

# Trump's Tariffs, Biden's Industrial Subsidies, and the Future of Globalization

## 1. Why Trump Is Right About Tariffs -- WSJ

By Oren Cass

Economists have reacted poorly to Donald Trump's recent proposal for a 10% tariff on all imports. Adam Posen, president of the Peterson Institute for International Economics, called it "lunacy" and "horrifying." According to Michael Strain, director of economic policy studies at the American Enterprise Institute, it would be "a disaster for the U.S. economy."

But why? After all, tax revenue is necessary to provide public services, and tariffs have long proved an effective way to collect it. In 1789, the first law in the first Congress -- advocated by Alexander Hamilton, introduced by James Madison and signed by George Washington on the Fourth of July -- established a tariff not unlike Trump's. For much of the nation's history, while growing from colonial backwater to continent-spanning industrial colossus, the U.S. imposed some of the world's highest tariffs, which were the primary means of funding the federal government.

## Production Matters

Tariffs are distinctive as a source of revenue because they tilt the market away from imports and toward domestic production. Whether that's desirable or disastrous hinges on a series of questions that go to the heart of economic thinking: Does making things matter? Do a nation and its economy require a strong industrial base? Is a persistent trade deficit a problem?

Common sense, historical precedent and a great deal of economic logic and research suggest that the answer to these questions is yes. Domestic production has value to a nation, so a tariff that gives it preferential treatment can be sensible and even, to use the economist's favored term, efficient. Large, persistent trade deficits are bad for America, which means a tax on imports can help.

One reason that making things matters is that the economy's growth and dynamism depend on it. As Harvard University's Ricardo Hausmann and the Massachusetts Institute of Technology's Cesar Hidalgo have shown in their research on "economic complexity," a nation's ability to produce a wide range of sophisticated goods shape its future economic performance. "Countries grow based on the knowledge of making things," says Hausmann. "It's not years of schooling. It's what are the products that you know how to make."

Andy Grove, Intel's legendary CEO in its era of global dominance, offered a related observation about manufacturing's role in innovation. "Our pursuit of our individual businesses, which often involves transferring manufacturing and a great deal of engineering

out of the country, has hindered our ability to bring innovations to scale at home, " he warned. "Without scaling, we don't just lose jobs -- we lose our hold on new technologies. Losing the ability to scale will ultimately damage our capacity to innovate." Grove's solution was "an extra tax on the product of offshored labor." That is, a tariff.

Making things also matters because the industrial economy provides an invaluable foundation for thriving local economies nationwide. While the U.S. economy now consists predominantly of services, a community cannot thrive on cutting hair, serving fast food and delivering packages alone. Undergirding the service sector there must be an industrial sector where people can create tradeable products, sent to the outside world for the many things the community needs and does not make itself. Industrial activity also tends to have a much higher "multiplier effect," rippling outward into greater local employment and investment.

And making things matters to national security. As Adam Smith acknowledged, it is "advantageous to lay some burden upon foreign, for the encouragement of domestic industry...when a particular industry is necessary for the defence of the country." In the 1700s, the principle seemed narrow, applying for instance to sailcloth and gunpowder.

But in a modern industrial economy, fielding a technologically sophisticated military and protecting the home front in times of crisis requires not only building and repairing billion-dollar warships but also the fabrication of advanced semiconductors, processing of rare earth elements and synthesis of pharmaceutical precursors. Each of these relies on its own complex supply chains, skilled workforce and long-term capital investments.

## Trade Imbalances

If global trade were working as promised, these concerns might be moot. Explaining the premise of international trade, Smith observed, "if a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry." With goods exchanged for goods, imports guarantee exports and thus expand production and consumption opportunities for both countries. By definition, domestic industry remains as robust as ever, perhaps more so, and certainly becomes more productive.

But the situation today is very different. In 2023, the U.S. will run a trillion-dollar trade deficit, representing \$1 trillion worth of foreign goods consumed here, bought not with "some part of the produce of our own industry" but instead by selling U.S. assets such as Treasury bonds, corporate debt and equity, and real estate. In effect, America consumes on credit while giving away ownership of the U.S. economy and future claims on its output.

The imbalance is doubly damaging. First, the industrial base stagnates, as imports reduce demand for output without exports creating an offsetting increase. Whereas real manufacturing output doubled from 1980 to 2000, it rose only 7% from 2000 to 2020. As a result, after holding steady for 50 years, manufacturing employment collapsed by one-third,

eliminating more than four million jobs. Automation is not the story here. To the contrary, manufacturing productivity has declined over the past decade -- a shocking trend incompatible with a well-functioning capitalist system -- leaving the sector far less competitive.

America's cumulative trade debt of \$15 trillion and counting will hamstring future generations as surely as the federal government's fiscal debt. As Warren Buffett put it in 2003, "Our country has been behaving like an extraordinarily rich family that possesses an immense farm...We have, day by day, been both selling pieces of the farm and increasing the mortgage on what we still own." His solution was a system of "import certificates" to discourage imports and promote exports -- or, in his words, "a tariff called by another name."

The persistent and ballooning U.S. trade deficit stands as a stark empirical refutation of the economic orthodoxy on free trade. Friedrich Hayek cited "how some necessary balance...between exports and imports, or the like, will be brought about without deliberate control" as a prime example of "the self-regulating forces of the market." Paul Krugman listed the insight that "trade deficits are self-correcting" among "the essential things to teach students." The school of thought that dismisses the case for tariffs is also a school that dismisses the possibility of the world in which we live.

In the world as it is, the U.S. cannot afford to be indifferent between purchases of goods produced abroad and ones produced by American workers in the American industrial ecosystem. In other nations, policy makers recognize that making things matters and aggressively tilt their own markets to attract investment and production, including with tariffs. Not by coincidence, and not because of some naturally occurring "comparative advantage," vital industrial functions like the production of semiconductors, rare-earth minerals and pharmaceuticals, all pioneered in the U.S., are now dominated by overseas operations.

## Policy Options

Undoing this failure will take a range of policy measures -- and time -- but a straightforward place to start is a tariff that gives domestic producers an advantage and thus encourages new investment in domestic production. This would replace the vicious cycle of industrial decline in recent decades with a virtuous cycle in which new capacity and infrastructure, an expanding workforce, returning supply chains and rising innovation create the incentives and opportunities for more of the same.

Skeptics rightly warn that other countries may retaliate with tariffs of their own. Certainly, a world with higher tariffs and lower but more balanced trade is by no means ideal. Reversing the damage wrought by globalization will create winners and losers, just as globalization did.

But the U.S., with its enormous trade deficit and reeling industrial base, has much more to gain than to lose in the process. Not until other nations conclude that the era of exploiting American passivity has ended can prospects improve for an international system in which all sides work to expand mutually beneficial trade.

The theories that claim to refute this strategy only beg the question. They begin from the assumption that persistent trade deficits and industrial decline are costless and conclude, unsurprisingly, that a tariff does no good. This perpetuates the "presumptuous error" for which John Maynard Keynes condemned economists nearly a century ago, of regarding "the balance of trade...as a puerile obsession, (when it) for centuries has been a prime object of practical statecraft."

U.S. policy makers -- and citizens -- should insist on a wider discussion about the full costs of unbalanced trade. If making things does matter, American trade policy should reflect it.

Oren Cass is the executive director of American Compass and the author of "The Once and Future Worker: A Vision for the Renewal of Work in America."

## **2. 'Industrial Policy' Is Back: The West Dusts Off Old Idea to Counter China--WSJ**

By Greg Ip

The U.S. and its allies have long pressed China to stop helping favored industries with subsidies, government preferences and other interventions.

Now they are beginning to copy it. Last month, the U.S. Senate voted for direct industry subsidies with little precedent: \$52 billion for new semiconductor fabrication plants, called "fabs."

Other regions have done the same. The European Union has committed to nearly doubling its share of global semiconductor manufacturing capacity, to 20%. South Korea approved up to \$65 billion in support for semiconductors, and Japan promised to match other countries' semiconductor aid while planning to turn Japan into an Asian data center hub.

Chip-manufacturing subsidies are the most prominent of a range of interventions Western governments are rushing out to promote industries they deem strategic, from electric-car batteries to pharmaceuticals. Such interventions have increased sharply in both the U.S. and Europe in the past decade, according to Global Trade Alert, a trade-monitoring group.

### **Industrial Policy Advocates**

Collectively, this represents an embrace of "industrial policy," the idea that governments should direct resources to industries critical to the national interest rather than leaving things to the market.

Advocates say the U.S. has employed industrial policy in some form ever since its first treasury secretary, Alexander Hamilton, used tariffs to nurture manufacturing. Critics call it "picking winners" in ways better left to capital markets, and point to money wasted on past efforts such as supersonic airliners and fast breeder nuclear reactors.

Support now is broadening, straddling the Trump and Biden administrations, driven by pandemic-driven disruptions to supply chains and the rise of China. American officials once assumed that as China's government matured, the state's role in the economy would shrink. Now they say the U.S. has to embrace government intervention or watch China dominate vital industries.

"I've been impressed with the Chinese model," said Mark Warner, a former venture capitalist and Virginia governor who as a Democratic senator sponsored the semiconductor legislation. The Chinese state ensures that Chinese, not foreign, companies become the dominant players in its domestic market, effectively guaranteeing them a big share of the world's market, he said.

"It's hard to see how a company in America or any normal, traditional market-based economy can compete against that kind of juggernaut and win," Mr. Warner said.

## **The Fall and Revival of Industrial Policy**

The biggest hurdle with industrial policy is governments' inability to predict technological trends, and the West's new industrial-policy push might prove wasteful and ineffective, which some analysts say is already true of China's.

"It would be a huge mistake for the U.S. to try and match Chinese government spending," said Scott Kennedy of the Center for Strategic and International Studies, a think tank. "So much of it is thrown down bottomless pits, leading to over-investment, lower profits, slower innovation and more debt."

Industrial policy was once commonplace among market-based democracies. Western European governments held controlling stakes in numerous companies. Japan's Ministry of International Trade and Industry, or MITI, influenced almost every major industry decision.

They pulled back over recent decades. European governments privatized state-owned enterprises, while the European Commission, the EU's executive arm, imposed strict limits on state aid. MITI's influence shrank in the 1990s in the face of deregulation and the collapse of Japan's bubble economy. The creation of the World Trade Organization in the mid-1990s made it harder for governments to protect "national champion" companies.

China, though, never retreated. Even after it introduced market reforms in 1979 and accelerated them after 1992, the state continued to guide economic development through ownership of enterprises and control over credit, government purchases, tax preferences, land and foreign investment. Since 2006 the ruling Communist Party has put priority on catching up to the West technologically.

Previously called "Made in China 2025," this endeavor was renamed "dual circulation" last year. In a speech, President Xi Jinping said the goal was to eliminate China's dependence on other countries while increasing their dependence on China. It could then threaten to cut off foreign customers to deter aggression, he said.

China is responding in part to the Trump administration's barring U.S. companies from supplying critical technologies to Chinese companies such as telecom manufacturer Huawei Technologies. The prospect of China's doing the same—made more urgent by many countries' restrictions on exports of medical supplies during the pandemic—has led some skeptics to swallow their reservations about industrial policy.

Sen. John Cornyn, a Texas Republican who co-sponsored the semiconductor legislation with Mr. Warner, said, "What we're doing is industrial policy unlike anything people with my free-market, conservative background would ordinarily be comfortable with. Our driving impetus is what China is doing and (the security of) the supply chain."

Current industrial-support efforts are narrower than in the past. Japanese officials say government intervention should be the exception, focusing on "chokepoint" sectors critical to others. A June document from its Ministry of Economy, Trade and Industry, the successor to MITI, described semiconductors as the "brain of industry," as essential as energy and food, and as meriting an exception. It called for securing "Japan's strategic indispensability and autonomy in the midst of confrontation between U.S. and China over technological sovereignty."

In 2014, the EU said exceptions could be made for "important projects of common European interest" that have widely shared benefits and don't distort competition. One is the European Battery Alliance, a public-private consortium with more than 600 members that is developing batteries for electric vehicles and power grids.

Commission Vice President Maros Sefcovic said he pitched the plan as an "Airbus for batteries," comparing it to Europe's successful launch of a competitor to Boeing. "In today's electric vehicle, the battery and the software represent more than half the value of the car," he said. "You cannot retain your competitive position as proud producers of the best cars in the world if you simply do not master and manufacture the most significant part of the electric vehicle."

In U.S. there has long been broad support for government funding of basic research and development. One result is that the U.S. still leads in inventing and designing new technology, even though the manufacture of the resulting products moved abroad, mostly to East Asia.

The U.S. led in the development of photovoltaic solar technology, but China dominates the manufacture of their panels. U.S. companies account for half of world semiconductor-design revenue, but U.S. factories make just 12% of semiconductors.

Advocates of industrial policy in Congress and the White House are no longer satisfied simply promoting innovation; they want the resulting products to be made in the U.S. They have multiple goals: to secure U.S. supply, create jobs and ensure that the resulting intellectual property stays in the U.S. rather than being transferred to Chinese competitors via outsourcing.

Last month, the White House proposed a breadth of tools to boost domestic production in four sectors deemed vital to the supply chain: semiconductors, batteries, specialized minerals and pharmaceutical ingredients.

It proposed using several existing federal loan, tax-credit and R&D programs to support electric-vehicle battery manufacturing. To reduce dependence on foreign supplies of neodymium magnets, important components of motors and other devices, it suggested imposing tariffs under the same 1962 national-security law that former President Donald Trump used to impose tariffs on imported steel and aluminum.

The administration also announced plans for a public-private consortium to revive domestic production of 50 to 100 critical drugs, as well as plans for a domestic lithium-battery supply chain.

## **Industrial Policy Competition with China?**

The return of industrial policy complicates life for businesses. The U.S.-China trade war had already led to tariffs and export controls. Now, industry officials say, decisions previously based on cost and proximity to customers, suppliers and the head office must also take into account political pressure to localize production.

Last year the Trump administration helped persuade Taiwan Semiconductor Manufacturing Co., the world's largest chip foundry—that is, a company that makes chips designed by others—to build a fab in Arizona.

"We conveyed to TSMC the importance of securing the semiconductor supply chain, and that the U.S. government as well as their U.S. customers wanted them manufacturing here," said Keith Krach, who led the negotiations as a State Department undersecretary at the time. "They knew it would strengthen Taiwan-U.S. relations and that it was strategic not just to our national security but also to Taiwan's."

TSMC said the Arizona fab is "of critical, strategic importance to a vibrant and competitive U.S. semiconductor ecosystem."

Efforts by the U.S. and its allies to build up industries that can challenge China face several obstacles to success. One is that China's commitment to industrial policy is deeper and older.

Its support for favored industries is pervasive and opaque, and difficult to challenge as a violation of international trade rules. By restricting the export of raw aluminum, China ensures that aluminum manufacturers have a cheap supply of raw material, said Chad Bown of the Peterson Institute for International Economics, a pro-free trade think tank.

Western governments are reluctant to take ownership of industrial companies, but doing that is central to China's industrial policy. Not only are many of its largest companies state-owned, but Chinese governments at all levels have established 1,741 industrial guidance

funds—in effect, state-sponsored private equity—with plans to deploy \$1.6 trillion, according to Georgetown University's Center for Security and Emerging Technology, a research center.

While often uncoordinated and duplicative, these holdings give Chinese authorities enormous sway over company decisions and blur the line between state and private ownership. State investors also tolerate losses for far longer than Western shareholders.

Government support from 2014 to 2018 was equal to as much as 30% or more of annual revenue for two of China's two major semiconductor companies, Semiconductor Manufacturing International Corp. (SMIC) and Tsinghua Unigroup, according to the Organization for Economic Cooperation and Development, an association of mostly advanced economies. Other countries subsidize semiconductor fabs through cheap land and tax breaks, but only China provides so much aid in the form of this cheap equity, the OECD said.

Whether China's spending is effective remains controversial. Chinese chip companies remain well behind leading Western competitors. Mr. Kennedy of the Center for Strategic and International Studies estimated China has injected between \$49 billion and \$72 billion into state-owned aircraft maker Commercial Aircraft Corporation of China (Comac) in a so-far-unsuccessful effort to make it a competitor to Airbus and Boeing.

Even if other countries spent as much as China, they would likely struggle to achieve truly independent supply chains because China dominates so many of the links. When semiconductor chips are fabricated in the U.S. they still must undergo assembly, packaging and testing, a low-margin business where China is the biggest player.

## Questions:

### 1. Questions about Trump's tariffs:

- What are the reasons Oren Cass raised to justify Trump's tariffs?
- Based on trade theories we discuss in this lecture, do you think Oren Cass's justification for Trump's tariffs is reasonable? Why or why not?

### 2. Questions about Biden's industrial policies

- Why do the U.S. and other advanced economies start conducting industrial policies? What did they do? Please try to relate industrial policies with scale economies.
- What did China do in terms of industrial policies? What's China's advantage? What did the U.S. do against China's industrial policies?

### 3. Questions in general:

- To achieve economic growth, which one is better, tariff or industrial policies? Please think about pros and cons for each policy.