Investment Insights

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Mr. Market Goes to Washington

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IN A NUTSHELL

- Market-driven globalization has probably passed its peak. Governments are now investing to diversify and onshore supply chains across manufacturing industries.
- Relations between the two largest trading nations—the United States and China—have become more challenging, moving from trade and tariff issues to a much broader conflict centering on technological leadership and reduced economic interdependence.
- Increased spending on industrial policy in the U.S. aims at sustaining the nation's technology leadership, considered critical for national and economic security.
- Ongoing entanglement of national security and economic policy creates new opportunities for investors across various industries.

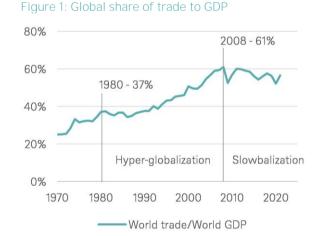
Once considered separate domains, economic and national security have seen growing convergence in recent years. And the U.S. government is not alone in blurring this line. In fact, the European Union in its European Economic Security Strategy¹ published this year sets out a plan to de-risk its economic interdependencies. The term "de-risking" used in the strategy-instead of the arguably more hostile phrase "decoupling"-has been readily adopted by the Biden administration, when referring to the U.S. relationship with China. In this paper, we argue that no matter one's view on globalization, its reversal will have extensive effects on global and regional economies, and investors should prepare to embrace this long-term economic transformation and play defense creatively.

Is the global economy deglobalizing?

For the past decade the future of globalization has been debated. Since the global financial crisis of 2008-09,

world trade has been growing slower than GDP, in contrast to an earlier trend of the era of so-called hyper-

globalization, Figure 1. Most recently, global supply chains



Source: International Monetary Fund (IMF), DWS as of 12/31/21.

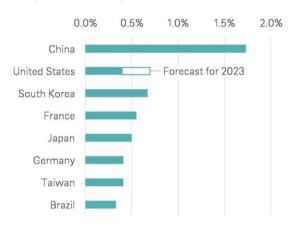
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¹ An EU approach to enhance economic security. European Commission (June 2023)

Figure 2: Industrial Policy Spending as a share of GDP (2019 estimates)²



Source: Center for Strategic and Industrial Studies, DWS.

have come under unprecedented stress as a result of U.S.-China trade tensions, the Covid-19 pandemic, and geopolitical shocks. For example, the shortage of supply of semiconductor chips during the pandemic took a drastic toll on all facets of the automotive industry, while Russia's invasion of Ukraine exposed the vulnerability of European countries' natural gas supply.

In response to fragile supply chains and growing threats to national security, many governments are looking to build up manufacturing capacities and expertise in strategic industries, such as computer chips, electric vehicles, biotechnology and Al. They are implementing substantial subsidies and requirements for domestic content to encourage production at home. In the U.S., the Bipartisan Infrastructure Law (BIL), the CHIPS & Science Act, and Inflation Reduction Act (IRA) together introduce \$2tn in new spending over the next decade. Although America's spending on industrial policy, relative to GDP, is likely to remain somewhat behind China's, it is estimated to rival that of South Korea, France and Japan,² Figure 2.

U.S.-China decoupling

No discussion about deglobalization can be complete without looking at the two largest trading nations in the world - the United States and China. Over the last few years, the trajectory of U.S. relations with China has

become indisputable: The two countries are headed towards a potentially substantial, though unlikely complete, decoupling. Both sides now seem to have accepted this reality, sparring with increasing ferocity, using a variety of economic sanctions and embedding it in their policy frameworks.

The most recent annual report on the state of globalization by DHL and NYU Stern School of Business³ looked at a sample of eleven types of trade, capital, information, and people flows, Figure 3. Taking a weighted average across this sample of flows, the share of U.S. flows going to and from China decreased from 9.3% in 2016 to 7.3% in 2022. Meanwhile, the share of China's flows to and from the U.S. fell from 17.8% to 14.3%. Despite Mexico surpassing China as the top U.S. trading partner in 2023, the U.S. and China still remain connected by far larger flows than any other pair of countries that do not share a border.

Bet on technology to boost national security

Perhaps the most consequential aspect of U.S.-China decoupling is in technology. While a sharp turn in U.S. economic policy towards China was the trade war launched by the Trump administration, the newest hotspots of bilateral friction have moved to technology and investment under Biden. In the words of National Security Advisor Jake Sullivan, the U.S. strategy shifted to "maintain as large a lead as possible" in critical technologies over its rivals.

In 2022, the Department of Defense (DoD) released a list of 14 technology areas deemed most critical to ensure the United States national security over the long term, Figure 4. A handful of these focus areas—such as hypersonics and directed energy weapons—are almost exclusively military-related, but the majority are already being developed for the commercial market by the private sector.

Historically, the DoD played a large role in seeding Silicon Valley's early technologies, from radar to semiconductors. However, anti-war sentiment, spread during the Vietnam war, changed all that—Silicon Valley has long displayed an aversion to battlefield technology. Now the two are pulling closer again, thanks to mounting geopolitical risk and technologies, such as advanced computing and AI,

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² Red Ink: Estimating Chinese Industrial Policy Spending in Comparative Perspective. Center for Strategic and Industrial Studies (May 2022)

³ 2022 DHL Global Connectedness Index. DHL and NYU Stern School of Business (2022)

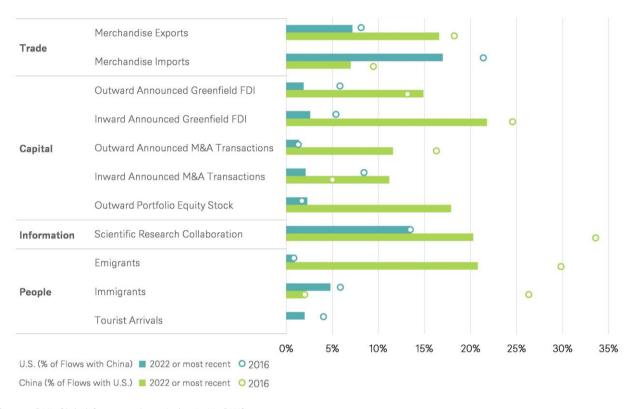


Figure 3: U.S. – China Flows, 2016 vs 2022³

Source: DHL Global Connectedness Index 2022, DWS.

finding their way into weapons and command-and-control systems. In fact, the value of venture capital deals into aerospace and defense tech was greater in each of 2021 and 2022 than in all of 2010 through 2019 combined.⁴ And the DoD launched its own investment arm to fuel innovation.⁵

In addition to investing in early-stage technologies to maintain the U.S. military's edge, policy makers are also looking to the private sector. They hope that commercial companies and nontraditional defense contractors can accelerate technology development and application and can help bridging "the valley of death" between research efforts and commercialization, or in other words to bring critical technologies to market. Big tech, including Amazon and Microsoft, are pitching for DoD contracts, eyeing the agency's \$140bn annual procurement budget.

Companies—both public and private—that focus on these critical transformative technologies may help to chart the path of economic growth and to afford investors opportunities to gain exposure to a potential "new economy."

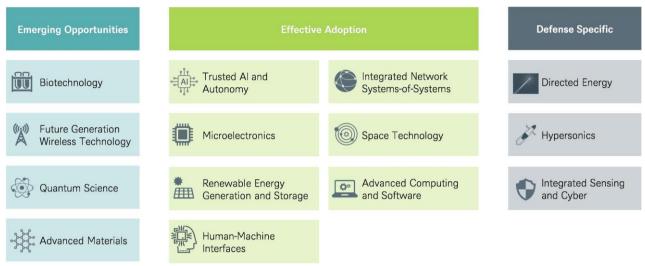
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The tech companies already equip the military and law enforcement with cloud storage, databases, app support, admin tools and logistics and they are moving closer to the battlefield. Alphabet, Amazon, Microsoft and Oracle obtained the \$9bn five-year contract to operate the Pentagon's Joint Warfighting Cloud Capability (JWCC). Microsoft was also awarded a \$22bn contract to supply its HoloLens augmented-reality headset to simulate battles for army training for up to ten years. In 2022 Alphabet launched a new unit, Google Public Sector, which will compete for the DoD's battle-networks contracts.

⁴ VCs go outside their comfort zone with bets on defense tech. PitchBook (October 2022). https://pitchbook.com/news/articles/defense-space-vc-ukraine-recession

⁵ Secretary of Defense Establishes Office of Strategic Capital. The U.S. Department of Defense (December 2022). https://www.defense.gov/News/Releases/Release/Article/3233377/secretary-of-defense-establishes-office-of-strategic-capital/

Figure 4: The Department of Defense (DoD) identified 14 critical technology areas vital to maintaining the United States' national security



Source: The National Defense Science and Technology Strategy, The Department of Defense (DoD), May 2023.

Outlook: Words of caution on industrial policy

For decades American politicians and executives were highly skeptical about industrial policy. Despite resorting to it on occasion, they believed it was inefficient and counterproductive. Now the debate is no longer about whether to pursue industrial policy at all, but about how to make it most effective.

Implementation will pose a huge practical challenge for the government. There is a need for lots of experienced managers to oversee it. They in turn will have to choose worthy recipients for subsidies, monitor their progress and cut them off if necessary. But even those uncertain about America's capacity to implement a successful industrial policy should be more optimistic about the portion that will go into supporting innovation.

A recent study by the Peterson Institute for International Economics⁶ analyzed and scored 18 U.S. industrial policy episodes implemented between 1970 and 2020. The study found that some of the episodes were partly or entirely successful, while others are complete failures.

Industrial policy can save or create jobs, but often at high cost. In contrast, industrial policy has worked best, when subsidizing R&D across a whole sector. The Defense Advanced Research Projects Agency (DARPA), for example, used federal R&D funding to boost the competitiveness of the U.S. semiconductor industry during the industry's formative years.

Funding multiple firms' R&D costs encourages competition. When grant distribution is left to industry experts without political interference, the most promising, high-risk projects that would otherwise struggle to attract private sector funding can benefit from government support. Current policies in the support of critical technologies can be seen as an attempt to mimic DARPA's approach in fields other than defense.

We believe that approaching industrial policy with healthy skepticism rather than unrestrained enthusiasm may create opportunities for investors who want to capitalize on this long-term trend. Embracing a strategic view that looks for opportunities across markets using a thematic rather than a sector-specific lens is one way to do just that.

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⁶ Scoring 50 years of industrial policy, 1970–2020. Peterson Institute for International Economics (November 2021).

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