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Biden administration concerned about U.S. investments in Chinese tech companies with military or surveillance ties

By Ellen Nakashima and Jeanne Whalen

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Last year, a fast-rising artificial intelligence company in China won a little-noticed contract from a Chinese military academy to provide battlefield command software — technology that defense experts say could become part of the military's operational network.

A few months later, Goldman Sachs invested in the Beijing-based company, helping it raise $700 million, according to the company, 4Paradigm. So did Sequoia Capital China, a Chinese affiliate of the prominent Silicon Valley venture-capital firm, which markets funds that draw investment from U.S. university endowments and charitable trusts.

There was nothing illegal about those investments in 4Paradigm, a seven-year-old start-up whose foray into artificial intelligence has been so successful it is planning to go public in the coming weeks.

That's because while U.S. policy bars exports of technology with military applications to China and also forbids investment in a limited list of largely publicly-traded companies that the government says support China's military, Chinese companies not on the list are fair game for investors. And that means American capital may be flowing to a variety of companies developing artificial intelligence, semiconductors and other advanced technologies that experts fear could have military or surveillance applications as well as civilian uses — a type of technology known as "dual use."

That policy gap has begun to worry Biden administration officials — as well as some lawmakers and security experts — who fear that U.S. investment is supporting Chinese entities whose activities may undermine U.S. national security. They are also concerned that such investment could facilitate Beijing's quest to dominate emerging technologies, giving it an advantage at a time when the United States and China are increasingly engaged in economic and military competition.

"U.S. investments in Chinese technology-based companies pose a national security risk because so many of the critical technologies the U.S. military relies on are dual-use, such as AI, cyber, satellite imagery and the like," said Michael Brown, director of the Pentagon's Defense Innovation Unit, a Silicon Valley-headquartered organization focused on accelerating the adoption of leading commercial technologies by the U.S. military. "U.S. investments in these technologies developed in China fuel the [People's Liberation Army's] ability to gain a technology edge."

The White House has held senior and cabinet-level meetings on the issue, but has not developed a specific proposal, said officials, who spoke on the condition of anonymity to discuss internal deliberations. They added that any new authority would be narrowly tailored. Jake Sullivan, the country's national security adviser, noted in a July speech that the White House was assessing "the impact of outbound U.S. investment flows that could circumvent the spirit of export controls or otherwise enhance the technological capacity of our competitors in ways that harm our national security."

Some policy experts argue that the fundamental goal should be to stem the transfer of American technology, not of capital. China is not short of money and can survive without U.S. investment, they say. And if Americans don't invest, then others will — and will reap the benefits.

But U.S. officials say the issue is not just the flow of American wealth into Chinese firms but of prestige and expertise that is often more valuable than a loan from a Chinese state-owned bank. When a prominent venture capital fund invests in a Chinese start up, “it’s not just bringing 10 million dollars in cash,” a senior administration official said, speaking on the condition of anonymity because of the matter’s sensitivity. “It’s also bringing a validation to potential customers and employees, board and management expertise and a Rolodex of connections globally as the start-up tries to scale. That has a lot of value.”

China, the world’s second-largest economy, has attracted vast sums of American investment, especially over the past decade as its tech start-ups took off. The research firm Rhodium Group estimates that U.S. venture-capital investment in China soared between 2014 and 2018 to an annual peak of $22.3 billion, before dropping back to $3.9 billion in 2020 amid the coronavirus pandemic and a straining of economic ties between the two countries.

In some cases these investments have linked U.S. investors to China’s military, or to companies that the United States would later accuse of human-rights abuses through high-tech surveillance of Chinese minority groups in the Xinjiang region. Often the Chinese firms do not publicize such links.

4Paradigm, for instance, did not publicly announce the contract with the People’s Liberation Army Armored Forces Academy, a professional military educational institution for soldiers who drive tanks. It appeared on a PLA procurement database, which had been publicly accessible until earlier this year, when it was taken offline without explanation, according to the Center for Security and Emerging Technology, a Georgetown think tank that used the database as the foundation for a recent report on the Chinese military’s adoption of artificial intelligence systems.

The contract for “battalion command decision-making and human-machine teaming software,” as it reads translated from Chinese, was posted in the database in September 2020, said CSET research analyst Ryan Fedasiuk, the report’s lead author.

Fedasiuk found that of 273 AI equipment suppliers to the PLA identified in his study, just 8 percent were named in U.S. export control and sanctions lists.

“It’s clear there are large gaps in the U.S. export control system that allow the Chinese military to access equipment, information and capital originating in the United States,” Fedasiuk said. “But plugging these gaps is easier said than done.”

The 4Paradigm software could become part of the Chinese military battlefield network as the academy carries out research and develops new tools, said James Mulvenon, director of intelligence integration for SOS International, a defense and intelligence contractor.

The PLA is developing its operational battle network — what military officers often call a “command and control” network — in the belief that fully autonomous systems are not only possible but desirable, said Mulvenon, a PLA expert.

“They believe they can design them to have cognition superior to humans’ and to make decisions faster than the high-tech adversary, the United States,” Mulvenon said.

The Chinese Ministry of Defense did not respond to requests for comment from The Washington Post regarding the contracts with the Armored Forces Academy. Phone calls to the academy went unanswered.

A 4Paradigm spokesperson, Paula Pan, said in a statement that the company’s products are “designed and intended only for civilian uses.” The statement said that military provisioning in China requires specific licenses and the firm does not have such a license. Asked whether 4Paradigm was denying the existence of the contract with the PLA academy, Pan said, “we have nothing further to add beyond the statement.”

Mulvenon said he has known Chinese companies that have sold to the PLA without the requisite license. The government has stepped up its military modernization, tapping China’s expanding commercial base of non-state-owned companies that are developing the cutting edge technologies the military needs. That is part of China’s “military-civil fusion” approach, which President Xi Jinping elevated to a national strategy at the National People’s Congress of 2015.

Of 273 AI suppliers to the PLA studied by CSET, a majority — 61 percent — were private, and most were established within the last decade, Fedasiuk said.

[China’s test of hypersonic vehicle is part of a program to rapidly expand strategic and nuclear systems]

Following the normalization of diplomatic ties with China, the United States pursued a strategy of economic engagement that most assumed would lead to political liberalization. In the 1980s it granted China normal trade status and supported China's bid to join the World Trade Organization, which happened in 2001. The U.S. government encouraged investment in and trade with China. American corporate interests welcomed the cheaper labor and massive consumer markets China offered.

But over the last decade and in particular with the rise of Xi, it became clear that Beijing was not abandoning its state-controlled economy, was intensifying its authoritarianism, and was growing more hostile toward the West. As a result, investments that in earlier times may have looked smart or at least appeared to align with U.S. policy, were now starting to raise issues.

Sequoia Capital China also has invested in Eversec, a Chinese company that specializes in cyber threat detection and data mining. It made its first investment in the company in 2016, according to a person familiar with the matter who spoke on the condition of anonymity to describe nonpublic information.

On its website, Eversec notes its customers include the Ministry of Public Security, or national police, and the PLA Strategic Support Force, the military's space, cyber and electronic warfare force. One independent corporate intelligence site, the Paris-based Intelligence Online, reports that Eversec has worked with the Ministry of Public Security since at least 2011, and that in 2018 Eversec teamed up with Beihang University, one of seven major Chinese universities that collaborate closely with the PLA, to launch a content security research center.

Eversec last year won a contract to provide threat intelligence software to the Strategic Support Force's Information Engineering University, according to CSET, the Georgetown think tank. The software helps to detect malware and other indications of efforts to breach a computer network, Fedasiuk said.

Phone calls to the university went unanswered. Eversec did not reply to emailed requests for comment from The Post.

Sequoia Capital China spokeswoman Sindy Shi declined to answer questions about the investments in 4Paradigm and Eversec. Natalie Miyake, a spokeswoman for Sequoia Capital in Menlo Park, Calif., said Sequoia Capital China is a separate legal entity that makes its own investment decisions. However, as recently as late last month, Sequoia China's investments were listed on Sequoia Capital's website. They have since been consolidated on Sequoia China's website, which is linked to from the main site.

In filings with the Securities and Exchange Commission, Sequoia Capital China funds list their "principal place of business" as the Menlo Park address of Sequoia Capital. Miyake did not respond to a request from The Post to explain the matching addresses. The China funds must register with the SEC when they are seeking to raise money from U.S. investors, industry experts say.

The risks for U.S. investors have also surfaced in relation to companies that aid Chinese state surveillance.

In 2017 and 2018, media reports highlighted concerns about China using facial recognition in ways that raised privacy and human rights concerns. In May 2018, according to market data provider PitchBook, U.S. investors including Tiger Global Management, Glade Brook Capital Partners and the venture capital arm of U.S. semiconductor giant Qualcomm invested in SenseTime, a Chinese provider of AI and facial recognition technology. That investment round, which included other firms, raised $620 million for SenseTime, according to a company announcement.

The following year the U.S. Commerce Department added SenseTime to an export blacklist — called the “Entity List” — citing the alleged use of its technology in China’s repression and surveillance of Uyghurs and other ethnic minorities. SenseTime said then it was “deeply disappointed” by the move, and that it had developed an “AI code of ethics to ensure our technologies are used in a responsible way.”

Such blacklistings raise moral questions for investors about whether to divest. There are no laws or regulations requiring U.S. investors to sell shares in companies added to the Entity List. However, some venture firms on occasion have sold stakes in Chinese companies whose products might be used by the government in problematic ways, industry executives say.

Qualcomm divested the majority of its SenseTime shares in August 2020 because “the company’s investment model is to invest and then divest at a profit,” according to a person familiar with the matter. Qualcomm plans to divest the rest after the Chinese firm has gone public, when certain divestment restrictions expire, the person said, speaking on the condition of anonymity to describe nonpublic information.

On Friday, the Treasury Department added SenseTime to its list of Chinese companies barred from U.S. investment.

“We strongly oppose the designation and accusations that have been made in connection with it,” SenseTime spokesperson June Jin said. “The accusations are unfounded and reflect a fundamental misunderstanding of our company. We regret to have been caught in the middle of geopolitical disputes.”

Following Treasury’s move, SenseTime announced it was postponing a planned public offering in Hong Kong, but said it “remains committed to complete the global offering” soon.

Tiger Global Management declined to comment and Glade Brook Capital Partners didn’t respond to requests for comment from The Post.

The bipartisan U.S.-China Economic and Security Review Commission, which advises Congress, last month recommended that lawmakers strengthen investment restrictions on military- or surveillance-linked companies in China. U.S. investors "have a due diligence responsibility," said Jeffrey Fiedler, who sits on the commission. "They have to know what they are invested in, and they certainly have no excuse for not knowing."

But the governance issues are not easy, said Gary Rieschel, founding managing partner of Qiming Venture Partners, a venture capital firm launched in Shanghai in 2006.

Many venture firms invest in early stage companies that don't even have products or customers, said Rieschel, a former senior executive at Intel and Cisco Systems. For investments in later stage companies that have customers, a venture firm could seek to screen for links to, say, the Chinese government. "At this point, it's an investor-by-investor decision," he said. "Is the company engaging in activity that [a] particular investor finds problematic?"

The U.S. government could try to require such screening. "But how do you enforce it?" he said. "No [Chinese company] is going to give you their entire customer list — that would be viewed as confidential."

The issue, said Thilo Hanemann, a Rhodium Group partner with expertise on China, is that "global investors want to increase their exposure to China but currently they have no clear rules as to what is problematic or not" and many lack the tools to screen potential investments.

"It's easy to get tobacco companies out of your portfolio, but harder to identify companies or securities that may ultimately be linked to China's military modernization," he said.

U.S. exporters, by contrast, routinely screen potential clients in China, Russia, Venezuela and Myanmar for any indication that the client provides a product or service that supports the military, police or intelligence services, said Kevin Wolf, a former senior official at the Department of Commerce, who, as a partner at Akin Gump, provides such screenings.

At The Post's request, Wolf ran searches on 4Paradigm and Eversec using an Akin Gump tool that scours publicly available information online in English and Chinese. The results flagged the firms as "high risk," meaning that a client would be advised to inquire further before exporting to the company. If there is even a suspicion that the company in question has dealings with a military entity, Wolf said he would advise the client not to ship.

Many clients take precautions simply to avoid risk to reputation. "They'll never talk about it, but they have a policy that even if the law would permit it, they won't ship to certain companies," he said. "This is coming up in relation to Uyghur issues," he said, referring to China's repression of its Muslim minority in the Xinjiang region. Companies know that publicity around exports to firms linked to China's actions in Xinjiang could harm their image, he said.

4Paradigm has applied to Hong Kong's stock exchange for permission to carry out an initial public offering, with Goldman Sachs acting as a joint sponsor, according to a 4Paradigm filing in August with the exchange. Acting as a sponsor typically yields a lead underwriting role for a bank — and large commissions — if the IPO happens. As a sponsor, Goldman Sachs is lending its prestige and credibility to the endeavor, enhancing trust and interest in 4Paradigm, said Fiedler, the USCC commissioner who has served as a senior official with the American Federation of Labor and Congress of Industrial Organizations.

"Goldman is clearly doing the wrong thing involving itself with a company supplying the PLA," Fiedler said. "They seem to take comfort that it is not illegal to do business with them, but it is wrong on every other level."

Goldman Sachs spokeswoman Maeve DuVally declined to comment on the bank's investment in or work with 4Paradigm.

Some lawmakers are pressing for action. "When it comes to Chinese companies working to undermine U.S. national and economic security, there is no real difference between transferring American technology or investing American capital," said Sen. Marco Rubio (R-Fla.), one of several senators who have introduced bills to address the issue.

Lily Kuo in Taipei, and Douglas MacMillan and Alice Crites in Washington contributed to this report.