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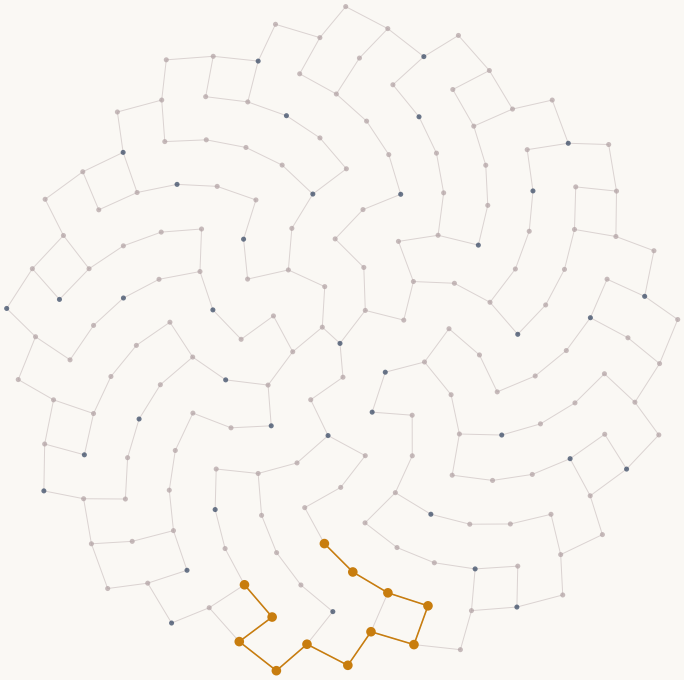

Semiconductor Divide: CHIPS Act & China Controls

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Here's what that means for export compliance and investment screening teams.

By Sayari Analyst Team . Published July 2025 . sayari.com

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For decades, the semiconductor industry operated on the principle of cross-border specialization: American design, Dutch and Japanese equipment manufacturing, Taiwanese and South Korean fabrication, Chinese assembly. The logic was efficient and deeply embedded in global trade.

That assumption no longer holds. The CHIPS and Science Act in August 2022 authorized $52.7 billion in direct subsidies for semiconductors, with $39 billion allocated specifically for semiconductor manufacturing incentives and $13.2 billion for research-signaling a permanent shift in US industrial policy. Two months later, the Department of Commerce Bureau of Industry and Security issued sweeping export controls cutting off China's access to advanced semiconductor manufacturing equipment. These two events formalized the semiconductor bifurcation.

For export control officers, CFIUS counsel, and third-party risk managers working in defense and critical technology sectors, this bifurcation has created a new compliance problem: the Chinese semiconductor sector is now structured around Military-Civil Fusion (MCF), a policy requiring Chinese companies, universities, and research institutions to share technology and innovation with the People's Liberation Army. Identifying MCF-connected entities-which often operate under civilian-sounding names, hold positions in US supply chains, and invest in American technology firms-has become essential to defensible supply chain and investment screening.

The CHIPS Act and the Reshoring Hypothesis

The CHIPS and Science Act represented something rarely seen in US industrial policy: a direct, conditional transfer of capital to reshape where semiconductors get made. TSMC committed to building a $20 billion advanced fabrication plant in Arizona. Samsung announced a $17 billion facility in Texas. Intel received commitments exceeding $7 billion for US manufacturing expansion. Micron Technology gained $6 billion for memory production facilities in Idaho.

The law's power lay not just in the capital offered but in the conditions attached. Any company receiving CHIPS Act funding faces a ten-year restriction on expanding semiconductor manufacturing capacity in China beyond certain thresholds. The guardrails were explicit: the goal was to reverse the concentration of advanced chip production in Asia and bring strategic manufacturing back to the United States and its closest allies.

The hypothesis was straightforward: shift the economics, shift the manufacturing location. The assumption was that supply chain risk, national security, and federal support would outweigh cost advantages in lower-wage jurisdictions.

Nearly four years in, the hypothesis has held partially. Major chipmakers are building US capacity, but the reshoring story is incomplete without understanding the China side.

China's Chip Ecosystem: The MCF Layer

The Chinese semiconductor sector is structured around Military-Civil Fusion, requiring Chinese companies, research institutions, and universities to integrate technical capabilities with the People's Liberation Army and defense industrial base. This is a formal governance structure embedded in Chinese law.

Nominally civilian chip companies have mandatory relationships with military and defense institutions through research partnerships, equity stakes, and contractual obligations to supply technology-connections that do not show up in corporate registries or conventional due diligence.

Semiconductor Manufacturing International Corporation (SMIC), China's largest semiconductor foundry, is the clearest example. SMIC operates under the US BIS Entity List designation, yet it continues to manufacture at legacy nodes and remains a critical node in China's semiconductor supply chain. Huawei, similarly listed, continues to design and produce chips-most visibly its Kirin processors-and sources foreign technology through intermediary networks designed to obscure the ultimate destination.

The scale of the MCF network is difficult to quantify precisely because the connections are often non-obvious. According to the Center for Strategic and International Studies, 263 Chinese entities were designated on US export control lists in 2024 alone-the most active year of designations on record. Yet CSIS analysis indicates that over 1,000 Chinese companies have documented MCF connections, while fewer than 200 appear formally on the BIS Entity List or OFAC sanctions lists. The gap represents an identification and screening challenge for any organization importing components, investing in supply chain partners, or conducting CFIUS-relevant transactions.

Export Control Escalation: From October 2022 to the Present

The October 2022 BIS export control rules imposed sweeping controls on advanced semiconductors (128-layer NAND flash memory, sub-16nm logic chips) and the equipment to manufacture them. The intent: deny China access to next-generation chip production.

In August 2023, Huawei released the Mate 60 Pro containing a processor manufactured by SMIC at approximately 7nm-a process node that should have been impossible given export controls. The revelation indicated workarounds existed: intermediary procurement networks, dual-use equipment reclassifications, or equipment from non-US manufacturers in allied countries.

The US response was predictable escalation. In October 2023, BIS expanded rules to cover additional equipment types and lower performance thresholds. In October 2024, another round lowered the advanced logic chip threshold from 16nm to 28nm and expanded controls to allied suppliers. Coordinated action with the Netherlands and Japan on ASML's EUV machines tightened restrictions.

Each escalation has been met with adaptive sourcing: used equipment imports, non-allied equipment, or civilian equipment with military applications. The export control dynamic has become regulatory closure versus technical adaptation.

What the Semiconductor Bifurcation Means for Compliance Teams

The new landscape is fundamentally an entity-identification and network-mapping problem. Defensible due diligence requires visibility into three areas: ownership and control networks (state-owned enterprise stakes, research affiliations, directorates); contractual and research relationships binding civilian entities to defense partners; and procurement networks for restricted technologies.

For export control officers, this means treating Chinese semiconductor companies as presumptively MCF-connected unless due diligence demonstrates otherwise. For CFIUS counsel, the bifurcation creates elevated scrutiny for any foreign investment into US semiconductor companies or equipment suppliers. For third-party risk managers, semiconductor assessments must include explicit MCF-connection screening. The 1,000-plus Chinese entities with documented MCF ties operate in global supply chains, many without entity-list designation.

The bifurcated semiconductor world is the operating environment. Companies that source from Asia, invest in semiconductor-adjacent businesses, or maintain Chinese-origin supply relationships face significantly higher compliance requirements and regulatory risk than five years ago.

Understanding this risk requires network-level visibility into ownership, control, and strategic relationships. Learn how Sayari helps defense and export compliance teams map global supply networks and identify MCF-connected entities. Request a demo to operationalize supply chain screening in a bifurcated semiconductor world.

Please visit sayari.com to learn more.

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