CHIPS Subsidy Plan Fails to Address Broader Challenge of Competition with China

Broad-based tax incentives will better address our global competitiveness

- The Chinese Communist Party’s “Made in China 2025” plan seeks global dominance in 10 separate industries, which reach far beyond semiconductors:
  1. Advanced information technology
  2. Automation & robotics
  3. Aerospace
  4. Ocean engineering & shipping
  5. Rail transport
  6. Energy efficiency & electric vehicles
  7. Power equipment
  8. Advanced materials
  9. Medicine & medical devices
  10. Agricultural equipment

- For about the same cost as CHIPS subsidies ($52 billion in grants + $24 billion tax credit), we could enact a powerful set of incentives to allow all American companies to compete and win in the global economy:
  - Double research and development (R&D) tax credit through 2025 ($69 billion).
  - 100 percent expensing through 2025 ($5 billion).
  - Allow R&D costs to be deducted immediately through 2025 ($4 billion).

U.S. is already on track to ramp up production with new semiconductor facilities

<table>
<thead>
<tr>
<th>Company</th>
<th>Location</th>
<th>Announced</th>
<th>Project Cost</th>
<th>Completed</th>
<th>Chip Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSMC</td>
<td>Arizona</td>
<td>Nov. 2020</td>
<td>$12 billion</td>
<td>Early 2024</td>
<td>5nm / 4nm</td>
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<tr>
<td>Intel</td>
<td>Arizona</td>
<td>Mar. 2021</td>
<td>$20 billion</td>
<td>Early 2024</td>
<td>7nm / 5nm</td>
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<tr>
<td>Samsung</td>
<td>Texas</td>
<td>Nov. 2021</td>
<td>$17 billion</td>
<td>Late 2024</td>
<td>3nm</td>
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<tr>
<td>Intel</td>
<td>Ohio</td>
<td>Jan. 2022</td>
<td>$20 billion</td>
<td>Late 2025</td>
<td>3nm</td>
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</tbody>
</table>

CHIPS tax credit—via government checks—is an excessive industry handout

- The 25 percent refundable tax credit would provide large government checks to a limited group of hand-picked companies.

- Also creates an unjustified windfall for companies with projects already underway.
CHIPS tax credit lacks any guardrails to prevent investment shifting to China

- Added to the $52 billion in grant money, the tax credit provides semiconductor companies with an unprecedented stack of benefits, all paid for by taxpayers.
- Unlike the grant money, the CHIPS tax credit does not include protection against companies using the money previously earmarked for U.S. investment to increase their China footprint.
- Without guardrails, Americans could be subsidizing expansion of the size and capabilities of semiconductor facilities in China.

Semiconductor companies already enjoy significant tax advantages

- Semiconductor companies pay low corporate tax rates:
  - U.S. companies: Broadcom – 1.8 percent, Micron – 7.6 percent, Intel – 9.3 percent, Texas Instruments – 12.8 percent, Qualcomm – 13.6 percent.
  - Others: TSMC – 10.4 percent, SK Hyinx – 23.7 percent, Samsung – 24.9 percent.
- Industry is using COVID-era supply chain problems to seek taxpayer-funded handouts.
  - These CHIPS subsidies will not alleviate existing semiconductor supply constraints because it takes years for facilities to ramp up and begin production.
  - Economists expect the market to rebalance before any new facilities come online.

U.S. is already a hub for tech investment, including semiconductors

- TCJA was a boon for U.S. R&D investment—25 percent higher than in the years prior, reaching an all-time-high in 2019 ($584 billion and 3.06 percent of GDP).
- U.S. semiconductor exports totaled $49 billion in 2020, behind only three other industries (aircraft, refined oil, and crude oil).
- U.S. semiconductor companies remain the clear global leaders, with 47 percent of global semiconductor sales in 2020 (South Korea was second with 20 percent).
- U.S. companies produce 44 percent of their semiconductors domestically, producing more here than anywhere else.
- While the U.S. share of global semiconductor production has shrunk in recent decades, domestic semiconductor capital investment and output are increasing: U.S. capacity grew from under 2 million units per month in 2000 to more than 3 million units in 2018.