Today's Export Control Explosion

By Shubham Singhal

Like tariffs, they are reshaping global markets.

Governments are expanding export controls in response to rising national security concerns. For some industries, such as aerospace and defense, this is business as usual. Others, such as biotech, are contending with diminishing market access, while still more are facing less competition. Indeed, these developments can be positive or negative depending on the location of the business and its export markets.

Export controls are measures to limit the movement of sensitive products and services across borders. Initially imposed during the Cold War with respect to military and related sales, in recent years a number of governments have taken to implementing them to promote a range of goals, including human rights.

In November 2024, the European Union required companies to ensure that their customers not sell certain products to Russia or Belarus. At least in part as a response to the announcement of new U.S. tariffs, in April China began to restrict the export of rare earth materials that are found in everything from wind turbines to aircraft and are widely used in the semiconductor industry. China has also imposed licenses on some metals. As for the United States, in 2019, the federal government restricted exports on about 1,350 items; by March 2025, that figure had more than doubled, to 3,350.

While trade tensions have fluctuated, they are higher today than in many decades. So it's complicated. Not only are restrictions proliferating but they

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are more expansive, with countries, including but not only the United States, imposing controls that extend beyond their borders.

Worse, the policy environment is unsteady, fraught with contradictions and abrupt shifts. For example, new U.S. restrictions on generative artificial intelligence products stipulate different rules depending on where a company operates. And just to complicate things further, information on global export controls is not readily available. According to former U.S. Trade Representative Michael Froman, now president of the Council on Foreign Relations, "This is probably the most complex international environment in eighty years."

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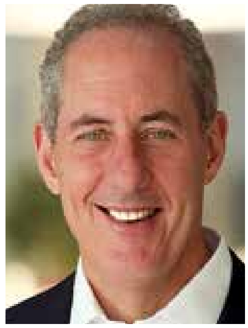
Business leaders are left feeling perplexed in this increasingly complex environment. It may be possible, however, to discover new opportunities by understanding the implications of evolving export rules. Companies that use knowledge can get ahead of less-savvy competitors depending on their changing relative advantages. For some companies, this might look like taking advantage of decreased competitor market access by entering a new market. For others, it could look like rebalancing their portfolio due to decreased competition in a product segment.

After all, like tariffs, export controls are often part of broad diplomatic negotiations, and are typically created in response to national security or other domestic concerns. But they also bring unique challenges. Specifically, they are sometimes implemented unilaterally and with immediate effect, catching business leaders off guard.

Moreover, while most countries publish import data and customs duties—typically organized based on Harmonized System codes, an internationally recognized system of numbers and names used to classify traded products—information on export controls is less easily available and is generally not linked to HS codes. This makes trends difficult to spot and analyze.

For example, when the United States increased controls on semiconductor exports to China, headlines predicted that U.S. chip exports to that country would drop precipitously. However, the controls only targeted a narrow subset of advanced chips and focused largely on chip-making tools. The outcome, counterintuitively, was a boost in U.S. chip exports to China in some years and there was no noticeable impact on market trends in others.



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Keeping abreast of evolving trade controls has become central to maintaining corporate resilience in the face of trade disruptions. The impact of export controls can go beyond supply chains and the ability to export products to specific markets; they can also affect research and development, manufacturing, and hiring.

Company compliance teams therefore have an important role to play by efficiently navigating the regulatory labyrinth. In 2022, when new U.S. restrictions targeted Chinese chip manufacturers, many foreign companies ceased collaboration with Chinese fabs, but a few were ahead of the game. They obtained regulatory waivers and were able to continue.

Export controls are political tools, but they can have serious economic consequences. A 2024 study by the New York Fed found that when Chinese customers were placed on export control lists, the stock price of affected U.S. companies dropped by an average of 2.5 percent. All told, the study estimated a decline in market capitalization of U.S. suppliers due to export controls at $130 billion.

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Moreover, export controls may even undermine their own goals. Some speculate, for example, that U.S.-led restrictions on artificial intelligence accelerated Chinese innovation in the field. Chinese firms' research and development investment as a percentage of their revenue increased by an average of 16.6 percent in the year after the restrictions were introduced. Might this have resulted in the emergence of China's DeepSeek as a competitive AI model?

In another case, in December 2024, China banned exports to the United States of gallium, germanium, and antimony in response to U.S. investment restrictions. The following month, the U.S. government granted a mining permit to a domestic company to explore for sources of antimony within the country's borders.

Export controls do not function in isolation. They are just one important feature in a growing system of enhanced scrutiny and restrictions on trade and investment. The European Union has foreign direct investment screening. China has rules requiring certain kinds of technology transfer to domestic partners, and Taiwan has a list of sectors where foreign investors are restricted or banned.

In general, foreign direct investment is being examined in greater depth. Spain now requires government approval of investment of more than 10 percent in what it considers strategic sectors. The same dynamic is true for outward investment, such as the rejection of an offer by a U.S. company to start a joint venture with a Chinese entity. Finally, governments can and sometimes do limit investors' ability to sell their investments on geopolitical or economic grounds.

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These actions change the market and thus reshape trade flows in industries affected, leaving some companies with new relative advantages compared to others and thus new value on the table. The bottom line is that economic models and business strategies need to account for expanding export controls along with investment restrictions, tariffs, trade agreements, and much more in this new geopolitical era. ◆

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