China and the WTO: The Yawning Gap Between Its Commitments and Practices

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Today’s Presentation

1. U.S.-China Trade and Economic Challenges
2. How China Falls Short of WTO Commitments
3. Policy Recommendations
Evolution of Chinese Economic Policy


- Phase 3: 2012-present: “China Inc.”
China Is Unique in the Global Trading System

- Heavily mercantilist strategy
- Seeks autarky and absolute advantage
- State and market are joined at the hip
- Policies favor Chinese firms
- Lack of rule of law/will of the party prevails
Chinese Innovation Mercantilism’s Impact on Global Innovation

Industry by Industry: More Chinese Mercantilism, Less Global Innovation
ROBERT D. ATKINSON | MAY 2023

China’s long-standing and rampart “innovation mercantilist” policies have global innovation by taking market share and restrains from more innovative foreign competitors, thereby diminishing the resources they can invest in research and development farther toward innovation.

KEY TAKEAWAYS
- In most industries, Chinese firms operate far from the frontier of innovation. To the extent China’s mercantilist policies impede market share and reduce revenue for innovation leaders, they also reduce investment in the next round of innovation.
- Most scholarly, economic studies on the impact of China’s economic policies on foreign research and development (R&D) and innovation find a negative relationship—ITIF compiled case studies of five industries: solar panels, high-speed rail, telecom equipment, semiconductors, biopharmaceutical products. In each case, our economic modeling suggested significant negative impact on global R&D and patenting.
- In the semiconductor industry alone, ITIF found that if Chinese firms had 80 percent less market share, there would be 5,000 more U.S. patents annually.
- If China were to reduce its unfair mercantilist policies, the pace of global innovation would increase. This is a classic win-win dynamic, China shows no inclination to do so.
- Allied nations should pressure China to reduce its harmful policies and encourage the WTO to focus more on the innovation efforts of hostile dictators.
- To apply pressure, allies should limit market access for innovation-based goods and services that are supported by Chinese government and its mercantilist policies.
- Allies also should cooperate more on technology policy and establish stronger trade agreements to allow for the free flow of innovation-based goods.

Moore’s Law Under Attack: The Impact of China’s Policies on Global Semiconductor Innovation
STEPHEN EZZELL | FEBRUARY 2021

China’s mercantilist strategy to grab market share in the global semiconductor industry is having the effect of inferior innovators at the expense of superior firms in the United States and other mature industry. That siphons away resources that would otherwise be invested in the virtuous cycle of cutting-edge R&D that has driven semiconductor innovation for decades.

KEY TAKEAWAYS
- No industry has an innovation dynamic quite like the semiconductor industry, where “Moore’s Law” held true for decades. The number of transistors on a microchip doubled every two years, producing twice the processing power at half the cost.
- The patterns permit because the semiconductor industry relies on biopharmaceuticals to be the world’s most vital—an industry—where the unique cycle that depends on one generation of innovation to finance investment in the next.
- To continue heavy investment in R&D and CapEx, semiconductor firms need access to large global markets where they can compete on fair terms to amortize and recoup their costs. When they face access, non-market-based competition, innovation suffers.
- China’s state-directed strategy to place itself in a leadership position in the semiconductor industry distorts its global market with reverse subsidies, IP theft, state-funded foreign firm acquisitions, and other mercantilist practices.
- Interior innovations thus have a key role and the global semiconductor innovation curve is bending downward for it. ITIF estimates there would be 5,500 more U.S. patents in the industry annually if not for China’s innovation mercantilist policies.
- To address the challenges Chinese innovation mercantilism poses to the semiconductor industry, the United States needs to work with like-minded nations while enhancing its own innovation capacity in the sector.

The Impact of China’s Production Surge on Innovation in the Global Solar Photovoltaics Industry
DAVID M. HART | OCTOBER 2020

China’s subsidy-aided rise to dominance in PV manufacturing has driven prices way down, but at the cost of undermining promising alternative technological pathways. Policymakers should adopt measures to sustain greater diversity in PV and similar technologies.

KEY TAKEAWAYS
- Sustained innovation in solar photovoltaics (PV) is vital to achieve global climate goals. Experts differ on whether today’s dominant PV technology can be improved to the extent required. The world needs more options. China’s dominance limits them.
- China’s trade barriers, subsidies, and export control policies are critical factors in the PV industry’s trajectory.
- China’s emergence as a dominant player has disrupted the PV industry in the rest of the world, eliminating many promising innovators.
- China’s surge shifted the course of technological innovation. PV prices dropped, efficiency rose, and process innovation flourished. But R&D intensity, patenting, and startup support slowed.
- As the course of innovation shifted, alternative technological pathways that might have led to lower prices and better performance were cut off.
- Policymakers should learn from this experience and adopt measures that would create and sustain technological diversity as PV and other climate-critical technologies, while working with allies to curb clean energy mercantilism.
China’s Mercantilist Policies Have Generated Large Surpluses…

U.S. Goods Trade Deficit With China, 2001-2020 ($Billions)

U.S./China Advanced Technology Products Trade 2001-2020

Source: ITIF, “False Promises II: The Continuing Gap Between China’s WTO Commitments and Practices”
And Foreign Currency Reserves

China’s Foreign Currency Reserves, 2000-2021 ($ Trillions)

Select Countries’ Foreign Currency Reserves, 2019, ($ Trillions)

Source: ITIF, “False Promises II: The Continuing Gap Between China’s WTO Commitments and Practices”
Today’s Presentation

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## China’s Adherence to Its WTO Commitments

<table>
<thead>
<tr>
<th>Chinese WTO Commitment</th>
<th>Has China Lived up to the Commitment</th>
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<tbody>
<tr>
<td>Embracing open, market-oriented policies</td>
<td>No</td>
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<tr>
<td>Embracing national treatment: treating foreign firms the same as domestic ones</td>
<td>No</td>
</tr>
<tr>
<td>SOEs shrinking as a share of the economy, especially in technology industries</td>
<td>No</td>
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<tr>
<td>SOEs making purchases based on commercial considerations</td>
<td>No</td>
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<tr>
<td>Curtailing extensive industrial subsidization</td>
<td>No</td>
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<tr>
<td>Providing timely and transparent notification of subsidies</td>
<td>No</td>
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<tr>
<td>Curtailing forced technology transfer, including coerced joint ventures</td>
<td>No</td>
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<tr>
<td>Intellectual property theft and violations being significantly reduced</td>
<td>No</td>
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<tr>
<td>Technology standards developed transparently according to WTO TBT principles</td>
<td>No</td>
</tr>
<tr>
<td>Competition and anti-monopoly policies applied on non-discriminatory terms</td>
<td>No</td>
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<tr>
<td>Joining the Government Procurement Agreement</td>
<td>No</td>
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<td>ICT and telecommunications market opening to foreign producers</td>
<td>No</td>
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### False Promises II: The Continuing Gap Between China’s WTO Commitments and Practices

**Stephen Ezezzi, June 2023**

China’s adherence to its World Trade Organization (WTO) commitments reflects a mixed picture. As China enters its 20th year of WTO membership, it has made significant progress in some areas, yet challenges remain.

#### Key Commitments and Adherence

- **Embracing open, market-oriented policies**: Despite initial commitments, China has struggled to fully implement market-oriented reforms.
- **Embracing national treatment**: Official policies have not fully aligned with WTO standards, particularly concerning access to domestic markets.
- **SOEs shrinking**: While there have been efforts to decrease SOE influence, progress has been slow.
- **Purchasing based on commercial considerations**: China continues to prioritize state-owned enterprises, limiting fair competition.
- **Extensive industrial subsidization**: Subsidy practices are still prevalent, which can distort trade.
- **Provision of subsidies**: Timely and transparent notification of subsidies remains a challenge.
- **Forced technology transfer**: Despite efforts, coerced joint ventures persist.
- **Intellectual property theft and violations**: Although有所减少, they remain a significant issue.
- **Technology standards**: Progress has been made in aligning standards with WTO guidelines.
- **Competition and anti-monopoly policies**: Application of non-discriminatory terms is inconsistent.
- **Government Procurement Agreement**: Adherence to non-discriminatory standards is lacking.
- **ICT and telecommunications**: Access to foreign producers is restricted.

**The Challenges**

China’s WTO commitments are critically important to global trade dynamics. The country’s adherence to these commitments is essential for maintaining a level playing field for all WTO members. Non-compliance can lead to increased protectionism and trade disputes.

**Implications for the Future**

China’s continued efforts to improve its adherence to WTO commitments will be critical for fostering a more open and fair global trading environment. This includes addressing issues such as forced technology transfer, intellectual property theft, and other non-commercial practices.

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**Information Technology & Innovation Foundation**

**June 2023**
Rejection of the WTO’s Market Orientation

- National treatment, transparency, non-discrimination.
- “The Government of China would not influence, directly or indirectly, commercial decisions on the part of state-owned or state-invested enterprises, including regarding the quantity, value, or country of origin of any goods purchased or sold.”
- Under Article 19 of the Company Law, all SOEs or private Chinese companies have a Chinese CCP cell, codifying CCP influence over corporate governance.

Influence and Prevalence of State-Owned Enterprises (SOEs)

- 150,000 SOEs accounting for 40% of industrial assets worth $15 trillion.
- OECD: “Somewhat surprisingly, state assets doubled relative to GDP in competitive SOE industries.”
- 80% of Chinese SOEs recorded a profit in 2020.

Industrial Subsidies a Key Component of Chinese Strategy

- Since China joined the WTO in 2001, subsidies have annually financed about 20 percent of China’s manufacturing capacity.

- 95% of Chinese firms in tech industries received R&D subsidies in 2015, with those subsidies accounting for 22% of firms’ R&D investments.

Source: Lily Fang et al., “Corruption, Government Subsidies, and Innovation: Evidence from China”; Jonas Nahm, Johns Hopkins SAIS
Chinese Subsidies to the Semiconductor Industry

- National IC Plan: $170 billion to develop a Chinese closed-loop semiconductor ecosystem.
- OECD: “86% of identified global semiconductor subsidies from 2014-2018 to Chinese firms.”

Source: OECD, “Measuring Distortions in International Markets: The Semiconductor Value Chain”
Subsidies Across Other Chinese Industries

- Huawei: $75 billion in state support over 25 years. $100 billion line of export credit.

- $42 billion in solar PV subsidies from 2010-2012 alone; China’s share of market grew from nil to 60% from 2005 to 2011.

- Chinese government provided $52 billion in subsidies to steel producers from 2001 to 2006 alone.

Forced Technology Transfer/Joint Ventures

- “Thanks to the WTO, foreign firms are no longer required to hand over technology in exchange for entry to China’s market.” – *The Economist, 2011*

- Forced tech transfer in sectors from high-speed rail, to autos, to biotech, and cloud computing.

- USTR: “Formal/informal JV requirements key to MIC 2025.”

Intellectual Property Theft

- “China has adopted a massive, whole of society approach to economic espionage.” – Nicholas Eftimiades

- $600 billion in annual IP theft “may represent the greatest wealth transfer in history.” – Gen. Keith Alexander

- CNBC: 1 in 5 North American organizations report having their IP stolen in China within the past year.

- EUIPO: Foreign IP infringement costs the EU $73 billion annually with China/Hong Kong “the main offender.”

Closed or Restricted Market Access

- U.S. cloud services companies lose nearly $1 billion in possible revenues annually due to China’s cloud services restrictions.

- At year-end 2020, foreign banks held just 1.4% of banking assets in China.

- China committed to allowing “20 films to be imported annually” and to “permit joint ventures to operate cinemas and distribute videos.”

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Five Choices for Confronting China’s Innovation Mercantilism

1. Wait for conversion to Washington consensus
2. Harangue and implore
3. Resigned defeat
4. Global isolation
5. Constructive, alliance-backed confrontation

Stopping China’s Mercantilism: A Doctrine of Constructive, Alliance-Backed Confrontation


There is a growing understanding that China is an outlier when it comes to global norms and rules governing trade, investment, and economic policy, and that the unrelenting and even accelerating “innovation-mercantilist” behavior on the part of the Chinese government represents a threat not only to the U.S. economy, particularly in advanced industries, but indeed to the entire global economic and trade system. The previous three U.S. administrations sought engagement and dialogue with China’s leaders, in the belief and hope that this would lead the Chinese government to retreat from its mercantilist path. It is now clear that this approach has failed. For, rather than reform, China has doubled down on its innovation-mercantilist strategies, seeking global dominance across a wide array of advanced industries that are key to U.S. economic and national security interests. And despite the claims of some apologists for Chinese behavior, it’s clear what the real game is: Chinese-owned companies across a range of advanced industries gaining significant global market share at the expense of American, European, Japanese, and Korean competitors. A far more prescriptive, whole-of-government response, in tight partnership with our allies, is needed to ensure that Chinese innovation-mercantilism is contained and then rolled back and a genuine market- and rules-based global trading system restored.
Policy Recommendations – Constructive Confrontation

- Bring a WTO non-violation nullification/impairment case against China.
- Jointly publish a comprehensive “Bill of Particulars” against China.
- Create a “DATO”: A Democratically-Aligned Trade Organization.
- Deny Chinese companies benefitting from stolen IP access to U.S. financial markets; insist Chinese companies use GAAP.
- Continue the work of the Trilateral Trade Ministers Working Group, including significant subsidies reform work in the WTO.
- Join the CPTPP, bringing South Korea and Taiwan with us.
Policy Recommendations – Strengthen Ourselves & Allies

▪ Pass the United States Innovation and Competitiveness Act (USICA).
  – $120 billion in advanced-tech industry R&D funding over the next four years.
  – $50 billion for semiconductor manufacturing in the U.S.
  – Investments in regional tech hubs, university tech centers, MEP, Mfg. USA.

▪ Pass the Strategic Competition Act of 2021.
  – Calls on U.S. to develop an Indo-Pacific strategy to counter China.
  – Provides $100 billion to the Development Finance Corporation to invest in supply chain security, infrastructure development, and cybersecurity w/ regional allies.
Thank You!

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