

SEMICONDUCTORS: THE INNOVATION THAT DRIVES AMERICA

Semiconductors provide the enabling technology for thousands of products and services we use every day, such as PCs, cell phones, medical devices, appliances, automobiles, TVs, and digital cameras. In fact, they play a key role in a wide assortment of technologies and industries ranging from medical imaging to retailing to precision agriculture. More importantly, however, the rapid growth in the capacity and speed of semiconductors has enabled tremendous gains in productivity across all sectors of the economy. Semiconductors are also essential to the defense systems that ensure our national security. As a result, a vibrant domestic semiconductor industry is critical to U.S. economic strength and homeland security.

The revenues of U.S.-based chip companies account for nearly half of global semiconductor sales and more than three-quarters of U.S.-owned chip manufacturing capacity is located in the United States. The U.S. chip industry enables related industries across the country, such as telecommunications, software, and consumer electronics. The technology industry is the largest merchandise exporter, representing 23 percent of total exports. Semiconductors are the number one U.S. high tech export -- nearly 75 percent of U.S. chip industry revenue is the result of export sales.

Chips, Productivity and Income

The rapid rate of innovation in the semiconductor industry facilitated the information technology revolution, which in turn has spurred rapid expansion in the global services industries and productivity gains in all sectors of the economy. Chip-enabled productivity allows Americans to earn high wages and maintain a standard of living admired the world over.

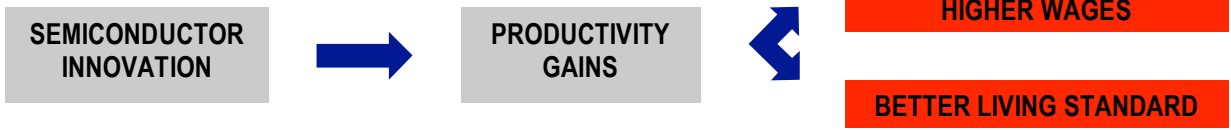
KEY FACTS

U.S.-based firms account for 50% of the world chip market.

20 states -- AZ, CA, CO, FL, ID, ME, MA, MN, MO, NJ, NM, NY, NC, OR, PA, TX, UT, VT, VA, WA -- have significant semiconductor industry direct employment and U.S.-based chip companies employ 222,000 individuals nationwide.

The semiconductor industry spends over \$15 billion each year on research and development and makes substantial contributions to U.S. universities.

The U.S. share of global chip production capacity is slipping, particularly in leading edge chip manufacturing.



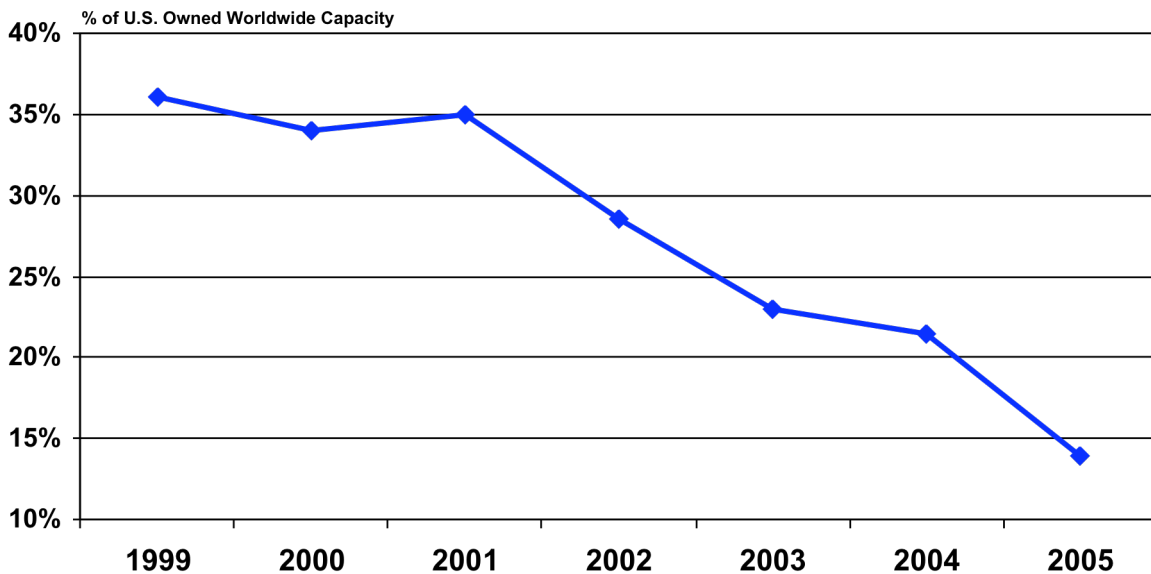
Chips and National Security

Semiconductors are also essential to America’s national defense. From the ‘smart bombs’ that allow the U.S. military to minimize civilian and allied casualties today to the ‘super suits’ that will protect and enhance the effectiveness of our soldiers in the field tomorrow, the important role chips play in many weapon and communications systems makes maintaining a strong domestic industry of strategic value. The importance of leading-edge microchips necessitates that we continue to have research and design centers and manufacturing facilities in the U.S.

Foreign Competition in the Chip Industry

The U.S. share of global chip production capacity has eroded, particularly with regard to the latest, state-of-the-art, leading-edge manufacturing facilities. Insufficient research funding, workforce challenges and the incentives foreign nations offer to attract investment have contributed to this slippage. SIA is working to reverse that trend because we believe a vibrant, domestic semiconductor industry is critical to U.S. economic strength and security.

U.S. LEADING-EDGE CHIP PRODUCTION CAPACITY IS DECLINING SHARPLY



WHAT OTHERS SAY:

DOD should advocate that a strongly competitive U.S. semiconductor industry is not only a DOD objective but also a national priority. Because the U.S. share of the world’s leading-edge semiconductor manufacturing has declined, and because research and development is closely coupled to manufacturing leadership, the United States will soon start to lose its R&D skill base if its onshore manufacturing does not remain vital.”

**“High Performance Microchip Supply”
Defense Science Board**

**For more information on the important role semiconductors play
in American innovation and competitiveness, please visit:**

www.choosetocompete.org

Or call SIA at 408.573.6612