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Domestic Politics and the US-China Chip War

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SYNOPSIS

Semiconductor chip technology has for some time been widely viewed as a key battleground in the ongoing rivalry between China and the United States. This is unsurprising because the expertise to develop and manufacture chips is concentrated in a few companies globally. What is surprising is the tendency to draw conclusions about the broader state of US-China relations from developments related to chips. Closer attention should be paid to the impact of domestic political developments on both countries' strategic calculations.

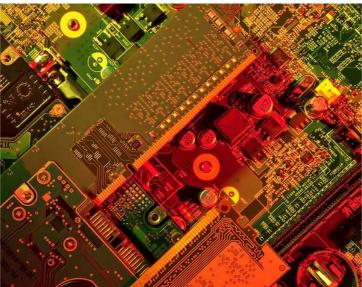
COMMENTARY

Chinese chipmakers' <u>cooperation</u> with US export control verification measures in recent months has been interpreted as a conciliatory gesture by the Chinese Communist Party (CCP) towards the Biden administration. However, this did not stop China from filing a <u>request for dispute consultations</u> with the United States at the World Trade Organization meeting in December 2022, signalling its determination to challenge attempts to cripple its chip technology capabilities.

China has also shown no signs of abandoning long-standing efforts to develop self-sufficiency in chip technology, with <u>reports</u> of a 1 trillion RMB (~US\$143bn) package on the cards to support its manufacturers over the next five years. The <u>CHIPS Act</u> passed by the United States in August 2022, which similarly aims to support American chipmakers, promised only US\$52.7 billion in comparison.

Nevertheless, the United States has continued to tighten the noose around key Chinese chipmakers, adding <u>21 companies</u> to the Entity List in December 2022, including Yangtze Memory Technologies Corp, which is China's biggest manufacturer of flash memory. In line with previous measures, this expansion of the Entity List not only aimed to restrict Chinese chipmakers' ability to use American technology for the People's Liberation Army's modernisation efforts, but also solidified a broader policy goal to <u>cripple rather than merely restrict</u> China's indigenous innovation efforts.

These developments highlight the need for more considered assessments of the impact that the battle over chip technology is having on US-China relations, particularly given the complexities in both countries' domestic politics. The CCP is grappling with multiple challenges at a time of transition following its 20th National Congress, including fallout from the recently dismantled "zero-Covid" policies. Meanwhile, in the United States, the Biden administration is into the second half of its four-year term with a divided Congress, placing further pressure on the White House's approach to relations with China.



Beyond mere rivalry, China and the United States face complex domestic political issues, which influence their strategies in the semiconductor chip war. *Image from Unsplash*.

Political Complexities in China

The CCP's 20th National Congress reiterated the importance of technological self-reliance, with "science and technology" (*keji*) mentioned <u>44 times</u> in the meeting's report. Achieving self-sufficiency in chip manufacturing is also featured <u>prominently</u> in China's 14th Five-Year Plan and is intertwined with the CCP's "dual circulation" strategy. The latter aims to promote domestic consumption while continuing to attract foreign investments amidst an increasingly hostile international trade environment and deteriorating relations with the United States.

Domestic challenges, which have been exacerbated due to the pandemic and "zero-Covid" policies, may also force the CCP to rethink its approach to economic growth and management of the private sector. Obstacles include strained government finances, growing inequality, a rapidly ageing population, and significant levels of youth unemployment. From June to September 2022, China's unemployment rate

among 16 to 24-year-olds was <u>nearly 20 per cent</u>. The struggle to find work and lack of social mobility have spawned what has been dubbed the "<u>lying flat</u>" (*tang ping*) or "involution" movement. For China's leadership, passive resistance to the national drive for development is a worrying trend that could hurt more than just the economy.

There are also top-down challenges in implementing national priorities amidst the CCP's ongoing efforts to clamp down on officials and entrepreneurs perceived to have gained excessive wealth and influence. For instance, key figures involved in the staterun China Integrated Circuit Industry Investment Fund (colloquially known as the "Big Fund" or *dajijin*) were <u>placed under review</u> by the Central Commission for Discipline Inspection in 2022.

One reason for this was the failure of companies that the Big Fund invested in, such as <u>Tsinghua Unigroup</u>, which was once seen as a lynchpin of Beijing's self-sufficiency in the chip industry before it filed for bankruptcy in 2021. The underlying problem is that local governments are incentivised to rush headlong into centrally prioritised industries highlighted in five-year plans, like chips, though they often lack the <u>necessary resources or expertise</u>.

Political Complexities in the United States

In the United States, the recent tilt towards industrial policy for chip manufacturing is not just about competing with China but is also part of a broader strategy aimed at boosting domestic regional development and job creation – key political promises of the Biden-Harris election campaign. Planned chip fabrication plants hold the promise of creating more than 180,000 jobs up to 2026, although they are geographically concentrated in states such as Arizona and Texas that have existing chip manufacturing ecosystems. At the same time, workforce shortages in construction have caused delays in reshoring efforts, and there is the longer-term problem of finding skilled workers to run the finished plants.

Following the midterm elections held in late 2022, the Republicans now control the House of Representatives, with the Democrats securing their majority in the Senate. A divided Congress could complicate approval of appropriations for existing legislation such as the CHIPS Act, even if bipartisan support for measures against China remains strong. A key issue that remains <u>unresolved</u> is how to allocate subsidies towards different parts of the supply chain under the CHIPS Act. Building new fabrication plants for cutting-edge chips alone would not eliminate <u>existing chokepoints</u> in precursor materials and in the final steps of assembly, testing, and packaging.

President Biden's term is also due to end in 2024, which creates further uncertainty for industrial policy initiatives concerning chips and executive branch efforts such as export controls. Although the broad trajectory of competition between the United States and China appears set, a change of leadership in the White House could see a shift in the approach taken, particularly if the new president is a Republican. The unfortunate reality is that the time horizon for investments in chip manufacturing does not follow the American electoral cycle, leaving much room for unpredictability.

Looking Ahead

China's ability to withstand American attempts to cripple its chip industry will likely depend on more than Beijing's continued generosity towards chipmakers. In particular, the ability to develop, attract and retain talent will be crucial. However, the logic of talent flow is not always determined by economic incentives; despite rising salaries, demand for chip talent in China is expected to exceed local supply by as much as one-third. Overseas sources of chip talent, such as Taiwan, are also taking defensive measures, tightening the global pool further.

Nevertheless, China has already achieved a <u>degree of mastery</u> in advanced chip technology despite facing various obstacles, and remains well-placed to dominate the global market for <u>legacy chips</u> that are more widely used and not covered by US export controls. However, given the political imperative tied to achieving self-sufficiency in chips, it is unlikely that China will take its foot off the pedal. The question is how the CCP will react to continued US pressure, and what steps it might take to change the rules of the game in its favour. Whatever the answer, the preservation of CCP rule and its continued legitimacy domestically will be as important as "one-upping" the United States.

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