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U.S. Investors' Exposure to Domestic Chinese Issuers[1]

Introduction

More than 150 China-based companies with a combined market value of $1.2 trillion[2] were listed on U.S. stock exchanges at the end of 2019. As more China-based companies have listed in the U.S., there has been growing concern about the lack of transparency into accounting and governance standards of Chinese firms, which policymakers and certain market participants have warned put U.S. investors at increased risk because of the inability of the Public Company Accounting Oversight Board (PCAOB) to inspect audit work and practices of PCAOB-registered auditing firms in China (including Hong Kong-based audit firms, to the extent their audit clients have operations in mainland China) with respect to their audit work of U.S.-listed companies with operations in China.[3]

Policymakers and market participants are discussing how to address these issues.[4] This note highlights an important area for those policy discussions: the increasing exposure of U.S. investors to the Chinese *domestic* issuer market. Compared with China-based companies listed in the U.S., Chinese domestic companies present potentially greater risks. The domestic Chinese financial markets have historically not been very accessible to non-Chinese investors, but that is changing, with accessibility increasing for, among others, U.S. investors. Over the past two years, providers of global financial market indexes have increased the weight on those indexes of Chinese domestic stocks and bonds. Accordingly, U.S. investors holding shares in investment products that track those global indexes are now increasingly holding Chinese domestic stocks and domestic bonds. Other than passive index investors, active fund managers, including pension funds and private funds, may also have access to Chinese domestic securities. U.S. investors, and especially U.S. retail investors, might not be fully aware of these increased weightings or how such changes may be substantively changing the risk profiles of their international investments. In addition to the risks regarding an inability to conduct due diligence to verify the soundness of accounting and governance standards noted above, the design and control of the Chinese financial market by Chinese

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[1] This is a spotlight by the staff of the Division of Economic and Risk Analysis (DERA) of the U.S. Securities and Exchange Commission (Commission). The Commission, as a matter of policy, disclaims responsibility for any private publication or statement of any of its employees. The views expressed herein are those of DERA staff and do not necessarily reflect the views of the Commission or other members of the Commission staff.
[2] Some of those listed companies are very large. For example, Alibaba Group Holding Ltd (BABA.N), Baidu Inc. (BIDU.O) and JD.com Inc. (JD.O), have a combined U. S. market capitalization of more than $500 billion (https://www.uscc.gov/sites/default/files/Chinese%20Companies%20on%20U.S.%20Stock%20Exchanges.pdf).
[3] Critics have also argued that China-based companies listed in the U.S. have an unfair advantage compared with U.S. corporations as they *de facto* circumvent the accounting and governance standards to which U.S. corporations are subject. *See*, e.g., https://www.cnbc.com/2020/04/03/luckin-coffee-debacle-is-a-painful-reminder-of-fraud-risk.html and https://www.realclearpolitics.com/articles/2019/10/19/why_are_american_investors_funding_chinese_fraud_141540.html and https://tax.thomsonreuters.com/news/president-trump-criticizes-chinese-firms-refusal-to-follow-audit-rules-seeks-solutions/ As of April 2020, out of the 269 unique issuers that PCAOB identifies on its website as being public companies whose PCAOB-registered auditor is located in a jurisdiction having obstacles to PCAOB inspections, 239 have auditors based in mainland China or Hong Kong (https://pcaobus.org/International/Inspections/Pages/IssuerClientsWithoutAccess.aspx).
[4] *See, e.g.,* https://www.sec.gov/news/public-statement/emerging-market-investments-disclosure-reporting.

authorities creates a series of potential concerns for U.S. investors related to disclosure, liquidity, volatility, fraud, and risk management. This risk spotlight sheds light and provides data on the exposure of U.S. investors to Chinese domestic markets.

U.S. Investors' Exposure to A Shares and Domestic Bonds

Companies that are incorporated in China can issue three different classes of shares: *A Shares*, *B Shares*, and *H Shares*.[5] A Shares are listed on either the Shanghai or Shenzhen stock exchanges and are traded in renminbi (CNY). B Shares are listed on the Shanghai stock exchange and are traded in U.S. dollars (USD), or they are listed on the Shenzhen stock exchange and are traded in Hong Kong dollars (HKD). H Shares are listed on the Hong Kong exchange and are traded in Hong Kong dollars (HKD).[6]

U.S. investors have always been permitted to purchase and sell B Shares and H Shares, but A Shares were limited to mainland Chinese investors until the launching of the Qualified Foreign Institutional Investor (QFII) program in 2002.[7] Controls on A Shares have been periodically relaxed since the launch of QFII, including the 2014 introduction of the Stock Connect and the Bond Connect trading programs that permit two-way trading between Hong Kong and China.[8]

As the Chinese domestic financial market became more accessible to foreigners in recent years, providers of global financial market indexes started to increase the weight of Chinese markets in some of their indexes.[9] For example, as of June 2020 all three major equity index providers (MSCI, FTSE, and S&P) have included A Shares in their emerging markets indexes. Between May and November 2019, the MSCI Emerging Markets index increased its coverage of A shares listed on the Shanghai and Shenzhen stock exchanges from 5% to 20%, and as of November 2019 its resulting overall index weight in A Shares became approximately 4%.[10] By adding A Shares, the MSCI Emerging Markets index weight on China rose from about 28% to about 33%.[11] Other indexes beyond these three have also started to include A Shares, with different degrees of weights depending on their geographical focus and/or risk profile.

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[5] Shares in Chinese companies that are incorporated and listed outside of China are referred to by other names, including *Red Chips*, *P Chips*, *S Chips*, *N Shares*, *L Shares*, and *G Shares*. In prior years, U.S. investors who wanted exposure to China got it by investing in N Shares or American Depositary Receipts, both of which trade on U.S. exchanges. See https://research.ftserussell.com/products/downloads/Guide_to_Chinese_Share_Classes.pdf

[6] Before 19 February 2001, domestic Chinese citizens were prohibited from trading B Shares. See http://www.lehmanlaw.com/resource-centre/faqs/securities/what-are-b-shares.html

[7] See http://www.szse.cn/enqfii/aboutqfii/

[8] The QFII program's initial capital controls have been relaxed over the years, and the quotas were removed on 07 May 2020. See https://www.safe.gov.cn/en/2020/0507/1677.html, https://www.law360.com/articles/1279403/china-s-relaxed-financial-sector-may-aid-foreign-investors. See also https://www.hkex.com.hk/Mutual-Market/Stock-Connect?sc_lang=en and https://www.marketwatch.com/story/heres-what-investors-need-to-know-about-mscis-inclusion-of-china-a-shares-in-its-indexes-2018-05-31

[9] "How China Pressured MSCI to Add Its Market to Major Benchmark", https://www.wsj.com/articles/how-china-pressured-msci-to-add-its-market-to-major-benchmark-11549195201

[10] *Inclusion* is different from *weight*. The former is the proportion of Chinese stocks that is included in the index, while the latter is the proportion of the overall index that is based on Chinese securities.

[11] See Panel A of Table 1 for the corresponding statistics for the FTSE Emerging Index and the S&P Emerging BMI.

Foreign investors also have easy access to certain parts of the fixed income markets in China thanks to the inclusion of Chinese sovereign and policy bank bonds[12] by some major global financial market indexes. Chinese corporate bonds and other types of bonds[13] are also available through QFII or Bond Connect. Panel B of Table 1 reports statistics for select indexes that include Chinese domestic bonds (hereafter, *Domestic Bonds*).

Table 1. Selected Global Indexes' Weights on A Shares and Domestic Bonds

Panel A. A Shares			
Index	**Inclusion Process**	**Stock Inclusion Change**	**New Weight of A Shares**
MSCI Emerging Markets[a]	May 2019 - Nov 2019	from 5% to 20%	4%
FTSE Emerging Index[b]	Jun 2019 - Jun 2020	from 0 to 25%	5.4%
S&P Emerging BMI[c]	Sept 2019	from 0 to 25%	5.5%
Panel B. Domestic Bonds			
Index	**Inclusion Process**	**Securities Type/Quantity**	**New Weight of Domestic Bonds**
Bloomberg Barclays Global Aggregate Index[d]	Apr 2019 - Nov 2020	386 Chinese government and policy bank bonds	from 0 to 5.5%
JPM GBI-EM Global Diversified[e]	Feb 2020 - Nov 2020	9 Chinese sovereign bonds	from 0 to 10%
FTSE Government Bond Index (WGBI)[f]	Inclusion decision expected in Sept 2020[g]	Unknown number of Chinese sovereign bonds	from 0 to 6% (expected)

a: https://www.msci.com/www/blog-posts/emerging-markets-since-china-a/01662775315
b: https://www.ftserussell.com/blogs/china-shares-inclusion-seven-key-points
c: https://www.indexologyblog.com/2019/03/28/are-you-ready-for-china-a-share-inclusion/
d: https://www.bloomberg.com/company/press/bloomberg-add-china-bloomberg-barclays-global-aggregate-indices/
e: https://www.reuters.com/article/china-markets-bonds/update-2-jpmorgan-adds-china-to-emerging-bond-index-from-february-2020-idUSL5N25V3F4
f: https://markets.jpmorgan.com/research/email/fhqgi299/EVQJuomMYOQFhWtrQNiDkA/GPS-3120982-0#research-document-GPS-3120982--section_16
g: FTSE Russell would keep China on its watch list until a planned review in September 2020.
https://research.ftserussell.com/products/downloads/Fixed_Income_Country_Classification_March_2020_Results.pdf

In Table 2, we estimate the dollar exposure of U.S. mutual funds to A Shares and Domestic Bonds. We identify $43.5 billion of these securities held across 664 funds at the end of April 2020, out of which there were $37.2 billion in A Shares and $6.3 billion in Domestic Bonds. This dollar exposure will likely increase as A Shares and Domestic Bonds are included in more global indexes in the coming months and years.

Table 3 reports our estimated 2020 year-end size of U.S. mutual funds' investments in A Shares (Panel A) and Domestic Bonds (Panel B). Our estimates are simply the product of current fund size (as of April 2020) and the expected year-end index weights of the index chosen by the fund as its benchmark.[14] These figures are imprecise for several reasons. First, we include only funds that use as their benchmarks

[12] Policy bank refers to China Development Bank, the Agricultural Development Bank of China, and the Export-Import Bank of China, see e.g. http://www.chinadaily.com.cn/a/201909/11/WS5d788406a310cf3e3556afaa.html
[13] Other bond types available through Bond Connect include Negotiable Certificate Deposit (NCD), asset-backed security (ABS), etc, see https://www.chinabondconnect.com/en/Primary/Primary-Information/Onshore.html
[14] For example, a $100 million fund that tracks an index that has an expected 5% weight at the end of 2020 will have a projected exposure of $5 million. The expected year-end index weights used in our estimates are either what the equity index providers have implemented, or the weights announced by the relevant bond index providers (Bloomberg and JP Morgan) or market expectation (FTSE Russell).

certain indexes from the six index providers listed in the table. Second, the index providers might not implement the changes that they have announced. Third, mutual funds might not allocate their Chinese investments in the same proportion as the index.

Table 2. U.S. Mutual Funds' Current Exposure to A Shares and Domestic Bonds

Security	# of U.S. Funds	AUM ($ billion)	Exposure ($ billion)
A Shares	586	2,477	37.2
Domestic Bonds	95	673	6.3
Total	664	2,959	43.5

Source: Morningstar holdings reported at the end of April 2020 and DERA staff calculations. The exposure is based on holdings tagged by Morningstar as Chinese and traded in local currency only. (A Shares trade in renminbi.) Funds' AUM is computed adding long and short positions to retrieve gross exposure. The sum of number of funds and assets under management (AUM) across A Shares and Domestic Bonds does not add up to the total because some funds have exposures to both A Shares and Domestic Bonds.

Table 3. U.S. Mutual Funds' Estimated 2020 Year-End Exposure to A Shares and Domestic Bonds via Selected Indexes

Panel A. Exposure to A Shares			
Index	# of US Funds	AUM ($ billion)	Exposure ($ billion)
MSCI[a]	1,179	1,851	27.6
FTSE Russell[b]	25	492	10.4
S&P[c]	72	62.7	0.9
TOTAL	1,277	2,346	38.9
Panel B. Exposure to Domestic Bonds			
Index	# of US Funds	AUM ($ billion)	Exposure ($ billion)
Bloomberg Barclays Global[e]	95	114.0	7.4
JPM GBI-EM[f]	34	15.9	1.6
FTSE WGBI[g]	47	110.4	6.9
TOTAL	176	240.4	15.8

Source: Morningstar Direct data reported at the end of October 2019, and DERA staff calculations.
a: Expected weights of A Shares in different MSCI indexes are as follow: ACWI = 0.4%, ACWI ex US = 0.9%, EM = 4%, Asia Pacific = 2.5%, Asia ex Japan = 4.0%, Golden Dragon = 7.4%, China All = 10.3%, China A = 100%.
b: Expected weights of A Shares in different FTSE Russel indexes are as follow: Global (All World) = 0.6%, Global ex US = 1.3%, EM = 5.4%, EM All cap = 5.7%, China All = 15%, China A = 100%.
c: Expected weights of China A shares in different S&P indexes are as follow: Global (BMI or property) = 0.6%, Global ex US = 1.3%, Emerging BMI = 5.5%, China (Total China or BMI or 500) = 15.1%.
e: Expected weight in Bloomberg Barclays Global Aggregate = 5%, Bloomberg Barclays Global Aggregate Ex US = 9%.
f: Expected weight in JPM GBI-EM Global Diversified = 10%.
g: Expected weight in FTSE World Government Bond Index = 6%. (The following indexes included China in 2017, but no funds are currently following them: 52.6% in the FTSE EMGBI, 10.0% in the EMGBI-Capped, 58.9% in AGBI and 20.0% in AGBI-Capped)

By the end of 2020, we estimate that there will be $38.9 billion of investment in A Shares across the three major equity indexes (Panel A). We also estimate that there will be $15.8 billion of U.S. mutual funds' exposure to the Domestic Bond market via Bloomberg, JP Morgan, and FTSE global market indexes (Panel B). The IMF estimates that the expected inclusion of Chinese domestic securities into major global indexes will generate up to $450 billion net inflow into the Chinese economy, which equals 3 to 4 % of China's GDP, in the next two years.[15]

In addition to mutual funds, there are a number of other large U.S. investors that might look to global financial market indexes when making investment decisions, including public and private pension funds, endowments, foundations, and hedge funds. For example, the Federal Thrift Retirement Investment Board (FTRIB) that oversees retirement savings for U.S. government employees voted last year to change the benchmark index on one of its large funds from an index that excludes A Shares to one that includes A Shares[16], though implementation of that decision has since been delayed.[17]

As shown in the Appendix, out of the ten largest state level public U.S. pensions, we identify that nine have allocated some of their funds to track one or more benchmark indexes that have exposure to A Shares (mainly MSCI indexes with A Shares exposure) or their investments include holding A Shares directly. For one of the pension funds we examined, such information is not available, based on the latest financial reports of these funds.[18] As of September 2019, the federally administrated Pension Benefit Guaranty Corp. (PBGC)'s portfolio includes a sizable emerging market allocation that has exposure to A Shares because that allocation tracks the MSCI Emerging Market Index.[19] Other public pension funds may also have exposure to Chinese companies via investments in venture capital funds that invest in A Shares.[20]

Risks of Investing in A Shares and Domestic Bonds

Various market participants have identified certain heightened risks associated with investing in A Shares and Domestic Bonds, including the following:

Fraud. Fraud is a commonly expressed concern with respect to Chinese firms, whether incorporated inside or outside China. With frequent government intervention and limits on credible standards in corporate governance, the risk of insider dealings, market manipulation and other misconduct increases.[21]

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[15] https://blogs.imf.org/2019/06/19/china-deepens-global-finance-links-as-it-joins-benchmark-indexes/

[16] https://www.msci.com/documents/1296102/12275477/China_A_Further_Weight_Increase_Feb_2019_Presentation.pdf and https://www.msci.com/documents/10199/822e3d18-16fb-4d23-9295-11bc9e07b8ba

[17] https://www.tsp.gov/whatsnew/Content/index.html#ifundDefer

[18] The ten largest state public pension funds that we examined are as follows (2018 AUM in parentheses): California Public Employees' Retirement System ($376 billion), California State Teachers Retirement System ($230 billion), New York State Common Retirement Fund ($213 billion), Florida State Board of Administration ($175 billion), Texas Teachers Retirement System ($153 billion), New York State Teachers Retirement System ($122 billion), Wisconsin Investment Board ($114 billion), Washington State Board ($112 billion), North Carolina Retirement Systems ($111 billion) and Ohio Public Employees Retirement System ($101 billion). Source of the pension funds' AUM: https://www.thinkingaheadinstitute.org/en/Library/Public/Research-and-Ideas/2019/09/P_I_300_2019_research_paper

[19] About a quarter of PBGC's International Public Stock fund, which accounts for 9.6% of its total AUM of $119 billion, tracks MSCI EM, see https://www.pbgc.gov/sites/default/files/pbgc-fy-2019-annual-report.pdf

[20] "U.S. Teachers and Firefighters Are Funding Rise of China Tech Firms," https://www.bloomberg.com/graphics/2019-china-tech-money-threatened-by-trade-war/

[21] https://www.realclearpolitics.com/articles/2019/10/19/why_are_american_investors_funding_chinese_fraud_141540.html, https://www.wsj.com/articles/that-calm-chinese-stock-market-its-engineered-by-the-government-1527775089 and https://www.cnbc.com/2018/09/11/chinas-stock-market-is-still-immature-so-volatility-is-to-be-expected-former-pboc-governor-says.html

Default Risk. China's debt ratios are steadily increasing. Its non-financial debt-to-GDP ratio rose from approximately 150% in 2008 to approximately 250% in September 2018.[22] With the recent slowdown in economic growth, this material debt load poses an increased default risk. Over the last two years, China reached back-to-back record years of bond defaults with the 2019 level ($18.6 billion) being four times higher than the 2017 level. Defaults are concentrated among privately owned enterprises, which are facing tightening in credit conditions and lower levels of government support. The default rate on bonds was over 4% in the first 11 months of 2019, up from 0.8% in 2017.[23]

Volatility. Compared with the U.S. equity market, which with the size of mutual funds and ETFs is largely an institutional market, the mainland Chinese equity market is dominated by retail investors who account for over 80% of the trading volume.[24] These investors tend to have shorter holding periods for their investments and are more likely to respond to short-term price movements than institutional investors. The different nature of China's investor base, along with the underlying riskier nature of Chinese issuers, is viewed as having contributed to trading activity that, in turn, led to episodes of high volatility in the Shanghai and Shenzhen markets, especially during market stress.[25, 26]

Corporate Incentives. Article 19 of China's Corporate Law stipulates that "In companies, Communist Party organizations shall…be set up to carry out activities of the Party."[27] Thus, Chinese companies' priorities may be different from those of U.S. shareholders. As an example cited by market participants, the Industrial and Commercial Bank of China (ICBC), which is the world's largest bank in terms of total assets and is included in the MSCI Emerging Market Index, deployed $430 million (RMB 3 billion) to shore up the Bank of Jinzhou in response to governmental direction. ICBC's investor announcement regarding this transaction provided only a very brief and general explanation for the investment.[28]

Lack of Transparency in Bond Markets. Bond ratings in China have been characterized as systematically skewed upward, reflecting both minimum rating requirements for issuance and implicit guarantees. More than 80 percent of all Chinese bond issuers are rated AA and above.[29] Many accounting or market practices with respect to bond issuers are not in line with international standards. For example,

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[22] https://www.internationalinvestment.net/opinion/4001647/china-debt
[23] https://www.ft.com/content/068a83e0-27a7-11ea-9305-4234e74b0ef3 and https://www.reuters.com/article/china-markets-default/chinas-private-firms-face-record-default-risk-to-stay-high-in-2020-fitch-idUKL4N28K1YM
[24] In terms of size, the China equity market remains relatively small at only 46.5% of GDP, compared with over 100% of GDP for most developed economies (https://cammackretirement.com/knowledge-center/insights/china-a-shares-the-implications-for-u-s-investors and https://www.ceicdata.com/en/indicator/china/equity-market-index).
[25] *See*, e.g., https://blog.alliancebernstein.com/library/will-china-export-volatility-as-equity-markets-open, https://www.cnbc.com/2015/07/02/why-are-chinas-stock-markets-so-volatile.html, https://www.cnbc.com/2018/09/11/chinas-stock-market-is-still-immature-so-volatility-is-to-be-expected-former-pboc-governor-says.html
[26] DERA staff calculations show that the daily price volatility on the Chinese stock markets has been higher than that for other Asian markets over the last 5, 10, 15 and 20 years. Moreover, using data from the last nine years, the *CBOE China ETF Volatility Index* had a standard deviation of 6.7, while the S&P500-based *CBOE VIX* had a standard deviation of 5.3.
[27] See https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/92643/108008/F-186401967/CHN92643 Eng.pdf
[28] "China's Banking Sector Risks and Implications for the U.S.," staff report by U.S.-China Economic and Security Review Commission. (https://www.uscc.gov/research/chinas-banking-sector-risks-and-implications-united-states)
[29] See https://www.wsj.com/articles/s-p-rating-is-landmark-for-chinese-bond-market-11562835842

firms that appear stable or growing may in reality be exposed to large, undisclosed risks. Without access to accurate market and accounting information, investors are limited in their ability to accurately assess asset values.

Lack of Hedging Tools. Regulatory constraints, capital requirements, and operational costs are among the reasons few hedging products are currently available to investors wanting to protect against downside risk in the Chinese market. The lack of a Chinese stock-index futures market that covers medium and small-cap stocks is particularly problematic for foreign investors seeking to protect their positions. Given that the Chinese government concluded that much of the 2015 market turmoil was due to derivative products,[30] it is an open question as to whether developments are forthcoming in this regard.

Macroeconomic Shocks. Other than the long-term inherent risks in China's financial system, there are also economic shocks that may interrupt China's (and sometimes the global) economy, like the COVID-19 pandemic. Given the country's large, low-income population with limited purchasing power,[31] and a growth model that relies heavily on fixed investments and exporting,[32] the economic impact of global macroeconomic shocks can have more significant consequence for the Chinese economy and its domestic financial market and capital flow than for those of other countries.[33]

National Security Risk. The increasing exposures of U.S. investors to Chinese financial markets that are intertwined with the Chinese government's political agenda has raised national security questions for the U.S.[34,35] For example, certain domestic Chinese companies are included in global financial market indexes, despite being directly involved in activities contrary to U.S. interests. Table 4 reports Chinese companies that are in the MSCI China A Index and that are also either in the U.S. government's *Entity List* or have been designated as a "national security threat" by certain U.S. agencies. Companies on the Entity List are deemed to have been "acting contrary to the national security or foreign policy interests of the United States" or are a "threat to the national security of the U.S."[36] Despite official U.S. policies banning

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30 https://www.bloomberg.com/opinion/articles/2019-12-01/msci-raises-bar-on-china-stocks-under-increased-u-s-criticism

31 "600 million Chinese earn 1,000 RMB a month — so are the Chinese rich or poor?", https://www.thinkchina.sg/600-million-chinese-earn-1000-rmb-month-so-are-chinese-rich-or-poor

32 https://www.imf.org/en/News/Articles/2017/08/09/NA081517-China-Economic-Outlook-in-Six-Charts

33 https://www.iif.com/Portals/0/Files/content/1_IIF_Capital%20Flows%20Tracker_April.pdf

34 *See*, e.g. "The emergence of China, Inc.: behind and beyond the trade war" (https://www.researchgate.net/publication/341357034_The_emergence_of_China_Inc_behind_and_beyond_the_trade_war), "Congress Urged to Block Certain Chinese Investments in the U.S." (https://www.pillsburylaw.com/en/news-and-insights/congress-urged-to-block-certain-chinese-investments-in-the-u-s.html), and "How China's Economic Aggression Threatens the Technologies and Intellectual Property of the United States and the World" (page 11, https://www.whitehouse.gov/wp-content/uploads/2018/06/FINAL-China-Technology-Report-6.18.18-PDF.pdf)

35 The China Securities Regulatory Commission requires listed companies to "set up Chinese Communist Party and carry out Party activities." Furthermore, China's 2017 National Intelligence Law states that any organization shall support and cooperate with state intelligence and that the state protects any organization that aids it. *See*, e.g., https://www.theepochtimes.com/china-requires-all-publicly-listed-companies-to-establish-communist-party-branches_2565214.html and https://www.reuters.com/article/us-china-governance-party/chinas-listed-firms-need-to-beef-up-communist-party-building-activity-regulator-says-idUSKBN1JB16F

36 The U.S. Department of Commerce's Bureau of Industry and Security (BIS) first published the "Entity List" in 1997 to inform the public of entities engaging in activities that could result in an increased risk of the diversion of exported, re-exported, and transferred (in-country) items to weapons of mass destruction programs. Since then, grounds for inclusion have expanded to activities sanctioned by the U.S. State Department and activities contrary to

a number of these companies from doing direct business with U.S. persons, their increasing index inclusion has led to an indirect flow of investments from U.S. investors into these companies.

Table 4. MSCI China A Index Companies that Are on the Entitle List or Threat List

Company	Entity List or Threat List
Dahua Technology	Entity List
Hikvision	Entity List
IFLYTEK	Entity List
FiberHome	Entity List
ZTE	FCC Designates it as National Security Threat*

Source: https://www.msci.com/index-consultations and https://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern/entity-list and https://www.fcc.gov/document/fcc-designates-huawei-and-zte-national-security-threats
*: Currently banned by the Federal Communications Commission from purchase of equipment using U.S. public funds

U.S.-China Policy Adjustment. Over the last few years, U.S.-China trade relationships have taken a center stage. Recently, the president issued a memorandum directing the President's Working Group on Financial Markets, which includes officials from the Commission, the Treasury Department, the Federal Reserve Board, and the Commodity Futures Trading Commission, to study issues relating to, among other things, risks to U.S. investors and financial markets posed by differing practices of Chinese companies listed on U.S. markets.[37] Following Beijing's decision to impose its national security law in Hong Kong, the administration also announced plans to revoke the special trade status of Hong Kong, as it is deemed no longer maintaining a high degree of autonomy from China. Table 5 shows that at the end of April 2020, U.S. mutual funds' exposure (equities and bonds) to Chinese firms available in different exchanges totals approximately $385 billion, with $183 billion available via Hong Kong's market. Total U.S. mutual funds' exposure to Hong Kong dollar denominated security holdings are approximately $264 billion. These holdings may be subject to increased volatility to the extent that Hong Kong's special trade status is revoked.

Table 5. U.S. Mutual Funds' Exposures to Chinese Securities and HKD Denominated Securities

Panel A. Exposure to Chinese Firms Headquartered in China	
Currency	Exposure ($ billion)
Renminbi (Shanghai, Shenzhen) – A Shares and Domestic Bonds	43.5
Hong Kong Dollars (Hong Kong)	183.2
U.S. Dollars (New York)	156.5
Other Currencies	2.1
Total	385.2

U.S. national security and/or foreign policy interests. (https://www.bis.doc.gov/index.php/policy-guidance/lists-of-parties-of-concern)
[37] https://www.whitehouse.gov/presidential-actions/memorandum-protecting-united-states-investors-significant-risks-chinese-companies/

Panel B. Exposure to Hong Kong Dollar Denominated Securities

Location of Headquarters	Exposure ($ billion)
China	183.2
Hong Kong	71.8
U.S.	4.0
Others	4.8
Total	263.7

Source: Morningstar holdings reported at the end of April 2020 and DERA staff calculations.

Conclusion

The inclusion of Chinese domestic securities (A Shares and Domestic Bonds) into global financial market indexes has raised a series of concerns for U.S. investors related to the transparency, functioning, and integrity of the Chinese market. With the increasing number of Chinese domestic securities becoming eligible for inclusion in various global financial market indexes, there is significant risk of U.S. investors becoming more exposed to companies potentially subject to U.S. policies, sanctions, and/or tariffs. While many of these issues are geopolitical in nature, it is nevertheless important for U.S. investors to be cognizant of the risks. The evolution of weighting in these indexes and the broader considerations discussed above warrant continued monitoring. The issues discussed above are further complicated by the ongoing COVID-19 global pandemic, which has already caused significant effects in global financial markets and global policy discussions.

Appendix: Large U.S. Public Pension Funds' Exposure to China A Shares

Pension	AUM ($ bil)	Benchmark with China A Share Exposure (in bold)	link to recent Financial Report
California Public Employees	$376.86	Five out of its seven sub-funds track **MSCI ACWI IMI (Net)** (among other benchmarks).	https://www.calpers.ca.gov/docs/board-agendas/202006/invest/item06c-01_a.pdf
California State Teachers	$230.209	International equity include 55 China A share companies, with a total market value of $332 mil	https://www.calstrs.com/investment-table/international-equities
New York State Common	$213.241	Public Equity fund is benchmarked to **MSCI All Country World Index (ACWI)**. Its Total Non U.S. Equity Composite fund ($27 bil) tracks the **MSCI ACWI Ex U.S. IMI (MSCI ACWI Ex U.S. to 1/1/17)**	https://www.osc.state.ny.us/sites/default/files/retirement/documents/pdf/2019-11/comprehensive-annual-financial-report-2019.pdf
Florida State Board	$163.135	Its Global Equity Fund tracks a custom version of the **MSCI All Country World Investable Market Index (ACWI IMI)**, in dollar terms, net of withholding taxes on nonresident institutional investors, adjusted to reflect the provisions of the Protecting Florida's Investments Act.	https://www.sbafla.com/fsb/Portals/FSB/Content/Performance/Annual/2018_2019_AIR.pdf?ver=2020-02-20-125811-027
Texas Teachers	$153.126	External Public Total World Equity - Invests in equity securities in countries represented in the **MSCI ACWI Value Index**, as well as certain other global markets	https://www.trs.texas.gov/TRS%20Documents/cafr_2019.pdf
New York State Teachers	$122.5	Its international equity portfolio, which represented 17.2% of System assets, generated a return of 1.3%, in line with its benchmark, **the MSCI ACWI Ex-U.S. index**. The global equity portfolio, which represented 2.1% of System assets and is exclusively actively managed, returned 1.2% trailing its benchmark, **the MSCI ACWI index**, by 4.5%.	https://www.nystrs.org/Library/Publications/Annual-Reports/2019CAFR.pdf
Wisconsin Investment Board	$114.63	na	https://7ffb9e60-f2dc-4359-b148-1db6b9d76c71.filesusr.com/ugd/69fc6d_e0c664dc85964d78953e358163b6a534.pdf
Washington State Board	$112.47	Its Collective Investment Trust Funds are composed by three parts, each tracking 1) Morgan Stanley Capital International (MSCI) U.S. Investable Market Index (passive); **2) the MSCI Emerging Markets Investable Market Index (passive); 3) MSCI Emerging Markets Investable Market Index (active)**	https://www.sib.wa.gov/financial/pdfs/annual/ar19.pdf
North Carolina	$111.37	Its Equity Collective Investment Trusts follows five equity index funds. Out of which, the BlackRock International Index Fund seeks to replicate the composition and performance of the **MSCI ACWI Ex-USA Index.**	https://files.nc.gov/retire/documents/files/Reports/June_30_2019NC_CAFR.pdf
Ohio Public Employees	$100.71	As of December 31, 2019, its Non-U.S. Equity Benchmark (net) include: **55% MSCI World Index x U.S. Standard (net), 31% MSCI Emerging Markets Standard Index (net).**	https://www.opers.org/pubs-archive/financial/cafr/2019-OPERS-Comprehensive-Annual-Financial-Report-CAFR.pdf

Source: the 2018 AUMs are based on this research paper, https://www.thinkingaheadinstitute.org/en/Library/Public/Research-and-Ideas/2019/09/P_I_300_2019_research_paper. New York City Retirement System is excluded in the above table, as the AUM reflected in its financial report is less than $100 billion (the AUM in the research paper may have included a few other pensions in New York City).