Export Enforcement and National Security

Trade School
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Mento LLC
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US—CHINA TRADE TIMELINE
The U.S. and China have long been trade partners, but when did it all go sour?

- **FEB. 22, 1784**
  - Trade between China and the U.S. commences.

- **1800s**
  - Trade between China and the U.S. flourishes.

- **LATE 1800s**
  - Steam replaces sails on vessels.

- **MAR. 1, 2018**
  - Current Trade War between China and the U.S. begins.

- **2007-2010**
  - Global financial crisis

- **1949**
  - Chinese Nationalists established a maritime blockade of mainland Chinese seaports.

- **1950s**
  - U.S. declares trade embargo on China.

- **1970s-2010s**
  - Trade between China and the U.S. flourishes.

- **1997**
  - Asian financial crisis

- **1972**
  - Nixon visits China, and negotiates opening trade between China and the U.S. once again.

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A GROWING DEFICIT
U.S. trade with China

- **1990**
  - $100

- **2000**
  - $300

- **2010**
  - $500

- **2018**
  - $410 billion in 2018

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THE TRADE WAR
The trade war has largely been a series of tariff-driven retaliations between China and the U.S., beginning with Trump’s Mar. 1, 2018 tariff announcement on steel and aluminium imports.

A prolonged deficit can hurt a nation’s economy due to declined spending on domestical products.

SOURCES: Investopedia, BBC, Market Insider
FBI Technology Theft Cases Involving China

IP & the US Economy

Strong IPR protection and enforcement are essential to creating jobs and promoting economic prosperity; opening new markets for U.S. goods and services; and fostering investment in innovation and development.

IP-INTENSIVE INDUSTRIES ACCOUNT FOR...

- 38% of GDP
- 52% of merchandise exports
- 27.9 million jobs
- 46% wage premiums

IP CRIME’S ANNUAL COST TO THE U.S. ECONOMY

- $180 Billion from theft of trade secrets
- $18 Billion from pirated U.S. software
- $29 Billion in displaced legitimate sales due to counterfeit and pirated goods

Who does intellectual property theft impact?

*According to the 2013 IP Commission Report

$300 billion estimated losses in the United States due to intellectual property theft.

$1.7 trillion estimated global value of counterfeit and pirated products by 2015.

$5,000,000,000,000,000 is the total estimated worth of intellectual property in the United States.*
PRC’s Tools For Acquiring Technology

- Intelligence Services
- Non-Traditional Collectors
- S&T Investments
- Talent Recruitment Programs
- Academic Collaboration
- Research Partnerships
- Joint Ventures
- Front Companies
- Mergers & Acquisitions
- Legal and Regulatory
Systematic, Expansive and Well Funded

• "They've pioneered an expansive approach to stealing innovation through a wide range of actors, including not just Chinese intelligence services but state-owned enterprises, ostensibly private companies, certain kinds of graduate students and researchers, and a whole variety of other actors all working on their behalf.” – FBI Director Christopher Wray
Thousand Talents Plan

• One of the most prominent Chinese Talent recruit plans that is designed to attract, recruit, and cultivate high-level scientific talent in furtherance of China's scientific development, economic prosperity and national security.

• These talent programs seek to lure Chinese overseas talent and foreign experts to bring their knowledge and experience to China and reward individuals for stealing proprietary information."
China Posts Weakest Economic Growth Since 1990

China's real GDP growth since 1980 (in %)

Source: National Bureau of Statistics of China
China debt crash may be the next global crisis

What’s up?
China’s super-cities are borrowing like mad to build highways, airports to record-breaking skyscrapers.

Its shadow banking system, in which banks and finance companies extend loans at high interest rates outside regulation is a big cause of worry.

While its central bank is looking to curb debt binge, the govt is forcing easing of credit to keep GDP growing north of 7%.

The magnitude
17.9 trillion yuan, or $2.96 trillion – Borrowings by provinces, counties and townships has reached

63% growth of local debt since 2010, much faster than 40% growth of the economy

69% share of shadow banking of China’s 2012 GDP, estimated by JPMorgan

57% of local government debt comes from bank loans, rest from bonds and shadow banking network

For legendary investor George Soros, the main risk facing the world isn’t the euro, or a Japanese asset bubble, but a Chinese debt disaster that’s unfolding in plain sight.
How it can go from “Bad to Dead.”

• Lack of management commitment
• Inadequate internal investigations
• Inaccurate, incomplete, or misleading reporting to enforcement authorities
• Failure to promptly implement or improve compliance procedures and other remedial actions, including wind down activities
• Concealment, circumvention or other willful conduct
• New violations during the investigation
## Export Violations

### Penalties for US Export Violations

#### Criminal Sanctions

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<thead>
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<th>EAR</th>
<th>ITAR</th>
<th>OFAC</th>
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<tbody>
<tr>
<td>Organization</td>
<td>Up to $1 Million</td>
<td>Up to $1 Million</td>
<td>Up to $1 Million</td>
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<tr>
<td>Individual (PI)</td>
<td>Up to $250,000 and/or up to 10 years in prison</td>
<td>Up to $1 Million and/or up to 10 years in prison</td>
<td>Up to $100,000 per violation and/or up to 10 years in prison</td>
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#### Civil Sanctions

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<tbody>
<tr>
<td>Organization</td>
<td>Up to $12,000 per violation</td>
<td>Up to $500,000 per violation</td>
<td>Up to $55,000 per violation</td>
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<tr>
<td>Individual (PI)</td>
<td>Up to $12,000 per violation</td>
<td>Up to $500,000 per violation</td>
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National Security Is the New Trigger

• Temp.Periscope has been blamed for cyberattacks that have resulted in the compromise of sensitive material related to military technology, including plans to construct a new supersonic anti-ship missile to be deployed by American submarines.

• Spending billions of dollars to develop and field new defense technologies, only to have their effectiveness compromised by a data breach, can be costly for developers and for taxpayers.

• More importantly, it can endanger U.S. service members who rely on that technological advantage to accomplish their missions safely.
WEAPON TECHNOLOGY: THE EVOLUTION OF WEAPONRY

Weapons are used to inflict damage or harm to living beings, structures, or systems. They increase the accuracy and efficiency in hunting, crime, law enforcement, self-defense, and warfare. Weapons are used to gain strategic, material or mental advantages over adversaries.

- **400,000 B.C.E.** | Paleolithic Arrowheads
  - First weapon used for hunting and defense

- **5000 B.C.E.** | Bone Age Daggers
  -Advanced weapons for warfare and hunting

- **20,000 B.C.E.** | Stone Age Axes
  -Sword-like tools for cutting and warfare

- **1561** | Machine Gun
  -First automatic weapon

- **1896** | The First Atomic Bomb
  -Nuclear weapon

- **August 6th & 9th, 1945** | Nagasaki, Hiroshima
  -Nuclear bombings by the United States

![Image of World War II bombing,nuclear explosion, and futuristic drone]
## How Are Biological Weapons Developed & Tested?

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<th>Step</th>
<th>Description</th>
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<tr>
<td><strong>1.</strong></td>
<td><strong>Choose An Agent</strong>&lt;br&gt;Factors considered in choosing an agent include: Pathogenicity (amount required to cause disease); Virulence (disease severity); Incubation (amount of time to cause harm after exposure); Lethality (how deadly the agent is); Transmissibility (how the disease spreads); and Countermeasures (treatments or cures).</td>
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<td><strong>2.</strong></td>
<td><strong>Acquire The Agent</strong>&lt;br&gt;Agents could be purchased from a microbiological laboratory or bank, or isolated from natural sources such as animals, soil, or water. Agents could also be acquired through scientists or technicians working in other BW programs, or created from scratch by altering an existing pathogen's genetic code.</td>
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<td><strong>3.</strong></td>
<td><strong>Acquire A Production Method</strong>&lt;br&gt;The production method produces small quantities that could later be scaled up for mass production. The choice of method would depend on the agent, how it would be used and the quantity necessary. Most agents would require nutrients to grow, many of which are widely available due to use in commercial industries.</td>
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<td><strong>4.</strong></td>
<td><strong>Stabilize The Agent</strong>&lt;br&gt;Biological agents break down over time and eventually die. Stabilization slows an agent's metabolism or stops it altogether. Some agents can naturally slow their metabolism by forming spores, and scientists can emulate this process in others through microencapsulation, applying a layer of protective coating.</td>
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<td><strong>5.</strong></td>
<td><strong>Concentrate The Agent</strong>&lt;br&gt;Concentrating the agent makes it lethal in small doses. This can be done through vacuum filtration, ultrafiltration, precipitation, and centrifugation.</td>
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<td><strong>6.</strong></td>
<td><strong>Choose A Delivery Method</strong>&lt;br&gt;Aerosols, tiny particles that can be suspended in the air and inhaled, are the best method for infecting a person with a biological agent. Some diseases are usually carried by vectors like ticks. But these diseases are often more virulent and easier to disseminate when they are aerosolized.</td>
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<td><strong>7.</strong></td>
<td><strong>Field Testing</strong>&lt;br&gt;Field testing can be done in a laboratory, through open-air tests in controlled environments, or on animals. There are also rare cases of countries using humans to test agents, such as Japan using prisoners as test agents during WWII, and the U.S. testing tularemia and Q fever on human volunteers from 1954-1973.</td>
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<td><strong>8.</strong></td>
<td><strong>Mass Production</strong>&lt;br&gt;Depending on the agent, large quantities may be needed to carry out a successful attack. Devices such as bioreactors or fermenters can grow cells on a large scale. Environmental conditions inside these devices, such as temperature, pH, and the presence of gases, must be carefully controlled to keep the cells alive.</td>
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<tr>
<td><strong>9.</strong></td>
<td><strong>Stockpile And Mobilize Weapons</strong>&lt;br&gt;Once stabilized and loaded into a delivery system, the weapons can be stockpiled. Even stabilized biological agents will decay over time, so stockpiles do not last indefinitely.</td>
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272 Scientists
Including engineers, computing, AI experts and roboticists in 37 countries have called for a ban on the development and deployment of fully autonomous weapons.

WHO’S INVOLVED?

At least 6 States are known to be researching, developing and testing fully autonomous weapons: The US, the UK, China, Israel, Russia and South Korea.

44 States have spoken publicly on fully autonomous weapons since the Human Rights Council debate on 30 May 2013.
A verified transaction can involve cryptocurrency, contracts, records, or other information.

Validation

The network of nodes validates the transaction and the user’s status using known algorithms.

Once verified, the transaction is combined with other transactions to create a new block of data for the ledger.

The requested transaction is broadcast to a P2P network consisting of computers, known as nodes.

The transaction is complete.

The new block is then added to the existing blockchain, in a way that is permanent and unalterable.

Has no intrinsic value in that it is not redeemable for another commodity such as gold.

Has no physical form and exists only in the network.

Its supply is not determined by a central bank and the network is completely decentralized.
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With Your Host Pete Mento