

## CHINA: Semiconductor corruption probe may signal industrial policy shift

- Anti-corruption investigators have detained at least seven executives in charge of China's state-led investments in the semiconductor sector.
- Beyond simple corruption, the detentions may also reflect top leaders' dissatisfaction with the industry's lack of progress towards achieving self-sufficiency in "choke point" technologies.
- State-led investments may now re-focus on choke point areas, but China's chip industry still faces daunting obstacles to closing the gap with the global industry leaders.

---

The detained fund managers helped manage the National Integrated Circuit Industry Investment Fund, which has raised around RMB 340bn (USD 48bn) in state and private capital through multiple funding rounds since its founding in 2014. State shareholders include the Ministry of Finance, China Development Bank, China Mobile, and China Tobacco, the state monopoly. Known as the Big Fund, its objective is to boost China's self-sufficiency in chipmaking, increasing China's resilience against US export controls. Many of the detained executives worked for Sino-IC Capital, the Big Fund's state-owned management entity.

A key question is whether the detentions reflect the top leadership's dissatisfaction with the Big Fund's investment strategy, or whether the detained officials were simply engaged in common corruption. The Central Commission on Discipline Inspection (CCDI), the Communist Party's anti-corruption agency, has disclosed few details about the alleged wrongdoing, but our sources indicate that both factors are at work.

Common corruption is certainly a significant factor. Within China's chip industry, it was an open secret that the Big Fund was allocating capital based on political connections and that many investments yielded poor results. In general, incentives for self-dealing are strong when relatively low-paid executives at a state-owned fund manager hold authority to allocate billions of dollars.

But concerns about the Big Fund's investment strategy probably also played a role in the probe. According to sources, China's top leadership was dissatisfied with the Big Fund's focus on investments that would yield quick profits at the expense of longer-term investments that were less commercially viable but more significant for overcoming China's dependence on imported chipmaking equipment and software. More profitable investments might also have been more vulnerable to self-dealing by the officials in charge.

### Re-focusing on "major tasks"

The overall trend in China's chip industry in recent years has been towards investment in the fabrication of less advanced chips. From a commercial perspective, China's focus on nodes at 28 nanometers (nm) and above arguably makes sense. These chips account for around 64% of global chip consumption, and global demand may triple by 2030. Though far from the industry's leading edge, such chips are essential for automobiles and a wide variety of electronic devices. China's market share in 28 nm or older nodes reached a record high of 10% in the first quarter of 2022.

But mastering mature technologies will do little to reduce China's dependence on foreign suppliers for key applications like supercomputing, artificial intelligence, 5G mobile networks, and high-end smartphones. Prospects remain dim for Chinese chipmakers to close the gap with Taiwan Semiconductor Manufacturing Corp (TSMC), which is planning to start production using a 3nm process this year. TSMC and other top chip fabricators like Samsung and SK Hynix rely in turn on US and European chipmaking tools, which means these companies and their Chinese customers are vulnerable to Western sanctions, especially US Commerce Department's [foreign direct product rule](#).

Apart from the Big Fund detentions, recent policymaking signals also suggest a renewed focus on solving the hardest technical problems. On 8 September, the Central Commission for Comprehensively Deepening Reforms, a powerful-but-secretive party organ established in 2013 to address long-term issues, [approved](#) a document entitled "Opinions on Improving a New System for Mobilizing National Resources to Achieve Breakthroughs in Core Technologies in Key Fields under the Socialist Market Economy." The document appears to reflect dissatisfaction among top leaders over the lack of progress in advanced semiconductors. President Xi Jinping told the meeting that China must "centralize resources to achieve major tasks, strengthening the party and state's leadership in large technological innovation." He also mentioned "wholistic planning in science" and "cooperation to tackle key problems."

### Daunting obstacles

But even with a sharpened focus on "key problems," chip industry experts doubt that Chinese chipmakers can close the gap with the global industry leaders within any foreseeable time frame. In July, Jin Zhuanglong was appointed to lead the Ministry of Industry and Information Technology, replacing Xiao Yaqing, whose detention by CCDI may also be linked to the Big Fund investigation. Jin made his reputation as chairman of Commercial Aircraft Corporation of China (Comac), where he led the development of China's first domestically built passenger jet. But while Beijing has hailed the C919 jet as a landmark achievement for indigenous innovation, the aircraft still relies heavily on inputs from Western suppliers like Honeywell and General Electric. And even with those inputs, the C919 is less advanced than rival aircraft from Boeing and Airbus.

China's semiconductor industry faces similarly daunting challenges, even before accounting for the new export controls [expected](#) from the US Commerce Department in the coming weeks. The new rules will build on existing restrictions on sales to China, while expanding their scope to cover equipment used for less-advanced nodes. This expansion may in turn reflect a broader shift in Washington's approach to export controls, which US National Security Advisor Jake Sullivan [outlined](#) last month. Sullivan called for shifting away from a focus on maintaining the US industry's *relative advantage* over China to an approach that maximizes the US' *absolute advantage*.

Pursuing *relative advantage* implied that Washington was comfortable allowing the Chinese industry to continue progressing, so long as the US remained several generations ahead. The new approach implies that Washington aims to "freeze in" China at its current level, enabling the US to increase its lead. The "freeze in" approach may reflect policymakers' recognition that progress at the industry's leading edge is slowing due to limits on what is physically possible. Enabling China's continued progress would therefore inevitably cause the gap to narrow over time.

### Client Portal >>

**Gabriel Wildau**  
Managing Director  
+1 (347) 714-4962  
[gabriel.wildau@teneo.com](mailto:gabriel.wildau@teneo.com)

© 2022 Teneo. All rights reserved. This material was produced by Teneo for use solely by the recipient. This communication is intended as general background research and is not intended to constitute advice on any particular commercial investment or trade matter or issue and should not be relied upon for such purposes. The views expressed here represent opinions as of this date and are subject to change without notice. The information has been obtained from sources believed to be reliable but no guarantees can be given as to its accuracy, completeness or reliability. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic or otherwise, without the prior consent of Teneo.