

# Silicon Sovereignty: Industrial Policy and the Post-Neoliberal Turn

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*The age of neoliberal hands-off economics is giving way to state-led tech geopolitics.*

For decades, neoliberal orthodoxy insisted that governments should stay out of the business of building industries. Markets, not ministries, were cast as the natural organisers of capital and innovation. The state's role was to deregulate, privatise, and get out of the way. Yet the semiconductor industry — the foundation of the digital economy — has now revealed the limits of that creed. In the world of chips, it is industrial policy, not laissez-faire, that secures technological power.

Semiconductor chips are the engines of the digital age. They are etched from silicon wafers into circuits of billions of transistors, which process and store the information that drives smartphones, cars, defence systems, and artificial intelligence. The level of miniaturisation, measured in nanometres, determines their capacity: the smaller the features, the greater the speed and efficiency. The ability to manufacture at 7nm, 5nm, or 3nm defines the technological frontier, and only a handful of firms can reach it.

This frontier rests on a finely divided global supply chain. American firms such as Nvidia, AMD, Qualcomm, and Apple dominate chip design. Taiwan's TSMC and South Korea's Samsung control advanced manufacturing. Memory production is concentrated in Samsung, SK Hynix, and Micron. The key equipment comes from ASML in the Netherlands, Tokyo Electron in Japan, and Applied Materials in the US, while Japanese and European chemical producers supply essential inputs. This system is both globally dispersed and dangerously fragile: disruption in any single node — above all Taiwan — could cripple the world economy.

Semiconductors are often described as the oil of the twenty-first century, and with reason. They have become indispensable strategic resources. TSMC alone is estimated to produce around 90 per cent of the world's most advanced chips, at sub-7nm nodes. This dominance is not a happy accident of market competition but

the result of decades of deliberate policy. Taiwan invested heavily in research institutes, educated its engineers, channelled state funding, and took equity stakes. South Korea's chaebols likewise rose through state-backed finance and planning. China is now attempting the same, funnelling tens of billions of dollars into its national champions such as SMIC.

The West long clung to the illusion that markets alone could deliver security in such a sector. That illusion has collapsed. Washington and Brussels now speak openly of chip sovereignty. Subsidies, export controls, and state ownership are back on the table.

The sharpest break with neoliberal convention came when the Trump administration announced it would take an equity position in Intel. Roughly \$11.1 billion in public funding — including \$8.9 billion already allocated through the CHIPS Act — is being converted into a 10 per cent passive stake, without a board seat. This makes the US government Intel's largest single shareholder. The symbolism is striking: Washington has moved from subsidiser to owner in the most strategic of industries.

There is precedent for government equity in the US, but it was always cast as exceptional. The Treasury held majority stakes in General Motors, Chrysler, and AIG during the 2008 financial crisis, but exited within a few years, stressing that it had no interest in permanent ownership. The Intel stake is different: it is not crisis management, but a deliberate bet on rebuilding national capacity in a sector vital to power.

Europe has lived more comfortably with state influence. Governments used "golden shares" to retain veto rights in defence, telecoms, and energy after privatisation. France still holds significant stakes in EDF and Renault, while Germany protects Volkswagen with a blocking minority. Brussels often pushed back against such arrangements, but the instinct to preserve national control never disappeared.

In Asia, the story is clearer still: success has depended on patient, long-term state policy. TSMC is often described as a national project as much as a private company. Its rise reflects sustained investment and collaboration across government, academia, and industry.

The Trump administration's approach, by contrast, looks less like coordinated planning and more like transactional intervention. It has pressured Intel's leadership over past dealings in China, demanded that Nvidia and AMD hand over 15 per cent of revenue from certain sales to China in exchange for export licences, and secured a "golden share" in US Steel to facilitate its takeover by Nippon Steel. Such moves

may deliver short-term leverage, but they risk undermining the trust and long-term relationships that chipmakers rely on.

Ownership further complicates the landscape. The semiconductor sector is dominated by large institutional investors — BlackRock, Vanguard, and State Street — each holding 5–10 per cent stakes across the industry. TSMC counts Taiwan's development fund among its significant shareholders. Samsung remains under the control of the Lee family, with the South Korean pension fund as a major investor. In China, national funds directly back SMIC and its peers. The new Intel arrangement puts the US state alongside Wall Street as a leading shareholder — a novel constellation of power.

What is emerging is not a return to twentieth-century nationalisation but a new phase of post-neoliberal geopolitics. The line between market and state is blurring. Equity stakes, golden shares, and weaponised supply chains are now instruments of national strategy. Chips, once treated as another traded good, are increasingly seen as the commanding heights of industrial power.

The experience of Taiwan shows that true industrial capacity is not built by one-off deals but by decades of consistent investment in research, education, and infrastructure, combined with stable partnerships with global customers. It cannot be achieved through executive fiat or overnight deals. If the US wants to rebuild its semiconductor base, it must learn to think in decades, not news cycles.

The faith in market primacy is fading, replaced by a messy experiment in state-led capitalism. Whether this produces resilience or simply more political interference will determine not just Intel's fate, but the balance of power in the twenty-first-century world economy. In the post-neoliberal age, the struggle for chips is the struggle for power.

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