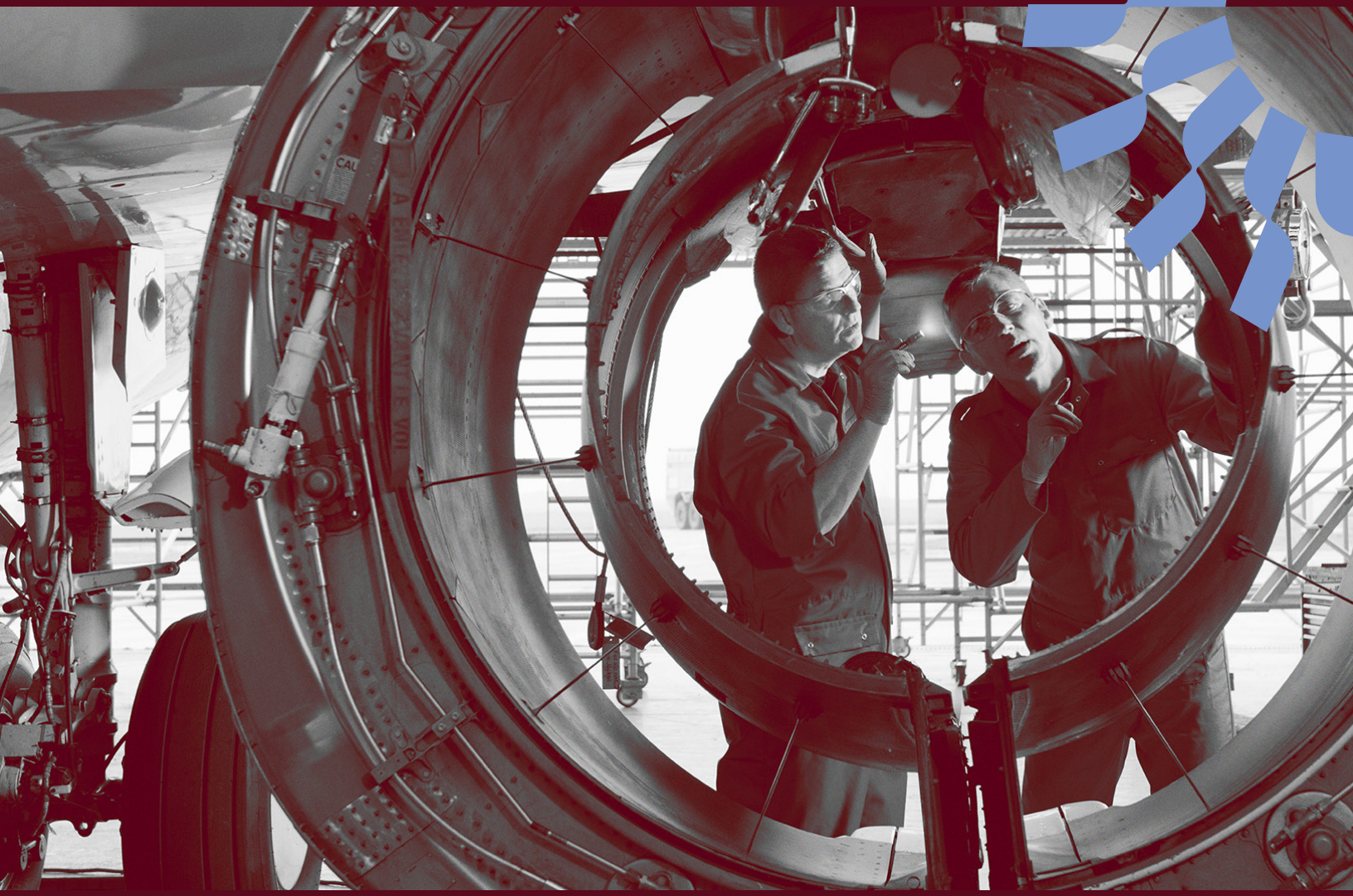
Commonweal

Is ‘Made in America’ Back?



A Commonweal Ventures Issue Brief

www.commonwealventures.com

Commonweal

Executive Summary

President Biden passed historic subsidies to rebuild American factories. President Trump has returned with aggressive tariffs to spur further investment. Together, through vastly different approaches, they have helped shape a narrative of a manufacturing revival. A growing wave of entrepreneurs are betting that the next generation of great American startups will be built to power this industrial renaissance. But is "Made in America" really back?

To assess the state of American manufacturing, we analyzed federal data on manufacturing production, employment, productivity, and capital investment. We examined the gap between policy ambitions and economic outcomes, focusing on where manufacturing investment is flowing and what types of jobs and production it's creating.

Overall, the promised manufacturing renaissance has not yet materialized. Factory capital expenditure has increased, and American manufacturing continues a decades-long shift toward higher-value products like semiconductors, but actual output measured by dollar value remains flat and employment is shrinking. The capital increase in manufacturing facilities, while a bright spot, represents only 3% net annual growth against a $4.5 trillion existing manufacturing capital base.

Within aggregate manufacturing, several sectors do show volume expansion in domestic production capacity: semiconductors, lithium-ion batteries, and space. Drones and critical mineral magnet manufacturing are growing, although the expansion is early.

Still, this modest progress despite aggressive policy measures underscores the challenge ahead. If historic levels of government intervention aren't resulting in a structural shift to the broader manufacturing sector, we have to ask: what actually would? Certainly sustained, bipartisan political support that gave manufacturers more confidence to make investments that pay off over decades would help. But ultimately, reversing decades of offshoring will require not just public policy but breakthrough innovations in productivity that make it economic to make more stuff in America.

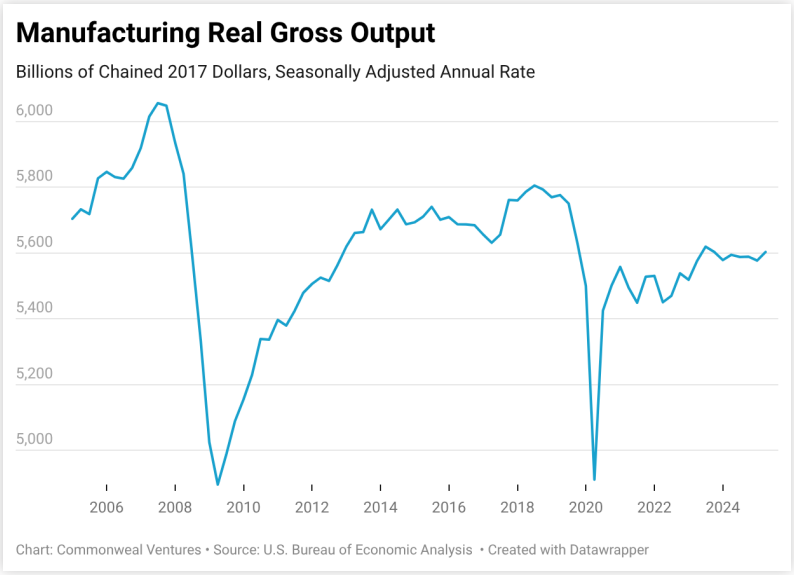
About Commonweal Ventures

Commonweal Ventures is an early-stage venture capital firm. We back founders building companies that matter for America at the pre-seed and seed stage. Our thesis is that in sectors like energy, health, and national security, founders can seize the biggest opportunities by partnering with government. Our team, which combines experienced investors with former Cabinet members, mayors, and other senior government officials, has cracked the code on helping early-stage companies partner with government to unlock value. Join us in meeting the moment.

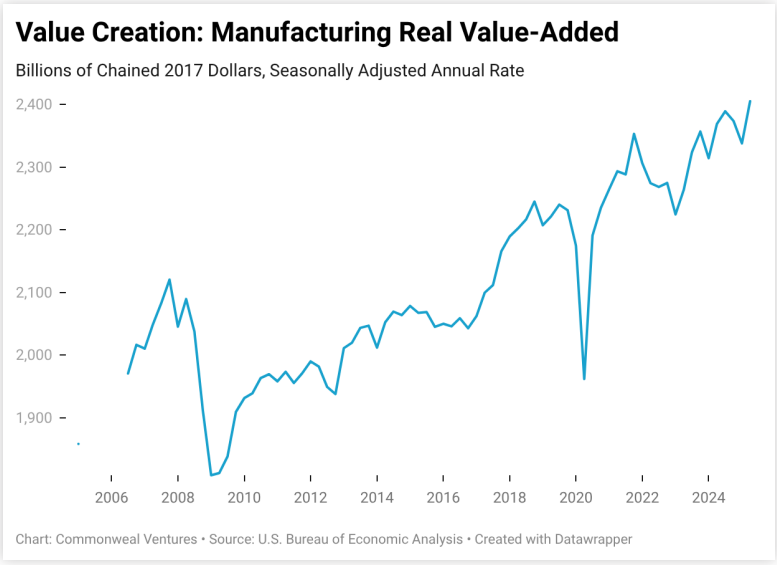
To learn more, visit our website at www.commonwealventures.com.

Manufacturing Output: Volume Flat, Composition Changing

Notwithstanding buzz in the venture market about the revival of US manufacturing, the manufacturing sector's real gross output has been largely flat with a slight decline since the early 2000s. Real gross output measures the total value of everything manufactured; it's the broadest measure of production volume. In short, we're making less stuff than we were nearly two decades ago.



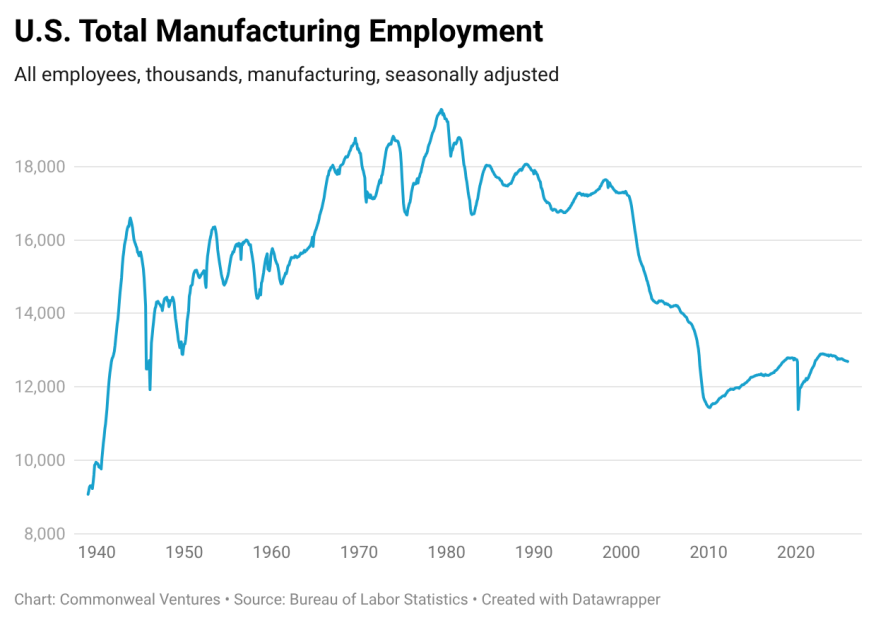
In economic terms, manufacturing real value-added is increasing. Real value-added measures what manufacturers contribute after subtracting the cost of materials and inputs. It captures the value created through the manufacturing process itself.



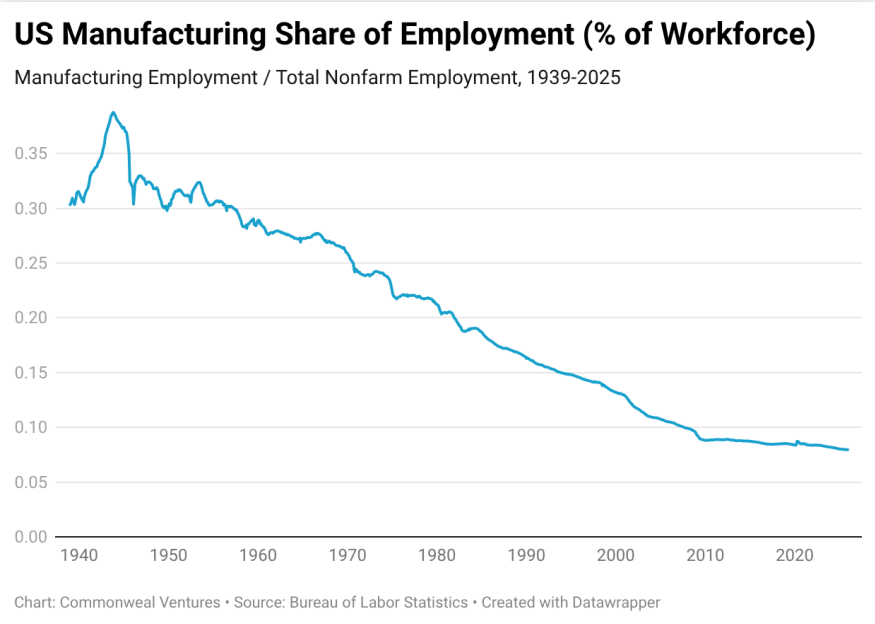
This shift reflects that US manufacturers engage in many of the most sophisticated and valuable forms of manufacturing, and the reality that low-value manufacturing has largely moved offshore and isn't coming back. Put differently, the kind of manufacturing that still makes sense to do in the US is the manufacturing of highly valuable products using complex and highly specialized technologies and workers. We're creating the same amount of value (real output) from less input.

Manufacturing Employment Is Shrinking in Absolute and Relative Terms

Not surprisingly, with real output remaining flat, employment also remains flat. Total manufacturing employment stood at approximately 12.7 million at the end of 2025, down 68,000 jobs year-over-year. In absolute terms, this is roughly where employment was in the mid-2010s (and in the 1940s).

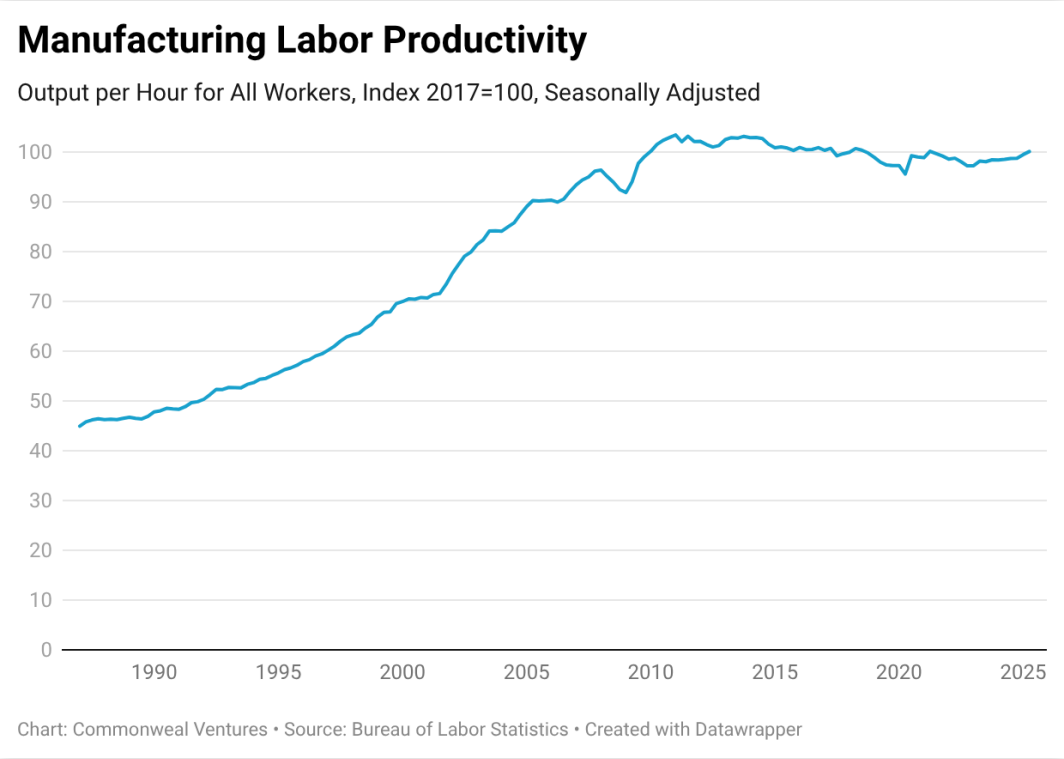


On a relative basis, US manufacturing is growing less important as a source of employment. Today, manufacturing represents 8% of total U.S. employment, down from nearly 40% in the 1940s and over 30% in the 1950s. Even as the overall economy adds a modest number of jobs, manufacturing's slice of the pie keeps shrinking.



Manufacturing's Productivity Plateau

Manufacturing productivity, the measure of how much a worker makes in a set amount of time, surged from the late 1980s through 2011, more than doubling. But since 2011, according to the US Bureau of Labor Statistics, productivity has essentially flatlined. This 14–year plateau is striking, since during this period, aggregate productivity has increased. That is, in other sectors, the same amount of labor is producing more output, but in manufacturing, it has leveled out. This is actually a reversal of historical patterns.

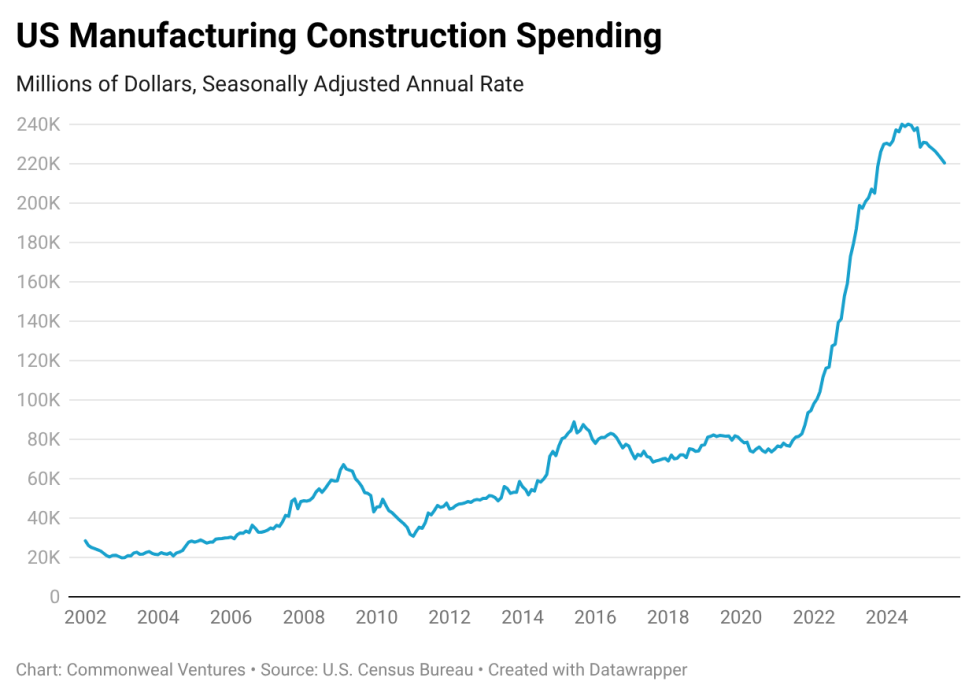


In recent years, some experts have argued that the U.S. government's traditional measure of productivity is failing to capture big gains in technology manufacturing. This is because the government measures how much manufacturers improve each year by looking at prices, with the idea that output only grows if prices are rising for the same quality product. But in high-tech manufacturing, products get much better each year (think faster chips, smarter sensors, more features in electronics), the price of older models drops quickly, and current data may miss these big leaps.

Has Factory Construction Peaked?

Spurred in part by major government investments in manufacturing like the CHIPS Act and incentives in the Inflation Reduction Act, capital expenditures on factories grew from around $80 billion annually in 2021 to nearly $240 billion by late 2023, a threefold increase in just two years, reaching levels not seen in more than 40 years as a share of the manufacturing economy.

However, that surge was short-lived. Spending peaked in Q3 2024 and has since declined slightly to around $220 billion on an annualized basis. The dip may be partly driven by tariff uncertainty and fears that rising import costs would render construction projects unprofitable. It may also reflect the roll-back of the incentives in the Inflation Reduction Act.



On its own, $220 billion seems like an enormous investment, but it's important to look at it in perspective. A $220 billion annual investment represents just under 5% annual growth relative to the United States' current $4.5 trillion manufacturing capital base—or approximately 3% net after depreciation. Manufacturing construction spending is an imperfect measurement of factory growth, since it does not account for equipment investments, but it does give an indication of the relative scale of the expansion we are seeing in the United States.

Construction investments concentrate in specific regions: the Southwest for semiconductors, the Southeast and Midwest for EVs and batteries.

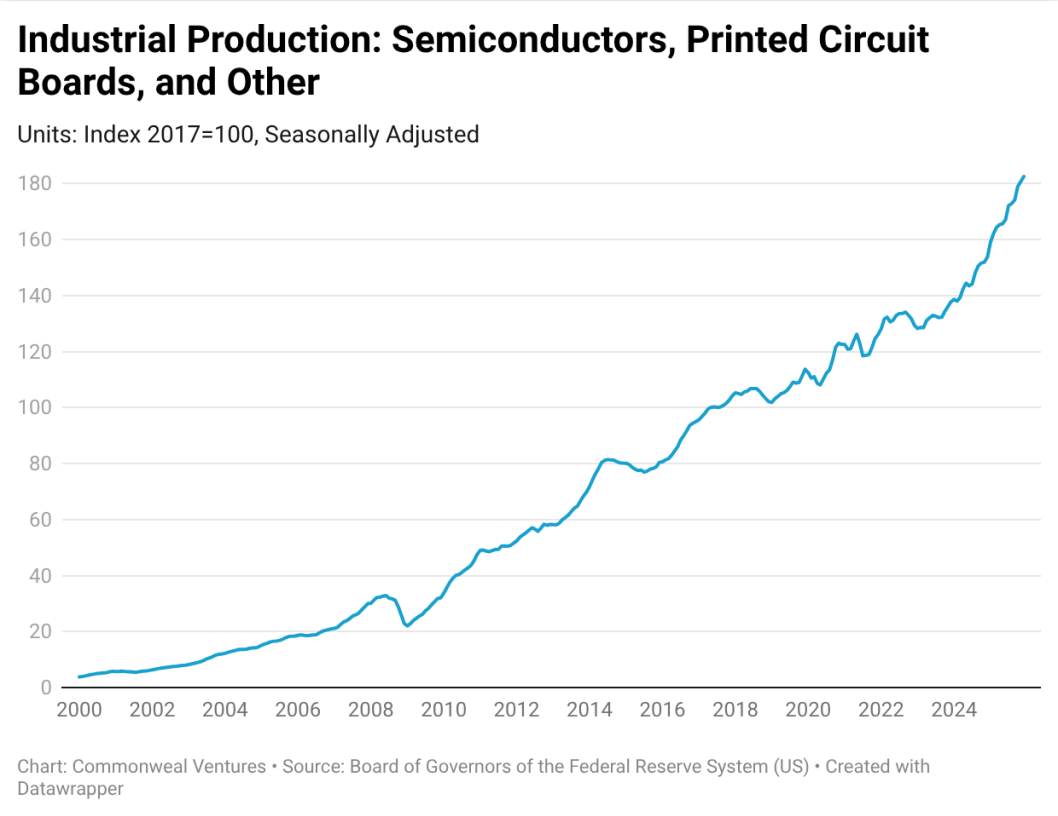
The impact of the recent surge in capital investments may not yet be fully reflected in the data on output and employment, which may positively shift upwards in the years ahead.

Where Manufacturing Volume Is Growing

Three sectors stand out as adding U.S. manufacturing capacity: semiconductors, lithium-ion batteries, and space.

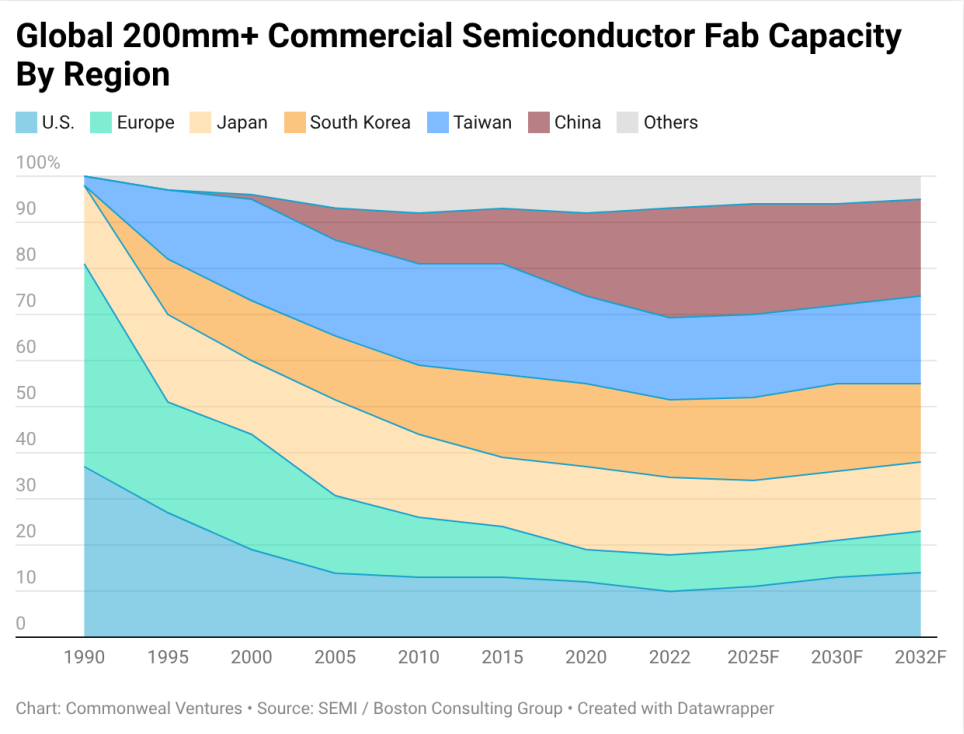
Semiconductors

Measured by quality-adjusted output, the United States has seen consistent growth in the production of semiconductors and related equipment since the early 2000s.

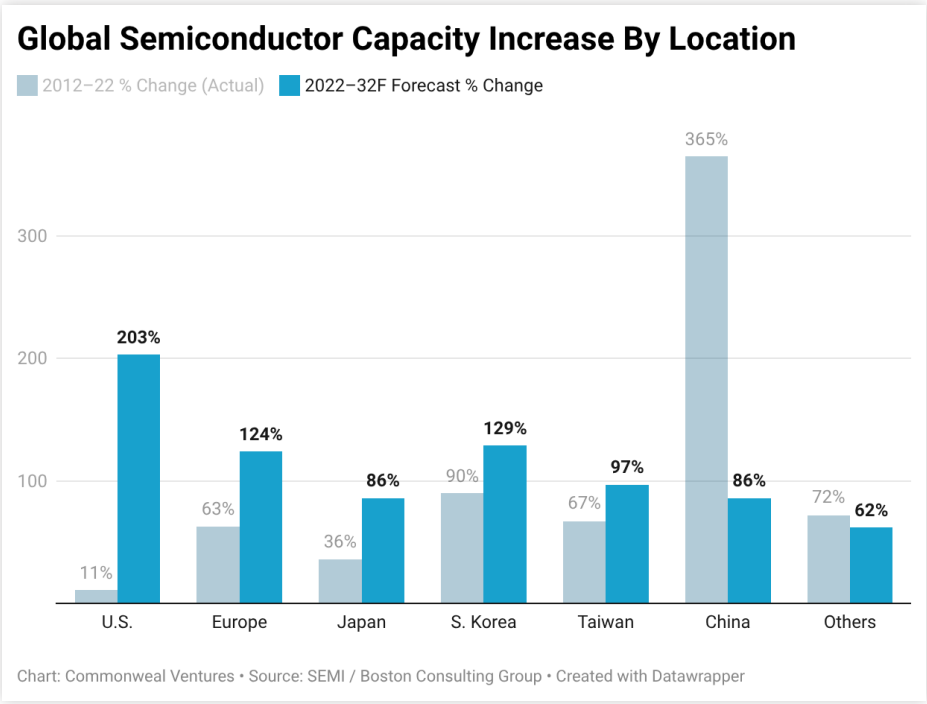


The apparent growth masks a more troubling reality: America's share of global chip manufacturing capacity fell from 37% in 1990 to just 12% in 2020. More critically, as other nations subsidized the construction of advanced fabs, the U.S. ceased manufacturing the world's most advanced chips entirely.

The intervention of the Trump and Biden administrations has begun to reverse that trend. U.S. semiconductor fab capacity is projected to triple between 2022 and 2032—the fastest growth rate of any region in the world. This expansion is supported by more than 140 announced projects across 28 states, totaling over half a trillion dollars in private investment.

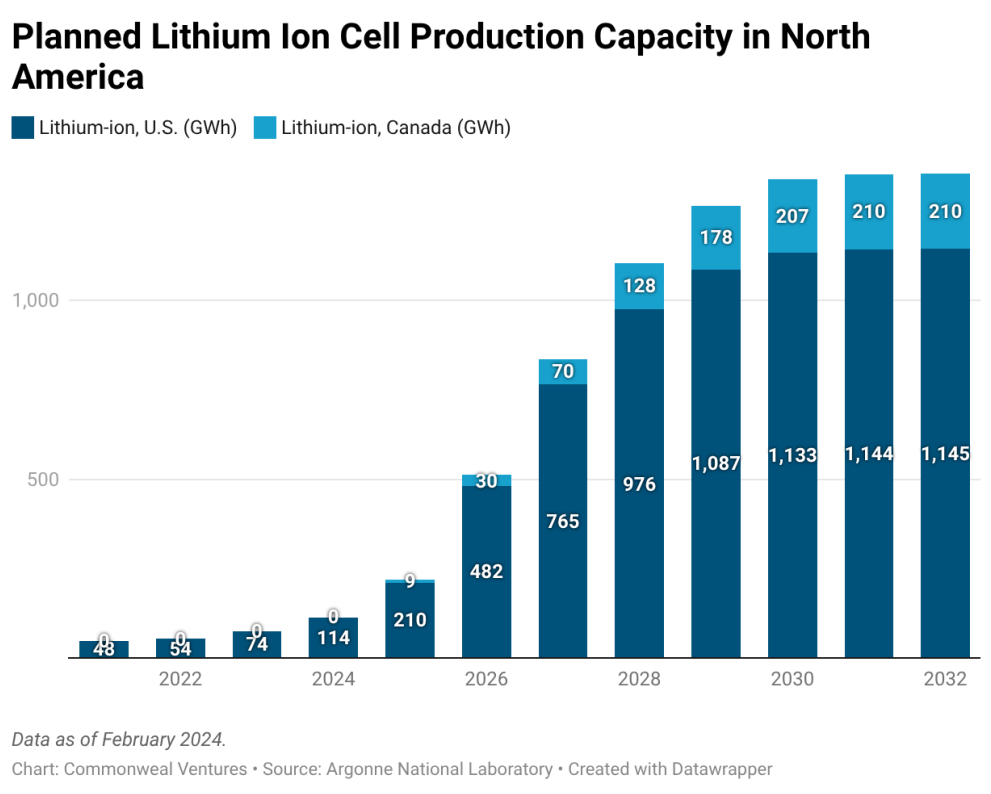


If such projections bear out in full, the U.S. will move from having zero domestic capacity for advanced logic (<10nm) in 2022 to capturing roughly 28% of the global market by 2032.



Lithium-ion batteries

American lithium-ion battery cell production capacity is projected to grow from roughly 100 GWh to 1,000 GWh or more by 2030—potentially a tenfold increase, though some announced projects have faced delays or cancellations. Dozens of new gigafactories are under construction or planned, anchoring a broader supply chain buildout across cathode, anode, and battery materials production.



While the capacity buildout is real, competition with China will determine whether the projections are fully actualized.

Space

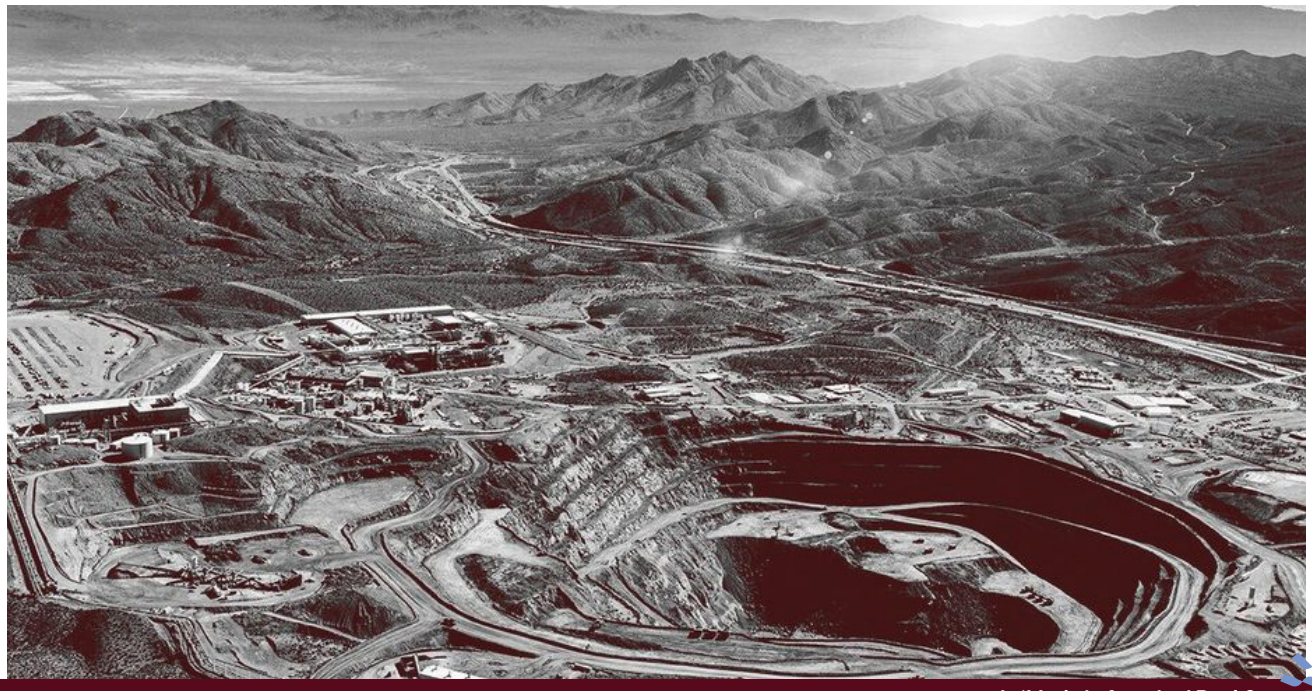
The U.S. space sector has grown its manufacturing capacity quickly, though this "boom" is heavily concentrated. In 2025, U.S. launch providers conducted a record ~192 orbital missions, delivering over 2,600 satellites to orbit. That's a volume unmatched by any other nation. This was mostly driven by SpaceX, which accounted for 86% of these launches (165 missions) and nearly all high-volume satellite production. Other start-ups, like Astranis, are beginning to manufacture at scale as well.

Drones and Rare Earth Magnets

Two additional sectors show policy and investment laying the groundwork for domestic manufacturing growth: drones and rare earth permanent magnets.

The U.S. has led in military drone manufacturing for decades, with General Atomics producing the Predator and Reaper series domestically since the 1990s. But commercial and autonomous drones are a different story. Chinese manufacturers still dominate the U.S. civilian drone market, and much of the domestic supply chain depends on foreign components. That is starting to change. President Trump's June 2025 executive order directed federal agencies to scale up domestic drone production, the FCC banned many new foreign-made drones in December 2025, and programs like the Pentagon's Collaborative Combat Aircraft initiative are funding a new generation of autonomous systems. Anduril is constructing Arsenal-1, a $1 billion manufacturing facility in Ohio for autonomous weapons. As autonomous capabilities improve, new dual-use startups are emerging; Commonweal portfolio company Grid Aero is developing low-cost, autonomous cargo aircraft that can supply the military in the Pacific and deliver humanitarian aid to remote locations. The manufacturing base is still early, but the policy architecture to support it is now in place.

The federal government is similarly taking steps to support domestic manufacturing of rare earth magnets. The Department of Defense took a $400 million equity stake in MP Materials in July 2025, becoming its largest shareholder, and has also invested in USA Rare Earth. As we wrote in October, China's dominance in rare earth elements and the threat of export controls are a forcing function for this spending. Full supply chain independence is likely a decade or more away, but the U.S. is on track to produce a significant number of magnets domestically. Commonweal portfolio company Mulberry Industries is one of the only end-to-end producers of samarium-cobalt magnets in the Western Hemisphere, a type used in the F-35 and other defense platforms.



Where Are the Venture Opportunities in Manufacturing?

Chips, space, and batteries are clearly strong markets. Beyond that, if manufacturing's return is constrained, but government and industry agree that onshoring is a priority, where should investors and founders focus? We believe the best opportunities are around software, automation, and process innovations that remove operational bottlenecks, help manufacturers remain competitive in a shifting global landscape, and play to America's strengths in high-tech and value-add manufacturing. Three areas stand out:

1. Energy

New factories need power, and they need it fast. The electrical grid is struggling to keep pace with demand from manufacturing facilities, data centers, and charging infrastructure. Semiconductor fabs and battery plants are massive electricity consumers, and interconnection queues stretch up to 5 years. According to a NAM Q3 2025 survey, 80% of manufacturers want comprehensive permitting reform to increase energy generation and grid modernization.

In this context, startups that optimize energy consumption, hedge against rising and volatile electricity prices, and provide alternative or interim power solutions will find eager customers. And obviously any company that could help reduce the institutional and political bottlenecks to grid interconnections or speed permitting would bring tremendous value, but we do not view that primarily as a commercial nor commercially solvable issue.

2. Supply Chain Visibility

As companies diversify away from China and build more complex, multi-country supply chains, visibility becomes critical. The era of single-source, China-centric supply chains is ending, but the replacement is far messier.

Tools that provide real-time tracking, risk assessment, and optimization across fragmented supply chains will see sustained demand. Companies are reshoring some production while nearshoring to Mexico and friendshoring to Vietnam, India, and other nations. In parallel, manufacturers and other importers and exporters are looking new digital infrastructure in areas like customs, cross-border payments, duty drawbacks, shipping, and insurance.

3. Robots and AI Systems to Guide Them

Twenty-two percent of manufacturers plan to use physical AI in just two years, up from 9% today, which can be defined as AI integrated into physical systems, such as robots or autonomous vehicles, enabling interaction with the physical world through sensors, actuators and adaptive control. Companies need customized autonomous systems – and need to train workers on how to use and interact with them. Factories in China installed nearly 300,000 new robots in 2024, many of these networked with each other in so-called dark factories. American factories installed 34,000.

At the same time, a new wave of startups are focused on building the foundation models that will make advanced autonomous manufacturing possible. These range from the general-purpose models being developed by companies like Physical Intelligence, General Intuition, and Skild AI to specific applications like AI for defense and infrastructure. The startups that build these systems will capture significant value in the emerging manufacturing stack.

The bottom line: invest in startups that help US manufacturers stay competitive as labor remains cheaper abroad, trade rules keep shifting, and China is automating fast. That's where we believe the returns will be.

SOURCES

- U.S. Bureau of Labor Statistics
- U.S. Bureau of Economic Analysis
- U.S. Census Bureau
- Quantification of Commercially Planned Battery Component Supply in North America through 2035, *Argonne National Laboratory*
- Emerging Resilience in the Semiconductor Supply Chain, *Boston Consulting Group / Semiconductor Industry Association*
- The Sluggish Renaissance of U.S. Manufacturing, *Federal Reserve Bank of St. Louis*
- US Manufacturing: Employment, Production, and Tariffs, *Tax Foundation*
- No, American Manufacturing Hasn't Been Revived, *ITIF*
- US Manufacturing Mired in Weakness as Tariff Gloom Spreads, *Reuters*
- What Manufacturing Rebound?, *ITIF*
- U.S. Manufacturing's Mixed Picture in 4 Charts, *The New York Times*
- Fact Sheet: The Manufacturing Renaissance That Will Drive the Economy of the Future, *United States Joint Economic Committee*
- Manufacturing in America: Contributing to Our Economy, Employment, and Innovation, *NIST*
- 2026 Manufacturing Industry Outlook, *Deloitte Insights*
- Trump Is Promising a US Manufacturing Renaissance. Many Experts Are Dubious, *The Guardian*
- Tariffs, Economic Nationalism, and the Future of US Semiconductor Manufacturing, *Stimson Center*
- AI, Energy Dominance, and Manufacturing: Manufacturing's Roadmap to AI and Energy Dominance, *National Association of Manufacturers*