Thucydides cap on the China equity rebound trade: surging Chinese espionage changes equation for investors

People ask me about geopolitical risk a lot. Maybe they read publications like the Eurasia Group's 2017 "Geopolitical Recession", which included the following preposterous opening salvo: "This year marks the most volatile political risk environment in the postwar period, at least as important to global markets as the economic recession of 2008". Something tells me the Eurasia Group considers *every* year the most volatile political risk environment of the postwar period, but in any case: it was absurd to compare the market risks of 2017 to the 2008 recession, the worst global economic downturn since the Great Depression. How wrong was the Eurasia Group on the impact of geopolitics on markets? Global equity markets (MSCI World Equity index) were up 23% in 2017 with a daily annualized volatility of 5.6%, the lowest volatility figure on record since the inception of the index in 1972. Global equity markets are also up 150% since then.

I don't write about geopolitics often, mostly since it hasn't been a very useful signal for US equity investors. I've updated our investment signal analysis to show why. For each variable, we compute market returns when the variable shows a strong reading and when its reading is weak; the net of the two in the last column shows the benefit of perfect foresight. Over the last 25 years, the variables with the best predictive power for investors: payrolls, industrial production¹, leading indicators and financial conditions.

In contrast, a geopolitical risk index comes in close to the bottom and its sign is negative, indicating that it would have been counterproductive for investors to use it. This finding is consistent with other research we've published showing that of all postwar geopolitical events, only the 1973 Arab-Israeli war still affected global markets a few months later, mostly a reflection of the OPEC oil embargo at a time of US energy dependence and Nixon's wage & price controls.

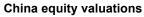
Net predictive return benefit by indicator

Strong positive signal Strong negative signal December 1998 - June 2023 S&P monthly return when S&P monthly return when Monthly return benefit from Investment horizon: 12 months following indicator* indicator percentile > 67 indicator percentile < 33 Payroll Growth 0.8% 0.3% 0.5% 0.5% Industrial production diffusion index 0.9% 0.5% 0.4% BLS % of businesses with rising employment 0.8% 0.4% 1.2% 0.7% 0.4% Leading Indicator Index 0.8% 0.4% National Financial Conditions Index 0.4% OECD US Business Confidence 0.8% 0.4% 0.3% Manufacturing Supplier Deliveries Index 1.0% 0.7% 0.3% Trailing 12-month profits growth 0.8% 0.5% 0.3% 0.2% ISM Manufacturing Survey 0.8% 0.6% 0.2% Industrial metals price change 0.8% 0.7% 0.2% Forward 12-month profits growth exp. 0.7% 0.5% -0.1% Geopolitical Risk Index 0.7% 0.6% -0.3% Small Business Optimism Index 0.8% 1.1% Economic Policy Uncertainty Index 1.0% 0.3% -0.7% Consumer Confidence 0.3% 1.1% -0.8%

Sources: JPMAM, Conference Board, BLS, BEA, NFIB, ISM, Chicago Fed, S&P, Boston College, Stanford. *Shading indicates variables for which rising values represent negative outcomes. Updated through June 2024

¹ The S&P 500 is much more of a production index than a consumption index: two-thirds of S&P 500 profits are from manufacturing, while two-thirds of consumption in GDP is services

In our prior Eye on the Market, I expressed optimism on China's package of monetary, fiscal, macro and regulatory reforms, particularly given how cheap Chinese equities had become in absolute and relative terms. The announcement prompted a rush back into Chinese equities: P/E multiples rose sharply and then retreated a bit. But I see Chinese equities as a "trade" and not an "investment", partly since China has the worst pass-through from GDP to earnings and equity returns among major markets. I also think there's a "Thucydides Cap" on how China high equity valuations can get...in other words, geopolitics may play a role here as well.





Pass-through from nominal GDP growth to corporate earnings

and	equity	market returns, 2010-2024
		Earnings growth

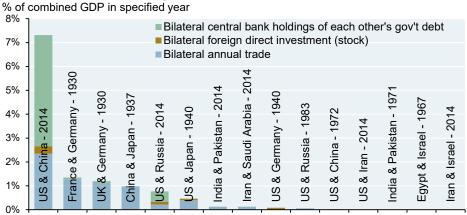
	Earnings growth		Market return
	multiple of GDP growth		multiple of GDP growth
US NASDAQ	3.0	US NASDAQ	4.7
US S&P 500	1.4	US S&P 500	2.3
France	1.2	Taiwan	1.5
Canada	1.2	France	1.4
Taiwan	1.0	Eurozone	1.2
Eurozone	1.0	Canada	0.9
UK	0.9	India	0.9
Australia	0.8	Korea	0.8
Brazil	0.7	UK	0.8
India	0.7	Australia	0.8
Korea	0.5	Brazil	0.4
China	0.4	China	0.3

Source: Bloomberg, JPMAM, 2024. Japan excluded due to declining GDP

The Thucydides Cap on the China equity rebound trade

In his 2017 book "Destined for War: Can America and China Escape the Thucydides Trap?", Graham Allison found 16 cases over the last 500 years in which a major nation's rise disrupted the dominant state; 12 ended in war and 4 did not. At the time the book was released, I received questions from clients on it. I was more optimistic than Allison, and countered with the chart below showing that the US and China are intertwined via bilateral central bank holdings, trade and foreign direct investment to a much greater degree than adversaries of the past. But as time passes, this argument seems less convincing to me; ongoing geopolitical tensions suggest that US investors in Chinese equities "take the money and run" once they achieve their target returns.

China and the US: much deeper economic linkages than actual and potential adversaries of the last 100 years



Source: JPMAM, UNCTAD, World Bank, UN, US Treasury, Baribieri/Keshk COW Trade data, US Trade Repr. Office, Setser (CFR), Bank of England, St. Louis Fed, Eichengreen (Berkeley), Howson (Princeton), East-West Center, O'Neil (CNA), Ritschl (LSE), Accominotti (LSE), Wilkins (FIU), Villa (CEPII). 2016.

Whether it's more bilateral tariffs², tighter semiconductor export policy³, more restrictions from the Committee on Foreign Investment in the US (CFIUS) or other policies, **geopolitics are more likely to negatively impact US investments in China in the years ahead than to surprise positively due to some kind of US-China detente.** The reason: the escalation in Chinese espionage activities outlined below may prompt increased sanctions, restrictions and retaliation by both countries. While President Xi stated this week that China is willing to be a partner and friend to the US and is still committed to peaceful coexistence, US politicians and voters may interpret its actions on the ground quite differently.

Consider the following:

- China is conducting espionage on an unprecedented scale. Last month, the FBI revealed that a Chinese state-linked firm hacked 260,000 internet-connected cameras, routers and other devices in the US and other Western nations. US officials have launched an effort to understand the consequences of the latest Chinese hack which compromised systems the US government uses for court-authorized network wiretapping requests after Verizon, AT&T and other broadband provider networks were breached⁴
- Chinese businesses are seen as inseparable from intelligence services. According to Harvard Kennedy School historian Calder Walton, Chinese businesses are required to work with its intelligence services whenever requested to do so, and these intelligence services are now "effectively silent partners in Chinese commerce with the outside world" 5
- Infrastructure and onsite espionage. Chinese "Volt Typhoon" hackers have hijacked hundreds of routers and used them to infiltrate US transport, telecom, water and electricity networks, and Chinese cargo cranes used at US ports had embedded technology that could allow Beijing to secretly control them. FBI Director Wray: "China's hackers are positioning on US infrastructure in preparation to wreak havoc and cause real-world harm to American citizens and communities, if and when China decides the time has come to strike" In some cases, Chinese hackers have had access to US infrastructure systems for five years
- Information theft. Other China hacks include the US Office of Personnel Management database (sensitive information obtained during high level government security clearances, exposing 22 million current and former officials to extortion), and a hack of Equifax with information on 150 million Americans⁷

The US is invoking the "foreign direct product rule": any chip manufacturing operation anywhere in the world that seeks to build high end Chinese chip designs will risk losing its access to US semiconductor manufacturing equipment. As a result, Chinese chip design companies will not be able to outsource manufacturing for advanced AI and supercomputing chips, and for the 28 Chinese organizations on the BIS Entity List, they will be blocked from outsourcing manufacturing of any chips at all. Almost every advanced semiconductor fabrication facility in the world is critically dependent on US technology companies for equipment, troubleshooting and repair

² **Tariffs**. The Biden administrated raised tariffs on Chinese EV batteries and battery components from 7.5% to 25%, increased tariffs on Chinese EVs from 25% to 100% and increased tariffs on Chinese solar cells to 50%. The US raised tariffs on steel/aluminum products as well, with further tariff increases on semiconductors and other medical supplies scheduled for the next year and a half

³ The new US semiconductor policy has 4 objectives: (1) impede China's AI industry by restricting access to high-end AI chips; (2) block China from designing AI chips domestically by cutting off China's access to US-made chip design software; (3) block China from manufacturing advanced chips by cutting off access to US-built semiconductor manufacturing equipment; and (4) block China from domestically producing semiconductor manufacturing equipment by cutting off access to US-built components

⁴ "Scale of Chinese spying overwhelms Western governments", WSJ, October 14, 2024

⁵ "China Has Been Waging a Decades-Long, All-Out Spy War", Calder Walton, Foreign Policy, March 2023

⁶ "Chinese hackers aim to wreak havoc on US critical infrastructure", NPR, January 31, 2024

⁷ "China's hacking spree will have a decades-long fallout: the data that China has amassed on US citizens will power its intelligence activities for a generation", Wired, February 11, 2020

- The view from the FBI. According to FBI Director Wray, the US opens a counterintelligence investigation into China every 12 hours: "China has made economic espionage a central component of its national strategy...China has a bigger hacking program than that of every other major nation combined, and has stolen more of Americans' personal and corporate data than every nation combined". The challenge: Chinabacked hackers outnumber FBI cyber personnel by 50-to-18
- Breadth of cyberattacks broadening. Chinese cyberattacks now target virtually every sector: healthcare, financial services, defense, energy, government facilities, chemical, critical manufacturing (including automotive and aerospace), communications, IT (including managed service providers), international trade, education, video gaming, faith-based organizations, and law firms⁹
- Recruitment of Chinese nationals at US military research institutions. Between 1987 and 2021, at least 162 Chinese scientists that had worked at Los Alamos (home to US military R&D on hypersonics, deep-earth penetrating warheads, unmanned autonomous vehicles and submarine noise reduction) returned to China to support its own military R&D¹⁰. Some of these scientists had been funded by US research grants
- IP theft and China 2025. According to the Dyadic Cyber Incident and Campaign Dataset (DCID), China is the world's most egregious actor in terms of cyber espionage targeting private firms and their intellectual property. Since 2000, China has been associated with 90 cyber espionage campaigns, 30% more than Russia. The actual number is likely higher and each instance sees multiple businesses targeted that overlap priority industries specified in China's "Made in China 2025" plan¹¹. One example: the Chinese hacking group APT41 which stole hundreds of gigabytes of intellectual property from over 100 US companies
- More on corporate espionage. A survey of CFOs estimated that 1 in 5 US corporations had their IP stolen¹². The challenge is greatest in startups, areas likely to see the greatest innovation linked to artificial intelligence and machine learning. At a recent gathering of US, UK, Australia Canada and New Zealand security chiefs, the head of the UK MI5 stated that China has been engaging in sustained espionage on "an epic scale", contacting over 20,000 UK individuals online including those at companies linked to military supply chains¹³
- Military espionage. Chinese hackers were caught stealing designs for cutting-edge military aircraft in 2016; today, many Chinese airpower systems share remarkable similarities with US platforms such as the F-16, F-22 and F-35 fighters, the MQ-9 Reaper drone and the C-17 Globemaster III. Beyond aircraft, China has also stolen information on the Patriot missile system, the Littoral Combat Ship, nanotechnology, directed energy systems, space surveillance telescopes, tactical data links and drone video systems, all of which Chinese hackers reached through networks of private defense companies working with the Pentagon¹⁴
- Doing business in China. Even Chinese companies that are not state-owned enterprises are in practice subject to laws that compel them to provide open access and information to the Chinese government. Foreign companies in joint ventures are required to allow Communist Party cells to be established inside them, enabling theft of technology, IP and data through the worldwide reach of the company's networks¹⁵

⁸ Foreign Policy, WSJ, Georgetown Security Studies Review

⁹ US Congressional Committee on Oversight and Accountability, May 6, 2024

¹⁰ "The Los Alamos Club: How the People's Republic of China Recruited Leading Scientists from Los Alamos National Laboratory to Advance Its Military Programs", Strider Technologies, 2022

¹¹ "How the Chinese Communist Party Uses Cyber Espionage to Undermine the US Economy", Congressional testimony by Ben Jensen from CSIS, October 2023

^{12 &}quot;1 in 5 Corporations Say China has Stolen their IP Within the Last Year: CNBC CFO Survey", CNBC, March 2019

¹³ "MI5 head warns of epic scale of Chinese espionage", BBC, October 17, 2023. I enjoy Slow Horses a lot, but its preposterous plotlines are hard to follow. The espionage challenges from China would be more realistic

¹⁴ Georgetown Security Studies Review, January 17, 2024

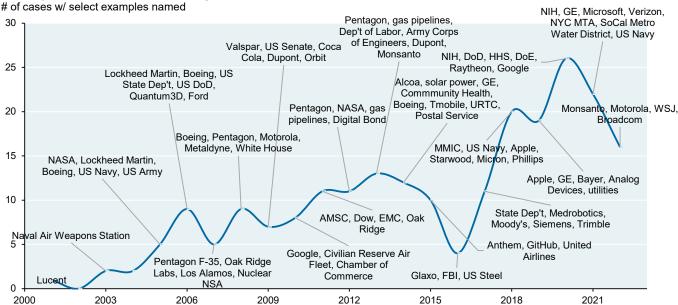
¹⁵ Ibid

High profile China espionage cases. CSIS compiled data on high profile Chinese espionage conducted against US entities based on open-source materials. CSIS analysts believe the true number of espionage incidents is much higher, and also state that the figures exclude Chinese smuggling of munitions or controlled technologies. I have added some of the more notable examples cited by CSIS on the chart below. Note the dip after the 2015 agreement between President Obama and President Xi to restrict commercial espionage by government entities. The decline was quickly reversed within a year of the agreement

Bottom line: if/when you book profits on the China equity market rebound, as Steve Miller said in 1976, take the money and run. Geopolitics will probably cap your upside¹⁶.

Michael Cembalest
JP Morgan Asset Management

Publicly reported Chinese espionage incidents sourced from open source materials



Source: Center for Strategic and International Studies, 2023

¹⁶ We have not even begun to discuss potential market implications of China's latest military drills with respect to Taiwan as reported in the NYT ("With Jets and Ships, China is Honing its Ability to Choke Taiwan", 10/16/2024) and WSJ ("China Test Drives a Taiwan Blockade", 10/16/2024). China employed a record 125 aircraft in these drills as well as its Liaoning aircraft carrier and ships, simulating the sealing off of key ports

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