

FTSE RESEARCH WHITE PAPER

FTSE China A-shares and Global Indices

Adapting the Benchmark for
International Market Participants



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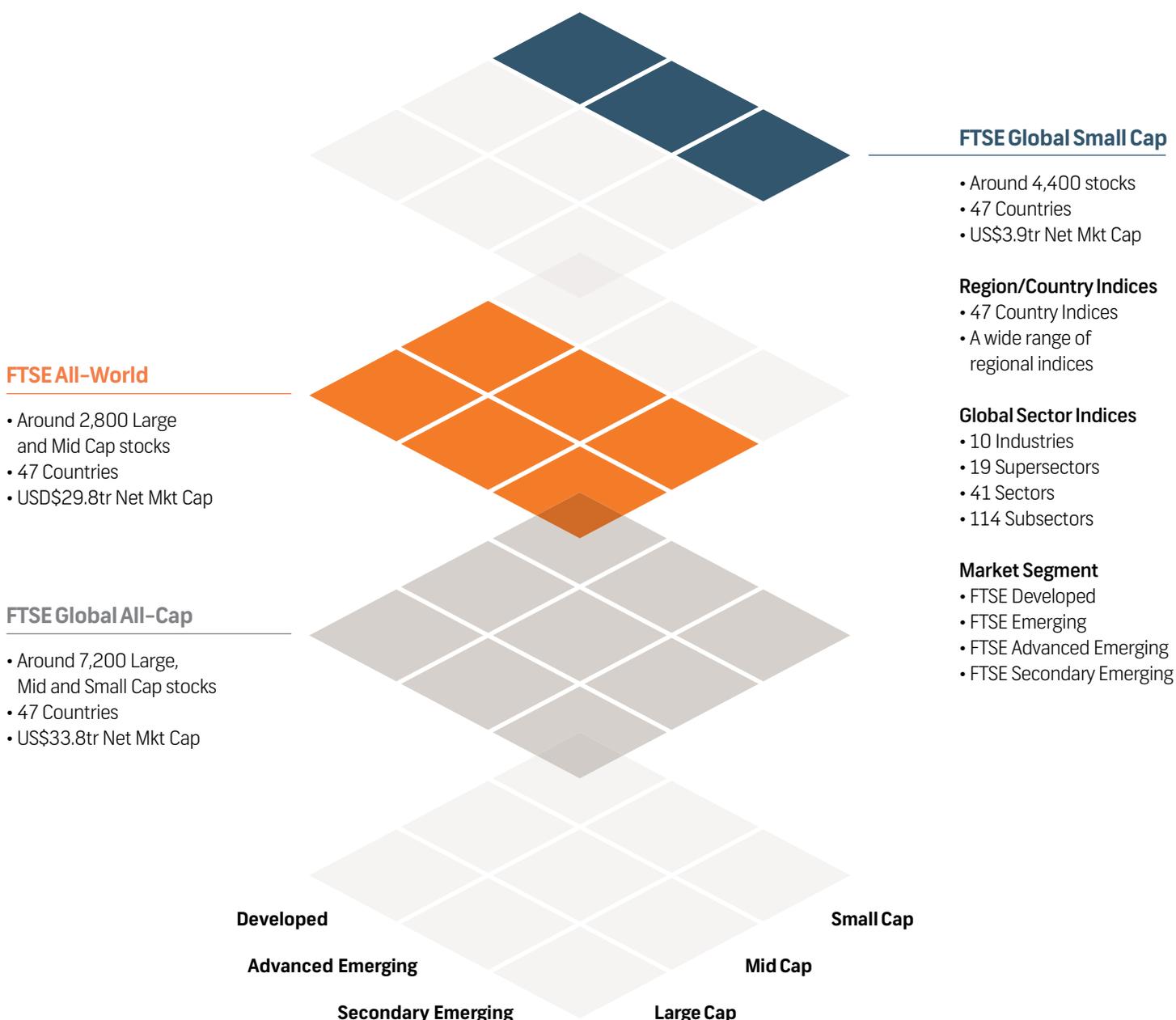
Adapting the Benchmark for
International Market Participants

Chinese equities represent an important part of the global equity investment landscape. This reflects investors' desire to access equities that are representative of one of the world's largest and fastest expanding economies. International investor exposure to Chinese equities is currently dominated by ownership of the mainly Hong Kong listed share classes as opposed to the less freely available A-shares.

This paper considers Country Classification and market access issues as well as the implications of adding China A-shares to FTSE's family of global benchmark indices.

As market participants prepare for the inclusion of A-shares and QFII allocations in their portfolios and global benchmarks, FTSE looks forward to providing clients with transition indices and custom capabilities to help them manage this transition.

In the FTSE Global Equity Index Series (GEIS), the mainly Hong Kong listed freely available elements of the Chinese equity market make it the 9th largest represented country constituting 2.10% of the FTSE All-World and 2.02% of the total market capitalisation of the FTSE Global All Cap Indices.

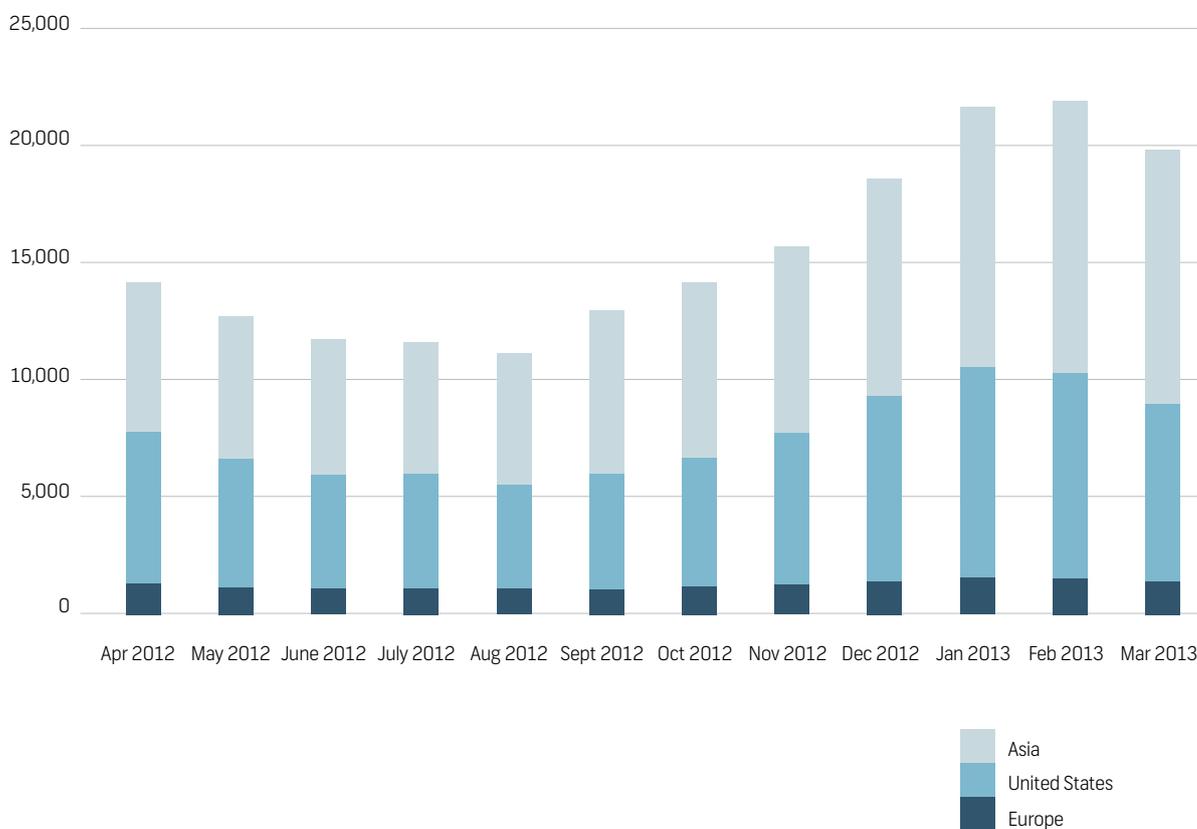


Although Chinese equities account for a reasonable size within global portfolios, Chinese “A-shares” which are companies incorporated and listed in mainland China and traded in Renminbi are largely inaccessible to many institutional investors because of current quota restrictions.

Despite these restrictions, institutional investors continue to be significant users of ETFs representing China A-shares, notably those tracking the FTSE China A50 Index. These ETFs allow investors to gain exposure to the domestic Chinese equity market even though A-shares are not yet incorporated into most benchmark indices. The ETF market provides a valuable insight into key investment trends in many areas, especially overseas assets that can be difficult to access and costly to manage. With ETF assets globally reaching over US\$2trn, the market is dominated by institutional long-term investors that often use ETFs to implement asset allocation decisions.

Overall, investors have been keen to ensure that they have access to Chinese equities through tradable products such as ETFs. At the end of March 2013, there were almost US\$20bn in assets under management¹ tracking FTSE China-based equity indices in ETFs listed in Asia, the United States and Europe. This makes FTSE the leading international provider of equity indices focussed on the Chinese market.

ETF AUM tracking various FTSE China Indices (\$m)



¹Source: Morningstar, FTSE

ETFs tracking FTSE China Indices	
All AUM by ETF and Region US\$(m)	AUM
iShares China Large Cap UCITS ETF	1,115.59
db x-trackers FTSE CHINA 25 UCITS ETF	268.38
EasyETF FTSE China 25 (EUR)	23.60
Europe total	1,407.57
iShares China Large-Cap ETF	7,387.09
ProShares UltraShort FTSE China 25	116.93
ProShares Ultra FTSE China 25	44.24
iShares FTSE China ETF	33.53
United States total	7,581.79
iShares FTSE A50 China Index ETF	7,966.27
CSOP FTSE China A50 ETF	2,699.65
KODEX FTSE China A50 ETF	159.59
Hang Seng FTSE China 25 Index ETF	27.60
CIMB FTSE China 25	9.64
Value China ETF	23.54
Asia total	10,886.29
TOTAL FTSE China ETF AUMs	19,875.66

Source: Morningstar, FTSE

FTSE China and Global Benchmark Indices

Given the current position of Chinese equities in global markets, the key question asked by market participants is what are the necessary steps that would allow Chinese equities to become integrated into benchmarks such as the FTSE All-World or FTSE Global All Cap Indices. The main issues that investors have to contend with in this regard are those of market access and the availability of equities that can be freely traded.

The readily accessible part of the Chinese equity market that is currently included in the FTSE Global All Cap Index has a free float market capitalisation of US\$727bn. Almost 56% of the FTSE China All Cap Index consists of H-shares, which are Hong Kong-listed companies incorporated in mainland China. The next largest group of securities are Red chips which are incorporated outside of mainland China but substantially owned by government related entities.

Red chips currently constitute 24% of the China All Cap Index. P chips, which have recently changed nationality in FTSE's indices from Hong Kong to China, account for a further 17% of the index. They represent companies that are incorporated outside of mainland China; listed in Hong Kong and controlled by mainland Chinese individuals with an establishment and origin in mainland China. Both the Red chip and P chip definitions also look at the sales/asset exposure to mainland China.

Finally the HKD and US\$ denominated B-shares, which make up 3% of the index, are incorporated in mainland China but listed on either the Shanghai or Shenzhen stock exchanges.

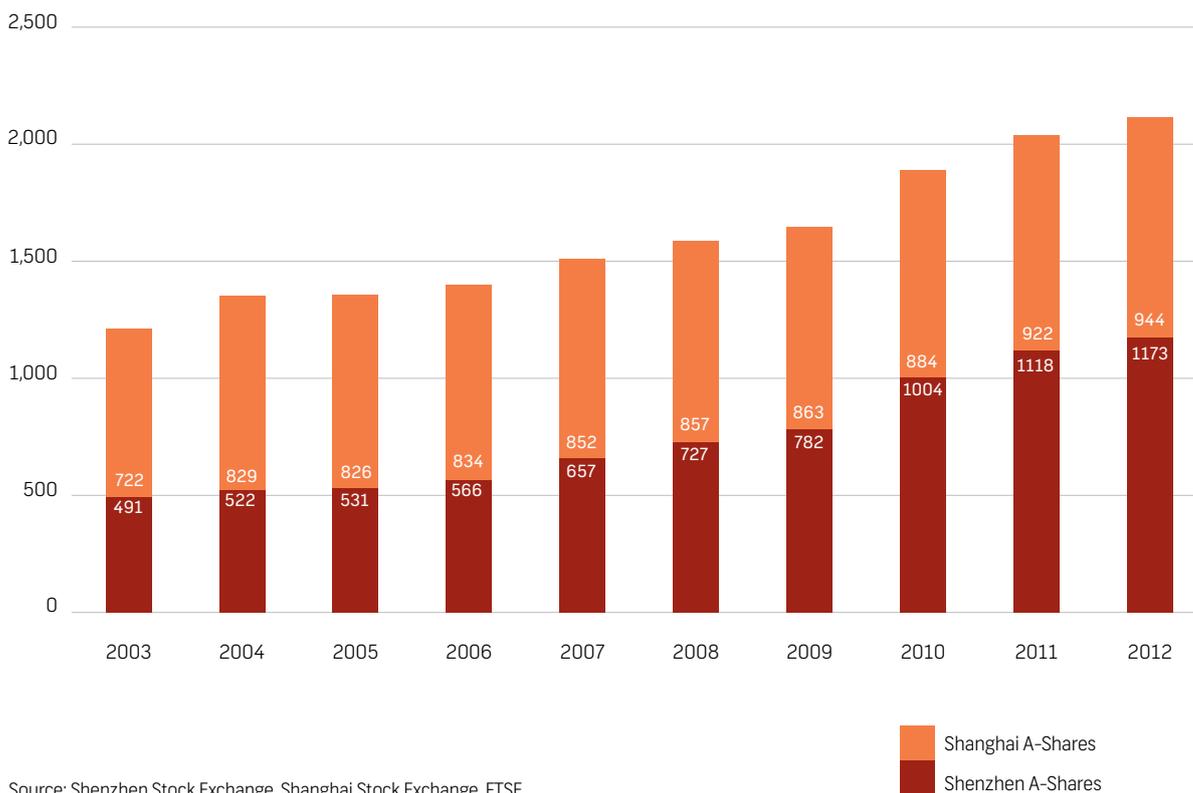
In total, these different classes of Chinese equities comprise only 350 companies, but they account for all of China's current weight in the FTSE Global All Cap Index.

The growth of the A-share market

A-shares are shares in companies incorporated in mainland China, with listings on either the Shanghai or Shenzhen stock exchange. The inclusion of these Renminbi denominated equities into global benchmarks will be dependent on the opening of the A-share market, which comprises more than 2,100 companies.

The total number of A-share listings has risen by 75% over the past ten years. The majority of the growth has come from the Shenzhen Stock Exchange where new listings over the past 10 years have more than doubled from 491 to 1173. Over the same period, listings on the Shanghai Stock Exchange have grown by almost 31% from 722 to 944, a relatively modest pace. Trading activity on both exchanges has risen from less than US\$400bn to in excess of US\$4.6trn.

Number of A-share Companies in SZSE and SSE



Source: Shenzhen Stock Exchange, Shanghai Stock Exchange, FTSE

In conjunction with this substantial growth in listings and trading activity there has been a commensurate increase in the total market capitalisation of A-shares. At the end of March 2013, the full market capitalisation of the A-shares listed on the Shenzhen and Shanghai Stock Exchanges, without taking into account free float or foreign ownership restrictions, had reached almost US\$3.6trn.

Qualified Foreign Institutional Investor (QFII) status and recent changes

Although the A-share market has grown substantially in terms of both the number of listed companies and total market capitalisation, foreign access to these listings remains controlled under the Qualified Foreign Institutional Investor (QFII) scheme. The scheme, which was initially put in place in November 2002, is regulated through the China Securities Regulatory Commission (CSRC). The CSRC allocates licenses based on applicants passing a range of criteria, while the State Administration of Foreign Exchange (SAFE) determines the timing and amount of quota available to individual applicants.

Since its initial creation, the QFII scheme has undergone a number of revisions. One of the largest changes took place in July 2012 when the CSRC relaxed the thresholds to becoming a QFII holder. It reduced from five to two years the time a fund manager or insurer had to have been in operation; for securities companies it was cut from thirty to five years. The required minimum AUM for fund managers and insurers was reduced from US\$5bn to US\$500m, and for securities companies from US\$10bn to US\$5bn. Previously, commercial banks applying for QFII status had to be ranked among the top 100 world-wide by total assets; the requirement was substantially altered to having 10 years in operation, securities assets of at least US\$5bn and Tier 1 capital of at least US\$300m.

A wider range of assets also became eligible under the new regulations, including equity index futures, corporate bonds and other domestic inter-bank traded bonds. The total allocation of the QFII quota was also significantly increased in April 2012 from US\$30bn to US\$80bn.

Market participation has been expanded through the creation of a separate Renminbi QFII scheme (RQFII). This allows institutional investors with offshore Renminbi deposits to invest back into the domestic Chinese market. Typically, the RQFII allowance has been used to create offshore A-share and bond funds, thereby encouraging international participation. The program has expanded from RMB20bn to RMB270bn (US\$43.5bn) as of March 6, 2013 and benefits from the same wider range of eligible assets as the QFII programme. In July 2013, CSRC, the People's Bank of China and SAFE announced that the RQFII programme will be expanded from Hong Kong and Taiwan to include Singapore and London.

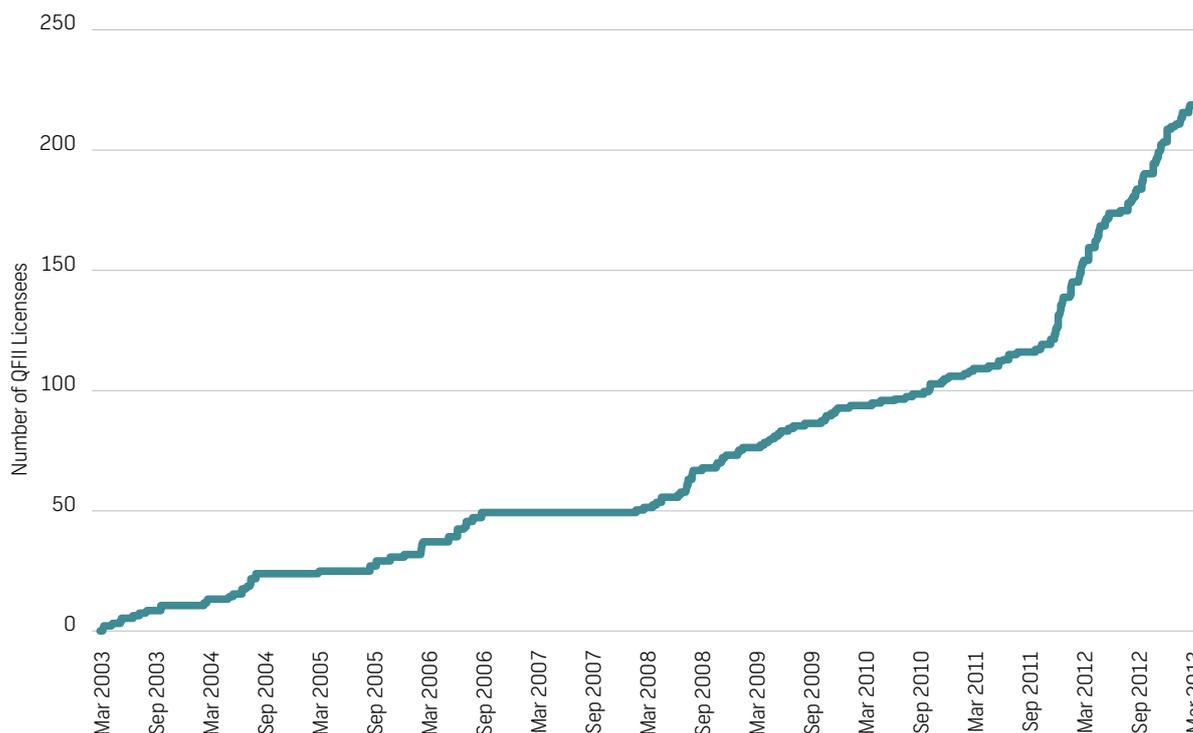
Furthermore the foreign ownership limits on A-shares was lifted from 20% to 30%. Even with these substantive and positive changes to the quota requirements, it is important to note that there are considerable barriers to investment flows.

Recent trends in QFII, RQFII approvals and quotas

Although the QFII quota has expanded over the years, it has typically been reserved for larger institutional investors, asset managers, pension funds and securities firms. As of early July 2013, the QFII quota was close to \$43.5bn, with the recent sharp growth reflecting the more expansive quota allocation and changes to approval requirements.

It is interesting to note that as of the end of June 2013, there were 229 firms that had been approved and had been allocated a QFII quota, with the pace of new applicants increasing significantly since late 2011. An estimated 150 of the QFII-approved firms are asset managers, many of them more recent applicants. Of the first 51 QFII firms from 2003 to the end of 2006, only 19 were asset managers. In 2012 alone, 71 firms were awarded approved QFII status, of which 60 were asset managers. These trends show how long term institutional investors have become increasingly attracted to gaining access to the A-share market.

Historical Number of QFII Licensees



Source: CSRC

Trends in ETF assets and A-share derivatives

Investors attraction to Chinese equities is evident in the inflows that have occurred via the ETF market. Although access to H-shares, Red chips and P-chips is relatively straightforward, investors in the US and Europe have chosen ETFs to provide cheaper tools for equitization. In this context, ETFs benchmarked to the FTSE China 25 Index have seen an increase in their assets. The largest US-listed China ETF has captured over \$6.6bn of inflows since inception, as at the end of April 2013².

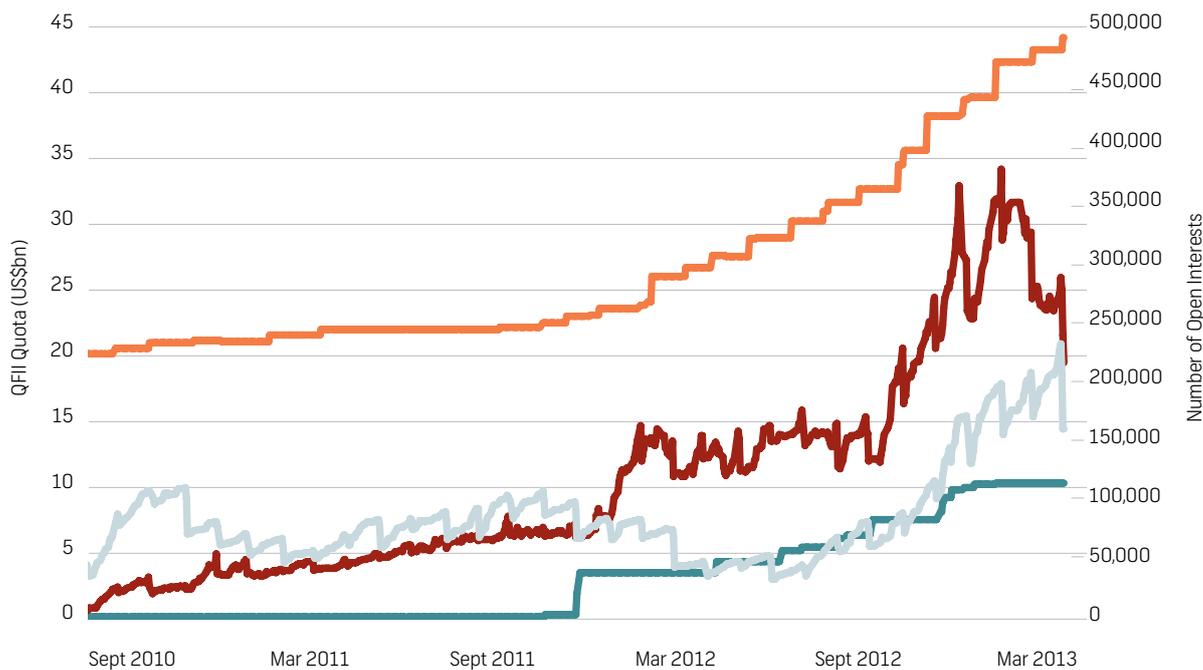
The growth in ETF assets tracking the A-share market via the FTSE China A50 Index is perhaps more interesting, given that A-shares are not yet included in core benchmarks. ETF issuers, apart from those with RQFII allocations, have typically used a participatory note (P-note) structure to gain market access for A-shares. From the end of 2011 through the end of March 2013, the market grew by close to 37% to more than US\$7.5bn. In this instance, investors are using ETFs to access a market tightly controlled with respect to QFII and RQFII allocations.

Another way investors have been able to access A-shares is through derivatives. This has been demonstrated through the Singapore listed futures included in the FTSE China 'A50 futures'. Trading started quietly when the futures were launched in September 2006. The SGX made changes to the A50 futures contract specifications in 2010, and with market access enhancements in 2012 by the CSRC, SAFE, and US Commodity Futures Trading Commission (CFTC) approval there has been a substantial pickup in both trading volumes and open interest in A50 futures. At the end of 2012, open interest had reached just over US\$1.6bn and was generally stable, suggesting longer-term holdings. There has also been an almost threefold jump in open interest in options on the iShares FTSE A50 China Index ETF³.

²Source: Morningstar, FTSE

³Source: SGX

QFII and RQFII Quota, FTSE China A50 Index Futures and ETF Options Open Interest



Source: CSRC, SAFE, SGX



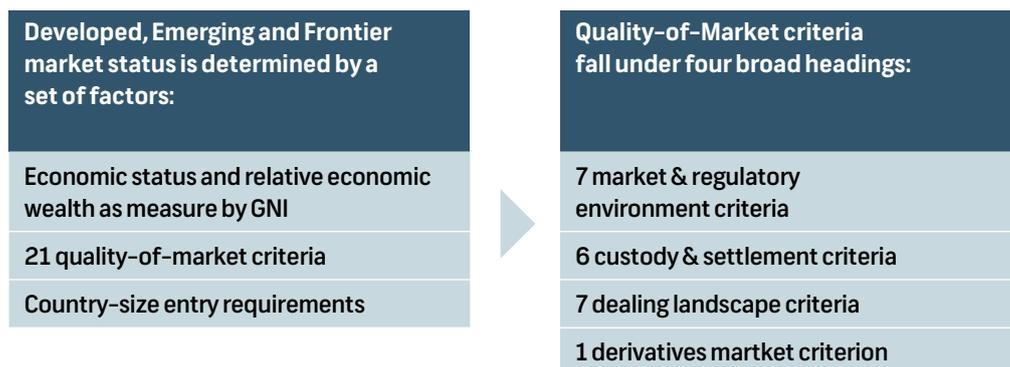
Market access and country classification

A key aspect of a global equity benchmark index is that it has to represent the opportunity set that is readily investable by international market participants. To analyse how best to integrate countries into a global benchmark, FTSE has a detailed and formal classification process that defines countries as Developed, Advanced Emerging, Secondary Emerging or Frontier. The process is governed by the independent FTSE Country Classification Committee, which consists of experienced industry practitioners from a mix of asset owners, institutional investors, investment banks and consultants.

The Chinese equities – H-shares, Red chips, P-chips and B-shares – currently included in the FTSE Global All Cap and FTSE All-World indices are classified as Secondary Emerging. For A-shares to be considered part of the FTSE global benchmark indices, China A must first be classified. The process begins with a country’s economic importance, starting with the World Bank’s figures for Gross National Income per capita. There are three categories and every economy is classified as either low income, middle income (subdivided into lower, middle and upper middle), or high income. On this criterion, China is currently ranked as “Upper Middle”. In terms of its credit rating, China is currently classified as Investment Grade.

The process includes a number of additional Quality of Markets tests, although market access is one of the most important criteria in determining investability by foreign market participants. These Quality of Markets criteria are important in assigning a country Developed, Advanced Emerging, Secondary Emerging or Frontier status.

FTSE Country Classification Framework



The Quality of Markets matrix has four main areas of analysis. Market and Regulatory Environment criteria cover investor protection, ranging from effective formal regulatory bodies to the legal treatment of minority shareholders, foreign ownership restrictions, free flow of capital, and well-developed equity and foreign exchange markets. The Custody and Settlement criteria assess the services and efficiency that investors are likely to experience as well as the flexibility of trading with respect to stock lending, settlement and clearing. Additional tests consider the dealing environment in terms of depth of broker services, broad market liquidity, transaction costs, short sales, off-exchange transactions and market transparency.

The following abbreviated table shows that China passes many key Advanced Emerging or Secondary Emerging criteria, a level that would allow its inclusion in the FTSE All-World benchmark indices. The recent trends with respect to the greater accessibility provided by the expanded QFII and RQFII programme have helped create a more open investment environment.

FTSE continuously reviews and evaluates the different aspects and criteria in the Country Classification Framework to reflect the recent development and evolution of capital markets. The most substantive area that is currently preventing China and the A-share market from formal classification is the restriction on capital flows. Although the latter have been progressively improved, the limitations in terms of the timing of inflows and outflows remains a critical issue for international investors.

The freedom to invest and repatriate capital would mark a dramatic change to the current market access of QFII investors. This is especially important for open-ended funds such as ETFs, which feature intraday trading and an efficient creation and redemption process that delivers daily liquidity. Other considerations include the lack of clarity on the tax treatment for QFII capital gains.

CRITERIA	Developed	Advanced Emerging	Secondary Emerging	China A
WORLD BANK GNI PER CAPITA RATING				Upper Middle
CREDIT WORTHINESS				Investment
MARKET AND REGULATORY ENVIRONMENT				
Formal stock market regulatory authorities actively monitor market (eg. SEC, FSA, SFC)	X	X	X	Restricted*
No objection to or significant restrictions or penalties applied to the investment of capital or the repatriation of capital and income	X	X	X	Not met
Free and well-developed equity market	X	X		Pass
CUSTODY AND SETTLEMENT				
Settlement – Rare incidence of failed trades	X	X	X	Pass
Custody – Sufficient competition to ensure high quality custodian services	X	X	X	Pass
Clearing & Settlement – T+0, T+5 for Frontier	X	X	X	T+0
Custody – Omnibus account facilities available to international investors	X	X		Pass
DEALING LANDSCAPE				
Brokerage – Sufficient competition to ensure high quality broker services	X	X	X	Pass
Liquidity – Sufficient broad market liquidity to support sizeable global investment	X	X	X	Pass
Transaction Costs – implicit and explicit costs to be reasonable and competitive	X	X	X	Pass
Efficient trading mechanism	X			Pass
Transparency – market depth information / visibility and timely trade reporting process	X	X	X	Pass
SIZE OF MARKET				
Market Capitalisation US\$m (as at 31st Dec 2012)				3,742,914
Total number of listed companies (as at 31st Dec 2012)				2,117

* Currently under review

Source: FTSE

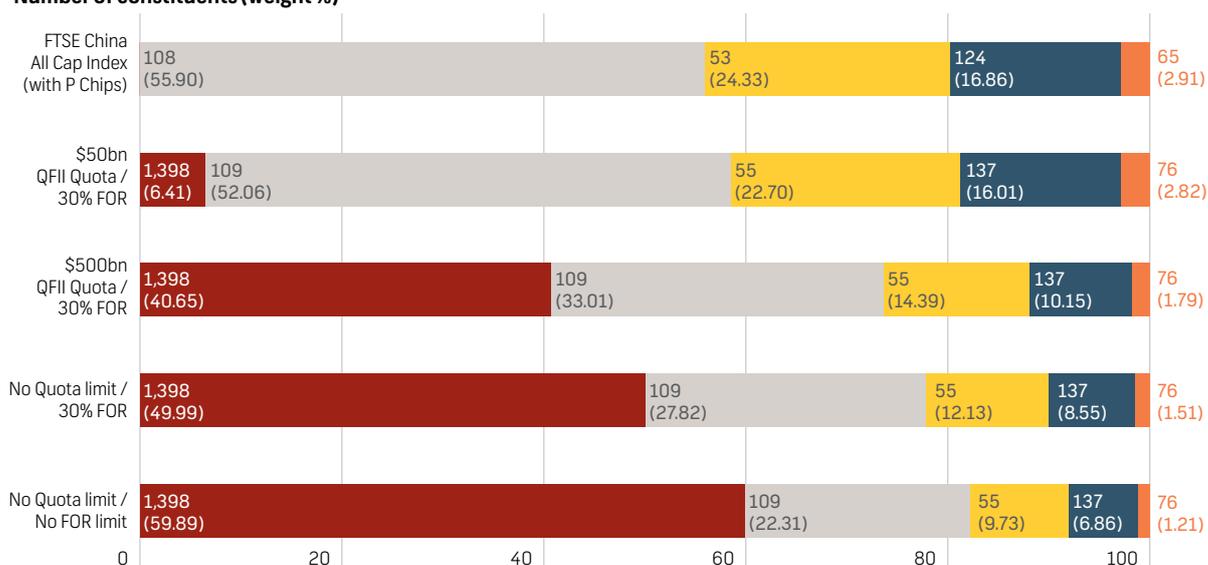
The impact of China A-shares on FTSE China

Regardless of any eventual change to China's country classification, it is possible to contemplate the impact of adding A-shares to an All China index.

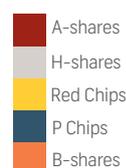
There are four scenarios that reflect the current and future state of the Chinese domestic equity market. FTSE Global All Cap country indices are designed to represent large, mid and small capitalization companies while targeting 98% coverage of the investable market. Based on these criteria, 1,398 A-shares would likely qualify for the index, out of current total of 2,115 at the end of March 2013.

FTSE China All Cap Index

Number of constituents (weight %)



Source: FTSE



To consider the hypothetical impact of adding these A-shares, we have had to start with \$50bn QFII and RQFII quotas – as well as an increase to \$500bn. Another scenario would see access to the A-share market open but limited by a 30% foreign ownership restriction; this would result in an investable capitalization of close to US\$780bn for these 1,398 companies. Finally there is the extremely long-term scenario of an investment landscape with no quota allocations or foreign ownership restrictions, resulting in a free float market capitalization of US\$1.8trn.

Under these different scenarios it is apparent that the structure of an All China index would change substantially as reforms and quota would broaden the investable market capitalization. An initial inclusion of A-shares based on current quotas would result in them accounting for 6.41% of an estimated All China index, while the total number of constituents would rise from the current 350 to 1,775.

China	After A-shares Inclusion				
	Before A-share Inclusion	US\$50bn QFII Quota / 30% FOR	US\$500bn QFII Quota / 30% FOR	No Quota limit / 30% FOR	No Quota limit / No FOR limit
Number of Constituents	350	1,775	1,775	1,775	1,775
Net MCap (USDb)	726.87	779.94	1,229.94	1,459.50	1,820.06
Index Weights %					
FTSE China All Cap	100.00	100.00	100.00	100.00	100.00
FTSE Global All Cap	2.02	2.17	3.38	3.98	4.92
FTSE Asia Pacific All Cap ex Japan	15.41	16.37	23.58	26.80	31.35
FTSE Asia Pacific All Cap	9.55	10.19	15.18	17.52	20.94
FTSE Emerging All Cap	19.36	20.50	28.91	32.55	37.57

Source: FTSE

An increase in quota to \$500bn would result in the A-shares reaching a weight just over 40% and a total investable market capitalization of over US\$1.2trn. Under this scenario, the weight of H-shares, which currently account for almost 56% of the index, would fall dramatically to 33%. It should be noted that many of the larger H-shares will have associated A-shares so there is a degree of overlap in constituents.

A longer-term view of the market without any quota would see the weight of A-shares rise to close to 50% of an All China index with a total investable market capitalisation of around US\$1.5trn. The final scenario of no quota and no foreign ownership limits would see the estimated weight of A-shares reach around 60% of the index and a further jump in index market capitalisation to US\$1.8trn. Based on these criteria, 1,398 A-shares would likely qualify for the index, out of current total of 2,115 at the end of March 2013, whilst other companies would also be added due to the expanded investable market cap of the total Chinese equity market.

The impact on China A-shares on Global indices

If China were to meet the criteria to be classified as eligible for the FTSE All-World Index, it is possible to assess its weight under the same scenarios. At \$50bn level of available quota, the addition of A-shares would have only a marginal impact on the weight of China in global indices.

An expansion of the quota to \$500bn would have a meaningful impact with the weight of China in the FTSE Emerging index, rising from the current 19.9% to 30.9%. In global benchmarks such as the FTSE All-World and FTSE Global All Cap Indices, the weight would rise from 2.1% to 3.7% and 2.0% to 3.4%, respectively.

The A-share market and China's position in global equity markets

The most striking aspect of China's global equity market ranking is how it could dramatically change even with relatively modest but important improvements to market access and free flow of capital. At the moment, China is the ninth-largest equity market globally, based on the free float market capitalization of existing equities excluding A-shares. Adding the existing modest QFII and RQFII quota would result in no change to its ranking.

A shift in quota to \$500bn, while respecting the 30% constraint on foreign ownership, would result in China becoming the fifth-largest equity market in the world. Any change in FTSE's global indices would be dependent on China meeting the relevant Country Classification criteria, especially those relating to free movement of capital. From a long-term perspective, it is evident that international market participants need to understand the implications of such an occurrence and the resultant shift in equity indices.

Country	All China excl. A-shares	China incl. \$50bn QFII & 30% FOR	China incl. \$500bn QFII & 30% FOR	China incl. No Quota limit & 30% FOR	China incl. No Quota limit & No FOR limit	Country
USA	1	1	1	1	1	USA
Japan	2	2	2	2	2	Japan
UK	3	3	3	3	3	UK
Canada	4	4	4	4	4	China
Australia	5	5	5	5	5	Canada
Switzerland	6	6	6	6	6	Australia
France	7	7	7	7	7	Switzerland
Germany	8	8	8	8	8	France
China	9	9	9	9	9	Germany
Korea	10	10	10	10	10	Korea

Solutions for an evolving index landscape

The challenge for market participants will be how best to manage such a substantial change.

This is increasingly important for the current raft of investors that may already have access to QFII quota. As QFII quotas expand and become more widely accessible, it will be critical for market participants to be able to benchmark their wider investment universe appropriately.

FTSE's position as the leading international provider of equity indices focused on the Chinese market means that it is well placed to provide market participants with global benchmark solutions that incorporate A-shares. The FTSE China Index Series is a comprehensive family of indices that covers the equity opportunity set and includes the FTSE China A50 and FTSE China 25 Indices.

In the current environment, with QFII quota being tightly regulated and allocated, the quota would not be treated as free float. The China A-share market also remains unclassified with regards to its country classification, largely because of the restrictions on capital flows. This does not preclude the necessity to provide current QFII market participants with an appropriate benchmark that can adequately reflect their portfolio holdings.

QFII market participants currently using a global benchmark can use the FTSE China A All-Share Index to represent a broad exposure to the A-share market within a custom index. The weight of the A-share exposure can be set in accordance to the relevant QFII allocation within the overall portfolio. This solution would allow market participants to accurately benchmark their portfolio performance relative to an index that meets their specific requirements.

Given the differences in QFII quota between sovereign wealth funds, insurance companies, asset management institutions and other institutional investors, it is not possible to create a single standard index that covers all market participants' A-share allocations. A custom index would benefit from being based on FTSE's rigorous methodology and independent index committees and governance.

Incorporating China A-shares into the FTSE GEIS

If China were to meet the requisite criteria for the FTSE Global Equity Index Series, the formal country classification process would begin. The independent Country Classification Committee recommends changes to countries on a Watch List. China A-shares are currently on the Secondary Emerging Market Watch List, which is reviewed on an annual basis. Any change in classification would then need to be approved by FTSE's most senior committee, the FTSE Policy Group, at its September meeting.

Assuming a September announcement were made, the country would begin the transition to the relevant indices after 12 months. This period between announcement and index inclusion is designed to allow market participants time to plan and manage portfolio flows. If one considers a scenario where China A-shares were reclassified and included in the FTSE All-World Index on the basis of a quota of US\$500bn, then the weight change in all impacted indices would be substantial. As previously shown, the weight in the FTSE Emerging Index would rise from the current 19.9% to 30.9%, while for the FTSE Global All Cap Index the weight would increase from 2.0% to 3.4%.

In light of the scale of index rebalancing after such a significant country classification event, FTSE would create a number of transition indices. Pro-forma and transition indices would typically be available from announcement to final implementation. This would potentially cover a period of 18 to 24 months depending on the final conclusion timetable. These indices would facilitate a manageable change in index exposure and allow market participants to efficiently consider the timing of their investment flows. Transition indices offer market participants choice and flexibility while offering transparency in the index change process.

Summary – China A-shares and Global Indices

International investors currently access the Chinese equity market through H-shares, Red chips, P chips and B-shares and these are already included in FTSE's global benchmark indices. As the ninth-largest equity market, Chinese equities have a weight of 2.1% in the FTSE All-World Index. The China A-share market, though significant in size, is considerably restricted from a market access perspective. At the moment, investment is organised through quota arrangements and although these have evolved over the past few years with a general easing of the requirements to gain QFII status and quota, substantial challenges remain.

The key to international institutional investment in China is the availability and accessibility of A-shares that are freely available to trade and where there are no restrictions on capital movement and investment timeframes. This is one of the key constraints with respect to China A-shares and the current country classification process. A move to free, unimpaired flow of capital once QFII and RQFII has been allocated would go a long way towards creating a dealing landscape suitable from the perspective of international investors.

As quota has become available to outside investors, there is a growing requirement to create custom indices that reflect individual investor exposure to the China A-share market. FTSE is building on its wealth of experience through its existing FTSE China Index Series to create relevant benchmarks for international market participants. Custom indices that include China A-shares on a pro-forma basis form part of a comprehensive FTSE index offering designed to help investors manage international asset class exposures.

A longer-term view of the China A-share market, with free movement of capital and fewer QFII restrictions, would potentially allow this part of the equity market to be included in FTSE's global benchmark indices. Free and unencumbered market access is a pre-requisite for global benchmark index inclusion, especially for indices that are widely used by ETFs, whose market access and liquidity are important factors.

As the CSRC and SAFE implement measures aimed at expanding international investor participation in the domestic equity market, FTSE's global benchmark indices will evolve to include China A-shares. The availability of pro-forma and transition indices will offer flexible benchmarking solutions for investors as they seek to incorporate A-shares in global equity portfolios.

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