PROANALYSIS

WHAT YOU NEED TO KNOW ABOUT

The Biden Administration's Semiconductor Strategy

BY STEVEN OVERLY AND MING LI AND ANNETTE CHOI | 11/23/2021 05:00:14 AM EST

PRO POINTS

- **A shift in consumer spending habits during the Covid-19 pandemic induced a global shortage of** semiconductors that has roiled industries ranging from automobiles to consumer electronics to medical devices.
- **The crisis has prompted the U.S. and other countries to devise strategies for expanding domestic** chip production, in large part to make their economies less dependent on imports from Asia.
- **The Biden administration has found there is no quick fix the U.S. government can implement and** has focused its near-term efforts on smoothing supply chain bottlenecks and leaning on companies to work out solutions.
- **The administration has also pushed Congress to allocate $52 billion to incentivize domestic** semiconductor manufacturing, an infusion of taxpayer dollars that the House and Senate have not yet agreed on how to pass.

HOW WE GOT HERE

Semiconductors have been described as "the brains of modern electronics," and they have become ubiquitous as more products are digitized. From vehicles to home alliances to children's toys, consumers routinely purchase items that contain a multitude of highly specialized microchips.

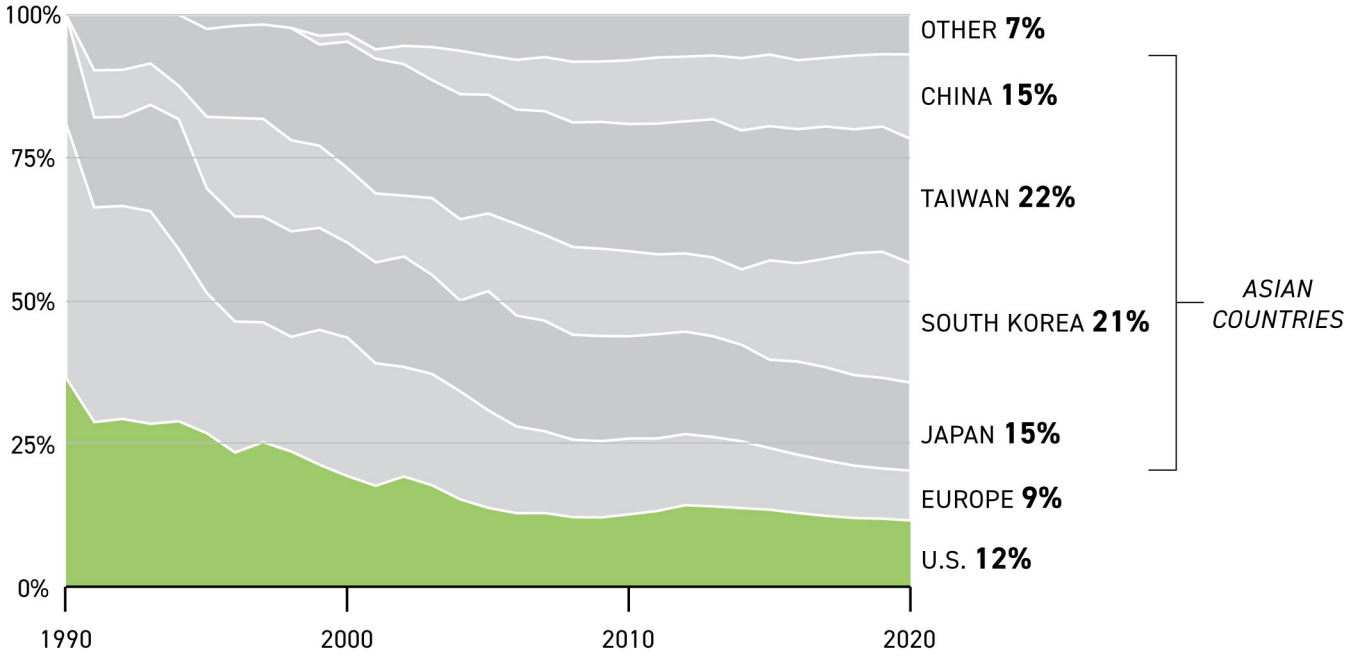
Demand for chips was already running high before the pandemic caused a shift in consumer spending that threw off the global supply chain. Suddenly, home-bound families had less need for new cars and instead poured money into goods like computers, video game consoles and refrigerators.

The misalignment between supply and demand persists and analysts now project it will last well into next year. The chip shortage even forced some automakers to idle plants and furlough workers. That got the attention of the Biden administration and lawmakers on Capitol Hill earlier this year, but policymakers found no switch Washington could flip to immediately ease the crisis.

That's partly because most U.S. chip manufacturing has moved overseas in recent decades. Semiconductors made in America today are largely low-tech chips, while the high-tech versions required for more sophisticated applications have to be imported from Taiwan, Japan and South Korea.

U.S. slice of global semiconductor manufacturing capacity fell 25 percentage points since 1990

SHARE OF MANUFACTURING CAPACITY*



* Percentages may not add to 100 due to rounding.
Sources: Semiconductor Industry Association, The Next Web

The Biden administration has spent the last several months convening meetings with semiconductor manufacturers and their customers, prodding industries that compete for chips to speak more openly about their near-term needs and how quickly their orders can be filled.

The White House has also backed a legislative proposal that would allocate $52 billion to spur domestic chip manufacturing. The Senate approved that funding in June when it passed the U.S. Innovation and Competition Act (S. 1260), but it stalled in the House as lawmakers focused on debates over infrastructure and spending.

WHAT'S NEXT

Senate Majority Leader Chuck Schumer attempted to break the USICA logjam last week by attaching the bill to the must-pass National Defense Authorization Act. That effort failed amid pushback from lawmakers in

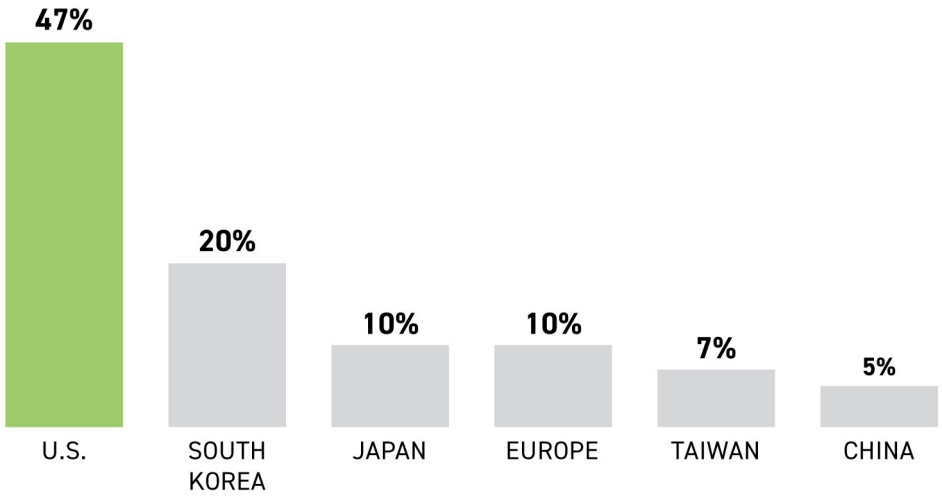
both parties and both chambers, but Schumer nevertheless got an agreement from House Speaker Nancy Pelosi to refine the legislation in a conference committee.

That announcement opens the door for the House and Senate to pass the bill and move it to President Joe Biden's desk before year's end. But just how quickly the two sides can move remains unclear as Congress grapples with Democrats' social spending proposal and a mid-December debt ceiling deadline.

Semiconductor funding is among the bill's most popular and bipartisan provisions. Lawmakers on both sides of the aisle have expressed support for weaning U.S. reliance on foreign providers and increasing the percentage of high-end microchips made at home, calling it imperative for both the economy and national security.

Nearly half of the global market share is controlled by the U.S.

ANNUAL GLOBAL MARKET SHARE, AS OF 2020*



* Percentages may not add to 100 due to rounding.
Sources: Semiconductor Industry Association, The Next Web

In the near-term, the Biden administration has been leaning on both chipmakers and foreign governments for support.

In September, the Commerce Department released a Federal Register Notice calling on companies and industry associations to voluntarily turn over information about their business transactions and supply-chain issues so that the agency can more readily identify kinks. Those responses were due Nov. 8, and Commerce is now digesting the feedback.

Meanwhile, the administration is pursuing strategic arrangements with trading partners in Europe and Asia to streamline existing supply chains and coordinate investments into new ones. The U.S. and European Union have begun talks to align their semiconductor investments through their joint Trade and Technology Council, which held its first meeting in September.

And just last week, Commerce Secretary Gina Raimondo and U.S. Trade Representative Katherine Tai were traveling throughout the Indo-Pacific region to pitch a new economic framework that Biden hopes countries will join. That arrangement is expected to address supply-chain shortcomings for semiconductors and other critical goods, Raimondo said.

The White House acknowledges that none of those efforts will fix the ongoing crunch. But administration officials contend that moves Washington makes now will make the U.S. more economically independent and help to prevent future shortages — a probable reality as demand for chips is only expected to rise.

POWER PLAYERS

- **Senate Majority Leader Chuck Schumer:** Schumer has been a key proponent of the U.S. Innovation and Competition Act, brokering political deals to ensure bipartisan support in the Senate. He's now conferring with Pelosi to get the bill over the finish line.
- **Sen. Todd Young (R-Ind.):** The leading Republican sponsor of the USICA, Young has been a major proponent of the bill's semiconductor funding. He corralled fellow Republicans to back the bill and has resisted efforts to break the chip funding away from the broader legislative package.
- **Gina Raimondo, Commerce secretary:** When Biden divided up oversight of supply-chain issues among members of his cabinet, he primarily put semiconductors under the purview of Raimondo. She has since engaged regularly with industry leaders and been an advocate for congressional funding.
- **Patrick Gelsinger, CEO, Intel:** Gelsinger has been a regular attendee at White House meetings on semiconductors and his company has lobbied Congress for manufacturing subsidies. The country's largest chipmaker, Intel has unveiled plans to build facilities in both the U.S. and Europe.
- **John Neuffer, president and CEO, Semiconductor Industry Association:** Neuffer manages an association that includes chipmakers like Intel, Qualcomm and Broadcom. The group has seen its policy issues thrust into the spotlight amid the global shortage. Neuffer previously worked at the Office of United States Trade Representative for seven years.