# A User's Guide To The Chinese Stock Market

**Thomas Gatley**
tgatley@gavekal.com

## Summary

China's onshore stock markets—the Shanghai and Shenzhen exchanges—are the second-largest in the world, but foreign investors still have relatively little exposure. This is for good reason: China for years did not particularly welcome foreign investment in domestic equities, and investors were put off by the market's extreme volatility and heavy-handed regulatory intervention. In 2015, China's reputation was blighted by the rapid rise and collapse of a huge margin-fueled bubble, after which large portions of the market became untradeable for weeks at a time.

All that is starting to change. New channels for foreign investors have opened up, and important changes in regulation have made the market more stable. This convinced MSCI to include onshore stocks in its emerging markets index, albeit at a substantial discount to their full market capitalization. China now makes up more than 30% of the MSCI EM index, and A-shares will reach a 3-4% weighting by November 2019. China's onshore stock market is no longer a sideshow for global investors.

Yet even after all this progress, the onshore market still retains many idiosyncrasies. Chinese equities exist in a very particular regulatory and political context which investors ignore at their peril. This report aims to help investors understand how this market functions by answering four basic questions:

1. **What is there to invest in?** Today almost 5,000 Chinese firms are listed on onshore and offshore stock exchanges. The majority of them are now private-sector companies on the onshore market, which is no longer dominated by state-owned firms.
2. **Who owns the market?** The majority of onshore equities are not tradeable, locked up in state holdings or restricted shares. Traditional institutional investors play a smaller role relative to other markets, with most tradeable stocks owned by either retail investors or high-net-worth individuals.
3. **How can foreigners invest?** Large institutional foreign investors have been able to access onshore equities since 2003 via QFII and RQFII schemes, but it is only with the advent of Stock Connect in 2015-16 that A-shares have become more readily accessible.
4. **How is the market regulated?** China's regulators intervene frequently in small and large ways to manage the supply and demand for securities and to try to defuse volatility.

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### The author

**Thomas Gatley** is the China corporate analyst at Gavekal Dragonomics.

### DeepChina reports

Published 3-5 times a year, DeepChina reports are in-depth investigations of key topics in China's economy, politics and society. They are written by Gavekal Dragonomics staff and our network of expert external contributors.

## 1. What is there to invest in?

China's stock markets started out as a tool for state-owned enterprises to raise cheap capital

When China launched its domestic stock markets in the early 1990s, only state-owned enterprises could list. Some large SOEs were able to raise global capital from Hong Kong's larger market, while smaller SOEs listed on the domestic exchanges in Shanghai and Shenzhen. Private companies had to resort to offshore structures and other stratagems to raise capital.

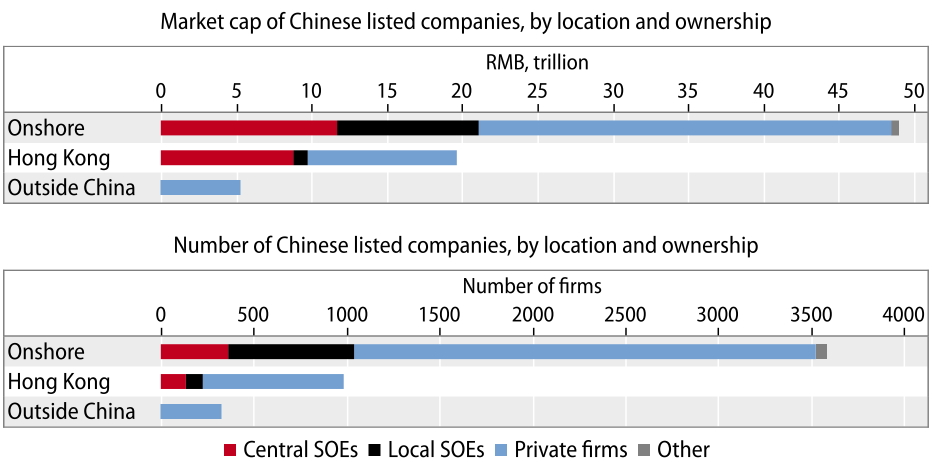
But the stereotype of China's onshore stock markets as the preserve of stumbling state-owned behemoths is no longer true: since around 2000, three waves of IPOs have brought thousands of private firms to the market. While many of China's largest and best-known private companies—Alibaba and Tencent—are still listed offshore, there are now thousands of private-sector companies listed onshore. And many of these are now large enough to be of interest to global investors.

China's stock markets have clearly become too big to ignore. As of February 2019, about 4,905 Chinese firms are listed on stock exchanges (only India has more). 3,586 companies are listed in Shanghai and Shenzhen, 1,051 in Hong Kong, and another 356 in the US and elsewhere. This number has doubled since 2010, and grown 33% over just the past three years. The total market capitalization of onshore stocks is currently around RMB49trn.

Virtually all of these are A-shares, the standard term for onshore renminbi-denominated stocks (originally, it was used to distinguish them from foreign-currency-denominated B-shares, but the B-share market has been moribund since the early 2000s). Firms listed in Hong Kong, account for a further RMB19.7trn; these are often classified into H-shares (shares of companies incorporated in China), red chips (shares of Chinese companies incorporated offshore), and P-chips (shares of non-state Chinese companies incorporated offshore). Chinese firms listed elsewhere—mainly in New York, but also in Singapore and London—account for RMB5.3trn in market cap. The total market cap of all Chinese firms listed globally, then, is around RMB74trn, or US$11trn, second only to the US figure of around US$30trn.

Now private-sector companies account for the majority of the market, if not yet of most indexes

**China's onshore stock markets are no longer dominated by SOEs**

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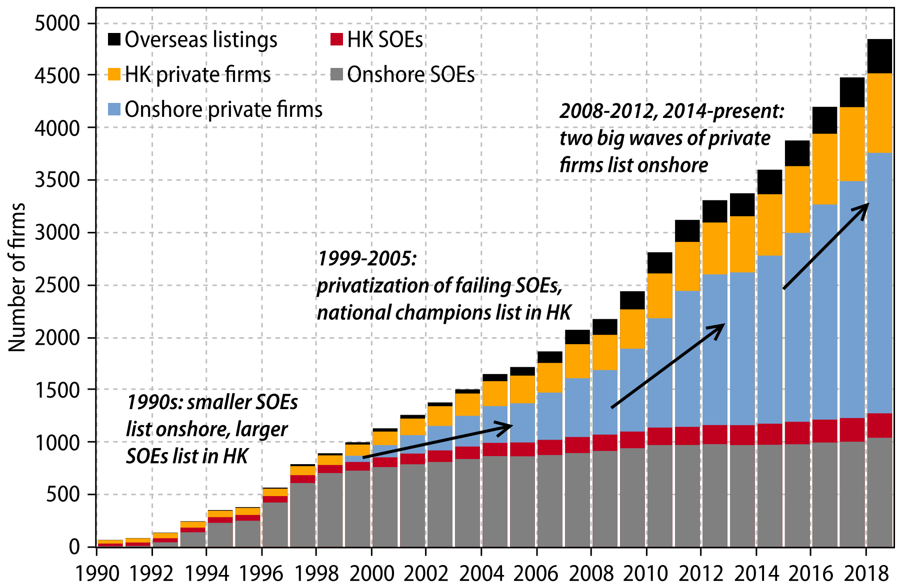
The first private-sector companies began to list onshore in the early 2000s, many of them former SOEs taken over by private owners during the restructuring program launched by then-Premier Zhu Rongji. But management buyouts and privatization of SOEs ground to a halt in 2005, as a new administration became concerned about profiteering in state assets. Since then, IPOs by private-sector companies have steadily continued, but the typical deal has involved a founder- or family-controlled firm selling a non-controlling stake into the public market.

Since the mid-2000s, China's regulators have been encouraging IPOs by smaller high-tech companies

Such transactions have become much easier after a series of regulatory changes opened the door to more listings by younger private firms. In 2004, Shenzhen launched its SME Board, which had less stringent size requirements, and saw a wave of new IPOs through the 2006-7 bull market. In 2009, Shenzhen launched the ChiNext board, with even lower size requirements for listings, which along with rising prices fueled another big wave of private-sector IPOs. Now, Shanghai is preparing a Science and Technology Innovation Board that will be open to unprofitable companies, a bid to attract technology startups.

**The rise and rise of China's listed firm population**

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State-owned enterprises now account for 43% of onshore market cap

It is not always easy to draw a clear line between private-sector companies and state-controlled ones. For many SOEs it is straightforward: their controlling shareholder is a central or local government entity, or another state firm. As of February 2019, there are 363 central SOEs and 678 local SOEs listed onshore, accounting for 29% of onshore firms and 43% of market cap. There are another 2,309 firms clearly controlled by domestic or foreign private individuals or entities, accounting for 64% of firms and 35% of market cap. The remainder are companies with broad stock ownership and without a single controlling shareholder (*dazhong qiye*); they can be quite large, accounting for 5% of stocks but 19% of market cap. It is not often clear whether to classify them as SOEs or private firms: both Vanke, one of China's largest property developers, and financial conglomerate Ping An, fall into this category, and have both entrepreneurial managers and some state shareholders. For simplicity's sake I have classified all of these companies as "private" in the aggregate data, though this probably misses some SOEs.

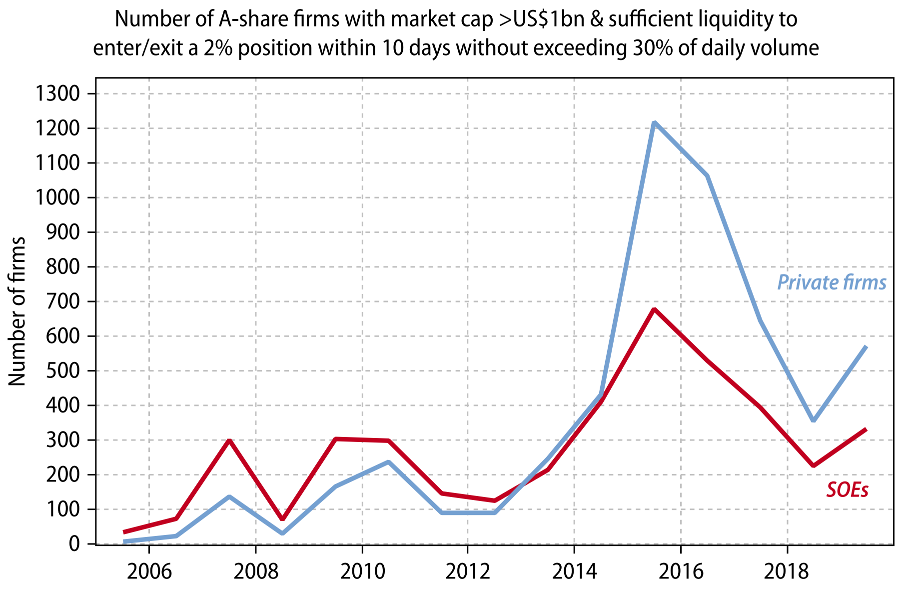
Foreign investors prefer private-sector to state-backed companies, but many private firms were too small

Most foreign investors are more interested in investing in Chinese private-sector firms than in SOEs: who would not want to get in early on the next Tencent or Alibaba? But the rising number of private firms listed onshore did not automatically translate into increased interest from foreign investors. One issue has been that few of these stocks were large or liquid enough to be of practical interest to foreign fund managers.

A somewhat arbitrary but realistic set of thresholds for investability would be: a market capitalization above US$1bn, and being actively traded enough so that an investor could enter or exit a position of 2% of the stock's market cap over ten trading days without exceeding 30% of its daily trading volume. In 2012, only 90 Chinese private-sector firms met those criteria; so far in 2019, 571 meet them, and 467 of those are readily accessible to overseas investors through the Shanghai- and Shenzhen-Hong Kong Stock Connect schemes.

Thanks to sustained growth and higher prices, more private companies are large and liquid enough

**The population of investable private firms is 6 times larger than in 2012**

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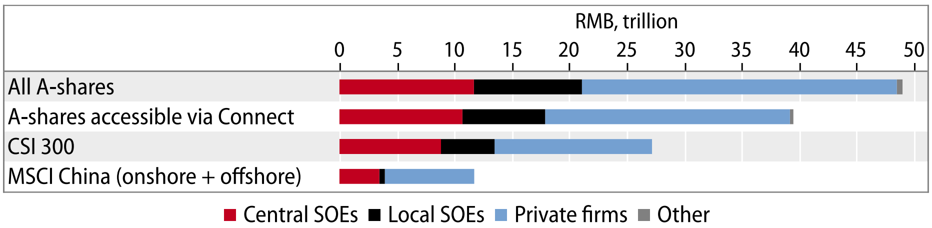
Some of this shift is because the share price, and thus market capitalization, of most listed firms is higher than in 2012. Some of it is because some larger private firms have recently had IPOs. But mostly it is the cumulative result of years of rapid growth: hundreds of the private companies that listed over the past decade have, after starting off quite small, grown to the point where they could be of interest to international investors looking at China.

It is still the case, however, that the most common indexes for the onshore market are dominated by state firms. The Shanghai Composite index is 53% SOEs by market cap, and the large-cap CSI 300 index is 50% state. The

MSCI China index is mostly private, but this is mainly because it has large technology firms listed offshore. Investors wanting exposure to the growing universe of onshore private-sector firms will thus not find it in these indexes.

**CSI 300 is more state-dominated, MSCI China more private-dominated**

Market capitalization by ownership

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## State enterprises and the private sector

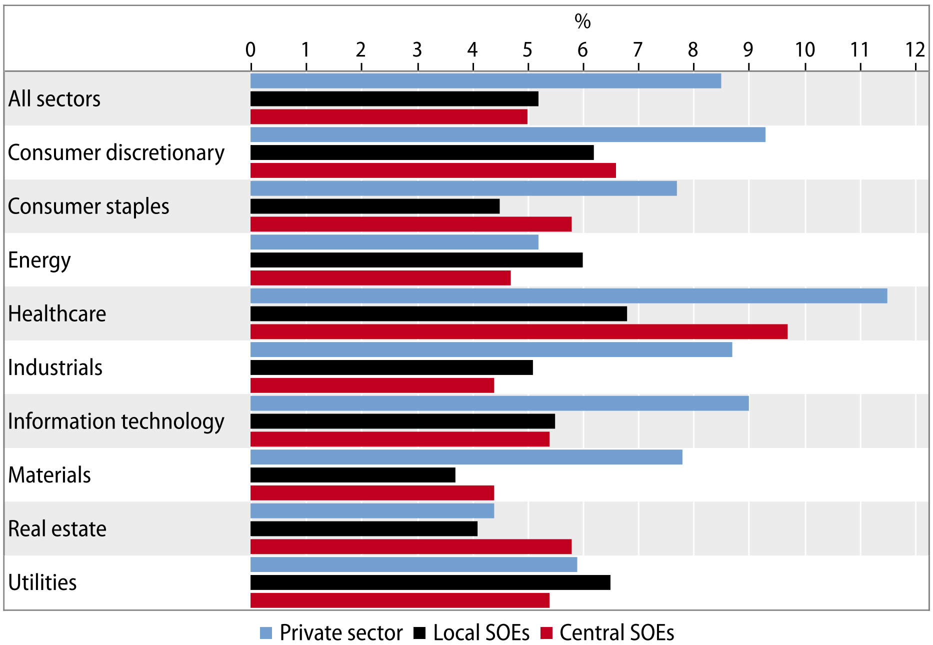
There are many reasons for SOEs to have worse financial performance than private-sector firms

Making sense of the difference between state-sector and private-sector companies is one of the bigger challenges for investors in Chinese equities. There is a widespread perception that Chinese SOEs have worse corporate governance and are less well run than private firms. And there are plenty of plausible reasons why this would be the case. State firms are sometimes directed to make investments more to help support national economic growth than because the investments will generate high returns. They are expected to demonstrate their eager participation in government campaigns, such as rural poverty alleviation and the Belt and Road Initiative. SOEs are also subject to government-mandated reshuffling of assets: stronger firms can be directed to absorb loss-making peers to avoid bankruptcies and layoffs. The managers of SOEs are selected by the Communist Party and not by shareholders, and can be subject to purges or rotated for reasons not clear to outsiders.

In most sectors, private firms do indeed handily outperform state companies

**Private-sector firms usually outperform SOEs**

Median ROA of listed non-financial firms, by sector, 2010-17

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All of these factors do seem to weigh on the financial performance of SOEs. Between 2010 and 2017, listed non-financial SOEs had a median return on assets of around 5%, while non-financial private firms were closer to 9%. Part of the difference is sector-related, as SOEs tend to be more concentrated in capital-intensive sectors like energy and materials. But even in those sectors private firms still outperform their state counterparts. The major exception to this rule is real estate, where central SOEs earn a much higher return—possibly because they are better able to negotiate the purchase of choice parcels of land.

China's intrusive regulatory state influences the decisions of private as well as state companies

Yet to insist on a binary state vs. private distinction would be misleading. The Chinese government certainly does influence the actions of state-owned enterprises under its control—but large private-sector firms must also cooperate with the Party and the state. Negotiating with multiple Chinese government authorities is a fact of life for any company doing business in any sector.

The influence of the Communist Party is also not restricted to state-owned companies. Top leader Xi Jinping has presided over a drive to reassert Party influence, and as of June 2018 listing guidelines require all publicly traded Chinese firms to set up Communist Party organizations and allow them to operate. State-owned companies are further required to ensure that their corporate charter formalizes the role of their Party committee. The role of Party organizations in private and state companies is certainly not the same, but it would be wrong to assume that private-sector companies are free of political influence. Both private and state companies in China must balance political and regulatory demands with the needs of their business, and also seek to benefit from government largesse when possible.

There is some China-specific political risk in all Chinese companies, regardless of their ostensible ownership

In other words, investors in A-share companies take on some degree of China-specific political risk regardless of the ostensible ownership of the firm. Companies can attract lots of government attention, both positive and negative, for reasons not directly related to ownership. For instance, the campaign to reduce excess capacity in the steel sector led to micromanaging of output decisions by officials. The current drive to promote adoption of electric vehicles has also created opportunities for private as well as state companies to take advantage of subsidies. The distinction between state and private ownership may sometimes be less relevant than the specific industry context.

## 2. Who owns the market?

Most onshore stocks are actually locked up in the hands of state or private entities restricted from trading

Foreign investors in A-shares will be participating in a stock market with an extremely unusual structure. Approximately 60% of onshore stock market capitalization is not tradeable at all: these shares are held either by the various government agencies that control state-owned enterprises, or, in the case of private companies, by founders who face restrictions on their ability to sell stock or who have pledged it as collateral for loans. Of the roughly 40% of the market that is freely floating, true institutional investors probably control only around 10%, with the remaining 30% or so held by individual investors (these estimates can only be very approximate due to the fragmentary data). Foreign investors, who are mostly institutional but also include retail investors in Hong Kong, account for roughly 2.5% of market cap.

The limited role of domestic institutional investors is one reason why Chinese regulators increasingly welcome more participation by foreign institutional investors (see section 3). The small free float and outsized role of retail investors means that the onshore market is highly volatile and subject to rapid shifts in sentiment, which is one reason regulators regularly intervene to dampen the wild swings (see section 4).

### Retail investors

According to China Securities Depository and Clearing, there are 147mn "natural persons" with open stock trading accounts as of February 2019. These enormous numbers are often cited as evidence that Chinese stock markets are driven by mobs of retail investors, but in fact these numbers overstate the role of small retail investors. In December 2016, CSDC published a partial breakdown of active stock trading accounts which gives a more accurate picture.

China probably has about 50mn active small-scale retail investors holding about 12% of market cap

First, only about 50mn individual stock trading accounts had any stocks in them at all. The huge number of empty trading accounts likely reflects the fact there is no charge for keeping an account open: a disaffected investor will often just empty their account rather than close it. Second, the value of stocks held by small investors was not that large. Based on numbers from CSDC, as of the end of 2016, there were around 48mn small investor accounts, defined as holding less than RMB1mn in assets (about US$150k). CSDC published a breakdown of these accounts by average size: under RMB10,000, RMB10,000-100,000, etc. Taking the average of each range and multiplying by the number of accounts in that range produces an estimate that these small accounts in aggregate held around RMB5.8trn in assets, or 12% of total market capitalization.

High-net-worth individuals are more important, holding about 17% of market cap

The most important individual investors are not the fabled "mom and pop" retail investors trading small amounts of stock, but high-net-worth individuals. According to the CSDC data, there were around 1.4mn individual stock trading accounts with assets of between RMB1mn and RMB100mn. Based on CSDC's detailed category data, it is possible to estimate that such investors together held about RMB8.7trn in stocks, or 17% of total market capitalization.

**How many investors are there, and what do they own?**

Number and estimated value of onshore trading accounts, end-2016

| | Under RMB1mn | RMB1mn-RMB100mn | Over RMB100mn | Total |
|---|---|---|---|---|
| **Number of trading accounts (CSDC numbers)** | | | | |
| Natural persons | 48,000,000 | 1,400,000 | 4,500 | ~49,500,000 |
| Non-natural persons | 30,000 | 55,000 | 10,000 | 95,000 |
| **Value of stocks in accounts (estimated), RMB billion** | | | | |
| Natural persons | 5,800 | 8,700 | ? | ? |
| Non-natural persons | 8 | 1,000 | ? | ? |
| Total | 5,808 | 9,700 | ~35,000 | ~50,000 |

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Finally, there were about 4,500 accounts of super-high-net-worth individuals, with assets of more than RMB100mn. Since there is no upper limit on the reported value of these accounts, there's no easy way to estimate how large their holdings are. But these accounts almost certainly include the founders and other major shareholders of many listed companies. Chinese rules prevent such large shareholders from selling for six months after an IPO, and limit the volume of sales they can make in perpetuity. Any shares pledged as collateral for loans (a common practice among private-sector companies) would also be restricted. So it is likely that most of the shares held by these huge accounts are not actually free floating.

Individual investors together probably hold about 30% of market cap, and 75% of the free float

Therefore, in terms of actually tradeable shares, individual investors clearly dominate. While small and large individual investors together may only own around 30% of market capitalization, that is roughly three-quarters of the onshore market's overall free float.

## Institutional investors

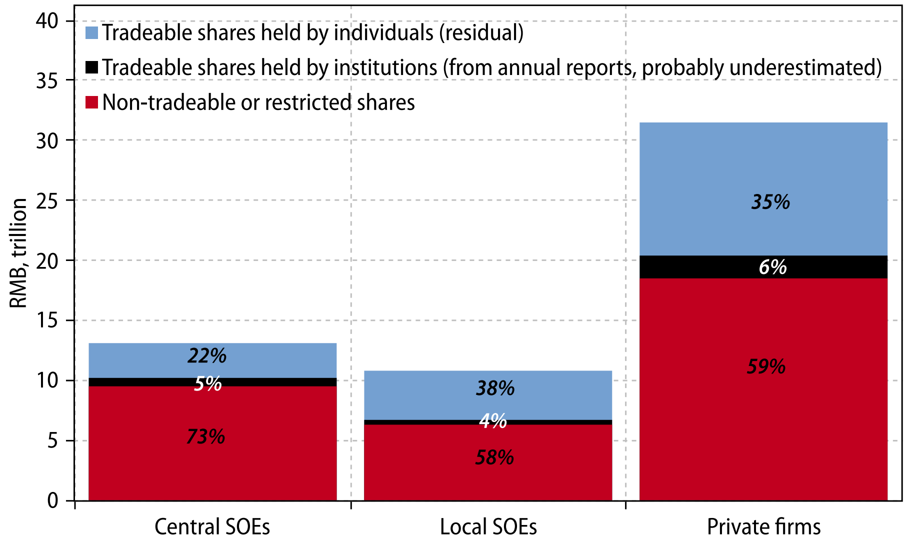
It is hard to separate out true institutional investors from the various state entities that hold stakes in SOEs

To get a clear picture of the role of institutional investors is, if anything, even more difficult than for retail investors. It is difficult to clearly separate true institutional investors, such as mutual funds and pension funds, from the various government entities that hold the state's shares in state-owned enterprises. However, Chinese listed companies are required to periodically report the share of their stock which is held by institutions of various types, and by aggregating these numbers together it is possible to arrive at some overall figures.

This data shows that 62% of total onshore market capitalization is in non-tradeable shares. Central and local state-owned enterprises have about 66% of their market capitalization locked up in non-tradeable shares held by the government, while private firms also have 59% of their market cap in shares subject to trading restrictions. Aggregating disclosures by firms suggests that around 5% of total market capitalization is held by institutional investors, but this is very likely an underestimate because such investors only have to disclose their holdings once they hit a threshold of 5% of market cap.

**A majority of stocks are locked up for all types of A-share firms**

Market capitalization, as of February 2019

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Both state and private firms have about 60% of their market cap in non-tradeable shares

Cross-checking this data with available public information on the various types of institutional investors suggests that in aggregate they actually hold somewhat over 10% of total market capitalization.

Various public data sources on institutional investors together suggest they hold about 10% of market cap

- China's 43 listed securities companies had combined assets of RMB6.2trn in mid-2018, of which RMB1.8trn was recorded as financial assets held for trading or available for sale, the category that would include equities (as well as bonds).
- The total net asset value of all mutual funds was RMB13.7trn in January, but most of these are money-market or bond funds; equity funds total RMB850bn and hybrid funds partially invested in equities total RMB1.3trn.
- Enterprise annuities had total funds of RMB1.4trn as of September 2018, of which RMB1.1trn was invested in equities.
- China's 68 trust companies had RMB22.7trn in assets at the end of 2018, most of which were pass-through assets held on behalf of a bank or other entity, and only RMB5.1trn were investments. Of these, RMB775bn were recorded as stock market investments in the statistics, though there are other line items which could also include equities.
- China's insurance firms had assets of RMB18trn in November 2018, of which RMB2.2trn was invested in mutual funds and stocks.
- The National Social Security Fund had assets of RMB2.2trn in 2017, of which RMB874bn was tradeable financial assets such as equities and bonds.
- Qualified Foreign Institutional Investors have a total available quota of RMB1.3trn, but are probably not fully invested, and can also invest in bonds. For their equity holdings to be around RMB500bn seems a reasonable guess.

- Finally, there is the so-called "National Team" of state-backed financial institutions, including China Securities Finance Corp. and Central Huijin Investment, which occasionally buy equities on the open market to stabilize prices. Goldman Sachs estimated that this group of entities held about RMB1.5trn in stocks in 2018, but there is some double-counting here as some mutual funds and insurers are also considered part of the National Team.

Adding these figures up, with appropriate discounts for double-counting and uncertainty, yields a total of around RMB5-7trn in institutional investor holdings, or around 10-14% of 2018 market capitalization.

Regulators have long talked about increasing the role of institutional investors, to little effect

Chinese stock market regulators have long advocated a larger role of institutional investors in the onshore market, since they tend to be more stable and long-term holders of equity than retail investors. For instance, in October 2018 financial regulators put out a statement encouraging "value investment" and emphasizing the role of insurance firms and funds. But there is little evidence that institutional investors' role in the onshore market has substantially increased over time.

## 3. How can foreigners invest?

In recent years China has taken a more relaxed attitude to cross-border flows of portfolio investment

In the early days of China's onshore equity markets, foreign investors were thought to be more trouble than they were worth. Policymakers prioritized monetary policy flexibility and control over the exchange rate, which meant that China could not afford significant cross-border capital mobility. It was better to have firms raise capital from foreigners in Hong Kong, which could then be brought onshore, rather than risk the large capital inflows and outflows faced by other emerging markets. This attitude has shifted in recent years: policymakers are increasingly relaxed about inflows and outflows of portfolio investment, even though they have tightened up controls on other cross-border financial flows by households and companies. The administration of Xi Jinping has also sought greater international prestige and acceptance for China's domestic capital markets.

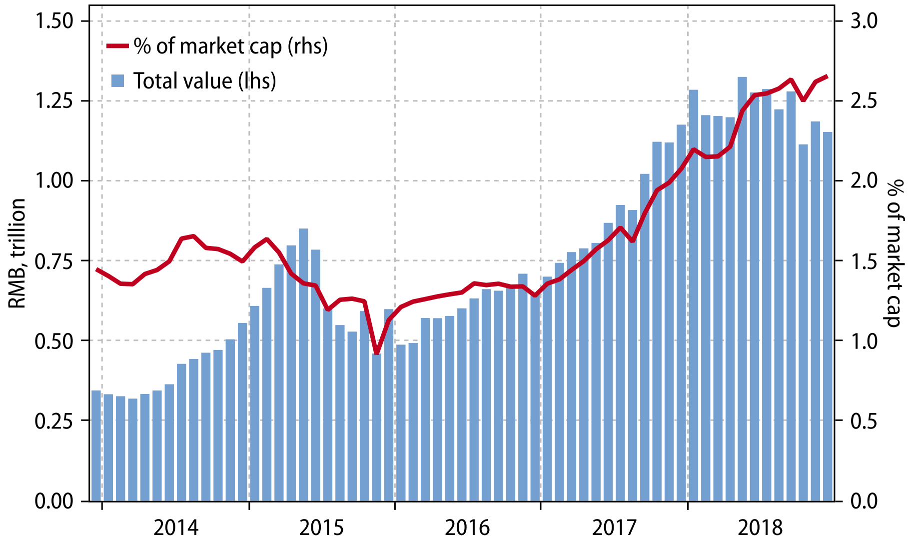
Today China is still far from a full opening of the capital account, but it has created mechanisms by which foreign investors can access the Shanghai and Shenzhen stock markets. The functioning of these channels has been gradually liberalized, and domestic market regulation improved, allowing index providers to start including A-shares in global equity indexes.

Barriers to foreign ownership of Chinese equities have never been lower, but they are still there

Yet while barriers to foreign ownership have never been lower, there are still two fundamental constraints on how much money foreign investors can put into the onshore markets. The first is the fact that (as discussed in section 2) the majority of the A-share market is not free floating: state entities' stakes in SOEs are usually not tradeable, while private firms also have lots of non-tradeable stock due to IPO lockups and share pledging. The second is that China imposes a ceiling of 30% foreign ownership on every listed company. In most cases, this functions to limit foreign investors to passive minority stakes and stop them from using public equity markets to take control of even private-sector Chinese companies.

**Foreign interest in Chinese equities has increased substantially**

Onshore equities held by overseas entities

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## Qualified Foreign Institutional Investors

China took baby steps toward allowing foreign portfolio investment with the launch of the QFII program in 2002

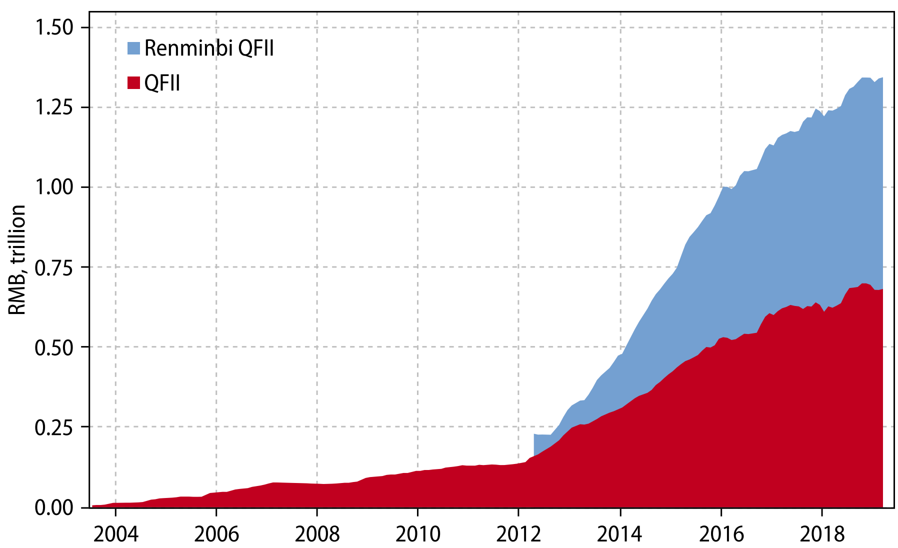
The Qualified Foreign Institutional Investor scheme, introduced in November 2002, was the first move in allowing a restricted amount of foreign investment in onshore financial markets. Investors have to go through a fairly onerous approval process to open a QFII account, and each institution is given a quota for how much money it can put in. In the first phase, China gave 11 foreign institutional investors a total quota of US$910mn. Today, the allocated QFII quota stands at US$101bn, shared among 287 foreign institutions. QFIIs can use their home currencies to buy A-shares, bonds, and other approved financial instruments. In 2011, regulators introduced the Renminbi QFII scheme, which allows investors to use offshore renminbi accounts to invest in the same range of financial assets. The allocated RQFII quota has grown rapidly and is now, at RMB660bn, roughly the same size as the QFII quota.

The total allocated quota via both QFII and RQFII, then, is around RMB1.3trn. However, this quota is not fully utilized, and much of it is invested in bonds. Data from 2017 show that bond holdings totaled RMB843bn and equities RMB118bn. One reason for this limited takeup is that QFIIs' ability to sell stocks has been highly restricted: they faced a three-month lock-up period, and could remit no more than 20% of their net asset value in a month. Both restrictions were removed in June 2018, and QFII equity holdings are now probably around RMB400-500bn. But the introduction of the more flexible Stock Connect schemes has continued to limit interest in QFII.

QFII quotas began to expand more rapidly in 2013, but the process remains somewhat cumbersome

**Use of the QFII program continues to grow, if more slowly**

Cumulative allocated quota for Qualified Foreign Institutional Investors

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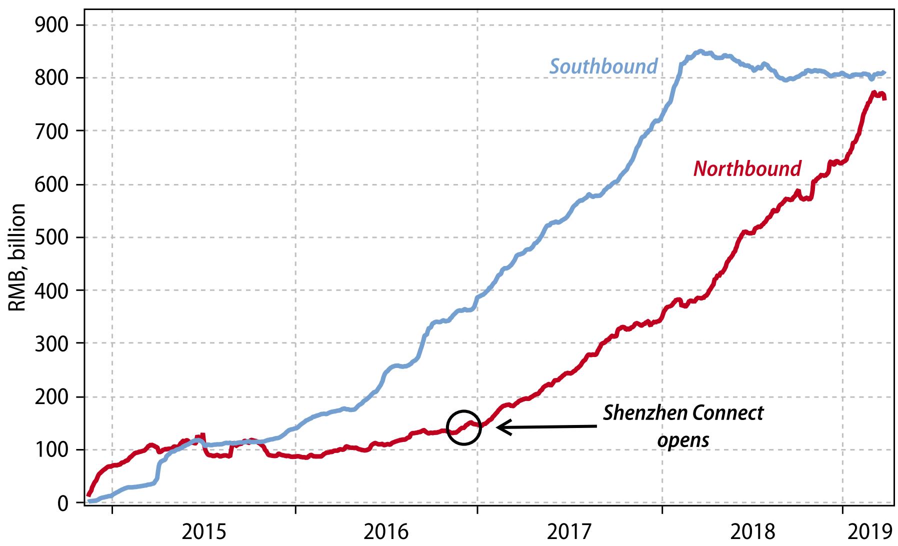
## Stock Connect

The Shanghai-Hong Kong Stock Connect program was launched by the two stock exchanges in November 2014, with a counterpart for Shenzhen starting in December 2016. The two Stock Connect programs allow any investor with a brokerage account in Hong Kong—a low barrier to entry compared to the QFII program—to buy and sell 1,320 onshore stocks (onshore investors have reciprocal rights to buy Hong Kong-listed stocks). Rather than setting a quota for each investor, Stock Connect applies an aggregate quota for total purchases. This was quadrupled to RMB104bn in 2018, and is not a practical constraint as it is well in excess of average daily net purchases. The greater flexibility of Stock Connect has made it the preferred channel for offshore investors to access the onshore market.

The launch of the Stock Connect programs did away with investor-specific quotas, allowing much more flexibility

**Use of Stock Connect to invest in onshore stocks is growing rapidly**

Aggregate net purchases through the Stock Connect programs

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For the first few years, "northbound" trading (i.e., offshore purchases of onshore equities) was modest: net purchases totaled RMB100bn by early 2015, and stayed at that level until late 2016. Starting in 2017, investors started to make more use of Connect, and cumulative net purchases are now close to RMB800bn. "Southbound" purchases of Hong Kong-listed stocks by onshore investors took off more rapidly, hitting RMB300bn in late 2016 and reaching RMB800bn in early 2018. But since then there has been close to zero net buying.

## Index inclusion

The smooth operation of Stock Connect helped convince MSCI and other index providers to add onshore stocks

Because of the barriers to foreign investment in the onshore market, for foreign investors "Chinese stocks" has for decades meant Chinese companies listed offshore. These were also the only Chinese companies included in global market indexes. The first Chinese stocks were added to MSCI indexes in 1996, accounting for less than 1% of the Emerging Markets index, but this rose to 6-7% in with the addition of H-shares in 2000. The rally of 2005-2007 sent prices up almost 200% and lifted China's weighting in MSCI EM to around 17%. In 2015, MSCI added Alibaba, Baidu and other Chinese stocks listed in the US to the EM index, lifting China's weight to 27%, the largest country in the index by a wide margin.

Index inclusion became an issue of national prestige for Chinese policymakers, who lobbied hard for it

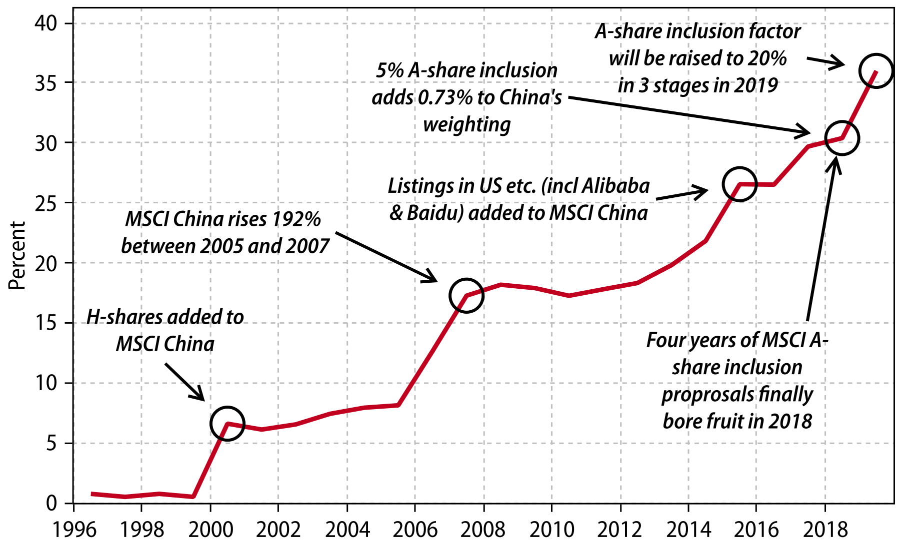
MSCI first floated the idea of including A-shares in its indexes in June 2013, noting that QFII quotas were getting larger and being approved more quickly. MSCI proposed inclusion to its clients in March 2014, but they rejected the idea, requiring further liberalization of capital mobility, quota allocation and clarification of beneficial ownership. Achieving index inclusion then started to become a priority for Chinese policymakers, who had previously ignored the issue. The fact that the onshore stock markets were huge in size but completely invisible to global investors increasingly became an issue of national prestige. The China Securities Regulatory Commission lobbied MSCI hard to achieve inclusion, and also worked to systematically address technical and regulatory problems flagged by MSCI.

Through 2015 and 2016, the CSRC made various changes to improve regulation and accessibility for foreign investors, but MSCI's client base was still unwilling to endorse inclusion. Finally, in 2017 the proposal was accepted, in large part because of the success of Stock Connect. A-shares were initially included in the MSCI China and MSCI EM indexes at a 5% inclusion factor. This means that the index weight is 5% of free float, multiplied by the foreign ownership limit of 30%; the initial weighting was 0.73%.

After initial inclusion in 2018, MSCI will further raise the weighting of onshore stocks in three stages in 2019

**The long march to full inclusion**

The history of China's weighting in MSCI EM index

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The big remaining issue for MSCI and its clients was the large number of onshore stocks suspended from trading: investors cannot replicate an index if they cannot buy all the component stocks. Stock regulators had rather freely allowed companies to suspend trading during the market downturn of 2015, but did not do so during the big decline of 2018.

As a direct result, MSCI proposed and investors accepted increasing the inclusion factor for A-shares to 20% in 2019. This will happen in three stages (May, August and November), and will bring the total number of onshore stocks in MSCI China to 253 large-caps and 168 mid-caps. The weighting of onshore stocks will increase to about 3.3% of the MSCI EM index, and the total weighting of all China stocks will rise to around 36%. FTSE Russell, whose emerging markets index is tracked by fewer funds than MSCI, will begin to include A-shares from June 2019, but is ramping up more quickly: onshore stocks will reach 5.5% of its EM index by March 2020.

Index inclusion has acted as a signal to global investors that Chinese onshore equities are worth looking into

The most direct impact of index inclusion of A-shares will be on ETFs tracking those indexes. The largest passive allocation to Chinese equities come from Vanguard's FTSE Emerging Markets ETF (US$63bn in assets), iShares' Core MSCI Emerging Markets ETF (US$59bn) and MSCI Emerging Markets ETF (US$35bn). Because of the change to indexes, these funds have begun buying A-shares, and will have to increase their allocation in 2019. The most popular onshore stocks purchased through Connect recently are not, however, those most heavily weighted in indexes. This suggests that the most important effect of index inclusion is not forced buying, but a signal to global fund managers that China's onshore markets are worth investigating.

The recent surge of foreign interest in the onshore market has also meant that the 30% foreign ownership limit—which no stock had previously come anywhere close to hitting—is starting to become a real issue. Han's Laser, a supplier to Apple Inc., hit the limit in March, forcing MSCI to remove it from the index. Appliance maker Midea, another popular stock with foreign investors, is also close to hitting the 30% ceiling. MSCI has urged Chinese regulators to consider raising the limit.

## The problem with tech

Many of the regulatory changes to the market are driven by a reaction to offshore IPOs by big tech firms

Although China's government has in recent years worked hard to break down regulatory barriers to foreign investment in onshore stock markets, it would be incorrect to portray officials as engaged in a single-minded quest to attract more foreign money. Rather, achieving index inclusion is only part of a broader agenda: to ensure that China's onshore stock markets are seen as the equal of stock markets of other major economies, particularly the US. This involves making onshore stock markets more attractive not just to foreign investors, but to domestic entrepreneurs. The reason why this has become an important item on the political agenda has a lot to do with the history of technology IPOs.

There is no question that the two largest and most successful private-sector Chinese firms of recent years are Tencent and Alibaba (the two largest constituents of the MSCI China index). But it is a persistent source of embarrassment and frustration to Chinese regulators and investors that these companies chose to list offshore. As a result, domestic investors mostly could not participate in the huge gains in their value.

Of course, the Chinese government has only itself to blame for that, since it maintains tight restrictions on foreign investment in telecommunications and the internet. But in the early days of those firms, foreign capital was by far the most attractive source of funding, and so they found ways to work around those rules. As a result, Alibaba, Tencent and Baidu all use what is called a variable-interest entity (VIE) structure. In this structure, an offshore-listed holding company controls an unlisted wholly foreign-owned entity onshore, which has contractual agreements with an unlisted operating company owned entirely by Chinese citizens. The tech companies could not list onshore while preserving this corporate structure and their foreign investment. They also would not have been able to preserve dual-class share structures that allowed founders to maintain control, or meet domestic listing rules that require three years of profitability before an IPO. These are issues that also affect the new crop of large Chinese technology startups.

China has tried various ways to give onshore investors access to offshore tech stocks, so far unsuccessfully

One way around this impasse would be to lower the legal barriers to foreign investment in internet companies. Since the government does not wish to do this, it has proposed other ideas. In April 2018 the State Council published guidelines encouraging the creation of China Depositary Receipts, and in May 2018, the CSRC released draft rules. The idea was to create a mechanism by which domestic investors could purchase the shares of offshore-listed technology companies. As with American Depositary Receipts, CDRs would be created by a custodian bank purchasing overseas-listed stock and selling the right to those shares in a "receipt" on a domestic exchange.

But the CDR experiment turned into an embarrassing failure. When mobile-phone manufacturer Xiaomi listed in Hong Kong in June 2018, it planned to simultaneously issue CDRs onshore. At the last minute, the CDR issue was canceled. Falling domestic markets played a role, but it seems that the larger issue was a dispute over pricing. Onshore IPOs cannot be priced at price-earnings ratio above 23, and Xiaomi's projected pricing for its Hong Kong IPO was quite a bit higher than that number. After the Xiaomi debacle, other firms including Alibaba quietly put their CDR issuance requests on hold.

The next stage will involve creating another new board for tech stocks in Shanghai

The new plan, laid out by top leader Xi Jinping himself in a speech in November 2018, is to create a new Science and Technology Innovation Board in Shanghai. The rules of this new board are being crafted with an eye to attracting technology startups: it will allow money-losing firms and those with weighted voting rights to list. Overseas-listed firms with VIE structures will also be encouraged to issue CDRs on the new board. And VIE-structured companies that are not already listed will be able to sell shares on the board if they have "self-developed cutting-edge technologies" and an expected market cap of no less than RMB5bn (or RMB10bn if they have revenues of less than RMB500mn).

This history makes clear that lowering the barriers to foreign investment in the onshore stock markets is not so much a goal in itself, and is certainly not primarily about attracting capital inflows. Rather, it is part of a broader agenda aimed at ensuring China's best companies will in the future choose to list onshore rather than offshore.

## 4. How is the market regulated?

Although China's financial regulators have shifted from blocking foreign investors to welcoming them, the way they regulate the onshore markets continues to be very different from other jurisdictions. Entities like the US Securities and Exchange Commission, or the Hong Kong Securities and Futures Commission, are designed to be independent and impartial bodies that set a framework of rules for the free actions of market participants. They enforce violations of the rules, but do not attempt to ensure that market trading generates a particular outcome.

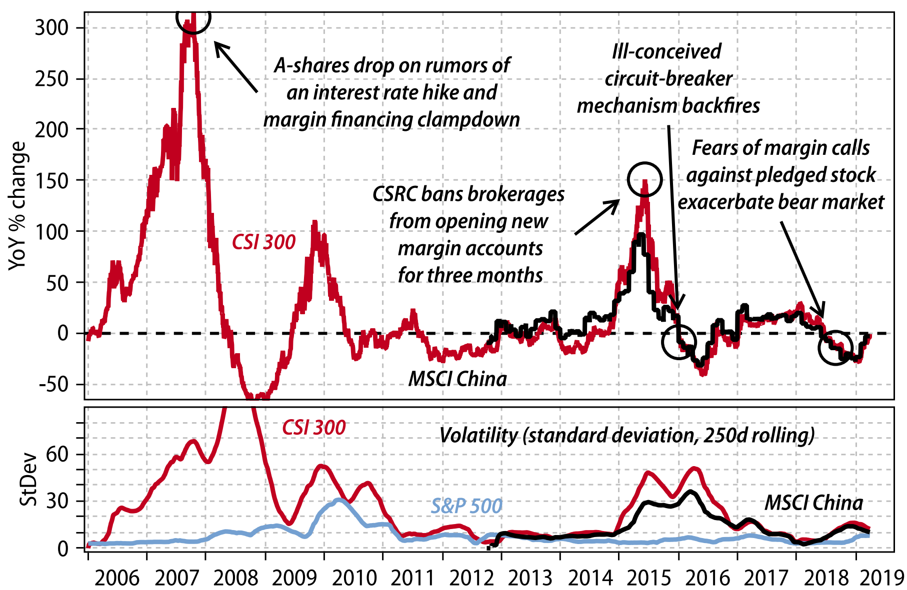
China's market regulators are not independent arbiters of the rules, but hands-on engineers

This is not how regulation in China works. The China Securities Regulatory Commission and other financial regulators instead see their role as that of a team of engineers working to make the machine of the financial system run optimally. (The People's Bank of China has overall responsibility for financial regulation, and coordinates with the CSRC and the banking and insurance regulators through the Financial Stability and Development Commission.) They are constantly tweaking the parameters of the system, changing rules and their enforcement, and issuing directives to both companies and to investors to change their behavior.

The central problem that the CSRC wants to manage is the extreme volatility of the onshore markets—which are, in fact, much more volatile than other major markets. It regularly intervenes both when it thinks prices are "too high" and sentiment is "too speculative," and when prices are "too low" and sentiment is "too negative." Its interventions fall into two main categories: managing the supply of equity securities, through IPOs and secondary offerings, and managing demand for equities, particularly by keeping control of leverage.

Regulators frequently intervene to try to manage market volatility and sentiment

**Chinese equity prices are far more volatile than other markets**

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## Initial public offerings

Regulators have long managed the pace of IPOs to prevent disruptions to trading

The pace of IPOs in the onshore market has historically been quite volatile, as regulators periodically clamp down on new issues in an attempt to support prices in the secondary market. Companies that wish to list must gain CSRC approval, rather than simply registering as in most other markets. This enables the CSRC to open or close the spigot of new equity issuance at will. It also creates great incentives for corruption, as companies try to buy their way to an IPO. There is typically a long pipeline of frustrated firms waiting to list.

The root cause of this micromanagement is the perception among Chinese market participants that IPOs are negative for other stocks because they increase the supply of stocks and withdraw liquidity from secondary market trading. No one thinks this way in other markets. Why is China different?

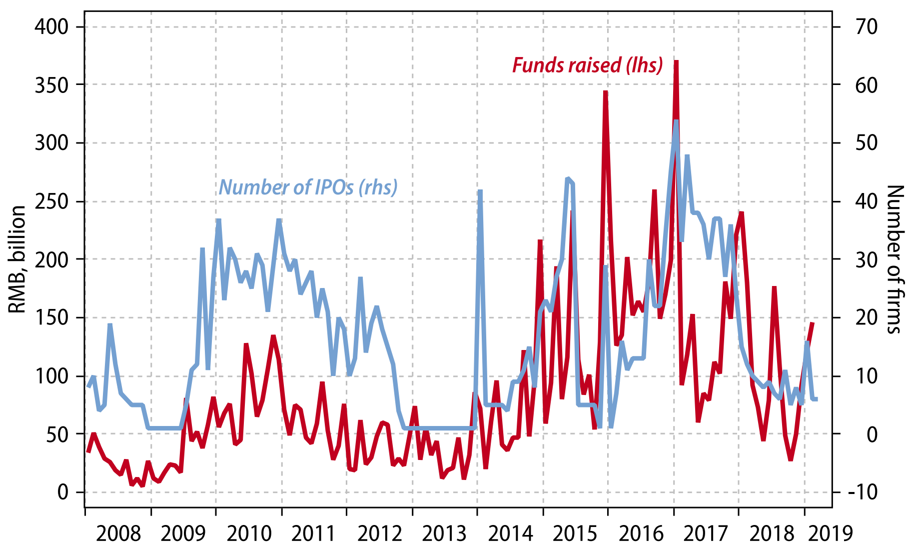
Part of the reason is that Chinese investors love IPOs. Since the market's early days in the 1990 it has been normal for newly-listed stock to open at well above the IPO price. In many cases investors lucky enough to get IPO allotments could double their money on the first trading day. But the median IPO saw no further price gains after the first day, and in most years prices of IPO stocks fell after the opening-day pop. A new IPO therefore was therefore a much more attractive proposition than trading stocks in the secondary market, so new IPOs would indeed suck investor money out of other stocks.

Since IPOs almost always rise on their trading debuts, investor demand for IPOs is very high

The CSRC drastically curtailed IPOs in October 2012, in part because of these pricing problems, and in part because it was trying to arrest a market decline. When IPOs restarted in August 2014, the CSRC made two big changes intended to reduce distortions. It capped the first-day gain at 44%, and required firms to list at 23 times earnings or less, well below the market median. The effect of these new rules was to supercharge traders' gains from new listings (since companies had to list at artificially low valuations), and to spread out these gains from the first day to the first month of trading.

**IPO fundraising is volatile and highly cyclical**

Shanghai and Shenzhen IPOs, monthly totals

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This rule change sparked an IPO mania, contributing to the short-lived bull market in which prices more than doubled between October 2014 and June 2015. CSRC responded by forcing IPO investors to post cash equal to the full amount of shares they had subscribed for—even though, thanks to over-subscriptions, most investors were allotted only a fraction of their requests. This caused liquidity shortages when even small companies came to market.

Changes to the IPO process since 2016 have eased disruptions and shortened the listing pipeline

After the June 2015 crash, the CSRC suspended IPOs again and went back to the drawing board. In January 2016 it abolished the requirement to prepay for IPO subscriptions. This encouraged investors to put more money into chasing the first-day pop, but this behavior no longer caused a liquidity squeeze. The CSRC gradually ramped up new listings over the course of 2016, and 2017 saw 438 listings, which went a long way to clearing the pipeline. The bear market of 2018 saw a slowdown in IPOs, with 108 firms listing, but the pace is picking up again as the market recovers in 2019.

Technical changes to the IPO process have therefore reduced some of the market impact of new listings. But Chinese investors still love to chase IPOs, in part because the rules virtually guarantee a first-day pop. And the CSRC still micromanages the pace of new listings, permitting far fewer than desired. The IPO pipeline is however much shorter in 2019, down to 268 active applications from 511 at the start of 2018.

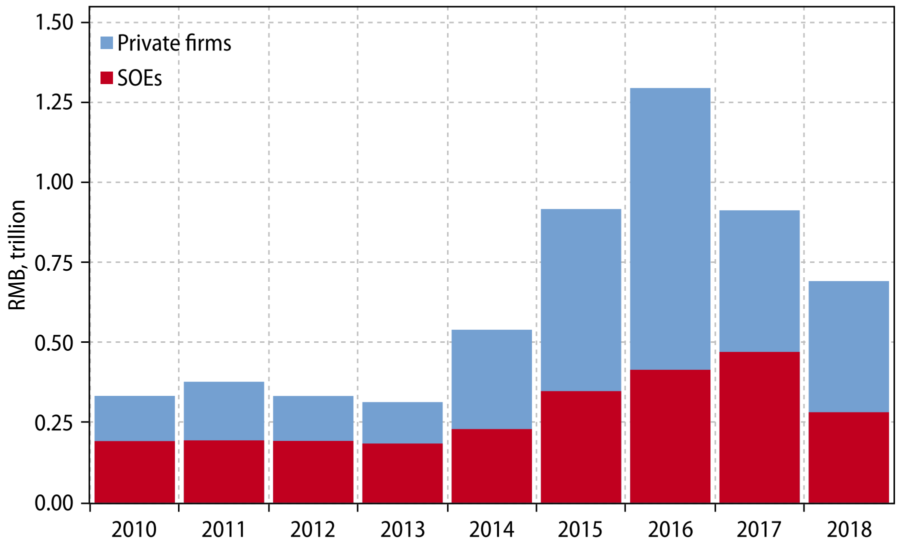
## Secondary offerings

Regulators also exercise control over the pace of secondary equity offerings. SEOs surged in mid-2015, as listed companies rushed to take advantage of then-high market prices, but really took off only in 2016, after the government officially endorsed corporate deleveraging. It then became a political priority to make it easier for companies to raise equity rather than add to already-high debts. CSRC officials declared that equity fundraising was a market-driven and well-regulated way for companies to reduce their financial leverage.

Once secondary offerings came into favor with regulators, they raised much more money than IPOs

**Secondary issuance surged in 2015-16, but has fallen since**

Secondary equity issuance in Shanghai & Shenzhen, by company type

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SEOs totaled RMB3.2trn in 2015 and 2016, more than in 2008-2014 combined and 10 times larger than the amount raised by IPOs during those two years. Those offerings provided much-needed funds for troubled companies to repair their balance sheets. In 2016, real estate, materials and industrial firms accounted for 51% of the RMB1.8trn raised from secondary offerings, which makes sense given that these sectors have been under the most financial stress. Nor did state enterprises soak up all the money: 57% of the funds raised in 2018, and 50% in 2015, flowed to private firms.

After it became clear that secondary offerings are easily abused by corporate insiders, regulation tightened

Yet there were downsides to the surge in secondary offerings. In China, most such offerings are private placements: transactions in which firms raise funds from large existing shareholders in exchange for new equity. Private placements in most markets are sold at a discount to the market price because the transaction is less liquid. But the discount on private placements in China can regularly be 20% or more, a gap which is hard to justify. Moreover, these heavily discounted prices tended to occur in deals in which existing large shareholders increased their control over the firm. So while secondary offerings do help firms improve their balance sheets, they are also easily abused to increase insider control and disadvantage outside shareholders.

In late 2016 the CSRC slowed the pace of approvals for secondary offerings, and in February 2017 released a new set of rules on these transactions: firms are not be permitted to conduct private placements worth more than 20% of their market capitalization, nor are they allowed to conduct more than one private placement over any 18-month period. Tougher rules, and falling markets in 2018, have curbed some of firms' appetite for secondary issuance. But policymakers are likely to continue favoring a fundraising channel that does not add to corporate leverage.

## Margin financing and share pledging

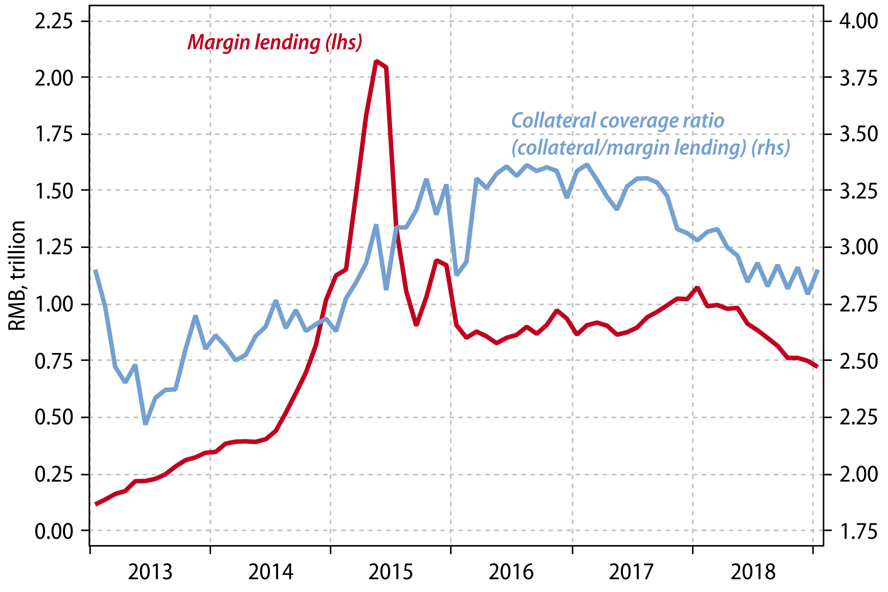
Control of leverage is one of the more important tools regulators have to manage demand for equities

In addition to managing the supply of new equity coming onto the market, regulators are also very hands-on in trying to manage demand. There are many informal ways to do this, such as by influencing the tone of editorials and market coverage in the media, making public declarations that stocks are a good value or that speculation is getting out of control, or even leaning on state institutions and big investors to buy or sell stocks. All of these are important and closely watched by Chinese market participants, but are difficult to track systematically. Another very important, and somewhat more transparent, regulatory lever is the control of leverage in stock trading.

Margin financing of stock purchases was first permitted in China in early 2010, and grew relatively slowly at first, to RMB13bn in 2010, RMB38bn in 2011 and RMB86bn in 2012. In 2013, however, margin financing surged to RMB345bn, and then reached RMB1trn by the end of 2014. In the first six months of 2015, margin lending doubled again to surpass RMB2trn. At that point, regulators stepped in, banning the largest brokerages from opening new margin accounts for three months. Almost immediately the market began to crash. The balance of margin financing fell back to around RMB1trn and has generally remained at or below that number ever since.

After margin financing inflated the bubble of 2015, it has stayed more tightly controlled

**Margin lending is down substantially from its peak in 2015**



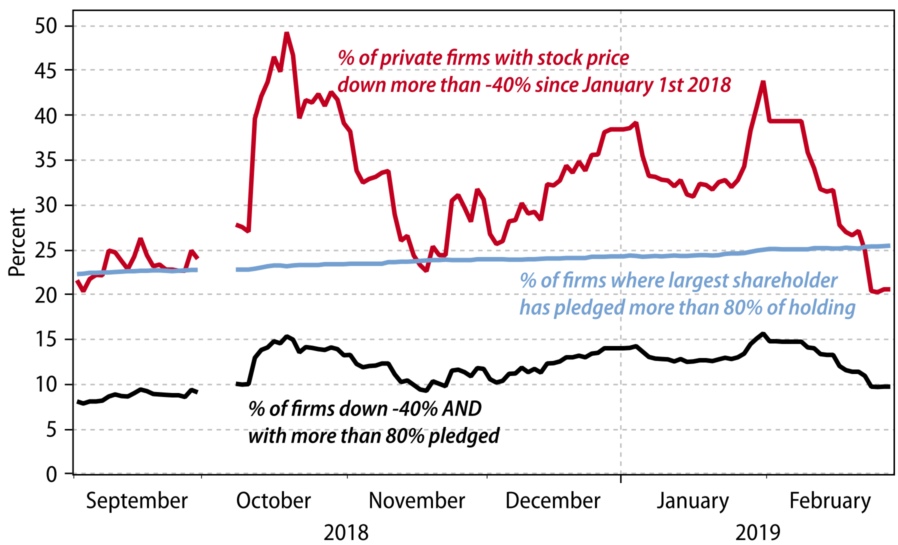

**Wind, Gavekal Data/Macrobond**

Since around 2015 a related leverage-driven phenomenon has emerged: share pledging. This refers to brokerages giving loans to entities and individuals in return for the posting of stock as collateral. Unlike margin financing, however, loans backed by pledged shares are not necessarily used to buy stocks through the brokerage. Instead, much of the funding is used by the firms pledging stock for operational purposes. In the latter half of 2018, a relatively modest market downturn became far more perilous because of the widespread use of share pledging.

Shareholders in private firms have borrowed against their stock not just to speculate, but also to fund operations

**The number of private firms in immediate pledging peril has fallen**

Share of the 2076 listed private firms in share pledging trouble

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The regulatory crackdown on shadow financing left many firms in need of cash, which they could no longer obtain from their usual credit channels. Share pledging offered another way to quickly raise funds. Between January 2016 and December 2018, the share of private-sector firms whose largest shareholder had pledged more than 80% of their stock rose from 9% to 24%.

Share pledging is a problem when prices fall, but the rally in 2019 has pushed the issue onto the back burner

This wasn't a problem if stock prices were not falling. But in late 2018, prices did fall far enough to start to force margin calls on pledged shares. Market actors and policymakers alike feared that when debtors couldn't post more collateral, brokerages would liquidate the stock, leading to more margin calls and more liquidation in a downward spiral. Policymakers responded with a raft of specific funding options and a broader campaign to get more credit to small- and medium-sized private firms. The rebound in markets in early 2019 has largely eased fears around share pledging, although there are still very large amounts of stock pledged as collateral, around 9% of total market cap.

## Trading suspensions

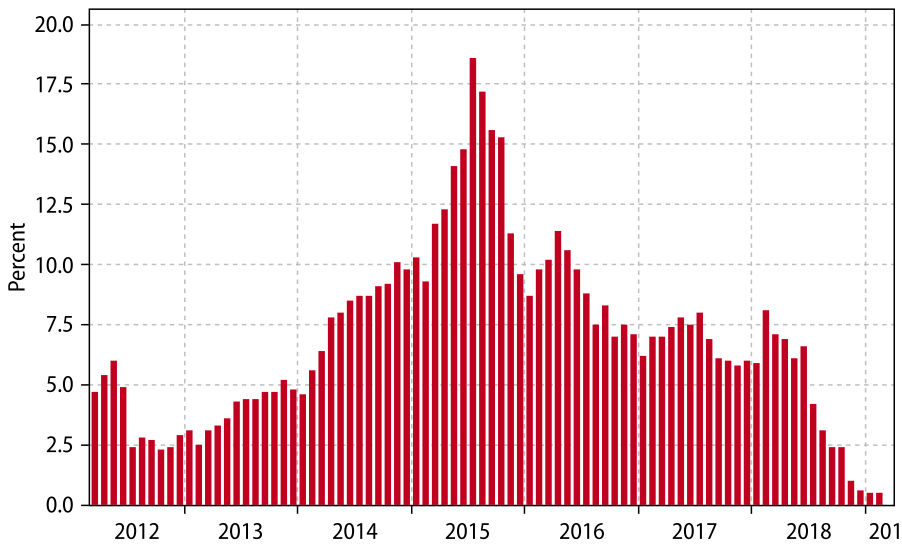
When neither supply- nor demand-side measures are enough to prevent excessive price volatility, regulators have traditionally been very relaxed about allowing trading suspensions. Companies could request a suspension of trading in their stock on the thinnest of pretexts. In the depths of 2015's bear market, around 20% of stocks were suspended from trading. This practice attracted much criticism because it reflected a regulatory stance which prized overall price stability over investors' needs.

Trading suspensions were one of foreign investors' biggest problems with onshore market regulation

Things have improved a lot since then. During the 2018 bear market, there was no repeat in the surge of trading suspensions, and in fact the number of suspended stocks fell further. In December 2018 the Shanghai and Shenzhen exchanges set more stringent rules for suspensions, formalizing the change in attitude by regulators. Pressure from MSCI and its clients was likely the key reason for the change of course.

**Very few stocks are still stuck in limbo**

Share of onshore stocks suspended from trading

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## Conclusion

China's onshore equity markets have come a long way over the last decade. Foreign investors have a far wider variety of firms to choose from, including a large population of private firms that are sizable enough to be plausible investments. They also have a far better channel for accessing onshore stocks: the Stock Connect program is a radical improvement over the cumbersome QFII system. Finally, regulatory fixes to a number of major issues, such as trading suspensions, have made onshore equities more palatable for investors accustomed to developed markets.

China's management of its onshore stock markets has improved, but remains highly interventionist

Yet China still has a long way to go. Regulators frequently micro-manage onshore markets in an attempt to quash volatility. These efforts are fundamentally futile, because the real or perceived stance of regulators and policymakers is itself the primary driver of market sentiment. The unusually large role played by individual investors relative to institutional investors too remains a live issue, super-charging swings in sentiment. Underlying all these issues is a highly interventionist government that exerts significant influence on decision-making by both state-owned and private companies.

Over the next decade, it seems a good bet that Chinese policymakers will continue to alternate between heavy-handed interventions and more market-based improvements. Many of the recent improvements have been driven by the high political priority attached to achieving some integration into global capital markets and encouraging big technology companies to list onshore. But other policy priorities will supersede these goals at times, particularly responses to various economic and market crises. Foreign investors can no longer afford to ignore China's onshore equity markets, but should keep an eye out for intense volatility and interventionist policy.