Understanding China: an economic and investment perspective, part II

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China's position in the world economy and its aspirations have important implications for investors. In part II of our series on China, we focus on China's financial markets, the channels accessible to institutional investors, and key risks.

China has the largest banking system, along with the second- and third-largest stock and bond markets, respectively, in the world. However, foreign participation and foreign ownership remains limited. Until recently, most of China's financial assets were not accessible to international investors. Even when assets were available, international investors were required to pass through extensive vetting by China's securities regulators. This has created a considerable imbalance between China's large and growing GDP footprint in the global economy and its position in international investor portfolios, which remains relatively small.

Executive summary

- The size of Chinese capital markets has increased rapidly in the past decade. There is a growing universe of onshore Chinese equity and bond investments, along with private market opportunities, that are accessible to foreign investors. As such, the China opportunity set merits serious consideration by investors.
- Foreign direct investment in China's capital markets is fairly new and includes novel risks as well as opportunities. China's capital markets remain heavily influenced by political forces. The quality of China's financial system is evolving rapidly, but is not yet on par with that of the US.
- Political and economic tensions between the US and China could generate ever increasing investment prohibitions or market disruptions. Chinese companies that have listed in the US may suffer from unilateral political injunctions and regulations.
- The Chinese onshore bond market is increasingly accessible to international investors. China's sovereign bond market, which represents the most liquid segment of the market, offers a healthy yield spread relative to the US and other developed markets.
- Concerns about liquidity, credit ratings, defaults, and disclosures create uncertainty that makes public credit markets less appealing.
- The private equity opportunity set in China is broad and deep, and it is accessible to foreign investors. Direct local knowledge and expertise are critical variables when selecting a general partner.
- Investors should be cognizant that when investing in China, they are placing capital in a country where the state exerts considerable control over the economy and capital markets. The Chinese Communist Party has repeatedly shown a willingness to interfere in markets in a manner that is detrimental to investors. Property rights and contracts are not sacrosanct. Moreover, the Chinese government pursues distinct, and sometimes opposing, objectives relative to the US.

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Important caveats: political risk and currency dynamics

Any discussion of the investment opportunity set in China should begin with an analysis of the risk dynamics. As with many countries classified as emerging markets, investors must be mindful of greater political, social, and economic risks. International political and economic events may also impact foreign investment in China's markets. Escalation in these risk factors has the potential to render China un-investable even if that is not our base case.

Unique political/social risks: Any financial market is beholden to some political risk. It is important to highlight the potential for political risks that could result in adverse shocks to investments in China:

→ **System of governance:** The Chinese Communist Party (CCP) is the sole political organization that governs China through all branches of national and local government. Although the CCP is an extremely large and diverse organization, there are no other competing political parties or organizations. While governmental authority is embodied in national, provincial, and municipal institutions, the CCP's power supersedes these governing bodies so that the CCP guidance directs government policy. Moreover, CCP party members frequently serve as board members of banks and businesses. The CCP exhibits explicit and implicit influence over all aspects of the Chinese economy, including financial markets. This increases the possibility of adverse, unilateral actions undertaken to advance domestic interests over foreign investors. While China is gradually opening its capital markets to qualified international investors, the CCP is actively engineering all aspects of the publicly traded investments. This can be observed in a variety of channels:
  - Approving the rate and pricing of IPOs in an effort to ensure sufficient demand and successful future share price performance
  - Implicit prohibition on short-selling while officially allowing market shorts
  - The lock-up of non-tradable shares of underperforming State-Owned Enterprises
  - Offering curated and scaled access to Chinese stocks issued in Hong Kong H-Share Markets through trade links like Stock Connect which links mainland exchanges with Hong Kong to create a single trans-regional China stock exchange.
  - Evolving financial regulatory landscape as new regional exchanges and foreign investment rules in Special Economic Zones (SEZs) and new trans-regional platforms and exchanges.

While the opening up of domestic markets to foreign investors should not be misconstrued as a transition to an open market economy, incremental progress toward open markets may be positive for foreign and domestic investors alike.

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- **Censorship/media control:** China continues to exert considerable domestic surveillance and censorship power. The Chinese government views the news media as an extension of the CCP. As a result, the potential for the suppression of information, or the spread of deliberate misinformation, is a risk for investors' ability to conduct due diligence and evaluate market pricing and information.

- **International influence and potential adverse actions:** China is acting to increase its influence regionally and globally. A push to consolidate power in the region can be observed most readily with China's continued actions to integrate the Hong Kong Special Administrative Region into China. For decades, Hong Kong has served as a trusted financial center for international investors looking to gain access to Chinese securities. An erosion of Hong Kong's independence will diminish this trait. China also remains focused on a similar path for Taiwan. Other initiatives, such as the Belt & Road Initiative (BRI), are likely to increase China's access to trade routes and strategic locations such as ports in Asia and elsewhere that could have military utility. China continues to engage in an active dispute with several Southeast Asian countries regarding claims over the South China Sea. An escalation could lead to a regional or global military engagement. China has also become increasingly confrontational with the US Navy and other forces in key international waters off the coast of Malaysia and as far south as the Philippines. China's Navy and Air Force have challenged US forces in the Sea of Japan where China claims potential oil fields near the disputed Senkaku/Diaoyu Islands.

- **Conflict with the US:** The US and China are engaged in an increasingly adverse relationship. Authorities in the US have cited unlawful intelligence gathering, intellectual property theft, and unfair trading practices as key motivations for placing sanctions on China. The People's Republic of China ("PRC") has made similar claims. As the world's two largest economies, but with very different political systems, ongoing conflict between the two countries is not surprising. US investors with investment allocations to China must be mindful of the risk that, as the dispute wears on, it is likely to impact financial markets both indirectly (e.g., increased consolidation of supply chains, reduced globalization) and directly (e.g., sanctions, measures to curb cross-border corporate influence, increased cross-border investment restrictions). We have recently seen legislation aimed at preventing investment in military-affiliated Chinese companies. Additionally, accounting regulations in the US have been strengthened in an effort to place greater pressure on Chinese companies listed in the US.

Unique currency dynamics: The currency component of investment must be considered carefully by foreign investors. China utilizes a managed, or "crawling," peg for the Chinese renminbi ("RMB," translated into English, the "people's currency"). The peg has ensured that all Chinese exports have a price advantage over their competitors, a feature that has drawn multi-national companies to onshore their production in China.

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The maintenance of this peg to a trade-weighted basket of currencies requires that the People's Bank of China ("PBoC") and currency regulatory arm, SAFE[1] sterilize foreign investment and accumulate foreign reserves mostly denominated in USD. These reserves accumulate as investor appetite increases, and in order to prevent the RMB from appreciating, the PBoC invests excess currency reserves in US Treasuries[2]. These foreign reserves have exceeded $3T US dollars and provided funding for massive counter-cyclical government spending during the Global Financial Crisis. More recently, these reserves have begun to increase and reached $3.4T US dollars in April 2021.[3] China continues to exercise strong capital controls over the RMB, resulting in the use of a dual currency system with a tightly controlled onshore currency (often referred to as the onshore yuan or CNY) and a floating offshore currency traded in Hong Kong (offshore yuan or CNH). China and Hong Kong businesses and banks are often engaged in "invoice" arbitrage of this system as a way to move funds across the border. The PBoC has, from time to time, reversed the currency peg to discourage this type of speculation. The risk of PBoC intervention driving significant appreciation or depreciation remains.[4]

In addition to setting the official conversion rate for its currency, the PBoC also actively manages official and non-official lending rates. While planning and regulatory ministries set target limits on credit creation to encourage or discourage investments in various sectors, the borrowing rate for these loans frequently reflects the degree to which the loan is officially sanctioned. Borrowing rates are therefore influenced by the political appetite for a venture to be financed. The official management of the yield curve has ensured that Chinese borrowers have been able to secure financing below the official rate of growth (annualized GDP) thus supporting an ability to repay or roll a loan at very favorable terms. Officially approved loans where the borrower becomes insolvent are frequently extended or re-categorized as "special category" loans on bank balance sheets. Since 2008, stimulus measures announced by the PBoC included provisions for extensions of official non-performing loans. These measures undermine market pricing for medium- and longer-term loans.

Equity market

Chinese stocks provide investors with access to the world's largest population and consumer base. The footprint of Chinese stocks within the broader global equity opportunity set has increased as a result of domestic financial maturation, gradual liberalization of the Chinese equity market, and a concerted effort to attract foreign capital. Equities offer a relatively liquid channel through which to gain access to the Chinese growth story. As is the case with any emerging market, investment in China is a tradeoff between risk and opportunity.

The equity market is the most likely pre-existing China allocation in international investor portfolios. Chinese stocks trade on domestic and foreign exchanges,

[1] Source: The State Administration of Foreign Exchange

[2] As of April 2021, the US Treasury estimates that China held approximately $1.1 trillion dollars in US Treasury securities. Source: https://ticdata.treasury.gov/Publish/mfh.txt

[3] Source: Chinese State Administration of Foreign Exchange ("SAFE").

[4] Source: US Department of the Treasury. On August 5, 2019 the US Treasury Department officially designated China as a currency manipulator in its Report to Congress on the Macroeconomic and Foreign Exchange Policies of Major Trading Partners of the United States. However, the Treasury rescinded the designation a few months later in January 2020. Source: New York Times, "US Says China is No Longer a Currency Manipulator," January 2020.

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especially in Hong Kong and the US. The market already represents a material portion of flagship emerging markets indices, and its weight has risen in recent years. The domestic Chinese equity market ("A shares") has been a constant topic of discussion among investors in recent years. Stocks traded on mainland Chinese exchanges account for a total market capitalization of approximately $13.4 trillion[5]. While this is far lower than the combined NYSE and Nasdaq market cap of $44 trillion in the US, it trails only the US in total market capitalization[6]. The China A shares market has existed since the 1990s, but China has only taken significant action to liberalize the A shares market over the past decade. A key development was the introduction in 2014 of Stock Connect, an access program between the Shanghai/Shenzhen and Hong Kong exchanges. Two access channels for international investors, QFII and Connect, now exist. As a result of the implementation of Connect, and other perceived improvements in market structure and governance, MSCI, a widely utilized provider of global and international equity benchmarks, has added a portion of large and mid-cap China A shares to its global equity benchmarks[7].

While investors have spent significant time focusing on China A shares, they are not the only way to invest in Chinese stocks. Even as the A shares market becomes more accessible, listings outside of mainland China continue to represent a material portion of the equity market opportunity set for international investors. Many Chinese companies are listed in Hong Kong and the US. China's largest company by market cap, Alibaba, is actually listed as an American Depository Receipt ("ADR").

TABLE 1
Unpacking the Chinese Equity Market Alphabet Soup

	China A Shares	China H Shares	China Red Chips + P Chips	Foreign Listings
Listing	Domestic	Hong Kong	Hong Kong	Primarily US ADRs
Defining Characteristics	Quoted in CNY (onshore)	Quoted in HKD (offshore)	Quoted in HKD, Red Chips are State Owned Enterprises, P Chips are privately held and incorporated overseas	Companies with foreign ownership restrictions, often Variable Interest Entity structure
Accessible to US Investor	Selectively	Yes	Yes	Yes
Securities	2,292	101	59 + 121	28
Est. Float-Adjusted Market Cap	$4,056 billion	$711 billion	$188 billion + $1,450 billion	$503 billion

Represents 95% of investable market, adjusted for free float, with no foreign ownership limit incorporated. China B shares and Singapore S-Chips not included as they are no longer widely utilized. Source: Stoxx Ltd. as of July 6, 2021.

China A shares are still not fully included in global indices. This is, in part, because index providers are taking a deliberate approach to inclusion. The MSCI China A Index includes only the large and mid-cap stocks that are accessible through the Stock Connect program. These securities represent approximately 20% of the free float-adjusted China A equity opportunity set defined in the table above.

It is easy to get lost in China index jargon as index providers offer an array of indices. For simplicity, we utilize indices for comparison that offer sufficient breadth but also provide a return history from which we can draw some inferences.

[5] Source: CEIC as of May 2021.

[6] Source: FRED, Wilshire 5000 total US market capitalization as of May 2021.

[7] MSCI elected to partially include China large cap A shares in global indices beginning in May 2018. As of 2020, MSCI has added 467 China large and mid-cap A shares at an "inclusion factor" (i.e., percentage of internationally tradeable, float-adjusted market cap) of 20%, with the potential for further increases over time as China takes steps to improve accessibility and governance. See our 2019 paper for additional details on inclusion and its implications.

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As of 6/30/2021, free float-adjusted, large and mid-caps

These indices include all securities in the MSCI China A Index, at a 20% inclusion factor

TABLE 2
MSCI Market Index Cheat Sheet

Primary MSCI Indices	MSCI China A Onshore Index	MSCI China B Onshore Index	MSCI China Index	MSCI Emerging Markets Index	MSCI ACWI Index
Scope	A shares	A shares available through Connect	China A/H Shares, Red/P Chips, Foreign Listings	Global Emerging Markets	Global Developed and Emerging Markets
Number of Securities	707	481	736	1,412	2,975
Total Market Cap	$3.6 trillion	$2.1 trillion	$3.2 trillion	$8.6 trillion	$66.4 trillion

Source: MSCI Data as of June 2021.

As index providers gradually add China A shares to their indices, and China's equity market itself grows, the country's footprint in global equity indices continues to rise. China now represents 37.5% of the MSCI Emerging Markets Equity Index.[8] Clearly, a passive investment in emerging market equities results in a large allocation to China-based companies. Going further, countries within China's sphere of influence in Southeast Asia now comprise a large portion of the MSCI Emerging Markets Index.[9] This is evident both geographically and financially. China is a meaningful source of revenues for other large constituents of the MSCI Emerging Markets Index. However, exposure to US revenues is often similar, if not greater, as a percentage of corporate earnings in each opportunity set. Taiwan and South Korea both generate greater revenues from the US than from China, despite their closer proximity to the latter. At the index level, China's footprint is the same on a capital weight and geographic revenue weight basis, while the US represents less than 10% of total emerging market company revenues.

[8] Source: MSCI as of June 2021.

[9] Taiwan is approximately 14% and South Korea is about 13% of the MSCI Emerging Market Index as of June 2021. Source: MSCI

TABLE 3
Index Weights and Geographic Exposures: Top Five Emerging Market Countries

	Index Weight (%)			Estimated Geographic Revenue Exposure (%)		
Primary MSCI Indices	MSCI Emerging Markets Weight	MSCI ACWI ex-US Weight	MSCI ACWI Weight	Home Country	China	US
China	37.5	11.7	4.9	90	90	2
Taiwan	13.9	4.3	1.8	25	18	33
South Korea	13.2	4.1	1.7	43	13	11
India	9.9	3.1	1.3	64	3	12
Brazil	5.2	1.6	0.7	73	7	5
MSCI Emerging Markets	100.0	~28.2	~13.0	--	42	9
MSCI ACWI ex-US	29.7	100.0	41.8	--	17	16
MSCI ACWI	NA	41.8	100.0	--	11	42

Source: Bloomberg, MSCI, and FactSet as of June 2021 Note that South Korea and Taiwan are included in emerging markets by MSCI, though not by the IMF or World Bank, and are considered part of developed Asia in some instances. Home revenue data from MSCI as of September 2020.

China's footprint is not relegated to emerging markets alone. China is now the third largest country in the MSCI ACWI Index. While the US remains the dominant exposure at a 58.7% weight, China's 4.9% weight trails only the US and Japan (at 5.9%)[10].

[10] Source: MSCI ACWI Index as of June 2021.

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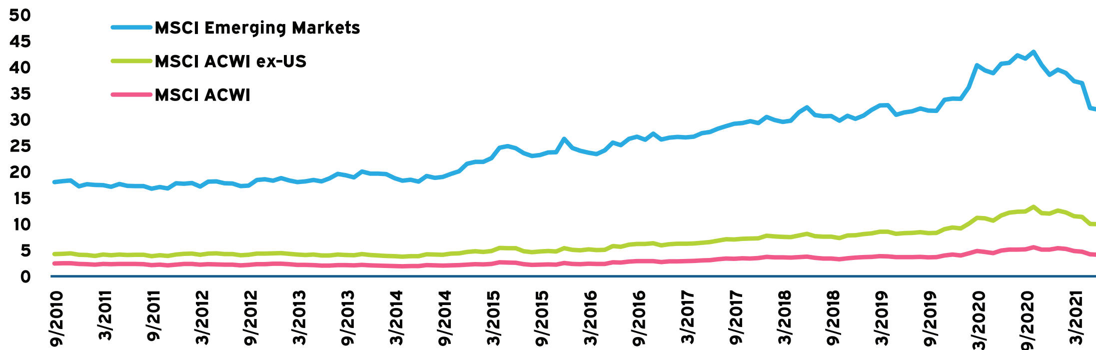

FIGURE 1

Index Allocation to China %

Source: MSCI, FactSet.

Examining the Chinese equity market itself, one of its most appealing qualities is depth. A broad, under-covered opportunity set means a deeper selection pool, which could be attractive to active managers[11]. Even so, market depth carries a variety of potential risks for active managers. With more depth comes the need for more due diligence and, given the opacity encountered in the Chinese market, the potential for unexpected risk events.

While the Chinese equity market opportunity set is deep by stock count, it is concentrated at the sector and stock levels on a market cap-weighted basis. Consumer discretionary and communication services sectors combined represent approximately 53% of the MSCI China Index. The level of concentration in the China opportunity set reflects the growing bifurcation between companies that are beneficiaries of the CCP's effort to push technological development and increase consumer spending and those that relied on the prior model of credit growth and investment. The chart below indicates the extent to which this shift has impacted the equity opportunity set. This structural evolution is poised to persist or even accelerate, based on the CCP's statements and actions, suggesting that investors should carefully weigh allocating capital to the old economy's State Owned Enterprises (SOEs), commonly found in the financials, industrials, materials, and energy sectors, in the face of potential structural decline. As noted in Meketa's China A shares paper , investors should be especially cognizant of the prevalence of old economy businesses in the domestic A shares market.

[11] The Fundamental Law of Active Management (Grinold and Kahn). FLAM posits that the information ratio, a measure of investment manager skill, is a function of the information coefficient (skill) and the square root of the number of independent bets (breadth), the latter of which is increased by a larger market of unique investable securities.

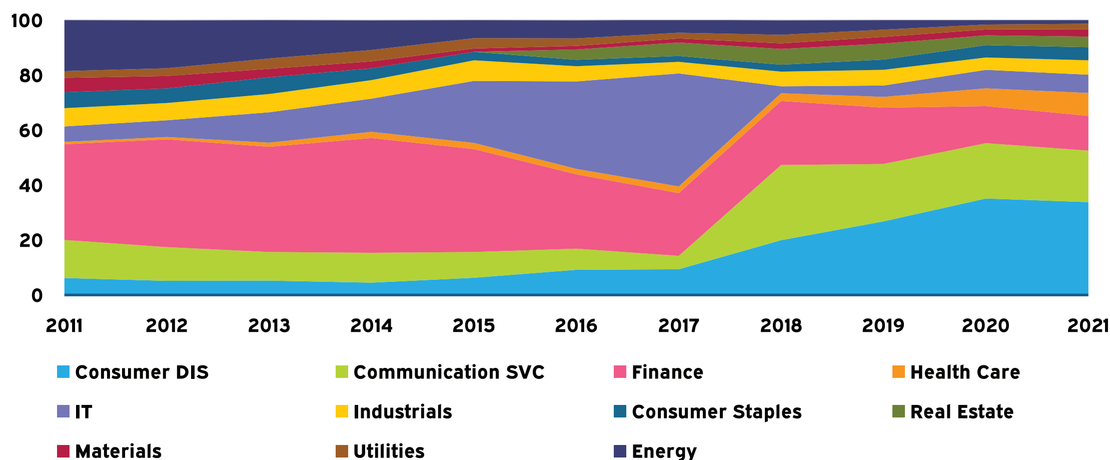

FIGURE 2

MSCI China Sector Allocations over Time (%)

Source: MSCI and Bloomberg as of July 2021. Annual GICS sector weights shown. In 2017, MSCI announced changes to the GICS sectors to be implemented in September 2018. Some of the changes included: eCommerce companies were moved from IT to Consumer Discretionary; Telecom was expanded and renamed as Communication Services; Media and Internet Service companies were added to the new Communication Services sector from Consumer Discretionary and IT sectors, respectively. China's Alibaba was moved to Consumer Discretionary, and China Mobile and Baidu were consolidated in Communication Services.

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Investors in US markets often lament the concentration of the US equity market in a relatively small number of mega cap companies. The Chinese equity market has likewise become increasingly top-heavy as large consumer and technology businesses within China gain market share. An investor in China might even have more to complain about than a US counterpart. On a market cap-weighted basis, the largest 10 companies in the MSCI China Index earned a 48% average weight as of mid-2021. The two largest companies in the index, Alibaba and Tencent, constitute a combined weight of nearly 27%.[12] For passive investors, this represents substantial idiosyncratic risk in what is often considered a diversified expression of a country's stock market. For active investment managers, a top-heavy index increases the risk of underperformance by omission.

[12] Source: MSCI as of June 2021.

TABLE 4
Headline MSCI Index Stock Concentration (%) As of June 30, 2021

MSCI China		MSCI EM		MSCI ACWI ex-US		MSCI ACWI	
Tencent	13.4	Taiwan Semi	6.1	Taiwan Semi	1.9	Apple	3.5
Alibaba	13.3	Tencent	5.0	Tencent	1.6	Microsoft	2.9
Meituan Dianping	4.6	Alibaba	5.0	Alibaba	1.6	Amazon	2.2
China Constr. Bk	2.4	Samsung Elec.	4.0	Nestle	1.3	Facebook	1.3
JD. Com	2.1	Meituan Dianping	1.7	Samsung	1.3	Alphabet (C)	1.1
Total	35.8	Total	21.8	Total	7.7	Total	11.0

Source: Bloomberg, MSCI, and FactSet as of June 2021 Note that South Korea and Taiwan are included in emerging markets by MSCI, though not by the IMF or World Bank, and are considered part of developed Asia in some instances. Home revenue data from MSCI as of September 2020.

China's equity market has generated mixed performance results when compared to broad market indices with significant volatility. The MSCI China A Onshore Index, a representative index of all large and mid-cap China A share stocks, irrespective of whether they are available to international investors, is included for comparison. Over the past decade, the A shares opportunity set generated weaker performance, and more volatility, than the MSCI China Index (recall, the MSCI China Index includes international listings and China A shares per MSCI's pre-announced A shares inclusion path).

TABLE 5
China Performance vs. Global Equity Markets (%) January 2001 through June 2021

	MSCI China A Onshore	MSCI China	MSCI Emerging Markets	MSCI ACWI ex-US	Russell 3000	MSCI ACWI
Annualized Return (%)	7.3	10.6	9.7	5.6	8.3	6.5
Standard Deviation (%)	28.0	25.2	21.3	17.1	15.4	15.7
Max Drawdown (%)	-66.7	-64.8	-61.6	-57.6	-51.2	-54.9
Sharpe Ratio	0.21	0.37	0.39	0.25	0.45	0.33

Source: eVestment and MSCI. Index performance in USD. Characteristics are for the longest common period. Index returns include gross dividends. Sharpe ratio uses the FTSE 3-month discount rate.

The gap between the A shares market and the MSCI China Index is significant. Since domestic investors continue to represent the bulk of investment in China's A shares market, A shares have, at times, been subject to considerable speculation. This dynamic resulted in a bubble in Chinese stocks in 2015, which was at least partly fueled by securities purchased on margin by domestic investors, and was later followed by a significant selloff[13].

[13] Source: Hale, Thomas. "Rise in margin lending stokes fears of China bubble." Financial Times. July 2020. See also Meketa's China A shares white paper.

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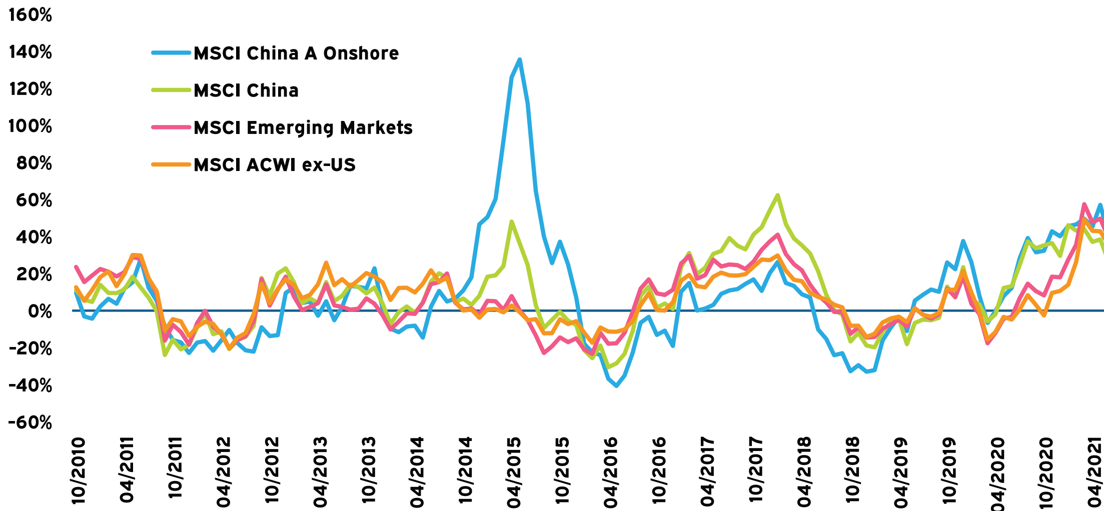

FIGURE 3

Rolling 1-Year Total Return

Source: MSCI, FactSet.

Under the surface, China's reforms have resulted in considerable divergence within equity markets. This is highlighted by evaluating sector dispersion in the Chinese equity market over the past decade. Returns in asset-heavy sectors (e.g., industrials, materials, and energy) have lagged communication services, consumer discretionary, and technology. This dispersion explains some of the weakness in China A shares. China A shares have had greater exposure to capital intensive sectors at the expense of consumer and technology underweights relative to the entire listed Chinese equity opportunity set.

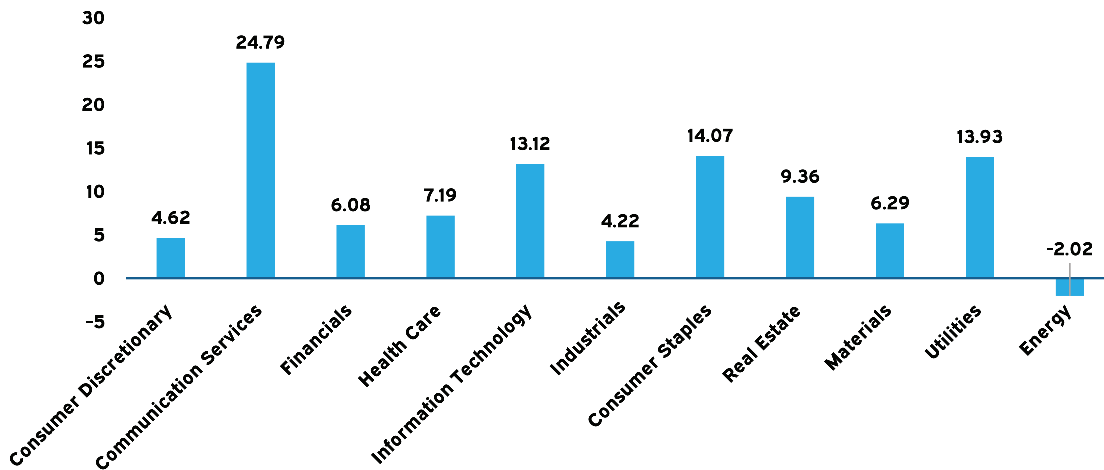

FIGURE 4

MSCI China: Trailing 10-Year Sector Annualized Return (%) As of June 30, 2021

Source: Bloomberg and MSCI China Index as of June 2021. Organized largest to smallest index allocation as of June 2021. In June 2011, the sector weightings were quite different; for example, Consumer Staples was approximately 33% of the index, Financials were 31.6% of the index, and Energy was 18.6%.

The dispersion between the MSCI China Index and the domestic A shares market is also explained by the incidence of "blow-ups" and the domicile of listings. Stock collapses occur at a meaningful frequency within the A shares market, though they do not often make headlines internationally. Of the 1,333 stocks held in the MSCI China A Onshore Index over the past 10 years, 130 have fallen by over 50% and 73 have declined by over 90%. The ratios are considerably lower for the MSCI China Index, which eschewed A shares over most of the period since they were not available to international investors.

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The extent to which the largest companies in the China opportunity set drove returns is evidenced by the "contribution to returns" shown in the table below. Tencent and Alibaba alone contributed over 100% of the total excess returns in the MSCI China Index. Both companies are absent from the A shares market, as they are listed in Hong Kong and the US.

As of 6/30/2021	Index Current Weight	Index Average Weight	Stock Total Return	Contribution to Return
Tencent	13.42	11.57	30.92	3.8
Alibaba	13.31	7.02	9.74	1.8
China Mobile[14]	0	6.27	-2.08	0.3
China Construction Bank	2.35	5.83	4.83	0.4
ICBC	1.03	4.50	3.1	0.2
Bank of China	0.88	3.34	3.8	0.2
CNOOC	0	2.81	-3.8	-0.2
Ping An Insurance	1.92	2.67	9.23	0.3
China Life Insurance	0.46	2.08	-3.5	-0.1
PetroChina	0.32	2.06	-6.72	-0.2
Top Ten	33.69	48.15	4.6	6.5
Total Index	100	100	7.6	7.6

TABLE 6
MSCI China Top 10 Constituents: Trailing 10-Year Performance and Contribution

[14] China Mobile and CNOOC were removed from the MSCI China Index in January 2021 as a result of the ban by the Trump administration on certain Chinese companies. FTSE and S&P index providers took slightly different approaches in how they complied with the ban..

Important considerations for Chinese equities

Real versus perceived diversification benefits: Much is often made of the potential diversification benefits of China (especially China A shares) in equity portfolios, but in an increasingly global financial market, the trend and the level of historical statistics should both be assessed. China A shares were mostly inaccessible to international investors until the past decade. As A shares have become more accessible, their correlations to other global markets have visibly increased. During adverse shocks to global markets, correlation often spikes, eroding perceived diversification at precisely the time when it matters most. Chinese stocks do offer direct access to domestic economic and corporate performance, which should provide diversification benefits relative to other global equity markets. However, their correlation to other global equities should not underpin a thesis for allocating to China.

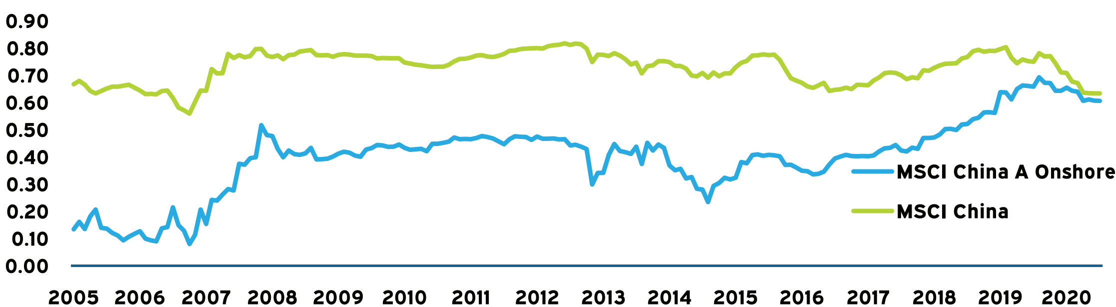

FIGURE 5
Rolling Five-Year Correlation of Returns with MSCI ACWI

Source: MSCI as of April 2021.

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Influence of the state: It is critical to remember that, regardless of their ownership structure or status as a publicly traded company, companies in China are subject to the CCP's authority. The CCP retains the ability to influence corporate decision-making through a variety of channels, both implicit and explicit. This represents a larger risk to some sectors than others. In the case of large, explicitly state-owned banks, for example, the CCP directs the pace of credit growth and can also direct state banks to intervene in situations where smaller, regional banks experience distress, in effect, absorbing their losses. In resource-intensive sectors, the CCP holds influence over the pace and scope of investment activity. In consumer-facing sectors, research suggests that data collection and censorship are widespread. China's largest companies like Alibaba and Tencent are under continual, heavy scrutiny by the CCP as evidenced by China's postponement of Alibaba's IPO of its financing arm, Ant Group. While the association between businesses and the CCP is not always clear, the nature of China's communist system means that companies often have a close relationship with the state, sometimes by necessity.

At SOEs, the CCP has a more direct impact on capital allocation decisions. This influence is used to accelerate national directives like the BRI, which have the potential to result in inefficient allocation of capital. It is also true that, historically, SOEs have earned lower returns on their assets than their private peers[15]. For investors, this means that any investment in an SOE should be made with an understanding of the potential for CCP intervention in strategic decision-making and governance.

[15] Source: Rosen, Daniel, Leutert, Wendy, and Guo, Shan. "Missing Link: Corporate Governance in China's State Sector." Asia Society. 2018.

Market access/listing structure: Gaining access to Chinese stocks does entail some complications for international investors. China's efforts to increase foreign participation are mostly an advent of the past decade. While A shares are now available to institutional investors, these investors must still contend with mixed access to domestic Chinese companies. Businesses deemed to be of strategic importance still have foreign ownership restrictions. Some Chinese companies have circumvented this restriction using a corporate structure that allows them to list on other stockexchanges, primarily in the US market, as ADRs. The structure is referenced as a variable interest entity ("VIE") structure in the US and an Agreement-Based Control

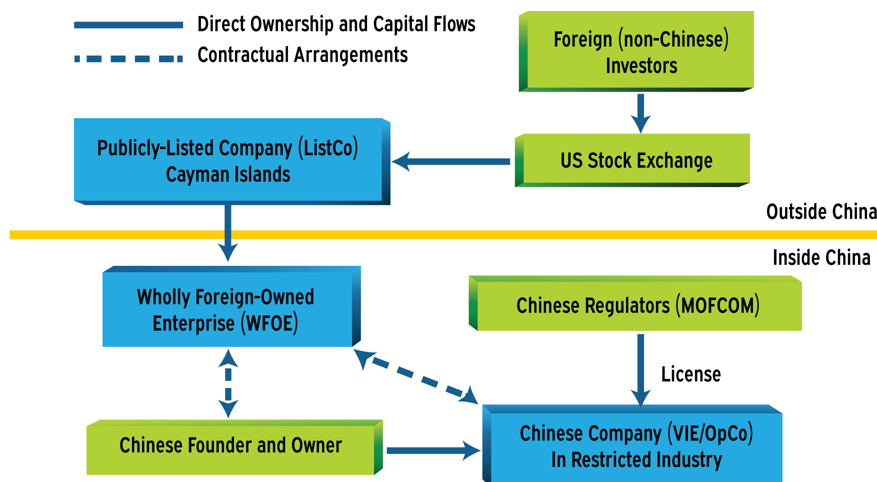

FIGURE 6
The VIE Structure and Ownership Scheme

Source: Meketa

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structure in China and was first set up in 2000 to list Sina.com. Chinese technology, media, and telecom (TMT) companies were early adopters of the VIE structure to circumvent foreign investment in sensitive sectors.

MDThe VIE structure is not formally recognized under Chinese law[16], creating obvious concerns around contractual viability. A VIE investment in a Chinese company is uncertain, and Chinese regulatory authority over these structures appears to be evolving. While it is not the most likely outcome, China's regulators (i.e., the CCP) could simply hold these structures invalid. This is an important issue considering that China's largest listed company, Alibaba, is listed as an ADR using the VIE structure on the New York Stock Exchange. Alibaba encountered difficulties with the structure in the past when attempting to list its payment processing subsidiary, now called Ant Financial[17]. In late 2020, China's anti-trust regulator fined Tencent, Alibaba, and others for failing to obtain prior approval for offshore acquisitions using VIE structures. The regulator's actions imply that China does not view VIE structures as being exempt from their anti-trust rules.[18] While there are concerns regarding the viability of VIE structures for future IPOs in the US, it is worth noting that there are also VIE structures in the MSCI China Index and other China indices.

[16] Source: Xiaodong, Dai. Foreign Investment Law Series – 05: The VIE Structure Remains in Grey Area." China Justice Observer. 2020.

[17] Source: Gillis, Paul. Variable Interest Entities in China." GMT Research. 2019.

[18] Source: https://www.wsj.com/articles/alibaba-hit-with-record-2-8-billion-antitrust-fine-by-chinas-market-regulator-11618018830 and South China Morning Post, December 2020. Anti-monopoly fines are capped at 10% of annual revenue according to the WSJ.

Accounting/disclosure standards: Accounting standards continue to be an area of concern. A recent study suggested that Chinese chief financial officers have notably lower incentives to provide maximum financial transparency, to reduce their cost of capital, and to reveal bad news to the market in a timely fashion due to a lower likelihood of punitive action[19]. In 2019, a number of planned IPOs were suspended after an investigation was opened into a top five domestic auditor, Ruihua, for securities law violations[20]. Accounting disparities have been increasingly cited as a reason for caution when investing in Chinese companies. The former Chairman of the SEC, Jay Clayton, published a statement in which he noted that "…in many emerging markets, including China, there is substantially greater risk that disclosures will be incomplete or misleading…" while making reference to the Public Company Accounting Oversight Board's inability to fully audit Chinese companies listed in the US[21].

[19] Source: Lu, Hai, Shin, Jee-Eun, and Zhang, Mingyue. "Financial Reporting and Disclosure Practices in China." Canadian Academic Accounting Association Annual Conference. 2019.

[20] Source: Hong, Shen and Zhou, Wei. "Chinese Auditors Are on the Hook After Clients Are Caught Cooking the Books." The Wall Street Journal. 2019.

[21] Source: Clayton, Jay. "Statement on Emerging Market Investments Disclosure and Financial Reporting Risks." Harvard Law School Forum on Corporate Governance. 2020.

US/China conflict – de-listing and fivestment: In 2020, legislation was passed in the US (the Holding Foreign Companies Accountable Act) that sought to delist companies listed in the US that fail to comply with Public Company Accounting Oversight Board disclosure standards, subject to a grace period in which the company can rectify disclosure issues. Historically, Chinese companies have refused to comply with US listing requirements, citing Chinese national security concerns. The new legislation requests companies to certify that "they are not owned or controlled by a foreign government"[22].

[22] Source: Holding Foreign Companies Accountable Act. 2020. Congress.gov.

If Chinese companies refuse to comply, their US-traded shares could be subject to forced delisting. Over 90 companies have arranged "take-private" transactions for US shares, delisting them at a buyout price and relisting them in China. This has often resulted in significant losses for investors in the US-listed security. Qihoo, for example, was delisted at a $9.3 billion valuation and re-listed in Shanghai for over $60 billion[23].

[23] Source: Fried, Jesse. "Delisting Chinese Companies Plays Straight Into Their Hands." Financial Times. 2020.

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ADR de-listing – how would it work?

→ There are over 250 Chinese companies listed on US exchanges, with a total market cap of approximately $2 trillion.

→ Under the proposed legislation, if a company is deemed to be out of compliance, it would have an extended period (multiple years) to come into compliance. If it failed to comply, additional time would be provided to process a delisting.

→ ADR delisting is a common occurrence – ADR terminations do not actually require shareholder approval.

→ Upon termination, companies are generally expected to surrender their ADR holdings in exchange for underlying ordinary shares or through a go-private transaction.

→ Importantly, if at least 300 US investors remained shareholders in the business, the company's reporting requirements to the SEC would remain in place .

→ Several Chinese companies have already responded with secondary listings in Hong Kong in recent months – dual listings would ease the process of delisting, providing the company with shares to offer existing ADR investors.

→ The formal policy of the SEC is likely to change significantly before implementation, given the potential adverse impact to US investors.

More recently, on November 12th, 2020, Executive Order 13959, "Addressing the Threat from Securities Investments that Finance Communist Chinese Military Companies," was designed to prohibit any transaction involving companies that the US has identified as being involved with a "Communist Chinese military company." The order stated that the companies posed "an unusual and extraordinary threat… to the national security, foreign policy, and economy of the United States."[24] The list included 31 companies, of which 13 were publicly traded. The order took effect on January 11, 2021 and required divestment by November 11, 2021. In December 2020, the NYSE removed three Chinese telecom companies. The London Stock Exchange removed two ADRs of blacklist companies that were backed by shares listed in New York. In December, MSCI, FTSE Russell and S&P Dow Jones index providers announced their intentions to remove the blacklist companies from their indices. However, each provider appears to have distinct implementation approaches. In January 2021, China Mobile and CNOOC were removed from MSCI China indices.

[24] Source: "Executive Order on Addressing the Threat from Securities Investments that Finance Communist Chinese Military Companies." whitehouse.gov. Issued on November 12, 2020.

On June 3, 2021, President Biden signed Executive Order 14032 that further refined the prohibition of investment in Communist Chinese Military-Industrial Companies ("CCMC"). Biden's order expanded the blacklist from Trump's 31 companies to 59 companies.[25] The new executive order recertified the original order and provided an annex listing CCMCs. Biden's order prohibited the purchase of shares of blacklist companies after August 2, 2021 and allowed a year for current holders to divest their holdings. Broker dealers and brokerages are allowed to facilitate transactions

[25] Source: https://www.ft.com/content/91e6fb2a-6385-49b3-83aa-8044374805c4

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for divestment.[26] While the Biden administration remains focused on circumscribing investment in CCMCs, the administration rescinded the 2020 bans on US downloads of TikTok and WeChat.

In June 2021, China passed a Data Security Law that will demand that Chinese companies secure governmental authorization before allowing Chinese data to be exposed to foreign regulators. The Cyberspace Administration of China ("CAC") has been concerned that Chinese companies listed through VIE – ADR structures could allow foreign regulators and lawmakers access to sensitive Chinese data. Days after its New York listing, Didi Chuxing was ordered by the CAC to remove its app from all app stores over concerns that its app allowed cross-border transfer of sensitive Chinese data. Didi shares lost 20% and investors have filed lawsuits on Didi's failure to disclose regulatory risks.[27] In response to Didi investor complaints, Gary Gensler, the Chairman of the SEC, announced that the SEC would be seeking disclosures from offshore issuers before their registration statements can be declared effective.[28]

Debt market[29]

In addition to a deep equity market, China offers robust sovereign and corporate debt opportunity sets.

China's debt market can be divided into three categories: the onshore (CNY) market ($16.3 trillion as of December 2020), the offshore, dollar-denominated bond market ($600 billion), and the offshore yuan-denominated (CNH) "Dim Sum" market ($85 billion). The CNY market can be further subdivided into the Chinese Interbank Bond Market ("CIBM") and the exchange-traded market. The CIBM is regarded as the more institutionalized of the two markets.

As is the case with the equity market, China's debt market is gaining more attention from global benchmark providers. The CNY market was first opened to international investors with the launch of the CIBM Direct Access program in 2016. China then established a Bond Connect program for onshore bonds, launched in 2017, predicated on a similar concept to Stock Connect for the onshore equity market. CNY bonds are also accessible through QFII and RQFII, like China A shares stocks. Greater accessibility has led to index inclusion. Bloomberg incorporated Chinese bonds into their global debt indices in April 2019, and JP Morgan added them to the flagship GBI-EM local currency emerging markets debt index in February 2020. FTSE Russell intends to include certain Chinese government bond sectors in its World Government Bond Indices in October 2021. These inclusions are confined to government debt – Chinese Government Bonds ("CGBs") and policy bank bonds. Policy bank bonds are viewed as similar to CGBs by market participants.

The credit market in China is still not broadly accessible to international investors. Exchange traded corporate bonds are available through Bond Connect, but they do not encompass the entire market. Still, Neuberger Berman estimates that exchange

[26] Sources: Financial Times, "Didi/New York's China Stocks in New Listing Clamp Down; 7/8/2021 and China's Crackdown on US Listing Threatens $2 trillion Market, 7/7/2021.

[27] Source: Financial Times, "Didi/New York's China Stocks in New Listing Clamp Down; 7/8/2021 and China's Crackdown on US Listing Threatens $2 trillion Market, 7/7/2021.

[28] Source: SEC.gov | Statement on Investor Protection Related to Recent Developments in China.

[29] Source: Debt statistics provided by Neuberger Berman, Bloomberg, WIND, BOAML

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traded corporate debt represents nearly 8% of the overall onshore bond market, so this represents a fairly large opportunity set. However, the opportunity set is concentrated, with a majority of issuance from the financial, industrial, utility, and materials sectors. Investors often cite illiquidity as a key risk precluding them from considering the credit market.

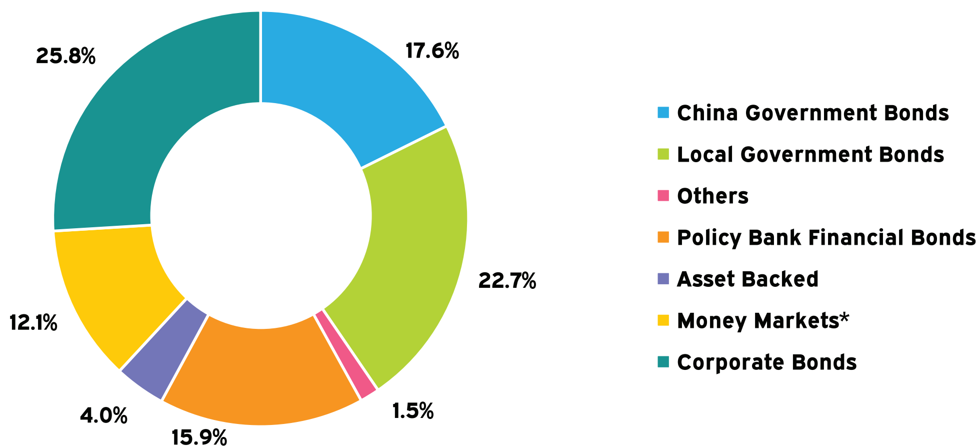

FIGURE 7
Onshore China Bond Market Sector (CNY % of Total Market)

Source: Neuberger Berman, JP Morgan, Wind as of June 2021.

The CNY market, even with a gradual increase in accessibility, remains held mostly by domestic investors. According to the PBoC, international investor holdings of CNY bonds amounted to just 2.6% of outstanding issuance (other estimates vary). The disparity between international investment and China's footprint is stark. China dwarfs emerging market peers in terms of total debt outstanding. In June 2020, corporate debt in China exceeded 150% of GDP.[30] In fact, the Chinese debt market represents over 20% of total global debt outstanding.

[30] Source: Oxford Economics, September 14, 2020.

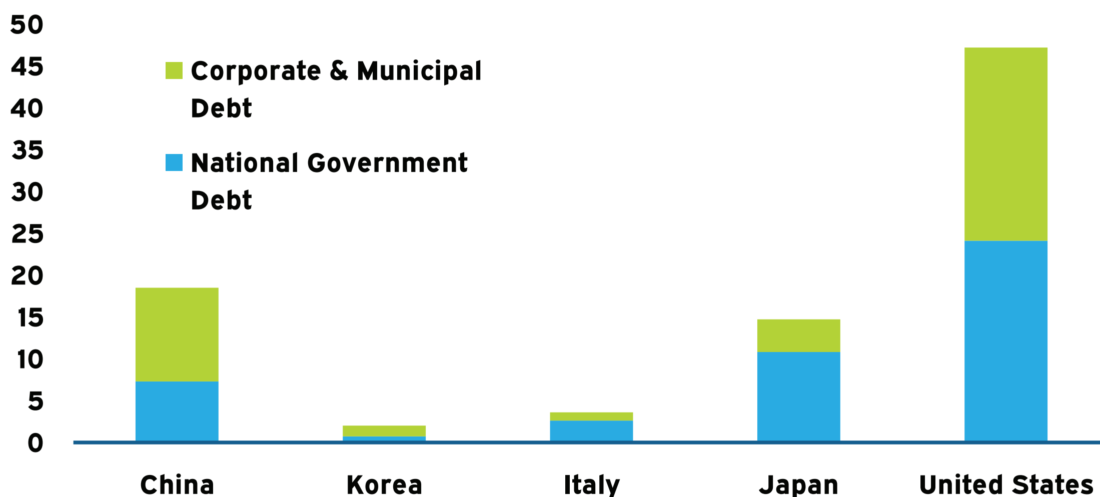

FIGURE 8
Total Debt Outstanding (USD $trillions)

Source: Bank for International Settlements, Statistics 4Q2020. In addition to private sector debt non-governmental debt in China includes municipal debt and policy bank debt.

For our purposes, the CGB market represents the most realistic opportunity set for investors to consider in the context of China's investable bond market, since access to credit and data on its performance is more widely available. In the table below, we use the JPMorgan JADE Broad China Onshore index as a proxy for CGBs.

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Opportunity Set	Onshore China Gov't Bonds	EM Local Gov't	Global Gov't	US Treasuries	Diversified US Fixed Income
Index	JP Morgan JADE Broad China Onshore	JP Morgan GBI EM Global Diversified	FTSE World Government Bond Index	BBG Barclays US Treasury	BBG Barclays US Aggregate
Annualized Return (%)	5.7	4.8	2.8	3.7	4.1
Standard Deviation (%)	4.1	12.1	6.1	4.1	3.2
Max Drawdown (%)	-7.0	-29.3	-10.3	-6.0	-3.8
Sharpe Ratio	1.08	0.29	0.25	0.60	0.90

TABLE 7
China Performance vs. Global Equity Markets June 2005 through June 2021

Source: eVestment, JP Morgan, FTSE, Bloomberg Barclays and Neuberger Berman returns as of June 2021. Index statistics as of June 2021 and longest common period (LCP) January 2005. FTSE 3-month discount rate. Neuberger Berman, JP Morgan, FTSE, Bloomberg Barclays.

Performance results suggest that an investment in a diversified basket of CGBs delivered a return profile similar to that of US Treasuries over that time period. However, those results were achieved with significantly more downside risk. Investors have received diversification benefits from CGBs, though, like Chinese equities, those benefits have declined as investor access has improved. CGBs were once negatively correlated with emerging markets sovereign debt. However, the correlation has moved to meaningfully positive levels over the past decade.

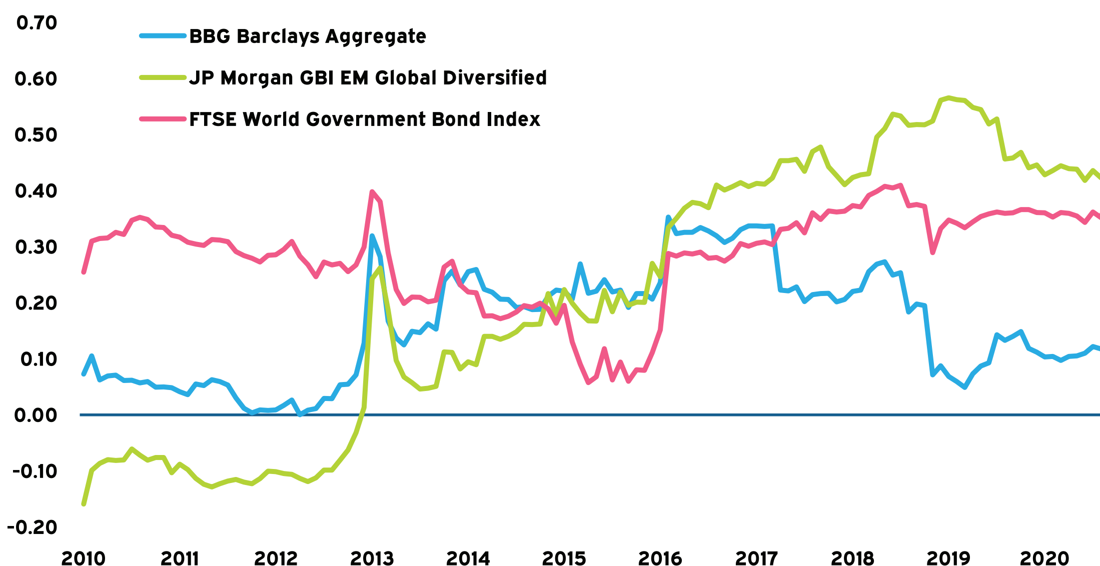

FIGURE 9
Rolling 5-Year Correlation: JP Morgan JADE Broad China Onshore

Source: JPMorgan, Neuberger Berman, Bloomberg Barclays, FTSE.

In 2020, China's foreign exchange regulator estimated that foreign investors accounted for nearly $94 billion US dollars investing in Chinese local bonds.[31] The case often made for China fixed income securities is fairly straightforward – they offer access to a more favorable long-term growth profile and a yield advantage relative to developed markets in a world increasingly starved for sovereign debt yield. This characterization likewise applies to many of China's emerging market peers. China's sovereign debt market offers a meaningful spread relative to US Treasuries. When compared to other large developed markets, the yield advantage is even more favorable. Sovereign debt in Japan and the Eurozone trades with very low or negative yields, in many cases. However, spread implies compensation for additional risk, which in the case of China's sovereign and corporate bonds is multi-faceted.

[31] Source: State Administration of Foreign Exchange "SAFE" and Oxford Economics.

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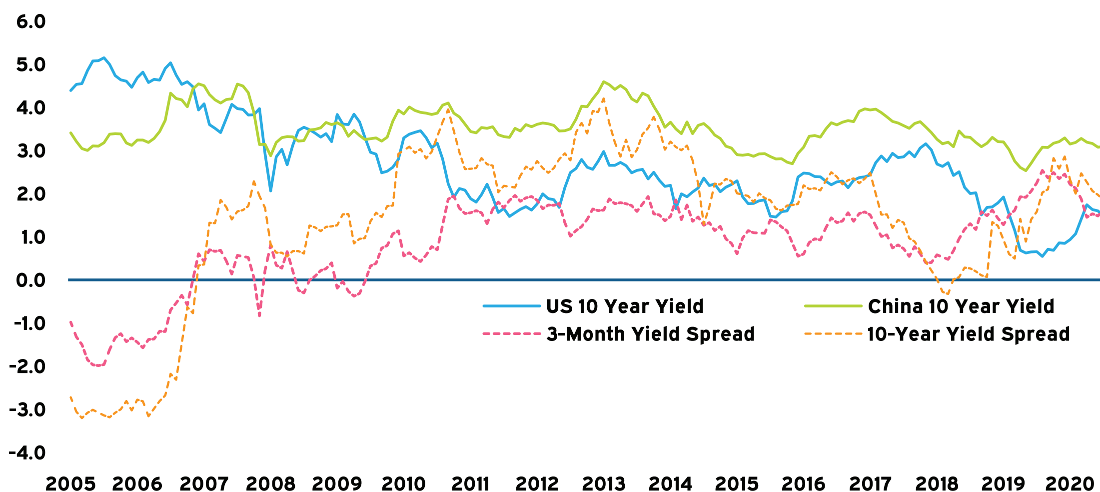

FIGURE 10

Government Bond Yields and Spreads (%)

Source: FactSet as of June 2021. Spreads reflect yield for Chinese government bonds relative to US Treasury bonds for the equivalent maturity.

The duration profile of CGBs, in aggregate, is low when compared to US Treasuries. China's sovereign debt market trades at an effective duration of approximately 5.0 years, notably lower than the US Treasury effective duration of 6.9 years.[32]

[32] Source: Neuberger Berman, BlackRock iShares data, as of December 2020.

Important considerations

High aggregate debt level: The opportunities and risks are not dissimilar to those of other emerging market issuers (e.g., currency and system-wide leverage should always be key considerations). However, as noted in part I of this series, China's economic expansion has been credit-fueled. System-wide debt levels are arguably excessive and require careful management going forward. It is often argued that, since China's sovereign debt is issued primarily in local currency (rather than hard currency), the country might be in a stronger position than some of its emerging market peers. After all, most of the sovereign debt crises of the past century have been driven by a currency-liability mismatch. However, non-financial corporate and household leverage continue to build. These credit channels add considerable complexity to the overall debt picture.

Opacity of policy tools and impact on debt markets: China's central bank operates a relatively complex monetary policy framework, which has direct and indirect effects on the bond market. The PBoC utilizes approximately 20 separate policy tools, ranging from traditional open market operations to multiple interest rates and administrative measures. Consequently, investors must grapple with the complex dynamics of how the bond market may react as the PBoC seeks to influence the yield curve's level and shape. The PBoC is attempting to shift towards a more standardized interest rate corridor by targeting the "seven-day repurchase rate for depositary institutions," similar to the Fed Funds Target Rate, which the US Federal Reserve uses to set interest rates. However, China continues to conduct monetary policy through a very broad set of tools that, at times, might lead to confusion.

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Lack of diversification within corporate credit: Where the equity opportunity set offers access to a broad spectrum of sectors, the corporate credit opportunity set is dominated by financial and industrial companies, many of which are state-owned. This introduces a host of potential risks related to governance and leverage. Whereas investors in equity securities in China can easily tilt portfolios towards "new economy" companies in an effort to reduce going-concern risk and exposure to sectors in structural decline, investors in corporate credit must accept greater exposure to large banks and investment spending-reliant industrials in an economy that has pushed the envelope of financial leverage. Additionally, China's credit market remains largely domestically owned, and is far less liquid than the sovereign debt market. As of early 2021, Chinese banks owned approximately 53% of local debt securities, and the China Interbank Market traded approximately 88% of local bonds.[33]

[33] Bloomberg Buy Side China Local Market Overview; January 2021.

Viability of corporate credit ratings and opacity of reporting: Corporate credit is rated by domestic agencies that are often themselves state-owned, resulting in a conflict of interests. Ratings profiles for Chinese companies are inconsistent with international standards. Of the more than 11,000 corporate bonds outstanding in China, more than 95% receive ratings of AA to AAA. In the US, the total is just 7%. More broadly, many of the same risks inherent in China's equity market with respect to ownership by the state and suspect reporting quality are also present in the corporate fixed income market. Of note, the China Securities Regulatory Commission ("CSRC") granted authorization to S&P to give ratings on exchange market listed bonds in October 2020.

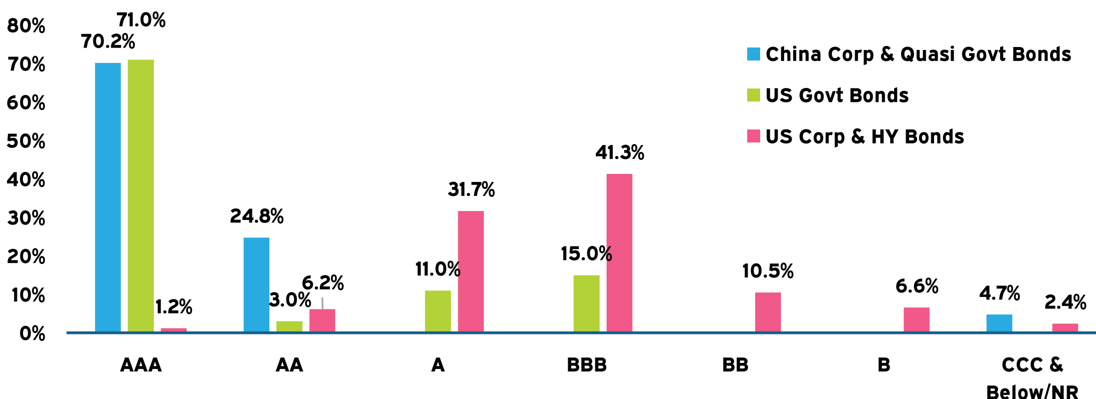

FIGURE 11
Credit Structure of China OnShore and US Bond Markets (% of Market Capitalization)

Source: Neuberger Berman, JP Morgan, and Bloomberg Barclays. Bloomberg US Intermediate Aggregate and Bloomberg Corporate Intermediate Indices as of June, 2021. China Onshore structure as of July 2021.. China's onshore bond market includes quasi-governmental issuers but does not include sovereign bonds or corporate bonds.

Duration profile: The proliferation of shorter-term debt in China is also noteworthy. Issuers in China must comply with State Council regulations regarding bond yields, total debt limits, debt servicing capacity limits, and relevant industrial and development policies. Consequently, they are often unable to issue longer-term debt, resulting in more short-term issuance. The result is a greater need for refinancing and potentially heightened default risk.[34]

[34] Source: Yin Yiuchao, et al, Debt Capital Markets in China: Regulatory Overview. For example, corporate bonds yields may not surpass the interest rate (Prime Lending Rate ("LPR")) thresholds established by the State Council.

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Financial repression's impact on cost of debt: As noted previously, financial repression through various means has artificially depressed debt costs for Chinese corporations and hence yields for investors. The CCP's control of large domestic banks means that this policy can persist over time. Consequently, a corporate debt investor might not be able to receive a yield that represents adequate compensation for risk in the Chinese debt market. When compared to the broader emerging market debt universe, Chinese debt markets may have a shorter duration, but the yields appear similar to index averages.[35]

[35] Source: Bloomberg. Bloomberg Barclays Emerging Market Debt Index (USD) characteristics as of June 2021,: yield to maturity ("YTM") of 3.8% and an average duration of seven years. The Bloomberg Barclays Emerging Market Debt Index (Local Currency) statistics as of June 2021: YTM of 4.2% and average duration of 6.6 years. As of June 2021, the State Council LPRs continued to be: 1-year loan LPR at 3.85% and 5-year LPR at 4.65%. Chinese government bond 10-year yield in CNY ~2.9% and 10-year bond yield in USD ~1.5%.

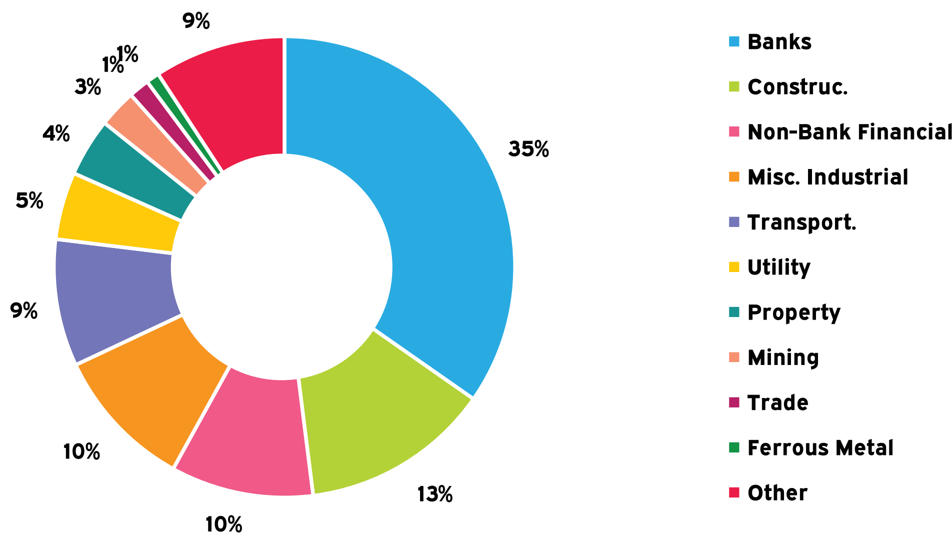

FIGURE 12

China Onshore Corporate Debt by Sector (%)

Source: Neuberger Berman and JP Morgan.

The risk of implicit guarantees: Investors can derive some confidence from the fact that the Chinese government can choose to intervene in the domestic debt market. Furthermore, SOEs, and even private issuers, have enjoyed an "implicit guarantee" from the CCP regarding creditworthiness (one means of financial repression). However, in recent years, China has exhibited an increased willingness to allow financially distressed companies to default on their obligations. In April 2015, China allowed Baoding Tianwei, a power equipment manufacturer, to default, which was widely viewed as a landmark decision given that many state-owned banks held considerable stakes in the company. Defaults continue to climb in China among both private firms and SOEs.

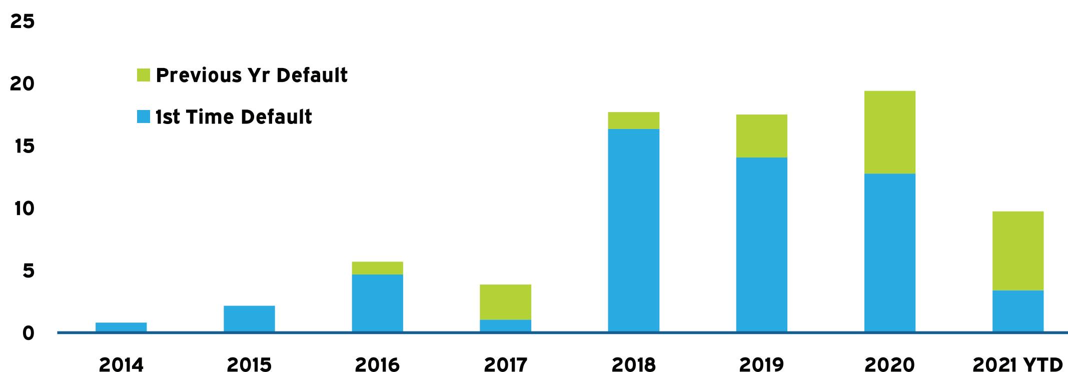

FIGURE 13

Defaults: China

Source: Neuberger Berman, Bank of America Merrill Lynch, WIND as of June 2021.

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Several high-profile defaults occurred in late 2020. In December 2020, the CSRC prohibited the rating agency Golden Credit Rating Company from taking any new clients for three months. The general manager of Golden Credit is accused of accepting large bribes to enhance company ratings and is facing formal prosecution. In spite of the public threat of more regulatory oversight, other credit rating agencies have continued to assign very high ratings to state-owned enterprises[36]. In addition, recovery rates for defaults in China have been extremely low relative to non-China corporate issuers[37]. A solvency crisis stoked by increased defaults could increase volatility, not just in corporate bonds but in sovereign bonds as well.

[36] Source: Lockett, Hudson, Hale, Thomas, and Yu, Sun. "China suspends top credit rating agency as defaults hit market." Financial Times. December 14, 2020.

[37] Source: "The Evolution of China's Bond Market." Seafarer Funds. 2019.

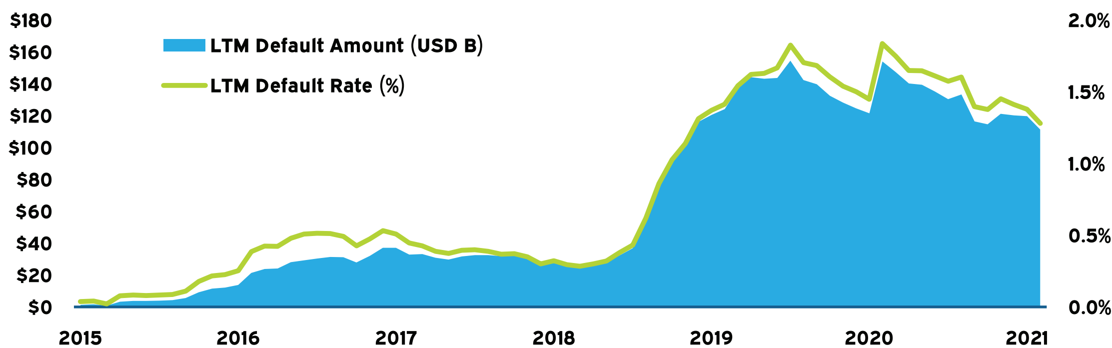

FIGURE 14

China Non-AAA Bond Default Rates % of Non-AAA Credit Universe

Source: Neuberger Berman, Bank of America Merrill Lynch, WIND as of June 2021. The non-AAA segment of the Chinese credit market has a notably higher default rate than the AAA segment. This is likely because AAA credits have the benefit of 'state support' from the National Development and Reform Commission and banks.

US/China conflict: Largely similar to the risks discussed within our review of equities, the tense relationship between the US and China may affect bond markets. For example, the ban on US investment in Chinese military-affiliated companies extends to debt markets. In June of 2021, China passed an anti-foreign sanctions law designed to resist US and European curtailment of investments in Chinese military-owned companies.[38] China may continue its own counter-measures to discourage US ADR listing through control of China data security measures and other forms of official influence.

[38] Source: https://www.npr.org/2021/06/11/1005467033/chinas-new-anti-foreign-sanctions-law-sends-a-chill-through-the-business-community.

Private markets

The private equity market in China is still quite nascent compared to counterparts in the US and Europe. It did not take shape until the 1990s, with the passing of important regulatory measures by the People's Bank of China and National People's Congress in 1995 and 1996, respectively. The 1995 measure was the first private equity regulation in China, allowing domestic non-banking financial and non-financial institutions to partner and co-invest with overseas investment institutions in certain industries. The following year, the National People's Congress passed a law allowing venture capital to be considered a commercial activity in China, paving the way for the growth of this sector. Through further reforms and developments, the private equity market continues to offer an increasing set of opportunities for foreign investors. Compared to other private asset classes (debt, real estate, and infrastructure), the private equity market opportunity in China is broader and deeper, more accessible to investors, and offers a more diversified and favorable risk-return profile, and is therefore the main topic of discussion here.

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China venture capital and growth equity

Similar to the maturation of the economy of China, the venture capital ("VC") market in China has come a long way, evolving into what is now the second largest venture market behind the US. In 2018, nearly 30% of global venture funding was directed towards China-based companies, second only to North America-based companies, which accounted for just over 50%, and well ahead of third place Europe, which accounted for nearly 9%.[39] In 2020, 38% of private equity managers and 55% of private equity investors surveyed thought that China offered the best investment opportunities.[40] The roots of the venture industry in China started in the late 1970s when the government began to relax its control on the economy and private enterprises began to flourish. The first international venture funds started popping up in the 1980s; however, they mainly focused on infrastructure and property investments. Government-directed policy wanted venture firms to invest in technology, but investors preferred lower risk industries and were still worried by the lack of formal institutions with market-friendly laws and regulations, enforcement, and global standards for maintaining company financial statements.

[39] Source: Pitchbook Venture Capital in China Report, 1Q19.

[40] Source: Preqin, Annual Global Report, February 2021.

China's venture market did not see extensive growth until the early to mid-2000s. After the dot-com crash, and seeing the success that a small number of foreign firms had in China via growth capital and buyout deals, many foreign VC firms began to shift their focus to China. US venture funds, in particular, have taken a growing interest in China, investing $19.4 billion in China-based startups in 2018. VC investing has accelerated rapidly since 2014, when only $3.1 billion was directed towards Chinese VC.[41] American venture capital money deployed in China has been directed largely toward late-stage rounds in the many "unicorn" billion-dollar companies that have proliferated in China.

[41] Source: US-China Investment Hub, Rhodium Group.

In China's 14th Five Year Plan, the national government targeted investment in research and development to grow 7% a year through 2025. Tremendous growth in the Chinese VC market continues as new economy sectors, including consumer/retail; technology media and telecom; healthcare and enterprise information technology services, continue to grow faster than GDP, led by business model innovation and technology integration. The Made in China 2025 plan and associated initiatives have increased capital flow into these projects. China is also beginning to challenge the US in areas such as AI/machine learning, 5G, biotechnology, and autonomous driving. The Chinese government has played an important role in fueling growth in these sectors through support and subsidies.

Meanwhile, growth capital deals, which have historically made up the majority of private equity investment activity in China, are seeing a slowdown relative to venture capital and buyouts.

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From 2014 to 2017, growth capital funds accounted for approximately 51% of capital raised each year. However, in 2018, growth capital funds only accounted for 27%, compared to 43% for venture capital and 26% for buyout funds.[42] Historically, private equity in China had targeted growth-stage companies, given their proven business models. Additionally, entrepreneurs were less willing to sell controlling stakes in their businesses while the valuations of their companies continued to increase. As the private equity market in China matures with increasing venture capital and buyout opportunities, growth capital should continue to play an important role, but the reliance on growth, driven primarily by the country's historically rapid rate of GDP expansion, may prove challenging in the years ahead.

[42] Source: Preqin Report: Private Equity & Venture Capital in Greater China's Innovation Economy, December 2019

The goals of the latest Five Year Plan have stressed technology independence and renewable energy so that traditional private equity activities are in direct competition with government guided funds. In 2015, private capital comprised about 70% of VC funding in China. Yet by the end of 2020, it is estimated that approximately 70% of VC funding was from government-guided private equity funds and that there were approximately 1,000 government-guided funds competing with private venture capital firms.[43] These governmental-guided funds may not be managed to maximize investor returns only, but they have a competitive advantage in accessing and identifying new deals. Still, venture capital funds raised approximately $57 billion dollars in 2020 and are on track to raise more in 2021.[44]

[43] Source: The Economist, "The Chinese State is Pumping Funds into Private Equity, June 3, 2021. PitchBook. https://pitchbook.com/news/articles/china-five-year-plan-venture-capital-tech.

[44] Source: PitchBook

China may be following Singapore's path by leveraging government investment in strategic sectors for development.[45] Local governments and national ministries have established public-private partnership vehicles like private equity limited partnership ("LP") structures. For example, there is a specialist government guided VC fund dedicated to microchips with an estimated 200 billion yuan under management.[46] The Economist reports that the average angel investment is approximately 3 million yuan, and according to PitchBook, government guided funds had approximately 5.65 trillion yuan under management at the end of 2020. The sheer scale of these new government guided funds may exceed the number of attractive investments,but with some of these funds promising to absorb up to 40% of investment losses, Chinese LPs may have some downside protection.[47] By the end of 2021, Preqin noted that the two largest VC funds were Chinese government backed funds. The China Manufacturing Transportation and Upgrading Fund is raising around $21 billion and the Guohua Military and Civilian Integration Industry Development Fund is raising approximately $15 billion.[48] While some traditional private equity firms may try to find ways to partner with government guided funds, the entry of these official funds could fundamentally transform pricing and exit strategies going forward.

[45] Singapore's GIC and Temasek provided very favorable investment terms for nascent industries in the 1970s and 1980s. Temasek and GIC are flagship sovereign wealth funds with global investment portfolios today.

[46] Source: The Economist, "The Chinese State is Pumping Funds into Private Equity, June 3, 2021.

[47] Source: Ibid.

[48] Source: Preqin, Annual Global Report, February 2021.

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Buyout market in China

Compared to venture capital and growth equity, control-oriented leveraged buyouts ("LBOs") have been less prevalent as a private equity strategy in China. The first buyout deals in Asia were completed in the late 1990s, and by the mid-2000s, buyouts of majority equity stakes in large companies were commonplace in Australia, Japan, Singapore, South Korea and Taiwan. However, the first buyout deal in China did not occur until 2005, when Carlyle purchased an 85% stake in Xugong Group Construction Machinery from its state-owned parent company. Two other transactions that occurred around this time, TPG's purchase of an 18% stake in Shenzhen Development Bank and Carlyle's purchase of a 24% stake in China Pacific Life, were notable, but they represented minority equity positions. Given the abundance of high-growth companies in need of expansion capital, buyout opportunities, which are more complicated, remained less prevalent. As the private equity market in China matures and the growth rate of the economy decelerates, buyout strategies should play a larger role, as companies will likely turn to private equity funds for their expertise in implementing business improvements.

Changing market characteristics in China are also evolving to support the development of the buyout market. These include an increased acceptance and understanding of the benefits of private equity ownership by founders and management teams, increased availability of leverage, the need for business and state-owned enterprises to run more efficiently, and the growing experience and availability of professional executives who can be brought in by private equity firms to enhance management practices at portfolio companies. State-owned companies, which have historically been acquirers of companies, are coming under scrutiny to deleverage their balance sheets and are less able to compete for deals. Many large corporations in China, which have also served as competitors when it comes to acquisitions, already have highly leveraged balance sheets and may need to sell off non-core assets to raise capital. The themes of founder succession, SOE restructuring, and corporate carve-outs are all catalysts for more buyout activity in China for years to come.

Performance of private equity funds by region

The chart below shows the net IRR to limited partners across various geographic regions and across different time horizons. Over the short- and long-terms, China's pan-private equity returns have exhibited strong performance, which can be largely attributed to the outperformance by venture funds in China. It is worth noting that within Cambridge Associates' data set, the US private equity universe includes over 3,000 funds that account for $2.1 trillion in commitments, while the Chinese private equity universe includes just over 230 funds that account for $122 million in commitments, further showing that China's private equity market is still not as mature as the US.

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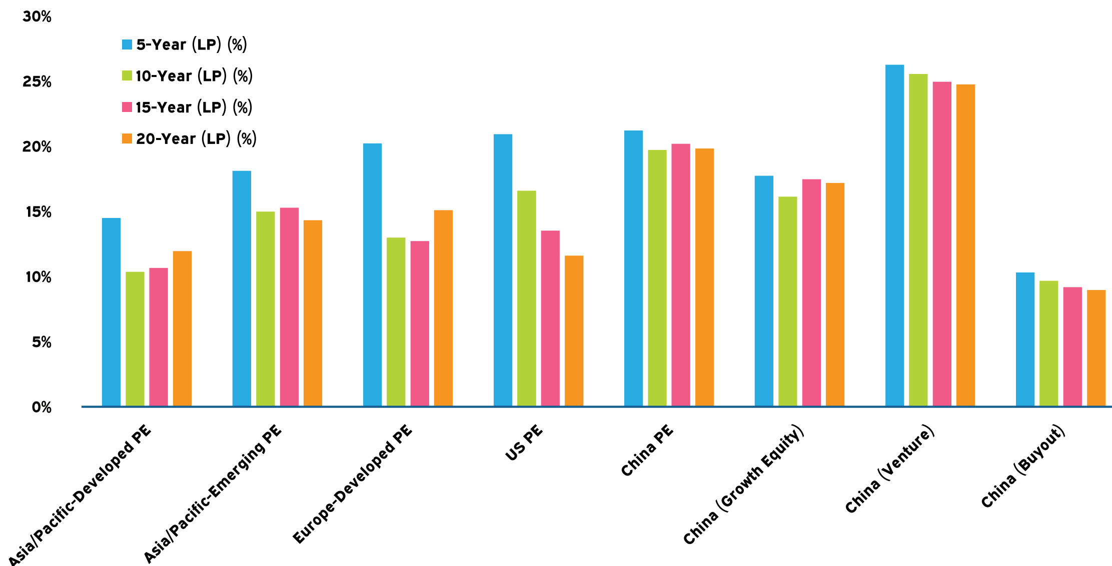

FIGURE 15

Net Horizon Returns (IRRs)

Source: Cambridge Associates. Returns in USD as of March 31, 2021.

Important considerations

The private equity market in China has generated significant value for investors, offering exposure to "new economy" businesses that are not as readily available through the public markets. However, there are specific regulatory and market dynamics that make the Chinese market distinct from other private equity markets.

- The Chinese government restricts foreign ownership of certain industries, which are only accessible to foreign investors through joint venture structures with Chinese companies or are restricted through shareholding limits. In other cases, foreign investors might need prior approval from the Ministry of Commerce of the People's Republic of China ("MOFCOM") to invest in a restricted industry. The restricted list is categorized into 18 sectors, including agriculture, utilities, construction, wholesale and retail trade, transportation, warehousing and postal services, financial, accommodation, information technology and software, scientific research, environmental, education, health and social work, sport, culture and entertainment industries.

- Many private equity investments into China are structured through offshore holding companies (e.g., VIEs), reducing the risk of cash being trapped onshore. In addition to potentially changing legal interpretations of VIEs (as discussed previously), converting an onshore domestic company in China into an offshore listing is complex and costly. The MOFCOM is still in the process of reconciling its mandate to enforce foreign investment rules while requiring VIE structures to apply for approval for IPOs or foreign acquisitions. In 2018, the sub-ministry State Administration of Market Regulation ("SAMR") was created to enforce anti-monopoly rules that were applied to the Tencent and Alibaba VIE structures. Legal experts are watching closely to see how MOFCOM may treat VIEs in the future.[49]

[49] Source: https://www.natlawreview.com/article/pre-merger-control-filing-china-concerning-variable-interest-entity-structures. MOFCOM has not officially approved VIE structures. However, China's Supreme People's court ruled in January 2020 that should a VIE violate Chinese foreign investment restrictions, the VIE contract could be challenged. SAMR is a recently established anti-Monopoly authority in China. Additional areas of authority include intellectual property, drug safety and competition.

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- The Chinese government imposes currency controls, but it has established a road map for capital transactions that follow a set of guidelines that market participants are aware of and comply with. Changes in capital flow policies are usually telegraphed in advance to institutional participants, but this may change.

- Compared to other private equity markets around the world, China possesses a more rigid IPO policy and narrow mergers and acquisitions market. Unilateral and unexpected decisions, such as the government's suspension of A-share IPOs between October 2012 and January 2014, limited access to capital for companies and raised difficulties in the exit environment for private equity managers.

- Some market participants believe that China's development model promotes unfair competition and disadvantages for US and other foreign businesses by subsidizing Chinese companies and limiting market access to foreign ones.

- Since 2008, RMB-denominated vehicles backed by domestic institutions such as banks, local governments and corporate investors have dominated the fundraising market compared to USD-denominated vehicles.[50] RMB vehicles can typically complete an investment more quickly than USD-denominated ones because they do not need a currency conversion. Foreign investors, in most cases, are able to invest only in USD-denominated vehicles. Certain cities in China do grant foreign private equity managers a Qualified Foreign Limited Partnership ("QFLP") license that allows them to invest a certain amount of RMB into local companies with flexibility in currency conversion.

- Increasing tensions between US and China may reduce the amount of funding China companies receive from US private equity funds. Additionally, there is increased scrutiny by both Chinese and US regulators of Chinese companies that are listed on US stock exchanges, which could further limit Chinese companies looking to list on these exchanges.

[50] Until 2020, foreign investors were subject to investment limits which also required additional governmental oversight.

Real estate, infrastructure, and private credit

Similar to other asset classes, the rationale for investing in real estate in China includes gaining exposure to the higher economic growth profile of the country, benefiting from certain sectors in earlier stages of development relative to the US and accessing transaction opportunities in a less brokered environment. As in other foreign markets, China's real estate markets can present challenges to foreign investors, such as adverse deal selection, difficulties in repatriating capital, and currency volatility. Given these risks, real estate investors might consider investing in China but primarily as part of a broader allocation to Asia to mitigate the idiosyncratic risks in China's real estate markets

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In terms of infrastructure opportunities, according to a 2019 report from the McKinsey Global Institute, China requires nearly $21.5 trillion in infrastructure investments across transportation, energy, and water & waste sectors. While there is significant demand, the competition from local capital providers with lower costs of capital makes it challenging for foreign infrastructure funds to generate the returns required. Similar to real estate, infrastructure investors should consider investing in China as part of a broader allocation to Asia.

Within private debt, the market is still developing, with the current opportunity set geared toward deals that are at the higher end of the credit risk spectrum (e.g., special situations and distressed credit). Over time, the market should evolve to include opportunities such as investing in a pool of consumer loans or providing lending in an LBO transaction. Between 2015 and 2019, the majority of private debt transactions were secured by real estate, raising concerns on diversification. China's efforts to reduce the amount of corporate debt and tighten the "shadow banking system" has led to a pause in opportunities for private credit investors. To date, reform has focused mainly on peer-to-peer lenders that target retail investors, and the government continues to take steps to open the financial services sector to foreign investors. Further reform of China's shadow banking system, which foreign credit funds are a part of, should eventually lead to more opportunities.

Summary

China's financial markets are a deep, growing opportunity set. The country's authorities have undertaken a variety of steps aimed at making equity and debt markets more accessible to international investors. Index providers have followed suit by adding stocks and bonds to global benchmarks. International investors should therefore not overlook China's investment opportunity set.

→ **Equities**

A growing proportion of China's equity market is now accessible to international investors. China, across various listings, is by far the largest country exposure within the MSCI Emerging Markets Index. Accordingly, most investors already have exposure to China. While the overall Chinese equity opportunity set is deep (a favorable characteristic), the MSCI China Index, for example, is highly concentrated. Just two stocks, Alibaba and Tencent, dominate the Chinese equity market.

While China is a unique market, it is not uncorrelated to the broader global equity market. It also exhibits many of the risks faced when investing in any emerging market (e.g., political, currency, corporate governance, etc.). Further growth of China within the MSCI EM Index could lead to the development of "ex-China" indices and increasing adoption of China-only exposure. Some investors have already carved

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China out as a separate component of a global equity allocation. The opportunity set of investment managers with dedicated, Chinese equity strategies continues to deepen, providing support for this approach. Dedicated China exposure might make sense for investors with the capacity to build a diversified global equity program.

With that said, investors often make the case for China exposure by citing state support and/or international investor flows. This is a risky basis for a long-term allocation thesis, as both of these can reverse rapidly. While China is a major driver of the world's economy, its financial markets are (for now) a much less significant portion of the world's market capitalization. And as we have discussed in our prior white paper, China's capital markets remain heavily influenced by political forces. The quality of China's financial system is evolving rapidly and foreign investors are able to access its markets directly, but this welcomed progress remains unfinished at this time.

A dedicated China allocation also represents a potential headache for institutional investors for several reasons, including index concentration, evolving domestic legal and financial regulation, and index composition and inclusion uncertainty for offshore and onshore securities. Political and economic tensions between the US and China may deteriorate further, which may generate ever increasing investment prohibitions and market disruptions. Until more clarity on the US-China conflict emerges, we believe China might best be left as a subcomponent of a diversified emerging markets equity portfolio. Experienced active management could offer investors an additional layer of oversight and market monitoring if investors prefer to invest directly in Chinese securities.

→ Fixed income

The Chinese onshore bond market is becoming increasingly accessibly to international investors. China's sovereign bond market, which is more liquid and investable, offers a healthy yield spread relative to the US and other developed markets. This provides a potential motivation for adding an allocation to CGBs within a fixed income portfolio. Like an emerging markets equity investor, an emerging markets debt investor might have an allocation to CGBs already.

Chinese credit markets are less appealing. They are heavily geared toward financial and asset-heavy sectors, which may be over-levered and poorly positioned as China shifts from its previous model of fixed asset investment-led growth. Concerns about liquidity, credit ratings, defaults, and disclosures create further uncertainty for credit investors. Investment managers with deep local knowledge could offer interested investors bottom-up credit assessment that might help reduce some related credit-rating and political risks.

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→ **Private markets**

Private markets in China appear to be a source of investment opportunity, providing investors with access to sectors of the economy not readily available in public markets. Compared to other private market classes (debt, real estate, and infrastructure), the private equity opportunity in China is broader and deeper, is more accessible to investors, and offers a more diversified and favorable risk-return profile. Within private equity, venture capital, growth capital, and leveraged buyout strategies offer exposures that can complement an investor's portfolio in the public markets. We recommend working with general partners that possess specialist knowledge and experience with investing in China. Investors may want to consider dedicated China-only funds or pan-Asian funds that include China.

We believe that an investment in any of these channels requires mindfulness of China's unique political and financial risks, which evolve daily. Corporations and the state operate in close proximity, whether the association is explicit or not. Investors should set careful expectations regarding risk, market exposure, and ultimately how to react to adverse changes. Investors should also be cognizant that they are placing capital in an economy whose government pursues distinct, and sometimes opposing, objectives relative to the US and much of the developed world.

Continued escalation of geopolitical disputes between the US and China could change the investment landscape in China for US investors. However, as a counterpoint, investors should not ignore the importance of growth and diversification. Investing in China provides an opportunity to participate in the growth of a country that increasingly contends as a key player on the world stage.

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Appendix 1: China Currency Dynamics

After closely managing a peg to the US dollar (which allowed China to suppress the value of the renminbi (Rmb), making exports more competitive) a managed float was introduced in the 2000s (and it was re-introduced in the 2008 Crisis temporarily). China subsequently introduced an offshore version of the renminbi ("CNH," deliverable in Hong Kong) as a first step towards currency internationalization in 2010[52].

[52] CME Group. "Offshore Chinese Renminbi Market (CNH)." 2014.

The CNY is regulated by China's State Administration of Foreign Exchange, while the CNH is regulated by the Hong Kong Monetary Authority. International investors can freely transact in CNH through Hong Kong, but China restricts transactions in CNY to approved market participants, in financial market transactions and direct investments. As a result, CNH tends to more closely resemble the likely fair market value of the renminbi as long as the PBoC allows reasonable fluctuations of CNY. Since 2015, the yuan has been pegged to a basket of major currencies. The People's Bank of China announces a reference rate for the yuan versus the US dollar and other currencies on a daily basis.

The value of the renminbi relative to other global benchmark currencies is watched closely by global market participants as China becomes increasingly integrated into the global economy. Fluctuations in the value of CNY/CNH have been a source of considerable market volatility in the past. In 2015, for example, after a considerable drawdown in foreign reserves resulting from capital flight and relative economic weakness, China unexpectedly devalued its currency over several days, setting the USD/CNY reference rate higher than 7.0 for the first time in more than 10 years.

Global market volatility spiked, with participants viewing the move as an admission of economic weakness in China and therefore slowing global growth. Importantly, any investor outside of China with Chinese security holdings realized an immediate, one-off devaluation[53]. As is the case with any international investment, and is especially the case for economic systems undergoing meaningful change, currency dynamics merit close attention as they inherently represent a potential mismatch between assets and obligations. Additional pressure on the renminbi, leading to devaluation, remains a risk for international investors.

[53] Provided that they were not invested in Chinese companies that were net currency importers.

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