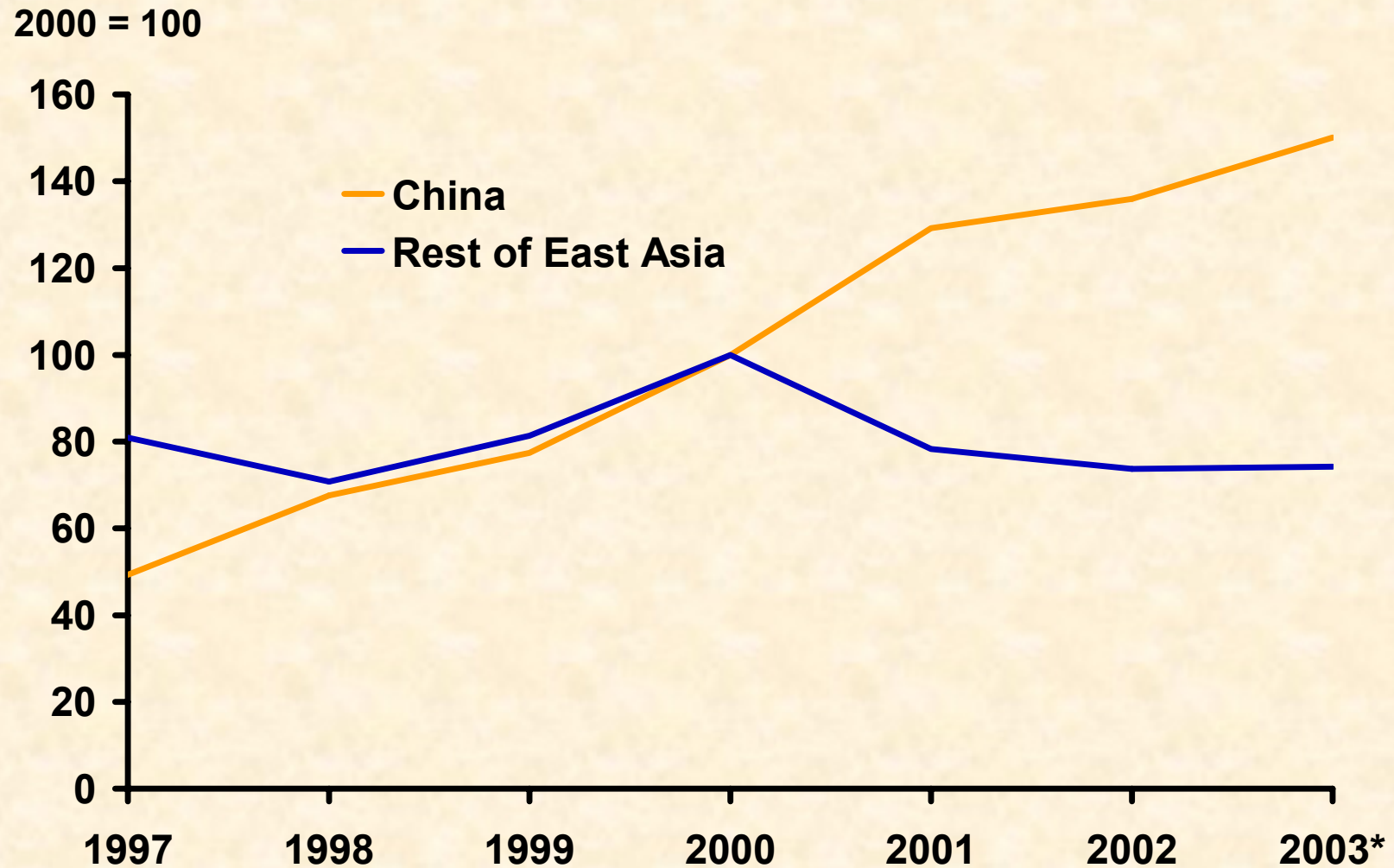
U.S. Manufacturing Trade Deficit



*2003 value estimated based on first half data.

Some U.S. companies and areas benefit.

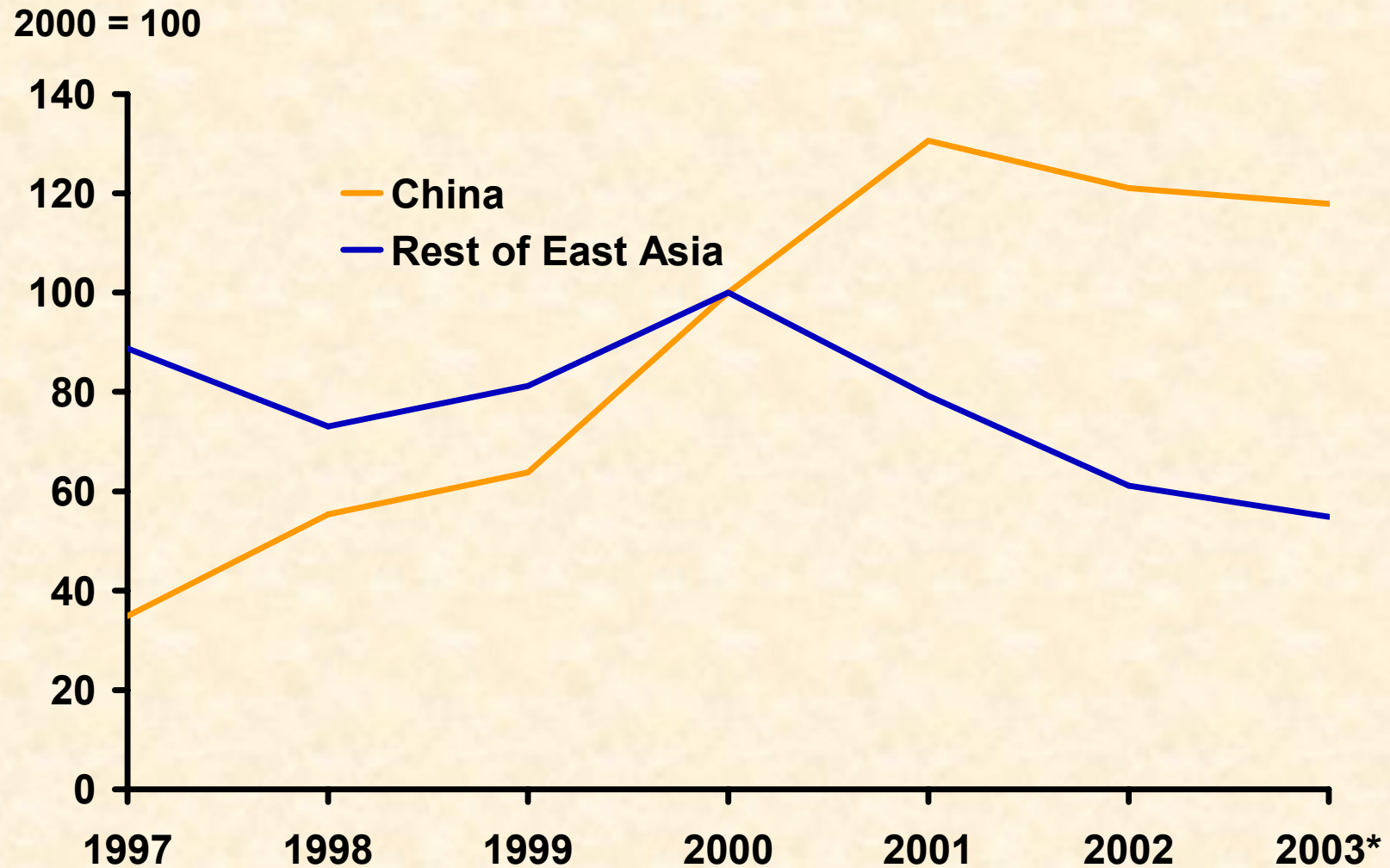
Annual IT Exports, U.S.



*2003 values estimated based on first half data.

California exports to China have done well.

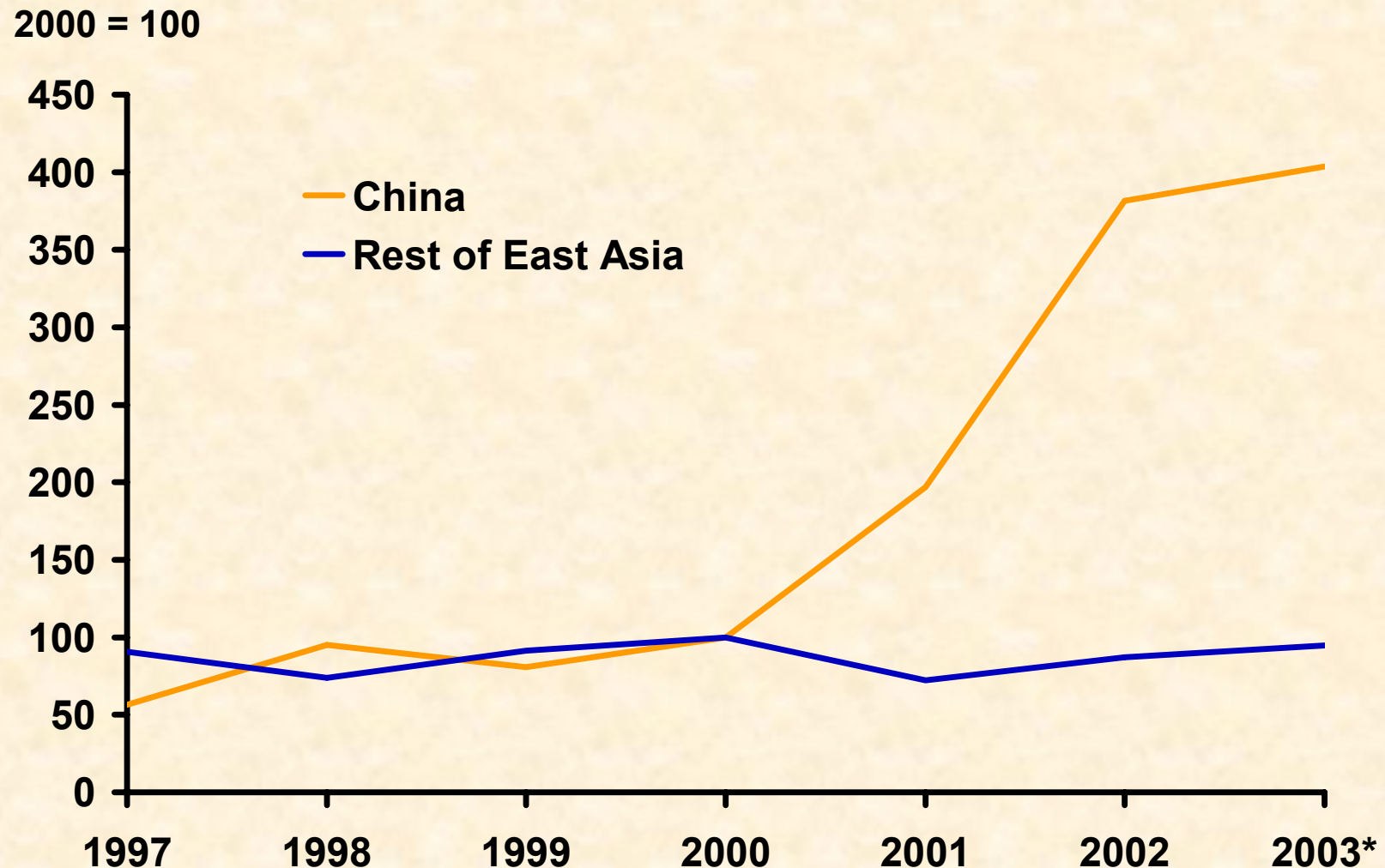
Annual IT Exports, California



*2003 values estimated based on first half data.

Even better in OR/AZ (microprocessors). . .

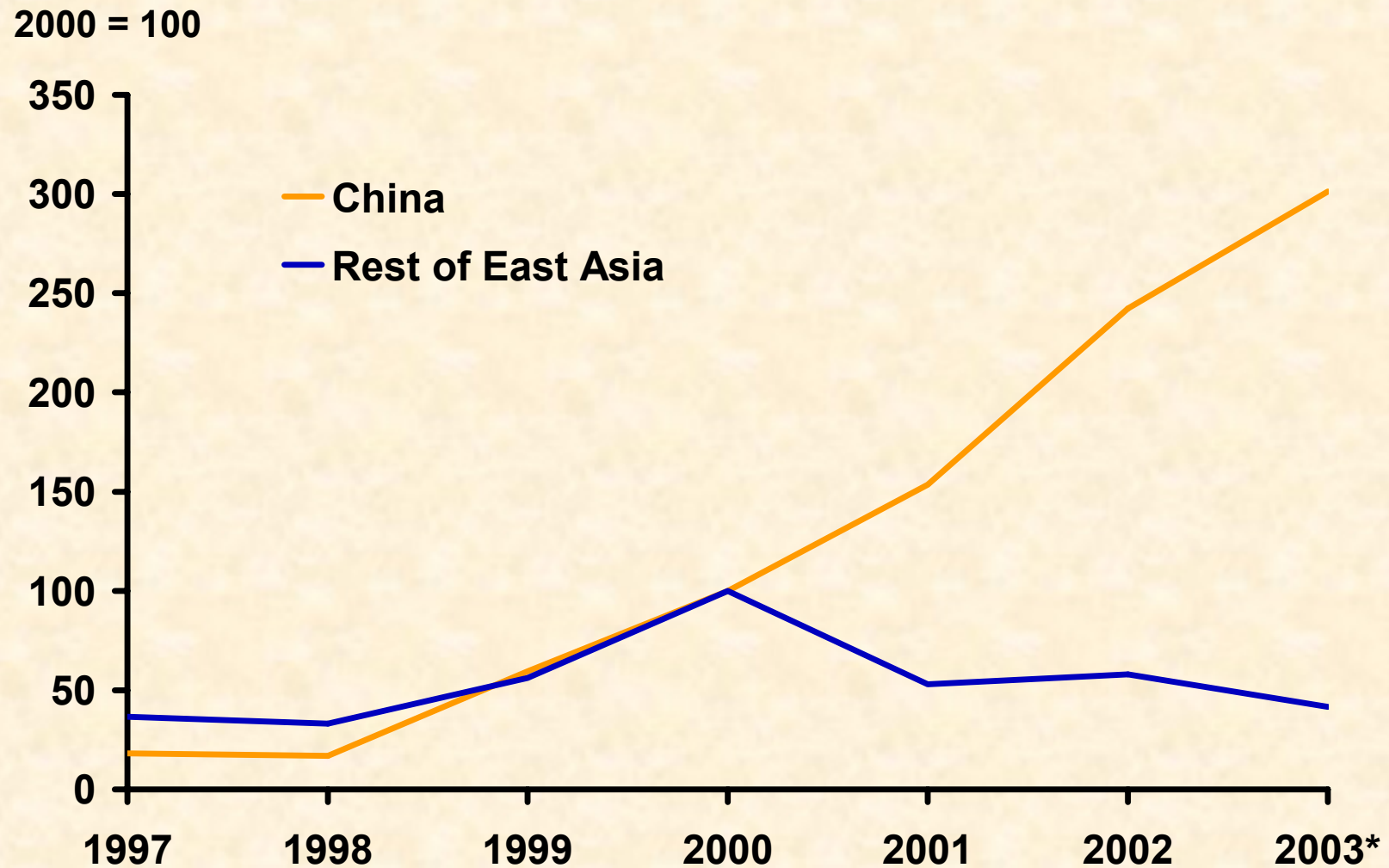
Annual IT Exports, Oregon and Arizona



*2003 values estimated based on first half data.

... and in ID/UT.

Annual IT Exports, Idaho and Utah



*2003 values estimated based on first half data.

Concluding Thoughts

- 1) China has made substantial IT inroads.
 - a) Low cost, displacing other East Asian countries.
 - b) Greater opportunities than in Japan.
 - c) U.S. IT sector beginning to reassert itself.

- 2) Policy issues
 - a) Intellectual property protection
 - b) Preferential tax policies
 - c) U.S. must maintain technological edge
(investment in human and physical capital)