

# Export Control Challenges

Background Notes for the  
International Security Industry Council

January 2021

ISIC-Japan  
International Security Industry Council

Frank Cevasco  
Cevasco International, LLC  
McLean, Virginia

# What Needs to be Controlled?

- Scientific knowledge applicable to:
  - current and future tangible and intangible national security capabilities, and
  - commercial sector
- Actual products, capabilities, production processes, hardware, software, and subsystems

# The Fundamentals

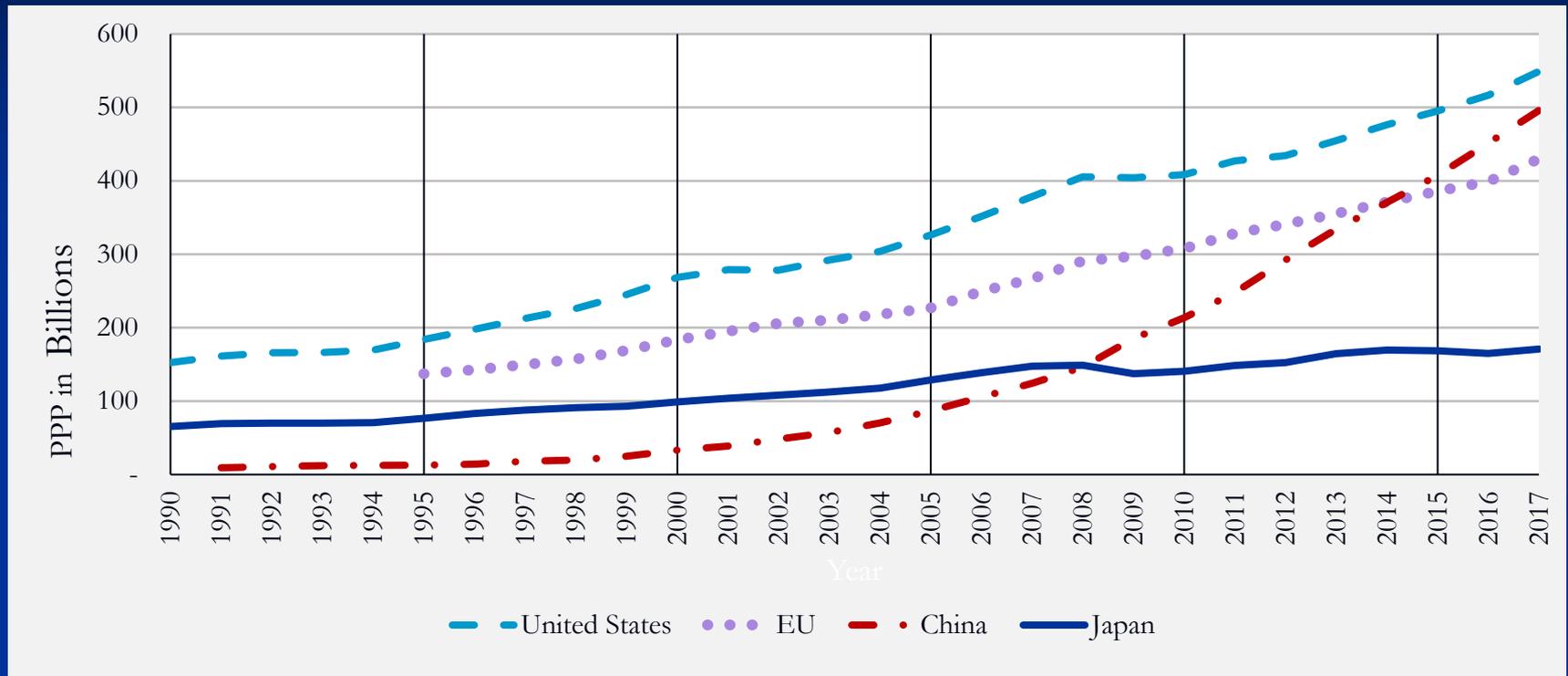
## ➤ Commercial sector

- existing products, production processes, equipment, and materials
- technology base for new products, production processes, and equipment
- sales generate corporate revenue, domestic employment, international trade, and funding for next generation R&D
- Commercial technology, know how, and products can have utility for defense systems

## ➤ National security sector

- defense systems, production processes, equipment, and materials
- technology base for new defense systems, production processes, equipment, and materials
- strengthens deterrence as perceived by others
- strengthens military response capability if a nation is militarily challenged
- Government contracts to aerospace and defense industry generate corporate revenue, domestic employment, international trade, and funding for next generation R&D

# Gross Expenditures on R&D



Source: The State of U. S. Science & Engineering 2020, National Science Board

PPP- Purchasing Power Parity. Compares different countries' currencies through a "Basket of Goods" approach.

France, Germany & UK account for 57% of EU expenditures on R&D.

# Export Control versus Technology Sharing with Allies

-Maximizing Collective Benefits and Deterrence-

# Relevance of R&D—Past and Present

- NATO nations contained the Soviet Union by:
  - investing in R&D,
  - protecting R&D results, and
  - cooperating with other nations
- China's level of R&D investment first surpassed Japan's in 2008; surpassed the EU's in 2015, and is about to surpass the US
- Despite low levels of past investment China advanced its defense systems and commercial competitiveness by stealing technology from numerous technologically advanced nations

# Modes of Defense System Technology Sharing

- Transatlantic cooperation benefitted the US and others for over 50 years:
  - US exchanged defense system technology, starting in the mid-1960s, through: Scientist & Engineer Exchange, Master Data Exchange, FMS, and defense system cooperation
  - Four nations signed an MOU in 1968 to develop the NATO Seasparrow Missile
  - Three nations signed an MOU in 1976 to develop the Rolling Airframe Missile
  - Five nations signed an MOU in 1975 for cooperative production of the F-16, in the US and Europe; they later cooperated on system up grades
  - Numerous MOUs were signed in the 1980s to cooperatively acquire a wide variety of technologically advanced defense systems
  - Many bi-lateral and multi-lateral agreements were amended to support second and third generation system advances

Nations should apply to today's threats, the lessons they learned from addressing Soviet Union threats

# How has the US Approached Export Control?

# Gradual Evolution of the US Export Control System

- Export control regime of 1935-1939 prevented US entanglement with warring European nations
- Export Control Act of 1940 (aircraft parts, chemicals and minerals), later extended to all commodities
- Export Control Act of 1949 restrained the Soviet Union, supported NATO, and formed CoCom
- Export Administration Act of 1969 balanced need to protect defense related technology and promote international trade
- Arms Export Control Act (1976)
- Export Administration Act (1979) responded to Soviet Union using western dual-use technology to modernize its forces

Export control organizations/practices evolved over several decades to accommodate changing international security and economic factors

# Major Evolution of the US Export Control System

- Export control system became increasingly bureaucratic, warranting reinvention:
  - numerous government agencies involved, and
  - lengthy delays processing export license requests which sometimes rendered US industry non-responsive to allies/friends and non-competitive in the global marketplace
- Obama Administration launched a 2009 comprehensive review of the US export control system
- Secretary of Defense Gates proposed a four part approach:
  - create a single export control licensing agency for dual-use and munitions exports,
  - adopt a unified control list,
  - establish a single enforcement coordination agency, and
  - create a single integrated information technology system
- Substantial progress was made, but more remains to be done

# National Security Implications for Japan of an Enlightened Export Control System

- Increase quantity of defense systems and components produced by serving domestic *and* export markets
- Reduce unit price of MOD defense systems and components
- Enable Japan's MOD to acquire more systems and components for the same budget
- Increase defense capability for the MOD
- Increase Japan's perceived value as a coalition partner
- Enhance Japan's national security

# Conclusions

- There is no single best way to manage export control.
- Each nation must consider its various government organizations, its industrial base, and regional allies, and regional threats
- It must craft a solution that protects its technology while also positioning its government and industry to collaborate with allies to their collective benefit.
- Every other nation has a similar challenge; perfect solutions are infrequent, periodic refinements are the norm, and simplicity is preferable to complexity

## Conclusions – cont'd

- Cooperative acquisition and defense system exports can strengthen national defense, but they require a predictable and responsive export control process
- Short decision times are achieved through agreed lists of what requires control, minimum number of players in the review and decision process, and open communications with those seeking export approval
- Japan, the US, and others need to stem leakage of defense and commercial technology to China and other hostile nations
- Export controls of themselves only *slow* erosion of technological superiority
- Technological superiority erodes over time:
  - adversaries build on knowledge/products that enter the marketplace, and
  - deploy current/next generation improvements with modest investment