



INTERNATIONAL
TRADE
ADMINISTRATION

China's Semiconductor Industry Policies Update

NDIA – Trusted Microelectronics Workshop

August 16-17, 2016

Preview

- Department of Commerce – International Trade Administration
- Global Semiconductor Trade Statistics
- China' Semiconductor Industry Development Overview
- Global Reactions
- Addressing the China Challenge

International Trade Administration

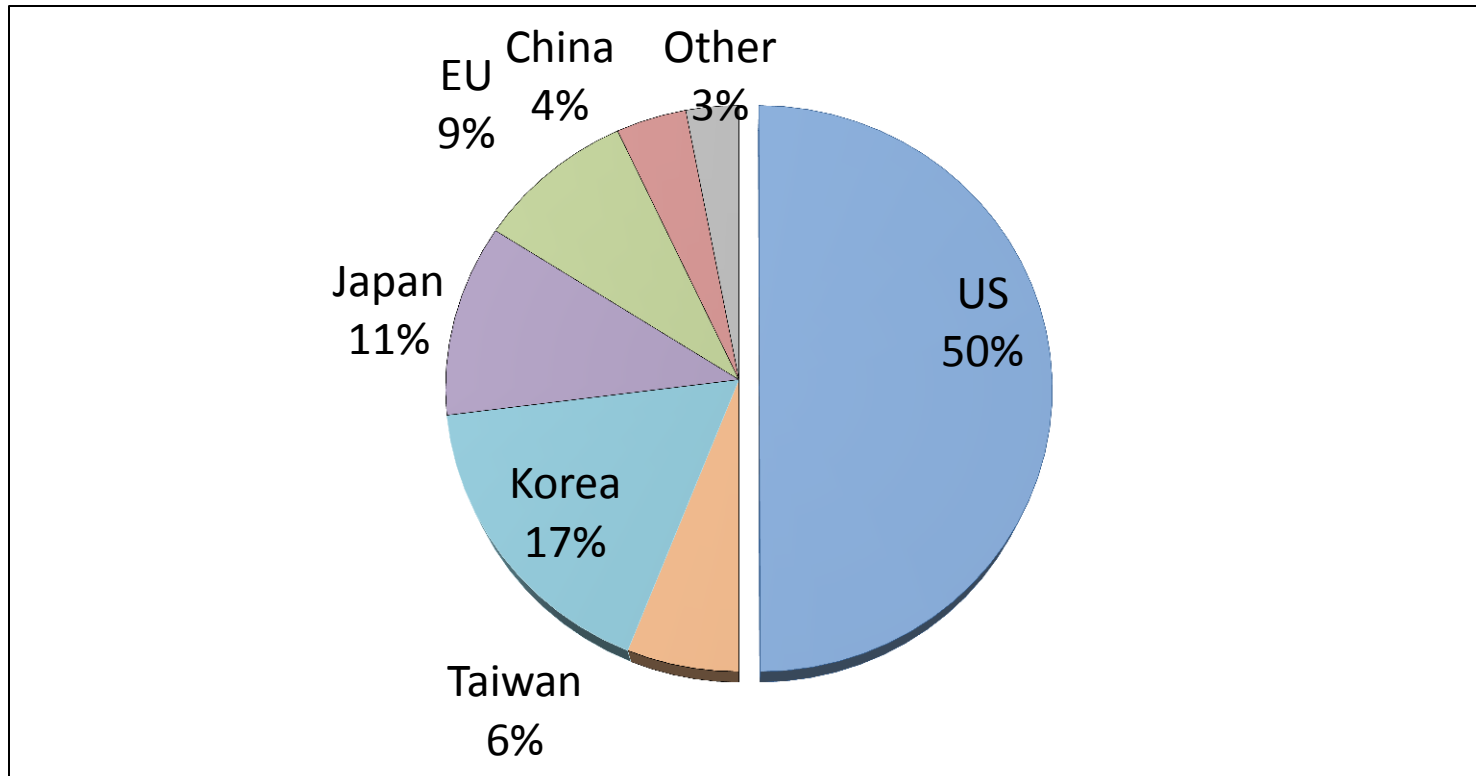
What is the ITA?

- Three distinct but complementary business units
 - Global Markets
 - Enforcement & Compliance
 - Industry & Analysis

What is the ITA's Mission?

- **Strengthen the competitiveness** of U.S. industry
- **Promote trade and investment**
- **Ensure fair trade** and compliance with trade laws and agreements

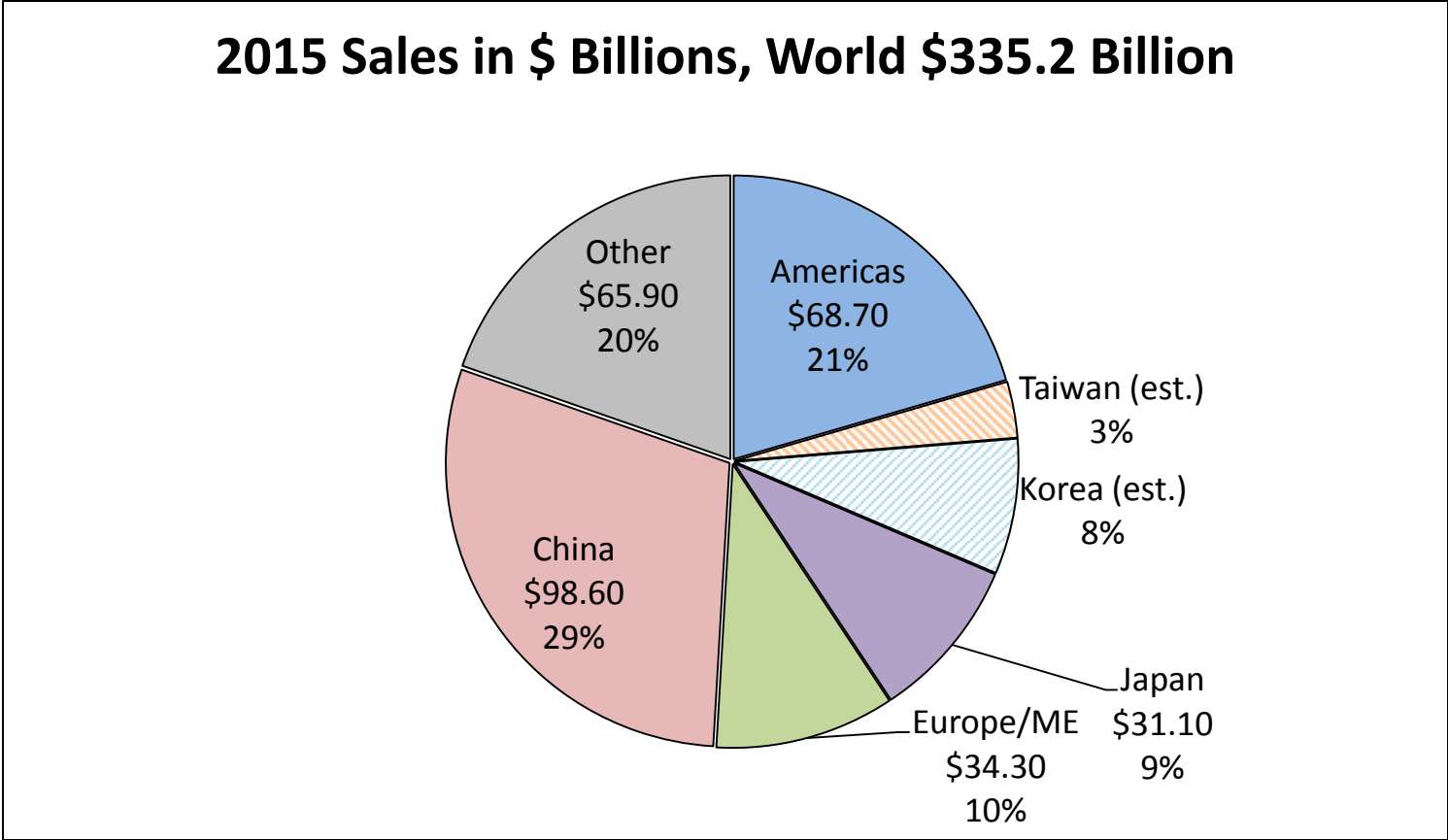
Global Market Share (2015)



Share based on headquarters of seller, including fabless. Does not include foundry output.

Source: SIA-World Semiconductor Trade Statistics /IHS/PwC/IC Insights

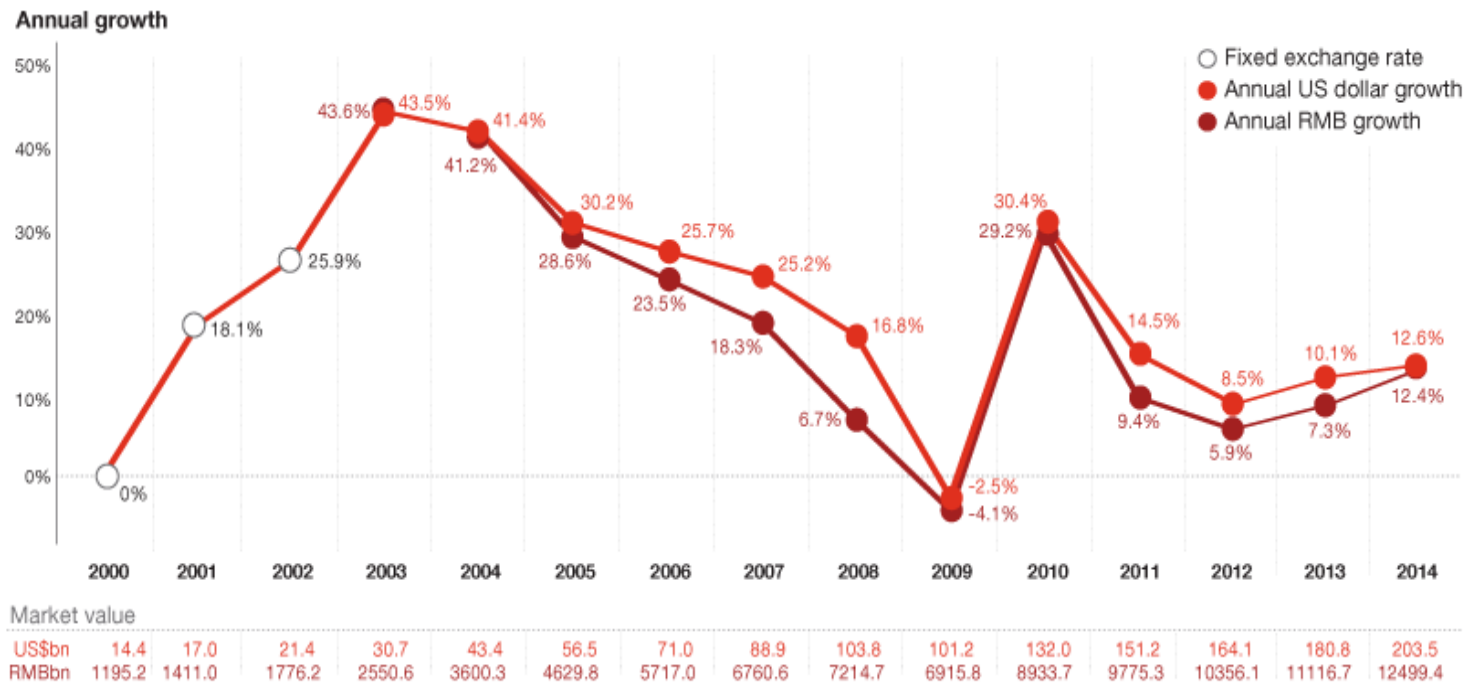
Markets for Semiconductors (2015)



Source: World Semiconductor Trade Statistics (February 2016)

China Market Growth

China's semiconductor market growth, 2000-2014



Note: Market reporting has changed since 2003 with sensors and optical semiconductors included as part of the optoelectronics-sensors-discrete (O-S-D) segment which along with integrated circuits make up the total semiconductor market.

Source: PWC, CCID Consulting, Semiconductor Industry Association

China's IC Industry Development Program

- Chinese Government has already invested **\$50 billion** and will invest an additional **\$100 billion or more** over the next ten years
 - additional and separate regional and municipal IC industry funds
 - support via direct investment, subsidies, and beneficial tax policies
 - potential to distort the global semiconductor supply chain and markets
- State-directed investment to acquire overseas companies (mainly U.S. and Taiwan) to help China “leap frog” into the cutting edge of the industry in all segments of IC supply chain
- R&D, intellectual property localization, and joint venture requirements support industry development goals
- Foundational to China's broader “secure and controllable” information technology indigenization strategy

Global Reactions

- **U.S. industry** and **government** are most **aware/concerned** about China's policies
- Industry **concerned that China's non-market driven investment will lead to overcapacity**, artificially pushing down prices and impacting profits needed for next gen R&D
- Industry concern that China will use **local content requirements**, develop **indigenous standards**, and deploy **anti-monopoly law** in tandem with investment to shut out U.S. and foreign competition
- Potential for **technology, IP, and know-how outflows** and **talent poaching**
- Leverage **Chinese policies** and **investment** for commercial advantage while mitigating risks associated with doing business in China
- Closely monitor **Chinese M&A activity** in semiconductor sector

Addressing the China Challenge

**Improve
Market Access**

**Support U.S.
Industry
Leadership**

**Maintain &
Strengthen
Value Chain**



**Minimize
Impact of
China's Policies**

**Strengthen
National and
Economic
Security**

Addressing the China Challenge

- **Assess the impact and legality of China's government-directed funding** for the semiconductor industry, **preferential R&D support** and **tax policies** for domestic entities, as well as state-directed and funded **merger and acquisition strategy**
- **Assess the impact of China's policies on U.S. industry, the U.S. economy, and U.S. national security**
- **Consider how to respond to China's policies**
 - Bilateral
 - Multilateral
 - Other policy tools
- **Ensure the U.S. semiconductor industry** will continue to be a **vibrant contributor** to the **U.S. economy** and **maintain U.S. leadership** in the world's most innovative industry

Thank You for Listening

J. Travis Mosier
International Trade Specialist
(202) 482-5314
travis.mosier@trade.gov

www.trade.gov