# Investing in Asia through a factor lens

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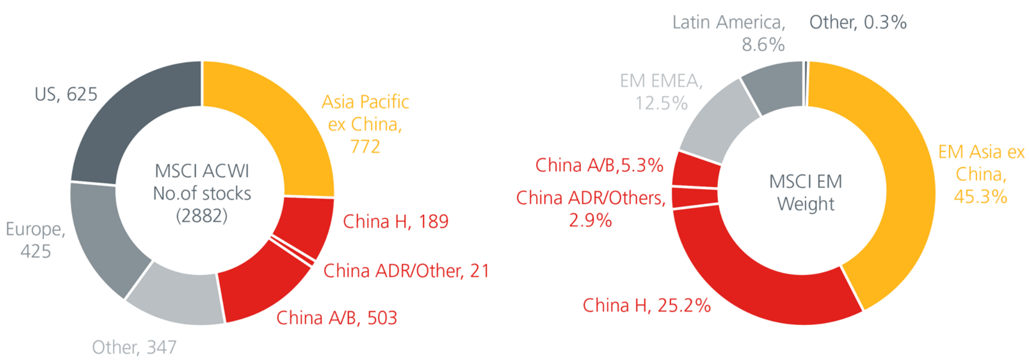
**Quantitative investment strategies based on factor investing have been employed in equity markets for many decades, with such approaches first taking hold in the US market and later trickling across the globe. In Asia, we find that many of the commonly used quant factors such as those based on company valuation, revisions in analyst estimates and low volatility perform strongly. With the added benefit that many factors have moderate (or even negative) correlations with each other, a multi factor approach that weights the different factors based on the strength of the reward they can earn, their volatility and co-movement and the conviction in the observed evidence should help investors achieve a more optimal outcome.**

Asia is too big to ignore. Its economy is the fastest growing in the world and it makes up almost half of the world's GDP. Asia has more internet users than Europe and North America combined, and its consumer market represents a trillion-dollar opportunity. Asian markets are growing - Asia including China[1] accounts for more than 50% of the number of stocks in the MSCI AC World Index and makes up 80% of the market capitalisation of the MSCI Emerging Markets Index. See Fig. 1. The region's markets also tend to have more exploitable

Fig. 1. Asia is growing and significant




Source: MSCI. Eastspring Investments, as of 31 January 2023.

Source: [1]China A-shares are currently included at a 20% inclusion factor.

inefficiencies than more mature equity markets around the world. As such, we believe that Asia warrants greater consideration and a larger share of the active risk budget in global asset allocations.

## ASIA IS NOT A COUNTRY

It is an oversimplification to think that Asia can be modeled as a region. Instead, investing in Asia requires consideration of each country's unique drivers and market dynamics.

In an earlier article "The case for Asia", we had highlighted the diversity within Asian economies and companies. Besides varying income levels, idiosyncratic factors including election cycles and central bank policies also drive individual markets differently. Some Asian markets are less efficient, have unique restrictions on aspects such as hedging, shorting, price limits and other trading constraints. Governance and policy standards also differ across the region.

Meanwhile, investor mix also varies. For example, institutional investor participation is high in Hong Kong, suggesting that the scope to exploit alpha opportunities arising from market inefficiencies may be less than in markets like China or India where the dominance of retail investors fuels greater market volatility but also create greater opportunities for sophisticated investors. Fig. 2. highlights the nuances across the equity markets in the region. While these all add to the complexity of investing in Asia, they also help to increase the diversification benefits to international investors.

As a result, within Asia, the country that a company belongs to plays a more important role in driving its returns than the sector it is in. By comparison, a region like Europe with a mostly common currency and more integrated trade, sees stock returns being more dominated by sector rather than the country they operate in. See Fig. 3. This highlights Asia's heterogeneity and the fact that it is made up of 14 distinct countries. At the same time, we note that the proportion of

Fig. 2. Nuances across Asian equity markets

- 14 countries (4 DM, 10 EM)
- 14 currencies/independent monetary policies
- 9+ business languages
- Conflicting trading calendars
- Complex geopolitics
- Diverse macro drivers
- Unique market norms
- Heterogeneous investor behaviors
- Varied investor mix
- Sparse and dirty data
- Inconsistent liquidity profiles

Source: Eastspring Investments. January 2023.

Fig. 3. % of return variance from country versus sector


Source: MSCI, Eastspring Investments, as of 31 December 2022. Note: APxJ = Asia Pacific ex Japan. EMEA = Europe, Middle East and Africa. UK = United Kingdom. DM = Developed Markets. EM = Emerging Markets.

return variation captured via country and sector combined is much less in Asia versus the other regions, implying that there are other factors driving returns and there is more scope to benefit from stock selection.

## MORE SCOPE FOR FACTOR INVESTING IN ASIA

Given the complexity within Asian markets, we believe that factor investing offers an effective approach to tap into Asia's opportunities and to leverage the full breadth of stocks within the region. Compared to the developed markets, we find that even common factors such as low volatility, earnings revisions and valuations perform strongly in Asia. See Fig. 4.

Generally, we see that these commonly used factors are more efficacious in the Asia Pacific ex Japan and China markets over the analysed period compared to the more developed markets.

## A MULTI FACTOR APPROACH IS KEY

Our analysis suggests that Asia's complexity and idiosyncrasies provide an ideal backdrop whereby factor investing can deliver investors greater alpha. At the same time, since the factors are only moderately correlated to each other, exposure to a diversified range of factors can increase diversification and decrease reliance on any single factor to achieve excess returns.

We also note that there are differences in reward to the factors in different markets. For example, valuation factors seem to perform strongly in the Korean equity market, whereas sentiment factors perform more strongly in Malaysia. We also found that different factors perform better during different economic phases, however in practice, capturing additional return by tactically tilting to specific factors can be challenging. See Fig. 5.

Fig. 4. Ranking of relative long-short returns by country/region

| Price/Book | Price/Earnings | Earnings Revisions (3m) | Low Volatility | Momentum (12m-1m) | Reversal (1m) |
|---|---|---|---|---|---|
| China | Asia Pacific ex Japan | China | China | Europe | China |
| Japan | China | Asia Pacific ex Japan | Asia Pacific ex Japan | Asia Pacific ex Japan | World (DM) |
| Asia Pacific ex Japan | Europe | Europe | Europe | China | Asia Pacific ex Japan |
| World (DM) | World (DM) | World (DM) | World (DM) | World (DM) | Japan |
| USA | USA | USA | Japan | USA | Europe |
| Europe | Japan | Japan | USA | Japan | USA |

Higher long-short performance

Source: Eastspring Investments. Returns in USD. Based on equal weighted factor portfolios formed monthly into 5 quintiles for the period from April 2009 to December 2022. No transaction costs are assumed in these backtests. Returns are shown relative to the equal weighted mean stock returns over the same period. Factor portfolios are formed from a universe of stocks based on S&P Broad Market Index for all regions except China. For China, it is based on the top 1000 stocks available in Datastream.

Fig. 5. Factor leadership varies through the cycle – Asia Pacific ex Japan

| Recession | Recovery | Expansion | Slowdown |
|---|---|---|---|
| Low Volatility | Price/Earnings | Earnings Revisions (3m) | Momentum (12m-1m) |
| Reversal (1m) | Price/Book | Momentum (12m-1m) | Earnings Revisions (3m) |
| Momentum (12m-1m) | Reversal (1m) | Price/Book | Low Volatility |
| Earnings Revisions (3m) | Earnings Revisions (3m) | Reversal (1m) | Price/Earnings |
| Price/Book | Low Volatility | Price/Earnings | Reversal (1m) |
| Price/Earnings | Momentum (12m-1m) | Low Volatility | Price/Book |

Higher long-short perfromance

Source: Eastspring Investments. As of 31 December 2022.

Fig. 6. Comparison of China A share and China offshore markets

| | | | Overlap with A-shares | | |
|---|---|---|---|---|---|
| | Stocks | Mkt Cap (USD bn) | Stocks | Mkt Cap (USD bn) | % of A-share Exposure |
| A Shares | 4,910 | 12,429 | | | |
| Stock Connect A Shares | 2,546 | 10,558 | 2,546 | 10,558 | 85% |
| ADRs | 64 | 459 | 2 | 5 | 0% |
| H Shares | 290 | 2,892 | 148 | 925 | 7% |

Source: Eastspring Investments. As of 31 January 2023.

As such, we believe that an active approach which includes weighting the different factors based on their strength, volatility and the conviction in the observed evidence is key to helping investors achieve a more optimal outcome.

## CASE STUDY: CHINA A-SHARES

In addition to the nuances in the individual Asian markets that investors need to navigate, China has its own unique challenges. Yet, the size (and growth) of the Chinese A-share market and the relatively low correlation with other global markets continue to make China A-shares attractive to global investors.

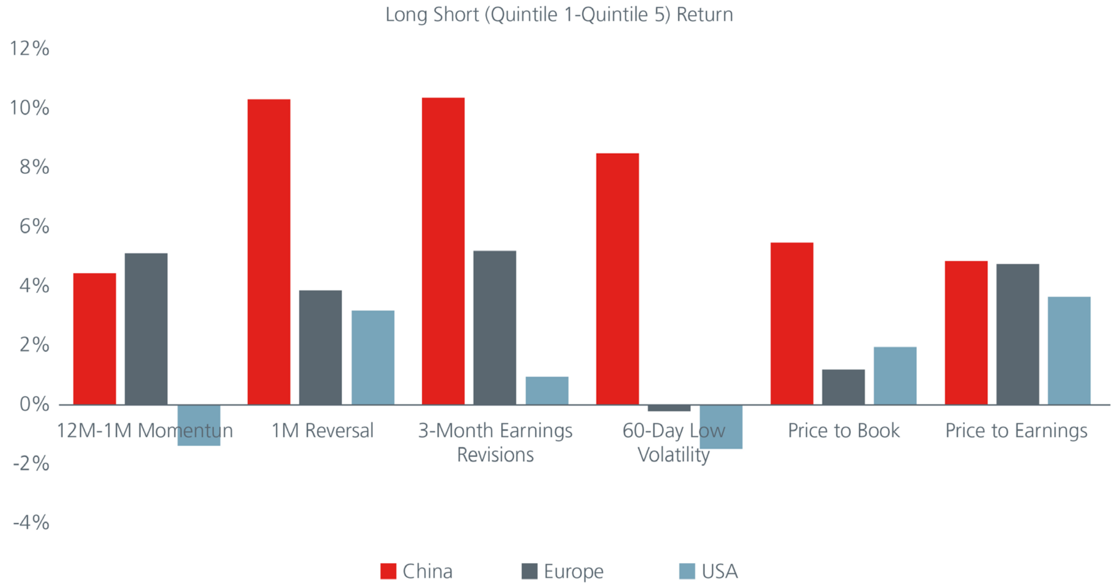
Compared to the offshore listings for Chinese companies such as the American Depository Receipts and H-shares, the China A-share market offers investors a more comprehensive exposure to the Chinese economy. See Fig. 6.

We believe that the China A-share market has many of the ideal characteristics in which quantitative strategies can flourish. It is a very liquid market, with relatively low transaction costs, a broad and diverse universe of stocks and with a high degree of return dispersion. A wide number of stocks ensures a more reliable and robust estimation of factor returns and other aspects of factor behaviour. In implementing a factor-based strategy, the greater the number of stocks available, the more diversified portfolios can be – thus gaining exposure to the desired factors while minimising idiosyncratic (stock specific) effects. This ability to have more diversified portfolios also plays a key role in the scalability in terms of strategy capacity for a factor-based strategy.

Data (a prerequisite for quantitative strategies) is bountiful and a moderate amount of history – though less than other more developed markets – is available for backtesting strategies. The presence of several large global data vendors with coverage of the China-A market (e.g. Refinitiv, Factset, Bloomberg, S&P) alongside local vendors (e.g. Wind) bodes well for the long-term quality of Chinese market data and the ability to cross validate data points across multiple vendors. The high proportion of less sophisticated investors and the still-low penetration of quantitative strategies in the China A-share market suggest that investors can still exploit the market inefficiencies to extract alpha.

The high information ratios of common factors for stocks for China compared to the other regions show the potential to improve returns via factor investing. Fig. 7. In the case of Price-Book, Low Volatility, Earnings Revision and Reversal, China ranks high versus the other regions. The strength of the shorter-term reversal factor particularly stands out. As in most other markets, stocks that have risen or fallen in the prior month, tend to reverse in the subsequent month. However, the persistence of this reversal behaviour is particularly strong in the Chinese market, particularly the reversal of stocks that rallied in the previous month. One explanation for this observation likely lies in the outsized individual investor participation and their high turnover trading behaviour. Uninformed trends in stock prices (i.e.

Fig. 7. Common quant factors generally perform strongly in China




Source: Eastspring Investments. Returns in USD. Based on equal weighted factor portfolios formed monthly into 5 quintiles for the period from April 2009 to December 2022. No transaction costs are assumed in these backtests. Returns are shown relative to the equal weighted mean stock returns over the same period. Factor portfolios are formed from a universe of stocks based on S&P Broad Market Index for all regions except China. For China, it is based on the top 1000 stocks available in Datastream.

not backed by any real change in fundamentals) would be expected to be corrected in the near term by more sophisticated investors who observe the price anomaly.

While our analysis suggests that commonly used quant factors are rewarded in the China A-share market, investors must be mindful of the impact of the domestic macro environment, policies and changing market dynamics as the China-A market opens up further to foreign investment and the aggregate level of institutional investment rises. Corporate behaviours have been shifting towards developed market norms and the local investment profession is rapidly growing and becoming more sophisticated. In fact, the number of candidates in China sitting the CFA examinations in 2021 was approximately 90,000; almost three times the number in the United States.

As the China A-share market develops and evolves rapidly, assumptions about the market need to be made carefully and re-assessed regularly. While the China A-share market may possess some ideal conditions for quantitative strategies to thrive, the rewards will only be realised with extensive research and expertise.

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