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Nathan T. Picarsic

Co-Founder, Horizon Advisory Senior Fellow, Foundation for Defense of Democracies

"Testimony before the U.S.-China Economic and Security Review Commission" U.S. Investment in China's Capital Markets and Military-Industrial Complex

Hearing Co-Chairs Fiedler and Borochoff, distinguished Commissioners and staff of the US-China Economic and Security Review Commission, and fellow panelists, it is an honor to participate in today's hearing.

I aim to emphasize two fundamental points in my remarks and look forward to offering additional examples and details in discussion:

- Bilateral capital flows between the United States and China today represent a novel feature, and one with novel importance, in a broader national security competition; and,
- As in most domains of integration, the Chinese Communist Party (CCP) deliberately pursues asymmetric positioning in international capital flows. To understand that asymmetric positioning will demand detailed monitoring. To redress it will require creativity, courage, and a willingness to trade short-term reward for long-term advantage.

Thank you for the opportunity to contribute to this important dialogue. In the following, I will briefly address what I believe to be novel about the strategic context of today's US-China contest, the ways in which US investment into China's capital markets may generate national security risks, and a series of related policy recommendations.

To underscore the bottom-line up front: I am concerned that the national security community lacks appropriate analytic frameworks for assessing the impact of capital market integration in the US-China contest. This Commission and Congress have a vital role to play in collecting and sharing relevant unclassified information; promulgating new reporting and legally mandated disclosure requirements; and, perhaps most critically, informing the US public about the scope of connections between US-domiciled pools of capital and China's military and national security apparatus. The national security risks apparent in bilateral capital flows indicate that US-China economic relations require a systemic recalibration as a part of a broader competitive strategy for a long-term, peacetime competition with the CCP.

¹ At a strategic level, this asymmetry is codified in the Chinese economic planning concept of "two markets, two resources"; for a discussion of this concept's history, see relevant discussion in a study completed for the US-China Economic and Security Review Commission: Emily de La Bruyere and Nathan Picarsic, "Two Markets, Two Resources: Documenting China's Strategic Engagement in Africa," November 2020, https://www.uscc.gov/sites/default/files/2020-

^{11/}Two_Markets_Two_Resources_Documenting_Chinas_Engagement_in_Africa.pdf.

Strategic Context

In this section I will briefly outline a strategic framework for understanding capital integration between the United States and China: how it differs from integration of the Cold War, the forms it takes, and examples of national security risks associated with capital integration.

A New Type Great Power Contest

The US national security establishment has determined that the People's Republic of China (PRC) presents a great power threat.² The language used to describe the China threat – including the "great power competition" label³ – harkens back to the last long-term, peace-time contest in which the US engaged: The Cold War. At least rhetorically, that fight's legacy continues to inform US strategic thought.⁴ There are certainly similarities. In the Cold War, too, the US faced off against a communist regime intent on rewriting the global order.

However, today's contest is not the Cold War. Where the US response to the Soviet Union was able to orient around "containment," today's competitive environment is one of integration and unprecedented structural interdependence. The CCP's competitive strategy hinges on weaponizing that integration and interdependence.

This is not to say that there was no economic relationship between the United States and the Soviet Union before and during the Cold War. As early as 1930, before the Second World War, the United States was the Soviet Union's largest source of imports. Some political and economic elites framed the Soviet Union as an opportunity, "the greatest undeveloped market in the world." That sentiment lingered as the powers aligned in World War II and thereafter, as they split. The sentiment continued even as the national security community recognized that the Soviet Union was a strategic adversary. This economic engagement led financial actors in the United States to exhibit a parochial interest in stability and in tempering rhetoric of conflict throughout the Cold War.

² The 2018 National Defense Strategy declared as much by describing "inter-state competition" as the focus of US national security and China as a "strategic competitor." See, for example, the summary of the 2018 National Defense Strategy, https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary pdf

³ On what is left to be desired about this terminology, see Zachary Cooper, "Bad Idea: 'Great Power Competition' Terminology," *CSIS Defense 360*, December 1, 2020, https://defense360.csis.org/bad-idea-great-power-competition-terminology/.

⁴ Charles Edel and Hal Brands, "The Real Origins of the US-China Cold War," *Foreign Policy*, June 2, 2019, https://foreignpolicy.com/2019/06/02/the-real-origins-of-the-u-s-china-cold-war-big-think-communism/.

⁵ A statement cited to Senator William Borah in John Lewis Gaddis, *Russia, The Soviet Union, and the United States*, (New York, NY: McGraw-Hill Publishing Co.) 1978, 97-104.

⁶ It should be noted that awareness of the Soviet threat and its "international promotion of Communism" was codified in US government policy as early as the 1920 policy of "non-recognition" developed by Bainbridge Colby; "Bainbridge Colby: Influence on American Diplomacy," US Department of State, https://history.state.gov/departmenthistory/people/colby-bainbridge.

⁷ Jonathan David Kirshner, *Appeasing Bankers: Financial Caution on the Road to War* (Princeton University Press) 2007.

Today, the US-China competition features similar economic interaction – and similar resultant hurdles. Except both interaction and its challenges are magnified. China is orders of magnitude more economically integrated today than was the Soviet Union during the Cold War. The Soviet Union sought a self-sufficient national economy. This typically generated a minimal international trade volume that accounted for around 5% of overall economic activity. Since the early 1990s, China has held a trade-to-GDP ratio above 30%. The implications are clear: Today, China is a larger trading partner than the United States for 128 countries, well over half the world. Metrics of integration tell a similar story about China's place in the global financial sector. China accounted for 24 percent of total global volume transacted in equity capital markets in 2020. The global stall caused by COVID-19 prompted flows of capital into China to accelerate in 2020: The PRC overtook the United States as the top destination for foreign direct investment (FDI) for the first time. These are non-trivial differences with the insular Soviet economy.

China is not the Soviet Union. The CCP does not contain itself.

But that question of greater versus lesser integration is just one part of the story. The more important question – and the one that really demands new frameworks for national security analysis and action – is of type and mode of integration, as well as the government's relationship to it. Much of the exchange between the US and the Soviet Union during the Cold War took place in well-regulated domains where governmental restrictions could be enforced when a national security imperative was clearly and consistently invoked. The United States national security apparatus was able to escalate restrictions against cooperation and exchange when it deemed appropriate. That may no longer be the case. The strategic environment has changed. As a result of proliferating information technology (IT) and the globalization it underwrites, integration today takes place in less transparent domains difficult for the government to monitor. Private sector supply chains and academic exchanges present tangible, timely examples. In the story of the story of the story of the story of the story.

Positions in global capital markets are more consequential today than they were during the Cold War. They are also relatively less transparent.

^{8 &}quot;Trade to GDP Ratio," World Bank, https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS.

⁹ Alyssa Leng and Roland Rajah, "Two Thirds of the World Trade More Goods with China than with the US," *The Interpreter*, December 18, 2019, https://www.lowyinstitute.org/the-interpreter/chart-week-global-trade-through-us-china-lens.

¹⁰ "China Yet to Crack Global Capital Markets," *Australian Financial Review*, January 7, 2021, https://www.afr.com/chanticleer/china-yet-to-crack-global-capital-markets-20210107-p56scq.

¹¹ Paul Hannon and Eun-Young Jeong, "China Overtakes U.S. as World's Leading Destination for Foreign Direct Investment," *The Wall Street Journal*, January 24, 2021, https://www.wsj.com/articles/china-overtakes-u-s-as-worlds-leading-destination-for-foreign-direct-investment-11611511200.

¹² For an input into such recognition, see the "Quest for Technological Superiority" sub-section in the annual US government assessment of Soviet power from 1981: "Soviet Military Power," http://edocs.nps.edu/2014/May/SovietMilPower1981.pdf.

¹³ Keith Bradsher, "Amid Tension, China Blocks Vital Exports to Japan," *The New York Times*, September 22, 2010, https://www.nytimes.com/2010/09/23/business/global/23rare.html.

¹⁴ John Brown, "Securing the U.S. Research Enterprise from China's Talent Recruitment Plans," Statement before the Senate Homeland Security and Governmental Affairs Committee, Permanent Subcommittee on Investigations, November 19, 2019, https://www.fbi.gov/news/testimony/securing-the-us-research-enterprise-from-chinas-talent-recruitment-plans-111919.

National Security Risks of US Capital Flows to China

US capital integrates with the Chinese market, including aspects of it tied to military and national security development, along several paths. US financial intermediaries of all stripes invest in China's public market equities (in Hong Kong and on the mainland), public market debt, private market equity, and private market debt. Passive fund managers incorporate the Chinese market as a vital component of mainstream allocation strategies. So do investors who more actively manage funds and portfolios, including those in private markets: A range of prominent US private equity and venture capital investors invest in and alongside actors in China with ties to the military-civil fusion enterprise. US technology companies, like Amazon, also actively engage in China's technology investment ecosystem sharing resources and bestowing legitimacy that supports the maturity and efficacy of China's own investors and technology companies that raise money in private market transactions. Few of these avenues of capital cooperation feature any explicit awareness of or mitigation against risks associated with China's military-civil fusion strategy.

National security risks associated with capital are not necessarily a new phenomenon. The interagency Committee on Foreign Investment in the United States (CFIUS) process has monitored foreign capital for national security risks since 1975. ¹⁸ The CFIUS process rests on, and is designed to address, the potential threats posed by capital inflows to the United States – on the basis that those can deliver proximity to critical technology, infrastructure, and data. ¹⁹

Similar risks hold for the capital flows on which this hearing focuses: Those *from* the United States *to* China. At a first order, those sources of capital risk providing funds for China's development of comprehensive national power – including its military and national security pillars. At the next order, US capital flowing to China can grant Chinese entities – whether investment partners, transactional throughways and advisors, or entities targeted as investments – proximity to critical technology, infrastructure, and data.

¹⁵ Alex Rolandi, "Exchange-Traded Funds: Who Are Chinese Sanctions Hurting?," *Funds Europe ETF Report*, March 2021, https://www.funds-europe.com/etf-report-march-2021/exchange-traded-funds-who-are-chinese-sanctions-hurting.

¹⁶ DJI, a leading unmanned aerial system company, is a useful example having raised funds from US-based or -backed investors like Accel and Sequoia, and subsequently being identified as a potential national security threat. See DJI's Crunchbase profile: https://www.crunchbase.com/organization/dji/; Jeanne Whalen and Ellen Nakashima, "U.S. bans technology exports to Chinese semiconductor and drone companies, calling them security threats," *The Washington Post*, December 18, 2020, https://www.washingtonpost.com/technology/2020/12/18/china-smic-entity-list-ban/.

¹⁷ See, for example, "Amazon and Chengdu Hi-tech Zone, Build Cloud Computing Industry Joint Innovation Center," July 12, 2019, https://www.prnewswire.com/news-releases/amazon-and-chengdu-hi-tech-zone-build-cloud-computing-industry-joint-innovation-center-300883961.html.

¹⁸ Danny Chrichton, "WTF is CFIUS?," *TechCrunch*, March 4, 2018, https://techcrunch.com/2018/03/04/wtf-is-cfius/.

¹⁹ Heather Somerville, "China Investors Keep Making Deals in Silicon Valley Amid Washington Pushback," *The Wall Street Journal*, October 28, 2019, https://www.wsj.com/articles/chinese-investors-u-s-tech-entrepreneurs-continue-to-make-deals-11572275105; Nevena Simidjiyska

[&]quot;New Foreign Investment Restrictions in Tech, Infrastructure and Data," Fox Rothschild, January 30, 2020, https://www.foxrothschild.com/publications/new-foreign-investment-restrictions-in-tech-infrastructure-and-data/.

Moreover, every level of bilateral capital flow creates vulnerability to Chinese strategic influence. For example, with critical financial nodes tied to the CCP's economic development model, China can shape US, and international, incentives to prevent the connection between foreign capital and China's national security development from triggering logical, defensive responses. Or, putting this more broadly, US pools of capital that are tied to the Chinese domestic market may find themselves operating according to incentive structures that could be more likely to contradict US interests, policy, and regulatory requirements.

And at the most strategic level, China's integration with global capital markets also impacts its cost of empire, a potentially critical factor in today's great power competition: The Soviet Union's closed system created sunk costs and economic burden that ultimately weighed on the ruling regime's efficacy and survival. By contrast, capital integration – and the broader "State led, Enterprise driven" economic model refined by the CCP – may allow Beijing to enjoy modes of imperial expansion, and tactical control over populations, with a cost profile drastically different from other historical examples. For example, the CCP's control of its population – through means including, but not limited to, reproductive policy, patriotic education, propaganda, forced labor, and high-tech enabled monitoring and policing – stands to benefit from technological advance. If China is able to use cutting-edge technology to perfect and automate elements of its surveillance state, Beijing's overall cost structure will benefit from an economy of scale. If China is able to obtain such cutting-edge technology at least in part through integration into global private and public capital markets, it could in fact turn a profit in the process.

National Security Risks Associated with China's Industrial Policy

In this section, I will address elements of China's domestic industrial and security apparatus that provide examples of the risks that US capital flows to China can pose; namely those associated with the military-civil fusion system, government guidance funds, and other features of the State led, Enterprise driven industrial policy system in China. I raise these because they suggest areas in which US capital flows into China present particular risk – in that their investment targets support China's industrial policy priorities and national security objectives.

These examples are intended as the beginning of a prioritization framework to identify areas of greatest risk from US capital flows to China. Such a framework would have to account for, first, the nature of the investment target, according to a series of definitional dimensions:

- Connections to China's military-civil fusion program, government-led industrial policy, and human rights abuses;
- The purpose that the investment target serves within those (e.g., Does it act as an institutional coordinator? Does it collect or does it fuse and apply military-relevant technology?);
- The proximity of the investment target to Chinese government entities (e.g., is it Statebacked? State-owned?)

Second, the influence of actors involved on either side: For example, how much capital do they hold? Whose capital?

Third, the capital intensity of the investment – accounting for the significance of a given US investment to its target and the target's potential value as a military-civil fusion contributor.

Military-Civil Fusion and Industrial Layout

Military-civil fusion offers a useful framing for understanding the national security risks attendant with US capital investing in Chinese markets. Military-civil fusion is a Chinese strategy and corresponding institutional apparatus that fuses military and civilian actors, resources, and positioning for the sake of overarching national power. Hu Jintao introduced the concept of military-civil fusion in the 1990s, drawing on the long-standing CCP concept of "military civilian combination." At the end of 2007, the 17th Chinese People's Congress called formally for developing a strategy of "military-civil fusion with Chinese characteristics" in order to "adapt to the technological revolution and military change with Chinese characteristics." In 2015, Xi Jinping elevated military-civil fusion to national strategy. Military-civil fusion is not simply a theory: Its conceptual evolution has taken place alongside the development of practical processes, resource allocations, and outcomes.

Right now, US capital, wittingly or not, contributes to China's military-civil fusion program. Passively managed index funds commonly invested in by US persons and institutions have been reported to hold billions of dollars of equity in companies designated by DoD as Communist Chinese military companies – and targeted in a 2020 Executive Order meant to deter US investment into such companies. These index fund intermediaries draw capital from a range of US sources, including, in all likelihood, the retirement savings of many individuals here today. This means, first, that a US index fund, and by extension its investors, provide capital to China's military-civil fusion program. Second, the interests of that fund and its investors become tied to those of China's military-civil fusion apparatus: The return on investment of retirement savings might hinge to some degree on the growth of a Chinese military company.

Vanguard's Emerging Markets Stock Index fund offers an instructive example, and one that is common across other, similar investment vehicles that incorporate international equities within the framework of technology, growth, emerging market, and China-centric funds. There is a good chance your 401K or IRA is invested in this Vanguard index fund or one just like it. The fund has featured stakes in several companies designated by DoD as tied to the Chinese military, including the surveillance firm Hikvision.²⁴ The fund also invests into strategic and military-

²⁰ Emily de La Bruyere and Nathan Picarsic, "Military-Civil Fusion: China's Approach to R&D, Implications for Peacetime Competition, and Crafting a US Strategy," 2019 Naval Postgraduate School Acquisition Research Symposium, May 2019.

²¹ Zhu Heping [朱和平]. "National Security and National Defense Economic Development" [国家安全与国防经济发展], Huazhong Normal University, 2005.

²² National People's Congress Finance and Economics Committee, 军民融合发展战略研究 [*Military-Civil Fusion Development Strategy Research*]. Beijing: China Financial and Economic Publishing House, 2010.

²³ Alexandra Alper and Ross Kerber, "Limited impact seen from Trump investment ban on military-linked Chinese firms," *Reuters*, November 17, 2020, https://www.reuters.com/article/us-usa-china-securities/limited-impact-seen-from-trump-investment-ban-on-military-linked-chinese-firms-idUSKBN27X2BI?edition-redirect=in.

²⁴ "Semiannual Report: Vanguard Emerging Markets Stock Index," April 2020, https://advisors.vanguard.com/funds/reports/q5332.pdf.

relevant companies like those that provide Beijing a stranglehold over rare earth element extraction and processing globally. Vanguard's Emerging Markets Stock Index features Class A shares of one such player, China Northern Rare Earth Group High-Tech Co. Ltd. DoD has not designated any of China's rare earths players as Communist Chinese military companies. But it is clear that these actors support Chinese industrial policy and the military-civil fusion program.²⁵

The Vanguard fund also invests into less obvious military-civil fusion players. Take Lier Chemical, a global chemical company based in China that primarily develops and distributes pesticides and pharmaceutical and agricultural chemical intermediates. Lier's controlling shareholder is Sichuan Jiuyuan Investment Holding Group Co., Ltd. itself owned by the Chinese Academy of Engineering Physics (CAEP). CAEP, subordinate to the Ministry of Industry and Information Technology (MIIT), is a key research force behind China's nuclear weapons program. It also undertakes research on directed energy weapons. This is no secret: CAEP is on the US Entity List. Lier describes itself as a "military-to-civilian company" and receives subsidies for participation in national military-civil fusion projects. The company's website boasts of partnerships with Dow Chemical and sales into the US market.

US sources of capital investing into actors like Hikvision, China Northern Rare Earth, and Lier is counterproductive on any and every metric of importance in the context of long-term competition with China.

The US government has begun to take actions to redress this entanglement. Language in the fiscal year (FY) 2021 National Defense Authorization Act (NDAA) offered the beginnings of a framework for monitoring China's military-civil fusion contributors alongside efforts to document traditional military companies as mandated by the FY1999 NDAA. Section 1260H of the FY2021 NDAA calls for "Public reporting of Chinese military companies operating in the United States" and lays out an annual reporting process to be led by the Secretary of Defense. This section of the FY2021 NDAA defines military companies within the Chinese system as those owned by the "People's Liberation Army or any other organization subordinate to the

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²⁵ Timothy Puko, "U.S. Is Vulnerable to China's Dominance in Rare Earths, Report Finds," *The Wall Street Journal*, June 29, 2020, https://www.wsj.com/articles/u-s-is-vulnerable-to-chinas-dominance-in-rare-earths-report-finds-11593423003; for an additional dissection of the industrial policy system and firm-level decision making in rare earths, see Mary Hui, "A Chinese rare earths giant is building international alliances worldwide," *Quartz*, February 19, 2021, https://qz.com/1971108/chinese-rare-earths-giant-shenghe-is-building-global-alliances/.

²⁶ The company's website is caep-forever.com.cn

²⁷ "Chinese Academy of Engineering Physics," China Defence Universities Tracker, Australian Strategic Policy Institute. https://unitracker.aspi.org.au/universities/chinese-academy-of-engineering-physics

²⁸ "Addition of Certain Persons to the Entity List; Removal of Person From the Entity List Based on Removal Request; and Implementation of Entity List Annual Review Changes," Federal Register, September 19, 2012. https://www.federalregister.gov/documents/2012/09/19/2012-22952/addition-of-certain-persons-to-the-entity-list-removal-of-person-from-the-entity-list-based-on The DoD list even includes Panda Electronics Group, a State-owned electronics group that, as the Australian Strategic Policy Institute has documented, reports an address in the CAEP's Institute of Applied Physics and Computational Mathematics, indicating a possible link. "Chinese Academy of Engineering Physics," China Defence Universities Tracker, Australian Strategic Policy Institute. https://unitracker.aspi.org.au/universities/chinese-academy-of-engineering-physics

²⁹ 利尔化学 [Lier Chemical],

http://www.lierchem.com/index.php?module=content&controll=index&action=lists&catid=1.

Central Military Commission of the Chinese Communist Party" as well as those serving as "military-civil fusion contributor[s]." This mandate captures those companies already designated as Communist Chinese military companies. ³⁰ It also paves the way for the Department of Defense to continue its documentation and public listing process. And a November 2020 Executive Order (13959) demonstrated a way in which this process could be acted upon to address national security risks of capital: The EO restricts the ability of US persons, institutional and retail investors, from trading in equities of companies designated in the DoD process and establishes timelines on which US investors must divest of holdings in designated companies.

However, this NDAA tasking and framing are insufficient. First of all, the documentation effort does not resolve the capital entanglement between the US and China's military-civil fusion program. It does little good to document the ties of Hikvision and its parent, China Electronics Technology Group Corporation (CETC), to the PLA and China's military-civil fusion program if Goldman Sachs can continue to invest into their public equities.³¹ The US national security apparatus has a critical role to play in terms of providing information to other regulatory agencies and the private sector. But incentive structures and oversight processes must be built on top of this DoD documentation effort to impact capital flows. EO 13959 provides initial steps in that direction but will require clear and consistent implementation to deliver on its potential impact.

Second, the documentation effort led by DoD and supported by the interagency – including the Treasury Department which has a critical implementation role in EO 13959 – only captures the tip of the military-civil fusion iceberg. China's military-civil fusion apparatus is diverse and global. It is also not entirely transparent. Webs of linked entities often obscure ownership and connections to the military industrial complex in China and complicate the traditional US approach of entity-based investment and trade restrictions. The case of Vanguard, Lier, and CAEP bears this out. DoD's Communist Chinese military company list does not include CAEP – or actors like it that play critical roles as research institutes fusing civilian insight for military applications. Nor does the list include offshoots and investments, like Lier. These actors are able to engage globally, gathering capital to support their operations as well as legitimacy from global partnerships. Actors investing or working alongside them are not legally mandated to provide disclosures or implement due diligence measures that identify and mitigate against resources being directed toward military-relevant efforts. As a result, passively managed index funds freely incorporate elements of China's military-civil fusion program into their offerings, expanding the companies' access to capital, and also, in turn, linking incentives between everyday Americans and the military-civil fusion enterprise overseen by the Chinese Communist Party.

Fuel for the Fire: Government Guidance Funds and National Security Risks of Private Market Capital Flows

³⁰ This tasking originated in the 1999 NDAA; see: Larry Wortzel, "The Administration Must Name Chinese Defense Companies in the United States," Heritage, October 10, 2000, https://www.heritage.org/asia/report/the-administration-must-name-chinese-defense-companies-the-united-states.

³¹ Goldman Sachs became the tenth-largest shareholder in HikVision in the second quarter of 2020: Hikvision 2020 Half Year Report, https://www.hikvision.com/content/dam/hikvision/en/brochures/hikvision-financial-report/Hikvision-2020-Half-Year-Report.pdf; Goldman Sachs reportedly subsequently and they do not appear on the top ten shareholders in Hikvision's 3rd quarter report from 2020.

The military-civil fusion program offers a concrete example of the relationship between China's industrial policy and China's military and national security development. The program operates in parallel to a larger, diversified "State led, Enterprise driven" economic development program that prioritizes science and technology domains with a high degree of dual-use, military relevance.

Government guidance funds offer a ripe example of this larger program and the role of capital within it. Government guidance funds are meant to operationalize Chinese industrial policy, particularly that focused on fields prioritized as strategic emerging industries.³² As pools of central, provincial, and municipal government resources, these funds do not necessarily benefit directly from US capital entering into China. US index funds do not invest into government guidance funds. But Chinese government guidance funds do benefit from co-investing alongside and, in select cases, active management from US financial intermediaries.

SVB Capital, the private equity arm of Silicon Valley Bank, in 2009 launched a fund-of-funds and venture capital fund in China in partnership with Shanghai's Yangpu district government. Reporting at the time suggested that "people with knowledge of the deal between SVB Capital, a division of Santa Clara, Calif.-based SVB Financial, and Yangpu said that the agreement gives the firm access to one of China's guidance funds." SVB Capital, of course, serves as a critical node within the US investment ecosystem: The firm's website touts having investment connections to over 300 "unicorns" across fund strategies and "relationships with [approximately] more than 50% of all venture backed companies in the US." 34

Over the past 10 years, individual funds, capital under management, and investments placed by government guidance funds have grown steadily. The overlap between these Chinese government investment vehicles and US capital has grown as well. Prominent venture capital firms that raise funds from US limited partners, for example, frequently invest alongside Chinese guidance funds and policy funds – or alongside and into military and military-civil fusion contributors in China.

IDG Capital is an instructive example. IDG's limited partners include a vast set of traditional US limited partners, ranging from the Robert Wood Johnson Foundation to Texas public employee pension funds to the Children's Hospital of Philadelphia Master Trust. IDG's investment vehicles vary in their operating domicile with several legally registered in the Cayman Islands but noting related persons in Hong Kong and US-based addresses for general partners attached to specific securities offerings. IDG's investment track record in China is legendary: The firm's

³² Tianlei Huang, "Government-Guided Funds in China: Financing Vehicles for State Industrial Policy," Peterson Institute for International Economics, June 17, 2019, https://www.piie.com/blogs/china-economic-watch/government-guided-funds-china-financing-vehicles-state-industrial-policy.

³³ Jonathan Shieber, "SVB Capital Makes Deal in China for New Fund of Funds," *The Private Equity Analyst*, September 2009.

³⁴ "SVB Capital by the Numbers," https://www.svb.com/svb-capital.

³⁵ Hannah Reale, "The Big Picture: Who is IDG?," *WireChina* (citing PitchBook data), March 7, 2021, https://www.thewirechina.com/2021/03/07/who-is-idg-capital/.

³⁶ For a recent example, see SEC filings associated with IDG Breyer Capital Fund L.P.: https://sec.report/Document/0001780594-20-000001/; For discussion of an earlier fund, see Rolfe Winkler, "Jim

backing of Baidu and Tencent have likely generated fund- and career-making returns for IDG's limited partners. IDG's China track record has also brought exposure to actors like Qihoo 360, which has been designated by the US Department of Commerce for "activities contrary to the national security or foreign policy interests of the United States" and others like ASR Microelectronics that contribute to military-civil fusion programs in China. ASR Microelectronics, for example, counts Shanghai Pudong Science and Technology Investment Co., Ltd as another investor, Shanghai Pudong S&T operates a government guidance fund. This example is one of dozens of prominent US-based venture capital asset allocators that invest US-domiciled capital into and alongside the Chinese military-civil fusion ecosystem. The tally – and volume of capital under management – is higher when considering actors applying other private market investment strategies, like private equity, that fit a similar profile of being based in the United States, managing assets raised from US sources, and that have returns tethered to the success of the Chinese military-civil fusion ecosystem.

In a great power, peacetime competition, connections between US private market investment vehicles and China's government guidance funds could bolster Beijing's hand at the expense of that of the US – and at the expense of a US response. China's government guidance funds are designed to push capital toward Chinese government priorities, including both the military industry and science and technology development efforts. By co-investing with these funds, US entities are therefore deploying their capital in accordance with the ambitions of CCP industrial policy. These US entities are also linking their interests to the success of China's industrial policy – including its military and national security objectives.

At present, no legal mandate exists to compel US limited partners or US-domiciled general partners investing into private markets in China to provide transparency into transactions that may provide capital to either Chinese investors investing according to a State-mandate or Chinese operating companies that support the PLA or military-civil fusion system.

Recommendations

US systems for monitoring and taking defensive action are built on assumptions about the normative value of cooperative exchange, whether in finance or academic research. The competitively oriented Chinese Communist Party distorts these, including through weaponization of capital both into and out of China. The US government therefore faces a difficult task to

Breye and IDG Raise \$1B China Fund," *The Wall Street Journal*, July 12, 2016, https://www.wsj.com/articles/jimbreyer-and-idg-raise-1-billion-china-fund-1468324804.

³⁷ "Commerce Department to Add Two Dozen Chinese Companies with Ties to WMD and Military Activities to the Entity List," US Department of Commerce, May 22, 2020, https://www.commerce.gov/news/press-releases/2020/05/commerce-department-add-two-dozen-chinese-companies-ties-wmd-and.

³⁸ For discussion of one relevant example effort pursued in partnership with State-owned China Aerospace Science & Industry Corporation, see: "ASR 与航天科工通信技术研究院等达成合作意向,共同研发安全终端"半导体投资联盟, February 2, 2019.

³⁹ See the Crunchbase profile of ASR Microelectronics: https://www.crunchbase.com/organization/asr-microelectronics/.

⁴⁰ From public records, it is not readily discernible whether this particular investment was made by the Shanghai Pudong S&T's government guidance fund or from a separate investment vehicle managed by Shanghai Pudong S&T.

address the scope and direction of national security risks related to capital flows.⁴¹ And avenues for capital integration have expanded to realms with less transparency and regulation than was the case the last time the United States faced a nation-state, great power adversary in the context of a long-term, peacetime competition. As capital flows become increasingly integral in the robust, but fraught, trade and investment relationship between the US and China, security frameworks have to update.

The robust US-China economic relationship was facilitated in part by US policy. Congress debated and approved permanent normal trade relations (PNTR) for China in the run up to Beijing's accession to the World Trade Organization. The assumptions that supported US policy toward China then have proven faulty time and again. Market access, forced technology transfer, and financial information challenges persist due to consistent CCP pursuit of asymmetric advantage. At the same time, China's human rights track record reflects a number of violations of the Jackson-Vanik amendment to the Trade Act of 1974. Meanwhile, the military-civil fusion apparatus developed by the CCP delivers capital and technology to an increasingly assertive PLA that threatens US security and the interests of US allies and partners globally.

The US-China relationship has reached a point that requires strategic recalibration. Incremental measures and tactical responses will not adjust the asymmetric global positioning that Beijing has accrued over the past 20 years, including in capital flows.

The US Congress should be encouraged to openly debate China's permanent normal trade relations (PNTR) status in light of these realities.

In addition to actively debating fundamental assumptions about the US-China economic relationship, like PNTR, Congress would be well advised to embark upon funding and implementing reporting requirements geared toward documenting military-civil fusion contributors in China and the scope of US capital that supports them. Those efforts can take the shape of tasking to US executive agencies, like the FY2021 NDAA Section 1260H guidance, as well as legally mandated disclosure requirements promulgated by regulators like the Securities and Exchange Commission.

These actions should be coordinated with technology-focused measures, like export controls, and inbound investment screening, like that conducted through the CFIUS process. Outbound capital flows should be evaluated for national security restrictions where capital directly supports military and military-civil fusion outcomes in China. 42 Congress should be encouraged to consider whether novel legal and bureaucratic approaches are needed to coordinate monitoring of bilateral capital flows and related technology transfer risks.

⁴² A relevant framework for doing so has previously been advanced by Senator Robert Casey in the "National Critical Capabilities Defense Act of 2020" introduced in the Senate as S.5049 during the 116th Congress.

⁴¹ This assessment of the difficult task at hand holds even in terms of monitoring inbound foreign investment into the United States despite a longer track record and bureaucratic recognition of this threat vector. For a reference point on the need to update for the ability of inbound capital evading existing oversight mechanisms, see Heather Somerville, Government 'SWAT Team' Is Reviewing Past Startup Deals Tied to Chinese Investors," *The Wall Street Journal*, January 13, 2021, https://www.wsj.com/articles/government-swat-team-is-reviewing-past-startup-deals-tied-to-chinese-investors-11612094401.

And these approaches should be pursued in a multilateral fashion. The Coordinating Committee for Multilateral Export Controls (COCOM) was established in the wake of World War II to restrict technology flows to potential strategic competitors. Today we find ourselves at a new inflection point – and facing a new strategic competitor armed with new tools. A multilateral regime for sharing information about and imposing restrictions against capital and technology integration that carry national security risks is needed, just as COCOM was necessary in the early stages of the Cold War. Such a regime could be codified through regional and bilateral trade agreements and enforced or supported by multilateral security bodies, like NATO.

It should be noted that different types of Chinese firms and actors pose different threats. And the application of any new or revised defensive measures should be carefully constructed to remain consistent with free market ideals and US norms and values. For these reasons and because of the reality of resource constraints, the US government approach to monitoring the national security impact of capital flows should follow a transparent prioritization logic that assesses the importance of types of capital and technology as well as the risk profiles of particular types of Chinese actors. At the present moment, there is an argument to be made that US government monitoring and action should focus on actors that play a pivotal role in the *fusion* phases of military-civil fusion in China. Defusing military-civil fusion will make more efficient subsequent efforts to cut off the information collectors that feed into the military-civil fusion apparatus on the ground in China. Prohibiting US capital flows to these fusing actors in China – the applied research organizations and systems integrators of the Chinese military industrial complex – is a logical first step.

But it would be just that, a first step. A coordinated US policy ecosystem and one that works effectively through multilateral channels would better be positioned to more reliably address second-order targets than we are today. Those second-order targets would include actors that more squarely contribute to the CCP's military-civil fusion strategy as information collectors. Among the collection-focused enterprises, critical nodes, like those exemplified by CAEP's investment arm and actors tied to government guidance funds, stand out as examples that could be prioritized for enhanced scrutiny of their military ties.

Defining and measuring the scope of integration in capital flows is itself a monumental analytic task. That this task is presently not an explicit and public priority of a US national security or regulatory agency indicates the difficulty that the US government and public face in assessing and responding to national security risks that have emerged, and will continue to emerge, from capital integration. The US government should work to encourage necessary information collection and sharing on these risks. That information sharing can propel more strategic defensive actions placing restrictions on integration with particular Chinese actors through particular capital channels. At the same time, relevant US government authorities should define a new vision for public-private cooperation that can fill gaps that will be created by defensive, restrictive actions. Such a vision should shape investments and funding mechanisms, ranging from those overseen by a diverse set of relevant actors ranging from DARPA to the Appalachian Regional Commission (ARC), for an era likely to be defined by long-term, peacetime competition with China.

And government action – as an information collector and distributor and as an investor and resource allocator – should be conceived of and messaged as a necessary precursor for igniting the asymmetric advantage at the disposal of the United States vis-à-vis the PRC. The US private sector. Markets and firm-level decision-makers should begin to internalize and act on the costs associated with doing business with the Chinese military system. They should be instructed to develop internal due diligence mechanisms that meet or exceed reporting requirements related to overseas investments, joint ventures, co-production, and R&D and talent cooperation. And they should be incentivized with both carrots and sticks to contribute to the development of trusted ecosystems of exchange that protect against supporting the enemy's military modernization.