MSCI

Research Insight

China A-Shares: Too Big to Ignore

Qi Wang

Chin-Ping Chia

September 2014

Executive Summary

China A-Shares are too big to be ignored, yet remain difficult to access for many investors. How can global investors sidestep a stock market that has become the third-largest equity market globally, with a total market value of USD 3.9 trillion and an average daily volume of USD 29 billion?

In our recent consultation on the potential inclusion of China A-shares in the MSCI Emerging Markets index,[1] most investors were generally supportive of their inclusion. However, accessibility constraints imposed by the current quota system makes many investors uncomfortable with an inclusion *right now*. The most common approach is to do nothing until access to the A-share market is further liberalized.

The problem is that this strategy leaves many global investors owning an incomplete China equity portfolio. In this paper, we examine the opportunity cost and implications of not having an A-shares allocation in a global equity portfolio. While current accessibility restrictions are cumbersome and pose significant operational challenges to investors, the reality is that there are strong supporting arguments for capturing a comprehensive China investment opportunity set.

The role of A-shares in portfolios is profoundly important to global investors. Key issues include:

- Rising correlations between developed market and emerging market equities in recent decades have diminished the diversification effect of emerging market investing. China A-shares – along with frontier markets – still offer relatively low correlations with the rest of the world, leading to potential diversification effects at the total portfolio level.
- The market accessibility of A-shares is comparable to that of frontier markets. However, A-shares are far more investable than frontier markets in terms of the capacity, concentration, liquidity and cost of replication.
- China, despite its recent slowdown, is still the largest contributor by far to global economic growth. Investors may find it difficult to capture China's long-term economic growth without access to the A-shares market.

Ultimately, each investor needs to assess the tradeoffs between A-shares' market accessibility as well as legal, tax, compliance and other operational requirements against the long-term strategic importance of having a more representative and comprehensive China allocation in the equity policy portfolio.

[1] "Consultation on China A-Shares Index Inclusion Roadmap" (2014). http://www.msci.com/resources/pdfs/ChinaA_Roadmap_Consultation_Mar2014_updated.pdf

Introduction

"There are four indicators I look for: contradictions, inversions, oddities, and coincidences. When you see a contradiction, it means more fundamental change is ahead."

--Paul Saffo, Visionary and Futurist

China accounts for more than one-fifth of the MSCI Emerging Markets Index weight, yet the majority of global institutional investors today own an incomplete China equity portfolio. China A-shares, which make up 34% of the total China investment opportunity set[2] are often missing from a typical institutional investor's portfolio.

There are valid reasons why this is the case. For starters, A-shares are simply not on the "radar" of global investors, who rely on the policy benchmark to guide their allocation decisions. When a market is not represented in the benchmark, it is typically ignored. Thus, investing in A-shares is often considered an "off-benchmark" bet and tends to be opportunistic in nature.

The reason why A-shares are not yet included in some mainstream global indexes is not difficult to understand. Market accessibility is the overriding issue. The existence of quota systems for overseas asset managers and capital mobility restrictions make it challenging for foreign investors to access the market freely.

In addition, the unresolved capital gains tax issue, the lack of proper nominee ownership structure and a very short settlement cycle continue to represent big compliance and operational hurdles for some institutional investors.[3] Despite efforts from the Chinese regulators to expand the Qualified Foreign Institutional Investor (QFII) and Renminbi Qualified Foreign Institutional Investor (RQFII) schemes in recent years, investment participation by foreign investors has remained low.

Benchmarking, accessibility and operational issues aside, no investor can ignore the significance of China in the global economy. In 2003, China accounted for less than 2% of the world's Gross Domestic Product. Today, this ratio has grown six-fold to 12%, putting China just behind the United States as the world's second-largest economy. Despite concerns of an economic slowdown,[4] China is still the largest contributor to global GDP growth, with a 50.7% weight in 2013. In terms of the global equity market, the A-shares market is already one of the largest and the most liquid in the world, as can be seen in Exhibit 1. Combining both the Shanghai and Shenzhen stock exchanges, China currently has a market capitalization of US$3.9 trillion, putting it just behind the United States and Japan. The size of China A-share market is likely to continue to grow 1) if privately held Chinese companies list their shares and 2) if Chinese A-shares resume their dramatic growth rate of 25% per year from 2006 to 2010.[5]

[2] As defined by the MSCI China All Shares Index, which contains A-shares, B-shares, H-shares, Red Chips and Private Chips.

[3] Source: Results of the 2014 MSCI Annual Market Classification Review: Uncertainty around the application of the capital gains tax has been a key issue affecting some international A-share investors. The need to set aside capital gains tax provision and its resulting effects on tracking error and profit repatriation are frequently highlighted as a concern by investors. In addition, certain investors are also concerned with the uncertainty over legal ownership and its potential fiduciary implications due the lack of real nominee structure. The current settlement cycle of T+0 for A shares is much shorter than the international practices of T+2/T+3.

[4] See our companion paper "China: Hard Landing or Gentle Descent?" for more detail.

[5] See our companion paper "China: Hard Landing or Gentle Descent?"

Exhibit 1: World's Largest Exchanges by Market Cap of Listings (June 2014)

Country / Region	Exchanges	Total Market Cap (USDm)	YTD Value Traded (USDm)
U.S.	NYSE + NASDAQ OMX	25,850,054	13,691,881
Japan	Tokyo	4,624,444	2,743,502
China	Shanghai SE + Shenzhen SE	3,934,402	3,497,111
Europe	Euronext	3,818,241	999,014
Hong Kong	HKSE	3,089,438	708,056

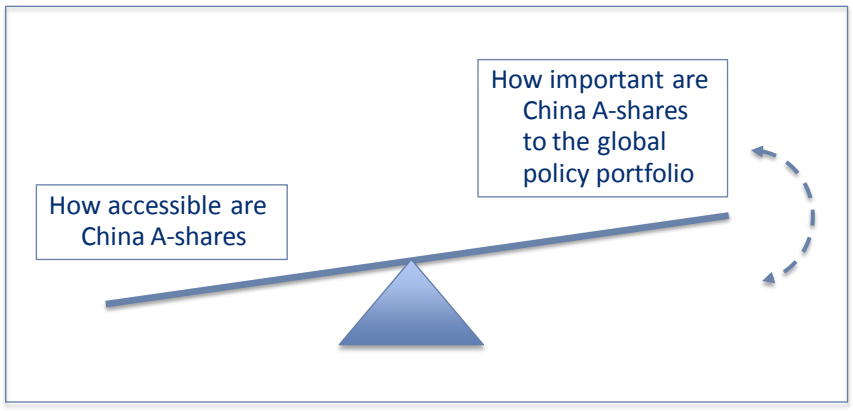
Source : World Bank.

China, in terms of its economy and the size of its equity market, is simply too big to ignore. Thus, investors need to come to grips with how to approach China A-shares. While market accessibility can be difficult, it is not always black and white – what's problematic for one investor may be fine for another. And market accessibility of China A-shares continues to improve: The impending launch of the Shanghai-Hong Kong Stock Connect program will permit global investors to trade A-shares via the Hong Kong stock exchange.

When investors weigh the pros and cons of allocating to A-shares, they should consider:

- The institution's own assessment of A-share market accessibility in the context of its legal, tax, compliance and other operational requirements, and
- The strategic importance of having a more comprehensive China opportunity set including A-shares in its equity policy portfolio

Exhibit 2: Striking the Right Balance Between Accessibility and Necessity



In this paper, we encourage investors to look beyond the current accessibility issues and consider the following issues:

- What are global investors truly missing when they avoid investing in A-shares?
- What are some of "implicit costs" of not having A-shares in a global equity portfolio?
- What is the potential role of A-shares (if any) in global equity allocation?

A-Shares: Correlations and Growth

"In the late '80s, a small group of institutional investors started to look beyond traditional equity markets to invest in emerging markets. These early investors had a very simple yet powerful rationale for investing in these markets. They postulated that they would benefit from rapid economic growth if they invested in markets that were at an early stage of development and had considerable potential for further development. They anticipated that developing countries would progressively adopt market-oriented policies in a globalizing world and that they could invest in companies at low valuation, as these markets were under researched and undiscovered."

--MSCI, Emerging Markets: A 20-year Perspective

The role of A-shares in a global equity portfolio is perhaps best understood in the context of emerging markets investing. For the last 15 years, emerging markets investors have been amply rewarded. From 1998 to 2013, the MSCI Emerging Markets Index achieved an annualized gross return of 11.2% compared to 4.8% for the MSCI World Index.

Investors allocate to emerging markets for two primary beliefs:

- Diversification: An emerging markets allocation with low correlations to developed markets creates diversification effects at the total portfolio level.
- Growth: Emerging countries typically display higher economic growth rates, which investors believe will translate into higher risk-adjusted returns over the long term.

The Diversification Argument

One of the key challenges for emerging market investors today is the convergence of correlations between emerging markets equity and developed markets in recent years. In a way, emerging markets have become a victim of their own success: As capital markets in emerging markets countries have become more open and gradually converged to the developed market standard, the two opportunity sets also started to behave alike.

Exhibit 3 shows the correlation of major indexes for the period of December 2004 to June 2014. The correlation for monthly returns between developed and emerging markets equities is 0.88 versus 0.76 in the previous 10-year period. At its current level of correlation with the rest of the world, the diversification motivation for investing in emerging markets has diminished.

On the other hand, the MSCI Frontier Markets Index still has relatively low correlations with the rest of the world, partially explaining why some global investors have increasingly turned to frontier markets despite capacity and liquidity concerns. However, the MSCI China A Index exhibits an even lower correlation than frontier markets: China A has a correlation of 0.39 with developed markets and 0.49 with emerging markets, well below those of frontier markets. Additionally, China A-shares offer a significantly larger investment opportunity set with higher liquidity and capacity.

Exhibit 3: Correlation of Monthly Returns (December 2004 – June 2014)

	ACWI	EAFE	WORLD	EM	FM	China A
ACWI	1.00					
EAFE	0.98	1.00				
WORLD	1.00	0.98	1.00			
EM	0.91	0.89	0.88	1.00		
Frontier Market (FM)	0.64	0.64	0.64	0.61	1.00	
China A	0.41	0.39	0.39	0.49	0.25	1.00

Note: Based on unhedged gross monthly return series in USD.

At a country level, the China A-share market is the only market among the major developed and emerging countries that has enjoyed such a low correlation with global indexes, as can be seen in Exhibit 4. For example, Brazil, India, Russia, South Africa and China (without A-shares) all had correlations with developed markets in the range of 0.72 – 0.80, based on the 9.5-year period ending June 2014.

Exhibit 4: Correlation of Monthly Returns (December 2004 – June 2014)

	ACWI	EAFE	WORLD	EM
China A	0.41	0.39	0.39	0.49
China*	0.75	0.75	0.72	0.88
USA	0.96	0.90	0.97	0.80
Japan	0.76	0.81	0.76	0.69
Europe	0.97	0.99	0.97	0.87
Brazil	0.79	0.78	0.76	0.91
Russia	0.79	0.79	0.76	0.86
India	0.78	0.75	0.75	0.85
South Africa	0.82	0.82	0.80	0.87
Taiwan	0.79	0.76	0.76	0.85
Korea	0.82	0.79	0.79	0.88

Note: *Current MSCI China Index which excludes A-shares. Based on unhedged gross monthly return series in USD.

Within emerging markets, the correlations of emerging markets countries with one another have also reached high levels. The average cross-correlation of the five BRICS (Brazil, Russia, India, China and South Africa) countries plus Taiwan and Korean is now 0.73 while China A continues to enjoy low correlations with other emerging markets countries. These results suggest that China A could be combined with other emerging markets country indexes, creating diversification effects for emerging markets portfolios.

Exhibit 5: Correlation of Monthly Returns (December 2004 – June 2014)

	China A	China*	Brazil	Russia	India	S. Africa	Taiwan	Korea
China A	1.00							
China*	0.59	1.00						
Brazil	0.45	0.77	1.00					
Russia	0.33	0.68	0.82	1.00				
India	0.39	0.74	0.75	0.67	1.00			
South Africa	0.41	0.76	0.78	0.72	0.74	1.00		
Taiwan	0.35	0.72	0.69	0.72	0.71	0.68	1.00	
Korea	0.41	0.72	0.71	0.70	0.70	0.74	0.79	1.00

*Current MSCI China Index which excludes A-shares. Based on unhedged gross monthly return series in USD.

In addition, the MSCI China A Index and MSCI World Index moved in opposite directions 35% of the time in the recent 9.5-year period. Such negative correlation can be useful particularly in times of high equity market volatility. For example, during the depths of the Global Financial Crisis,[6] the monthly returns of MSCI ACWI and MSCI China A Index displayed low correlations. The MSCI China A Index bottomed in October 2008, four months earlier than ACWI, providing much-needed diversification for global and emerging markets investors.

Exhibit 6: Percentage of Months with Directional Mismatch (December 2004 – June 2014)

	ACWI	EAFE	WORLD	EM	FM
ACWI					
EAFE	8%				
WORLD	3%	9%			
EM	14%	17%	17%		
Frontier Market (FM)	25%	28%	26%	27%	
China A	36%	35%	35%	34%	42%

Note: Based on unhedged gross monthly return series in USD.

The Low Correlation Puzzle

Practitioners and academics alike debate why China A-shares have such a weak correlation with global equity markets and whether such a low correlation is likely to continue. Below we discuss explanations that may account for this relationship.

Openness of the A-Share Market

First and foremost, foreign investors face heavy restrictions in accessing the A-shares market. In the absence of free flow of capital, the China A-share market has been largely insulated from global capital events. As such, the behavior of a closed market is likely to behave differently from open capital markets and may result in a lower correlation.

Historically, the China A-share market has been dominated by retail investors and has had limited institutional participation. According to the annual reports from the China stock exchanges, the ratio of retail and institutional investors is roughly four to one.[7]

Today, foreign investors can access A-shares directly via the QFII and RQFII programs. Despite rapid growth in the RQFII/QFII quotas and a significant increase in the number of qualified investors, foreign participation in A-shares remains low. As of July 2014, foreign ownership of A-shares was estimated at less than 3% of the total market capitalization. Not surprisingly, the A-share market tends to behave differently from other global markets that have significant institutional and foreign participation.

Academics have long observed that the behavioral biases of market participants vary from country to country. The behaviors of investors are not uniform across markets, and the reasons for making "systematic errors" are highly varied. For example, Eun and Huang (2008) showed that systematic risk (beta) is not significantly priced in the expected return of A-shares. However, there is a notable negative relation between firm-specific risk and expected return. They also found that Chinese investors are willing to pay a significant premium for more liquid stocks and dividend-paying stocks. Like Wang and Xu (2004), they attributed this phenomenon to the dominance of small retail investors in the A-share market.

[6] October 2007 – February 2009

[7] Based on 2012 annual reports of Shanghai Stock Exchange and Shenzhen Stock Exchange.

Mei, Scheinkman and Xiong (2009) focused on the speculative nature of A-share trading which they compared to that of the U.S. technology bubble of the late 1990s. Chinese stock market speculation is evident in the significant price differences between A- and B-shares, even though the two share classes offer exactly the same shareholder rights. They found the price differential between A and B-shares is positively correlated with the turnover of A-shares, even after controlling for liquidity, risk premium and discount rates etc.

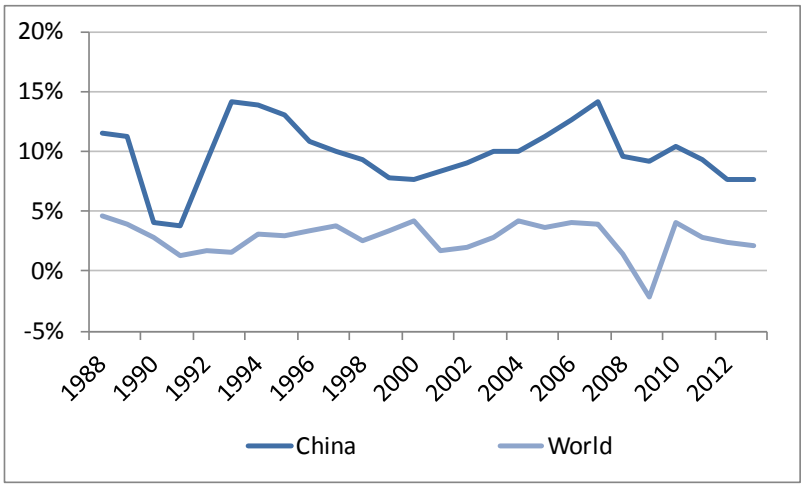
Trading restrictions also play a big part in contributing to the inefficiency of the China A-shares market. In addition to the quota system and currency controls imposed on foreign institutional investors, short sales and futures trading are still very new to China, and there remains no fungibility of the different share classes (A, B and H etc.).

However, the impending launch of the Shanghai-Hong Kong Stock Connect program in October 2014 potentially could alter the correlation of A-shares with global equities and render the diversification argument less persuasive. This program will enable foreign investors to access a portion of A-shares via the Hong Kong Stock Exchange and thus avoiding the cumbersome quota system and currency controls placed on QFII/RQII investors.

Macroeconomic Cycles and A-Shares

Some experts believe macroeconomic cycles play a role in China's low correlations with the rest of the world.[8] As can be seen in Exhibit 7, China entered major up cycles in 1991-1994 and 2000-2007 with accelerating growth each year, while global GDP growth plateaued over the same periods. In addition, world GDP growth bottomed in 2008-2009, yet China maintained high growth of more than 9% at the same time. The correlation of annual GDP growth rates between China and the world was only 28% from 1988 to 2013, while the correlation between U.S. and world GDP growth rates was nearly three times higher, at 78%. This may explain why China A-shares – under the direct influence of the Chinese economy – traded differently from other equity markets around the world.

Exhibit 7: GDP Growth Rates of China vs. Rest of World (1988-2013)



Source: World Bank.

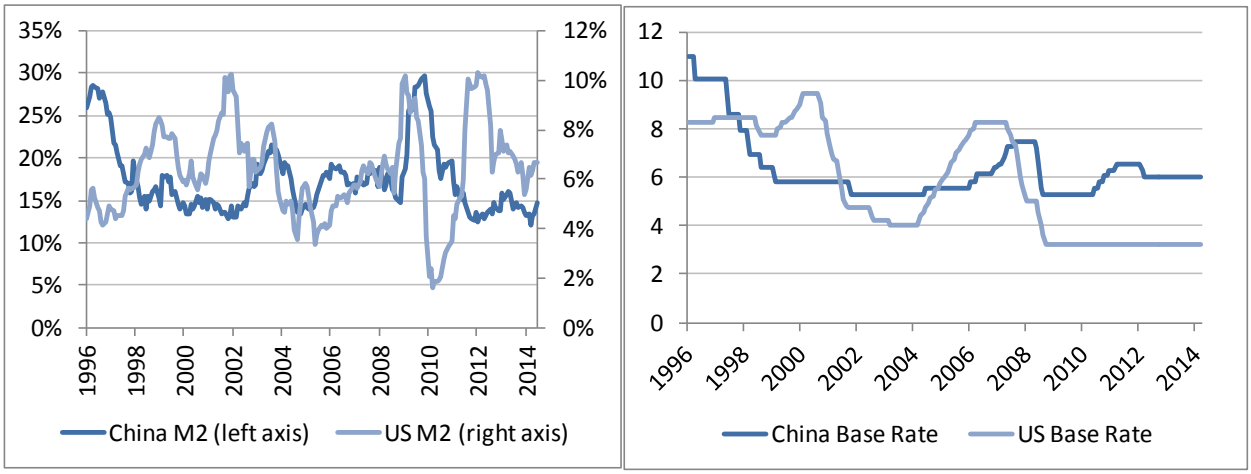
The differences in money supply and the interest rate cycle also weigh on asset pricing. China and the United States[9] engaged in contrasting monetary policies during the past two decades, as can be seen in

[8] For a detailed discussion on how macroeconomics affects China's economic growth and equity market, see "China: Hard Landing or Gentle Descent?"

[9] For simplicity, we will use the United States as the main reference point instead of comparing China to every other country in the world.

Exhibit 8. Often, M2 growth accelerated in one country while decelerating in the other, resulting in an overall negative 30% correlation between the two M2 measures. The interest rate cycles of China and the United States are also noticeably different from each other. For example, China has been raising rates since October 2010 while the United States has maintained low interest rates for nearly six years. Many observers have commented that U.S. monetary policy has contributed to increases in the valuation of emerging markets assets and drove the differences in equity performance.

Exhibit 8: YoY Money Supply (M2) Growth and Central Bank Base Rate – China vs. the U.S. (1996-2014)



Source: Bloomberg.

Note: The China base rate refers to PBOC's one-year best lending rate. The U.S. base rate is FRB's prime loan rate.

The Growth Argument

Emerging markets as a whole have generated superior economic growth in recent decades. Many investors relying on macroeconomic views to guide their asset allocation decision have turned to emerging markets stocks as a way of capturing those countries' long-term economic growth. While researchers debate whether a relationship between economic growth and stock returns exists and how to untangle them,[10] empirical data for the last two decades ending 2010 have shown that emerging markets' higher relative GDP growth coincided with higher relative equity return compared with developed markets.[11]

[10] An emerging consensus in the Macro-Finance academic literature suggests that there are insights to be derived from understanding the macroeconomic risk from the angle of persistent shocks to trend growth and inflation. In other words, investors need to care about these shocks in the short-term because they may carry signals about persistently higher (or lower) growth in the long-term. Very large shocks (either positive or negative) usually signal the possibility for disruptive changes in trend growth into the future. The MSCI Asset Pricing Model links macroeconomic factors to long-term portfolio return and risk. The model indicates that macroeconomic factors drive long-term portfolio return and volatility, and that long-term return premia can be understood as providing compensation for exposure to macroeconomic risk. Our research shows that investment strategies differ in their sensitivity to macroeconomic shocks, leading to implications for the expected returns of these strategies in different macroeconomic scenarios. Modern asset pricing shows that the competitive equilibrium value of an asset equals the expected discounted value of current and future asset cash flows. The application of this fundamental principle leads to the conclusion that macroeconomic risk, which we define as the risk of persistent shocks to trend GDP growth and inflation has an impact on asset return and risk via the discount factor and asset cash flows. In the MSCI Asset Pricing Model, both of these are dependent on the state of the economy.

[11] Bambaci, Juliana, Chin-Ping Chia and Billy Ho. (2012). "Built to Last: Two Decades of Wisdom on Emerging Market Allocations."

Exhibit 9: GDP Growth and Equity Return – Developed Markets vs. Emerging Markets (1990-2010)

CAGR	GDP	Equity Market
Developed Markets	2.4%	4.0%
Emerging Markets	4.2%	8.3%

Source: MSCI and World Bank.

Within emerging markets, equity index returns of large emerging countries such as Brazil, India, Russia and South Africa have been higher than or inline with nominal GDP growth in the same period. However, despite the spectacular growth in Chinese GDP (a compound annualized growth rate of 16% over the 20-year period), the MSCI China Index returned only 2% annually. On the other hand, the MSCI China A Index returned close to 12% annually for the same period, a pattern that is more similar to the other BRICS countries, as can be seen in Exhibit 10. This striking contrast suggests we need to dig deeper into the relative composition of these two China indexes to fathom the implications for investors.

Exhibit 10: GDP Growth and Equity Return – BRICS Countries (1994 – 2013)

CAGR (%)	GDP	Equity Market
China	15.9	2.0
China A	15.9	11.9
Brazil	7.7	10.3
India	9.5	7.3
Russia	9.2	13.4
South Africa	5.1	8.1

Source: MSCI and World Bank.
Note: The equity market return refers to the total return of MSCI standard indexes in USD.

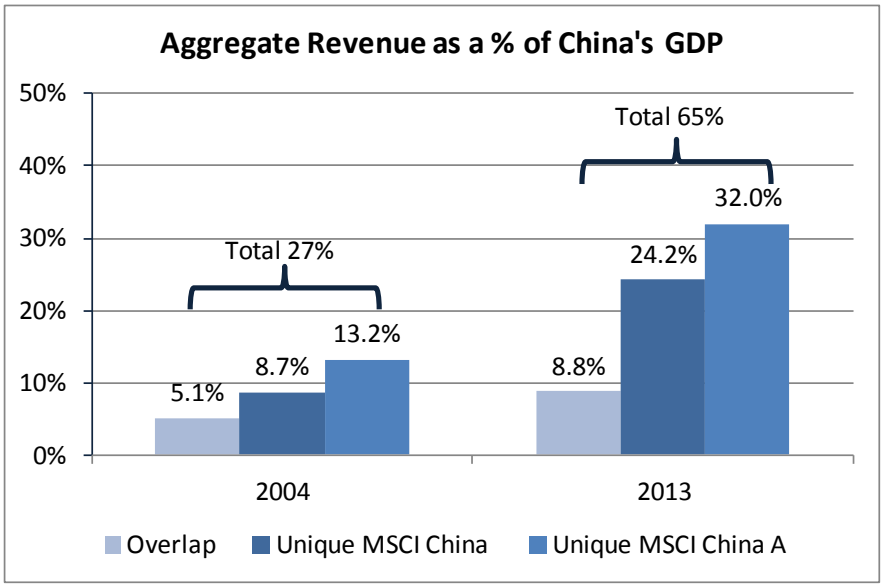
What Drives the Big Mismatch?

Index Revenue as a Percentage of GDP

The underlying composition of the two China equity opportunity sets represented by the MSCI China Index and the MSCI China A Index can partially explain the index performance differential in response to the same GDP growth.

Below we compare the "bottom-up" characteristics of the two indexes in terms of the aggregate revenue and sector constituents. We use the aggregated revenue of companies in each of the indexes, and compare that to the size of the country's contemporary GDP. The ratio of revenue to GDP is intended to serve as a crude proxy to estimate how well the index constituents represent the country's economy. To make the comparison more accurate, we have separated the revenue contribution of dual-listed shares – companies that appear in both China indexes. Exhibit 11 shows the unique revenue contribution of each index and the revenue contribution of dual-listed shares.

Exhibit 11: Aggregate Revenue as Percentages of GDP



Source: MSCI and Bloomberg.
Note: Aggregate revenue and GDP in USD. The "overlap" refers to dual-listed shares in both MSCI China and MSCI China A.

Compared to the other major global equity markets, the China stock market historically has offered a poor representation of the country's economic activities. Ten years ago, the unique revenue contribution of the MSCI China Index was only 8.7% of GDP, compared to 13.2% for the MSCI China A Index. Thus, they each offer small but differing slices of the Chinese economy, and it may not be surprising that both MSCI China indexes have produced different outcomes as proxies for the country's economic growth. Even when combined, their total revenue contribution in 2004 was only slightly more than one-fifth of the Chinese economy, reflecting the earlier stage of China's equity market development.

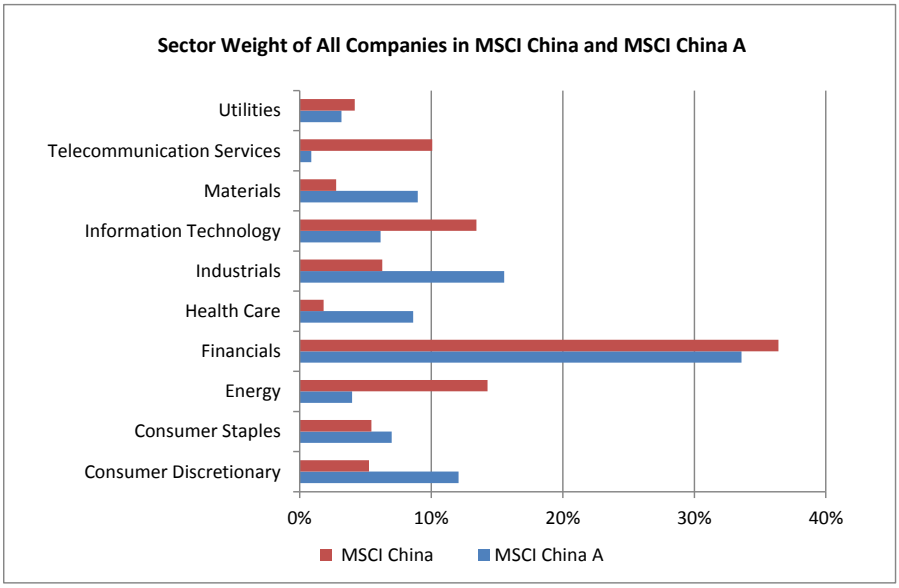
Today, the combined revenue of MSCI China A and MSCI China companies, including the dual-listings, equals about two-thirds of the country GDP, more than double from 27% in 2004. This number is comparable to the ratio of the revenue contribution of the MSCI USA Index to U. S. GDP (67%). This growing proportion of the Chinese economy represented by the two China markets has two implications:

- Both of these opportunity sets now offer better representations of China's GDP than before.
- Combining the two opportunity sets – in one way or another – potentially could offer a more accurate reflection of the economic landscape in China.

Differences in Sector Weighting

The sector distribution of the MSCI China and MSCI China A Index indicate that these indexes offer very different investment opportunities. While the MSCI China Index has higher weights in Energy, Financials and Information Technology, the MSCI China A-Shares Index is more concentrated in Materials, Industrials and Consumer Discretionary. Thus, they each represent different segments of China's domestic consumption growth. Investors seeking a play on the domestic economy may find that a combination of the MSCI China and the MSCI China A indexes provides a better proxy for this investment view.

Exhibit 12: Sector Distribution of MSCI China vs. MSCI China A Index.



Size of the Index Universe

At the security level, the MSCI China A Index is a broader index with a much larger investment universe than the MSCI China Index, with three times the total number of constituents. Removing the A- and H-share[12] overlaps of about 43 companies for the MSCI China A Index and the MSCI China Index, there are still a significant number of companies in China which are accessible only via the A-shares market. An alternative way of capturing the China A market is to use the new MSCI China A International Index, which provides comprehensive representation of those A-shares available to non-domestic investors. As can be seen in Exhibit 13, the MSCI China A International Index offers 221 constituents, compared with 462 for the MSCI China A-Shares Index and 138 for the MSCI China Index.

Exhibit 13: Number of Constituents by Sector (December 2013) and A-H Overlaps

Sector	MSCI China	MSCI China A	MSCI China A International
Consumer Discretionary	15	55	29
Consumer Staples	12	34	18
Energy	9	25	13
Financials	38	72	44
Health Care	5	46	21
Industrials	25	108	39
Information Technology	7	30	16
Materials	14	67	28
Telecommunication Services	4	2	2
Utilities	9	23	11
Total	**138**	**462**	**221**

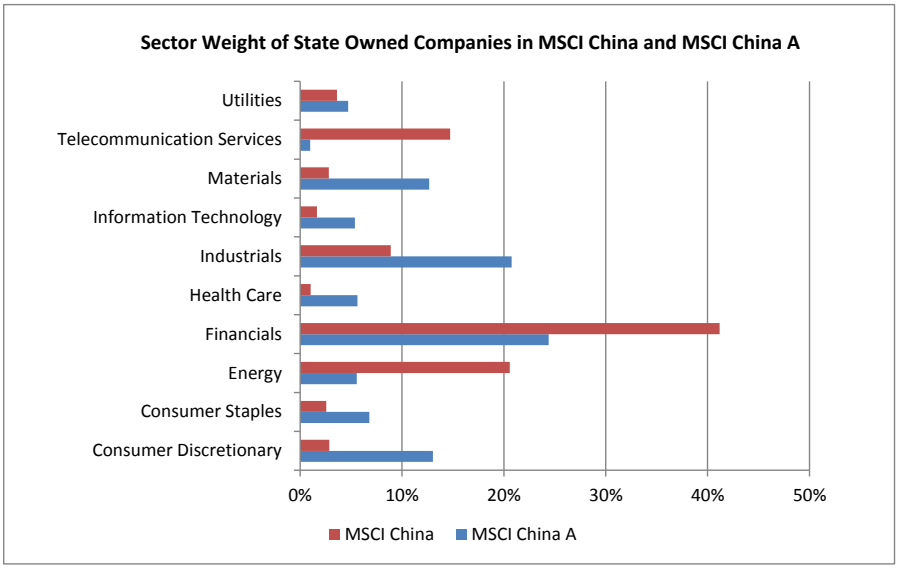
Ownership Profile of the Companies

The company ownership structure provides another dimension on how to view differences between the MSCI China Index and the MSCI China A Index. Both indexes contain a significant number of state-owned

[12] Chinese securities that are incorporated in Mainland China and listed on the Hong Kong Stock Exchange.

companies (SOE). On a free float-adjusted basis, 68% of the MSCI China Index are SOEs while the number is about 50% in the MSCI China A Index.[13] However, the sector profiles of these SOEs in the two indexes are again quite different, as can be seen in Exhibit 14. Any investor who wishes to bet on governmental efforts to clean up the tarnished image and corporate governance of SOEs would benefit from a combined universe.

Exhibit 14: Sector Weights of State-Owned Companies in MSCI China and MSCI China A



[13] Based on preliminary estimates using definitions from Wind, a Chinese data service provider.

Conclusion

Many global investors have overlooked the potential strategic role of China A-shares in their global portfolio, deterred by benchmarking, accessibility and operational concerns. As the China capital market liberalizes, China A-shares could well become part of global equity investors' opportunity set. Valuation and investment outlook considerations aside, adding China A-shares to a global equity portfolio could potentially provide enhanced diversification and improve the potential to capture a long-term economic growth premium.[14]

Our analysis shows that there are significant differences in the fundamental characteristics of the MSCI China and MSCI China A indexes. In addition, each index has grown as a proportion of the Chinese economy; together they can provide a more complete and representative proxy for China GDP. While owning an "economically representative" portfolio does not necessarily imply that one can capture the country's GDP growth more effectively, a portfolio lacking A-shares is unlikely to do a better job.

By combining the MSCI China and MSCI China A indexes, one can potentially capture revenue opportunities equivalent to 65% of China's GDP. This is a powerful argument why investors might consider a more comprehensive China portfolio. Potentially, one could even push the concept further to one that encompasses all China shares classes domiciled in different geographical regions, i.e., A-shares, B-shares, H-shares, Red-chips and overseas-listed China companies (e.g., NYSE or Nasdaq and Singapore-listed Chinese companies) as proxied by the MSCI All China Index.[15] We will address the concept of the "all China Index" in a future paper.

However, it is important for investors to understand that the A-shares market is by far the largest missing piece of the China equity puzzle. Getting this exposure right is likely to have long-lasting effects on their portfolios.

[14] The China growth premium is further discussed in a companion MSCI Research Insight "China: Hard Landing or Gentle Descent?" Our analysis implies that the observed premium for Chinese equities is a compensation for long-term risk to Chinese economic growth.

[15] See the Appendix for a list of key MSCI China Indexes.

Appendix: MSCI China Index Family

MSCI Indexes	Methodology/ Coverage	Use Cases	Investors
MSCI China	Methodology: GIMI Construction universe: H, B, R, P Index Representation: H, B, R, P Weighting: FIF based 140 of stocks:	• The de-facto China benchmark for international investors who use the MSCI ACWI/EM as policy benchmark – **its the "no decision" option** • If, and when, A-shares or other China share classes become eligible, they may be included in this index	ALL INTERNATIONAL INVESTORS **Asset Owners, Asset Managers, Broker Dealers**
MSCI China All Shares	**Methodology:** GIMI **Construction universe:** H, B, R, P, A **Index Representation:** H, B, R, P, A **Weighting:** FIF based **384 of stocks:**	• Depicts China opportunity of international investors if A shares are included in the MSCI EM Index – the future MSCI China. • For international investors who's China opportunity set is defined as HK/PRC listed China securities	**ALL INTERNATIONAL INVESTORS** **Asset Owners, Asset Managers, Broker Dealers** wanting to pre-position for the benchmark inclusion of A shares in the MSCI EM index
MSCI China A International	**Methodology:** GIMI **Construction universe:** H, B, R, P, A **Index Representation:** A only **Weighting:** FIF based **220 of stocks:**	• Represents the A Share component of the MSCI EM benchmark when the full inclusion happens. • Standalone benchmark for **China A specialist Mandates** (i.e. QFII mandates)	**Asset Owners** investing in A-Shares ahead of the benchmark inclusion, **and for whom the ACWI consistency matters**
MSCI China A	**Methodology:** GIMI compatible **Construction universe**: A only **Index representation**: A only **Weighting**: DIF based **441 of stocks:**	• The broadest representation of the China A opportunity, **as a standalone allocation** • The broadest benchmark for **China A specialist Mandates** (e.g. QFII mandates) • A share Benchmark for **domestic China investors**	**Asset Owners** investing in A-Shares ahead of the benchmark inclusion , who are comfortable with the benchmark misfit, and want to give more freedom to their managers **Private Banks** investing for A share exposure **Domestic Chinese Investo**r (e.g. a Chinese Insurance Company)
MSCI Overseas China	**Methodology**: Select constituent based on GIMI parameters **Construction universe**: Overseas China (OC) **Index representation**: OC **Weighting**: FIF based **9 of stocks:**	• S**tandalone benchmark** for investors seeking investment opportunity of China companies listed in US and Singapore (outside Hong Kong and Mainland PRC) • Can be combined with other China indexes to offer global China exposure	**Asset Managers** offering China specialist mutual funds/ETFs **Private Banks** wanting to invest in China companies currently not listed on HK & PRC
MSCI ALL China	**Methodology:** Composite Index **Construction universe:** 3 separate universes H, B, R, P / A / OC **Index Representation:** H, B, R, P , A, OC **Weighting:** Composite DIF + FIF based **590 of stocks:**	• The broadest opportunity set of **all Chinese companies, listed anywhere in the world** • Benchmark for investors seeking a broad definition of "China" **without geographical and benchmark constraints**	**Managers** offering China specialist mutual funds/ETFs **Private Banks** wanting to capture the broadest China exposure Potentially as **specialist institutional** mandates focus on China - as a carve out of EM mandates

Note:

MSCI launched the MSCI China A International Index and the MSCI China All Shares Index in June 2014. The MSCI China A International Index represents the A-share portion of the MSCI China All Shares Index, which includes A, B and H Shares with Red Chips and P Chips. These two new indexes are designed for international investors, reflecting the full inclusion scenario outlined in our recent roadmap for client consultation. The former can also be combined with the MSCI ACWI Index and the MSCI Emerging Markets Index to provide an approximation of the investment opportunity set if China A-shares were to be fully included in these indexes.

References

Bambaci, Juliana, Chin-ping Chia and Billy Ho. (2012). "Built to Last: Two Decades of Wisdom on Emerging Market Allocations," MSCI, 2012.

Cheng, Louis T. W., Hung-Gay Fung and Yiuman Tse. (2008). "China's Exchange Traded Fund: Is There a Trading Place Bias?" Review of Pacific Basin Financial Markets and Politics, Vol. 11, No.1.

Cornell, Bradford. (2010). "Economic Growth and Equity Investing," Financial Analysts Journal, Vol. 66, No. 1.

Decovy, Sherree. (2012). "The Future of China's Exchanges," CFA Magazine (July-August).

Eun, Cheol S. and Wei Huang. (2008). "Asset Pricing in China's Domestic Stock Market: Is There a Logic?" CFA Digest.

Hirsh, Joel. (2011). "China: Unhedged Risk in Your Portfolio?" CFA Magazine (November-December).

Malkiel, Burton G. (2008). "From Wall Street to the Great Wall: Investment Opportunities in China," CFA Institute Annual Conference presentation.

Mei, Jianping, Jose A. Scheinkman and Wei Xiong. (2009). "Speculative Trading and Stock Prices: Evidence from Chinese A-B Share Premia," Annals of Economics and Finance Vol 10 (2).

Mroczek, Madalena. (2012). "Unraveling the Supply-side Equity Risk Premium," The Value Examiner, (January/February).

MSCI. (2008). "Emerging Markets: A 20-year Perspective."

MSCI Research Bulletin. (2010). "Is There a Link Between GDP Growth and Equity Returns?"

Ritter, Jay R. (2005). "Economic Growth and Equity Returns," Pacific-Basin Finance Journal, Issue 13.

Vivanti, Albert and Perry Kaufman. (1997). "Global Equity Investing," McGraw-Hill, 1997.

Wang, Fenghua and Yexiao Xu. (2004). "What Determines Chinese Stock Returns?" Financial Analysts Journal, Vol. 60, No. 6.

Client Service Information is Available 24 Hours a Day

clientservice@msci.com

Americas

Americas	1.888.588.4567 (toll free)
Atlanta	+ 1.404.551.3212
Boston	+ 1.617.532.0920
Chicago	+ 1.312.675.0545
Monterrey	+ 52.81.1253.4020
New York	+ 1.212.804.3901
San Francisco	+ 1.415.836.8800
Sao Paulo	+ 55.11.3706.1360
Toronto	+ 1.416.628.1007

Europe, Middle East & Africa

Cape Town	+ 27.21.673.0100
Frankfurt	+ 49.69.133.859.00
Geneva	+ 41.22.817.9777
London	+ 44.20.7618.2222
Milan	+ 39.02.5849.0415
Paris	0800.91.59.17 (toll free)

Asia Pacific

China North	10800.852.1032 (toll free)
China South	10800.152.1032 (toll free)
Hong Kong	+ 852.2844.9333
Seoul	00798.8521.3392 (toll free)
Singapore	800.852.3749 (toll free)
Sydney	+ 61.2.9033.9333
Taipei	008.0112.7513 (toll free)
Tokyo	+ 81.3.5290.1555

Notice and Disclaimer

About MSCI

MSCI Inc. is a leading provider of investment decision support tools to investors globally, including asset managers, banks, hedge funds and pension funds. MSCI products and services include indexes, portfolio risk and performance analytics, and ESG data and research.

The company's flagship product offerings are: the MSCI indexes with over USD 9 trillion estimated to be benchmarked to them on a worldwide basis1; Barra multi-asset class factor models, portfolio risk and performance analytics; RiskMetrics multi-asset class market and credit risk analytics; IPD real estate information, indexes and analytics; MSCI ESG (environmental, social and governance) Research screening, analysis and ratings; and FEA valuation models and risk management software for the energy and commodities markets. MSCI is headquartered in New York, with research and commercial offices around the world.

[1]As of March 31, 2014, as reported on June 25, 2014, by eVestment, Lipper and Bloomberg *September 2014*