



What happens when the chip shortage ends?

As signs emerge that the worst is over, some in the microelectronics industry worry rebounding semiconductor supplies and surging capacity could undercut the urgency for federal subsidies.

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The global semiconductor shortage sparked by pandemic-related disruptions has proven a boon to the chip industry in more ways than one.

For one thing, the scarce supply of chips caused prices to skyrocket, allowing top semiconductor producers around the world to rake in huge profits.

At the same time, the crunch caused by a lack of chips across a wide swath of industries—particularly the automotive and consumer-electronics sectors—lit a fire under Capitol Hill. Lawmakers in both parties are now looking to subsidize new domestic chip facilities to the tune of \$52 billion, in large part to avoid a repeat of the current crisis.

But while the shortage is far from over, there's emerging evidence to suggest that the world has now passed through the worst of it. In fact, some analysts are already warning about the potential for a global oversupply of some microchips by early 2023, which could conceivably cause new or existing facilities to sit idle—a potentially devastating blow for some chipmakers, given the massive capital expenditures sunk into each new fab or foundry.

The improving situation could be bad news for lobbyists from the microelectronics industry, who were hoping to ride the current wave of congressional anxiety on chips to secure broader subsidies for other cutting-edge electronics.

Shawn DuBravac, the chief economist at IPC, a lobbying firm for the global microelectronics industry, called it “unfortunate” that so many in Washington conflate the current chip shortage with longer-term concerns around geopolitics and brittle supply chains.

“This is one of the great challenges of Washington, D.C.,” said DuBravac. “Everything is influenced by the short term—what’s happening in the short term, what’s happening around election cycles. And this issue, in particular, should have a much longer horizon.”

IPC is one of several firms pushing for an expansion of federal microelectronics subsidies far beyond what’s currently envisioned by Congress. In a hearing held Thursday by the House Science, Space, and Technology Committee, representatives from chip firms Intel and Micron Technology pushed for commitments to a broader set of federal microelectronic investments. Committee chair Eddie Bernice Johnson warned that a “onetime infusion of funding will not be enough to maintain U.S. leadership in microelectronics innovation,” and called the hearing “the beginning of a long-term effort by our committee.”

But Johnson is retiring at the end of this Congress. And many of the members now pushing hardest for chip subsidies in both chambers represent states whose auto-manufacturing sectors are struggling from a lack of chips. If those supply issues start to resolve, their laser-like focus on chip subsidies may also start to wane.

“Clearly the short-term nature and short-term focus does make it harder, if there are acute pains that companies are feeling and consumers are feeling and vocalizing,” said DuBravac.

With the shortage still top of mind, analysts are split on whether the chip industry will find itself with much more capacity than it needs to meet demand by early 2023.

“It remains unclear whether there is a real danger in the near term of an oversupply of semiconductors,” Paul Triolo, the director of tech policy at the consulting firm Eurasia Group,

said in an email. “There are always risks in a cyclical industry, but the general view is that increasing demand for the foreseeable future will soak up most of the new capacity.”

The chip industry itself is sanguine, claiming they’ve learned from the kind of oversupply issues that plagued manufacturers in the past and are now well-positioned to weather all manner of dips or spikes in demand.

“Global demand for semiconductors is up substantially and projected to increase for the foreseeable future, as chips enable increasingly smarter, more efficient, and better-connected technologies throughout society,” David Isaacs, the vice president of government affairs at the Semiconductor Industry Association, said in a statement.

But others view with trepidation the creeping sense from analysts and investors that overcapacity is on the horizon—and fear subsidies would throw fuel on that fire.

“Once you get the government subsidies involved, market discipline kind of disappears,” said Scott Lincicome, a senior fellow in economic studies at the libertarian Cato Institute. “You already have a market that appears to be right on the edge of the danger zone. What are the government subsidies going to do? They’re going to push them over.”

As a former lawyer who specialized in international trade law, Lincicome also warned of the potential for a chip glut to cause major trade disputes with U.S. allies over subsidies. Such disputes, he said, occurred repeatedly during past periods of overcapacity.

“When the United States gets into trade wars with Europe or with Japan, those things have geopolitical implications,” said Lincicome, pointing to frequent international disputes over chips during cyclical periods of oversupply in the '80s and '90s.

But geopolitics could also drive continued interest in microelectronics subsidies on Capitol Hill, even in the face of potential oversupply. Taiwan is far and away the primary supplier of advanced chips to U.S. industrial interests—and as tension with China over its status rises, the need for advanced chip-production capabilities beyond the reach of Beijing could outstrip any short-term concerns about overcapacity.

“The industry is always cyclical,” said Triolo. “But politicians pushing for subsidies are not looking at [the oversupply] issue so much as at the strategic problem of overdependence on Taiwan and [the Taiwan Semiconductor Manufacturing Corporation] for cutting-edge manufacturing nodes.”