



Insight

The Return of Industrial Policy Means Bad News for Emerging Technology Sectors

JUAN LONDOÑO | JULY 15, 2021

Executive Summary

- Bipartisan bills such as the United States Innovation and Competition Act (USICA) signal an interest among an array of policymakers in using industrial policy to bolster preferred sectors and counter the economic influence of China.
- The past use of industrial policy has often translated into resources controlled by the politically connected and failed investments, rather than promoting the general welfare.
- Even with good intentions, policymakers lack the incentives and knowledge to make the best decisions about the direction of markets, and as a result industrial policy has historically resulted in underperforming or failed investments, with taxpayers bearing the costs.
- An alternative strategy for promoting strategic sectors is reducing barriers to entry and innovation, such as focusing on light-handed regulation and the removal of regulatory red tape.

Introduction

Policymakers on both sides of the aisle have expressed concern about rising economic competition and influence from other countries such as China. These countries are not only aiming to supplant U.S. economic leadership in key industries such as technology, but seeking to expand their geopolitical control through aggressive economic intervention. In response, federal policymakers are considering several avenues of industrial policy, which is government-directed support for certain companies or industries with the goal of bolstering specific technologies or companies deemed critical. The United States Innovation and Competition Act (USICA), which includes the Endless Frontiers Act (EFA) and the Creating Helpful Incentives to Produce Semiconductors (CHIPS) Act, is one example of such industrial policy.

Nevertheless, history shows that previous attempts to use industrial policy—both in the United States and around the globe—have largely resulted in failed investments and inefficient spending with little impact on consumer welfare or competitiveness.

What Is Industrial Policy?

While the term industrial policy has been used for decades, defining it [has proven](#) to be a difficult task. Policymakers and scholars expand or contract the definition of industrial policy depending on the task and viewpoint, but it is generally defined as a national policy aimed at developing or retrenching a particular sector or industry that has been deemed strategic or of national interest. This aim is achieved through targeted government intervention, which usually translates into tax benefits, direct investment, protection from foreign competitors, or monopolistic privileges that would not occur normally in private-sector competition.

Advocates for industrial policy efforts deem certain industries as critical to the “national interest” and argue that government intervention in the market is necessary to protect the wellbeing of Americans. By using this classification and rhetoric, policymakers justify the extended government involvement or promotion in these sectors. Such government intervention took place with the U.S. space program and the global positioning system (GPS), which advocates for industrial policy often highlight as technologies that would likely have taken longer or not developed without government direction and support. Most industrial policy, however, does not reflect an investment in a technology that is failing to develop or developing too slowly to achieve desired benefits, but rather a government manipulation of the market.

The Shortcomings of Industrial Policy

The fundamental problem with industrial policy is that government bureaucracies do not have the same incentives to focus on consumer welfare that market participants have. Unlike businesses, policymakers are not investing their own resources, nor does their own success depend directly on the outcome of the targeted companies. Therefore, those making the investment decisions bear neither the financial costs nor reap the benefits from their decision making, and this insulation from the projects shifts their decision criteria to privilege politically convenient projects over those that maximize consumer welfare. Thus, industrial policy tends to favor different types of businesses: those that are well-connected and have robust lobbying teams, those in politically popular sectors, and those in trending markets.

The perverse incentives for the policymaker are clear. Politically popular sectors and companies, such as in Solyndra’s case, allow policymakers to brand themselves as champions of green energy or manufacturing. There are also clear electoral incentives: When policymakers direct investment into a strategic or booming sector labeled as crucial for economic growth, failure is permitted because “something had to be done.” This tolerance of failure may be particularly relevant if the investment is likely to occur in a member’s home state or district. In short, industrial policy ends up picking winners and losers rather than maximizing consumer welfare.

Another significant issue with industrial policy is its timeliness. Industrial policy is not a quick process and could be outdated by the time its “solution” comes to fruition. For example, the semiconductor shortage, due to both pandemic-related supply chain disruptions and an increased number of “smart” devices, has [stifled production in various industries](#). Due to the lengthy production process and noticeable scarcity, businesses might opt out to reduce their dependence on semiconductors, as some products, such as smart toasters or fridges, might be more than adequate for consumers without a microchip. Such is the discovery process inherent to the market process. Manufacturers of various products will have to decide if their current use of scarce semiconductors is efficient and adapt accordingly. The approach of policies such as the CHIPS Act, which focuses on funding the creation of new semiconductor factories, could be tremendously risky, as it locks resources into these technologies. By the time these factories are built, which could [take up to 3 years](#), the demand for semiconductors could be significantly lower, rendering the investment fruitless.

The application of these policies is also often linked with cronyism, as companies will fiercely lobby for the public resources at stake. But as the cases of Japan, Europe, and the United States expose, the resources invested do not always translate into economic growth, as companies often underperform on the promises they make when bidding for these benefits. Taxpayers are left worse off, seeing their valuable resources drained away into risky investments with low returns. Additionally, consumers face a less dynamic market, as small businesses have more difficulties to compete against bigger companies that now have benefits such as tax breaks, subsidies, or access to low-cost lending.

Lessons from the Past: Industrial Policy in the United States and Abroad

Promoting industrial policy in the United States in an effort to counter advancements in other countries is not new. During the 1980s and 1990s, there was a [broad push for an industrial policy](#) to counter the rise of Japan. Much of Japanese success was attributed to its domestic industrial policy. Proponents of using a similar approach in the United States claimed that the economic rise of Japan posed an inherent threat to American leadership and could possibly fuel another war. This fear led to a fervid anti-Japan campaign, which included policymakers [bashing Japan-made products with a sledgehammer](#) in front of the Capitol.

A further look into the implementation of these policies in Japan, however, indicates that these policies have not had the intended results. A [2007 study](#) of Japanese industrial policy highlights that the economic rise of Japan can be attributed mostly to its labor and financial market reforms, not to industrial policy efforts. While industrial policy did allow for an increase of output in the sectors to which it was applied, those increased outputs did not seem to enhance welfare. Meanwhile, the labor and financial market reforms allowed for process innovation and the expansion of capital goods and investment, boosting innovation. Industrial policy has also been widely used by the European Union (EU) and its member states, with hopes of bolstering innovation in their tech industry. Nonetheless, the EU's interventions have failed to position the continent as a competitive force in the tech market. In 2019, [no European company](#) made the list of the 10 highest-valued companies in the world. Despite significant investments, European industrial policy has little to show but [multiple failures](#) such as Minitel, Galileo, and Quaero. In all of these cases, policymakers attempted to enter into rising markets such as the internet, GPS, or search services with sizeable investments backed by taxpayer money. Most of these initiatives were either short-lived, faced multiple delays, or offered no innovation in the market they entered.

In the United States, cases such as federal investment in the solar energy firm Solyndra and Wisconsin's Foxconn subsidy exemplify how these types of policies [tend to underperform](#) and privilege a select few, while taxpayers face the costs.

A Better Way: Less Regulatory Approaches

The USICA is a response to valid concerns regarding the importance of sectors such as semiconductors and artificial intelligence (AI) in the current economy. Policymakers rightly fears that nations such as China could pose a threat to American leadership and lead to tough decisions regarding product choices for both the United States and its allies. Nonetheless, the use of industrial policy tools is not the most effective way to incentive growth and maximize welfare for Americans. Markets and technology are in constant change, often in way that cannot be predicted.

Instead of relying on heavy-handed government intervention in the market, policymakers ought to consider encouraging private-sector innovation and development by reducing cumbersome government hurdles. One example of this type of approach is the Clinton-era "[Framework for Global Commerce](#)," which encouraged the

further development of internet services and commerce. Instead of encouraging direct government intervention, this framework reduced the amount of regulatory red tape and discouraged the imposition of new tariffs and taxes on internet commerce. The bill recognized the explosive and decentralized nature of the internet, which made regulation inconvenient and potentially harmful. Government regulation of the sector was stipulated as a last-resort, and only under certain conditions. This framework allowed e-commerce to grow rapidly and consistently, with internet shopping now representing [14 percent of all retail sales](#).

The use of “soft law” tools such as policy guidance, regulatory [sandboxes](#)^[AK6], consensus standards, or pilot programs allows for flexibility and innovation and can provide an alternative mechanism to industrial policy. This approach could be especially helpful for a federal policy targeted toward technologies such as semiconductors or AI, as examining regulatory barriers or working collaboratively with innovators on regulatory policies could support these industries. By adopting policies with a technology-neutral approach, market actors can rapidly adapt to these changes, supporting productive evolutions and applications that might not be foreseen. For example, the adoption of a federal standard would provide a baseline federal standard that gives companies legal certainty for their operations while allowing for experimentation at the state-level. This certainty is valuable for those companies seeking to make sizeable long-term investments, such as in a semiconductor factory, by allowing them to more accurately calculate the return on their investments.

Conclusion

Concerns over the rise of competing economies such as China have prompted policies such as the USICA seeking to counter the influence of these countries domestically and abroad. These bills propose an extended role for the federal government in such strategic sectors as AI and semiconductors. But this strategy does not guarantee success and has consistently underperformed in the past. Policymakers often lack the incentives to correctly assess the markets in which they hope to intervene, often directing resources to less-valuable uses. A light-handed approach, such as sandboxing or deregulation, would instead allow these strategic sectors to thrive by removing the barriers that constrain innovation.

