## A Top-Down Look at the Chinese Equity Market

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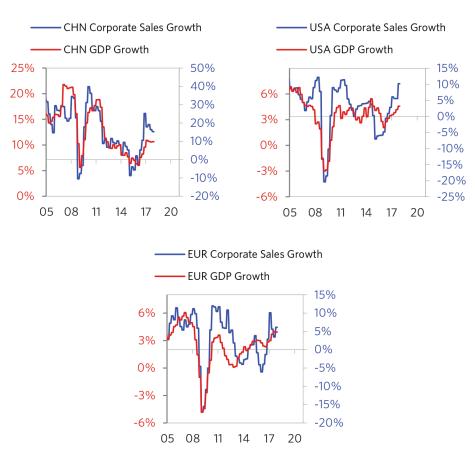
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This is a decade or so there is a high likelihood that the Chinese equity market will be on par with the US and European equity markets in terms of its size and importance to global investors. The size of the economy and the related size of the cash flows that it throws off for companies will be of comparable size, listings on public markets are growing rapidly, and the opening up to domestic and foreign institutional investors is happening faster than most are ready for.

With this in mind, a top-down view of the Chinese equity market in relation to the US and Europe shows similarities in their fundamental drivers and important differences in how things are playing out. To frame the discussion we will work our way top-down, from revenues to pricing, with consideration given to important linkages.

Starting with revenues, the revenues of Chinese companies are quite representative of overall economic activity in China. They are a more volatile version of China's nominal GDP growth plus a small bump for economic conditions in non-Chinese countries where they do business. Companies listed on the A-share market derive 86% of their revenues from inside China and only 14% from abroad. This is much more domestically focused than the US (29% outside the US) and Europe (45% outside of Europe). Further, the sector composition of the Chinese equity market is reasonably well balanced, thus representing a broad economic exposure. As shown below, the revenues of China's listed companies are more tightly related to China's growth than those of the US and Europe (all of the following charts are based on the full A-share market available to onshore investors).



But revenues are a function of not just domestic growth but also growth in other countries where companies do business and the translation effect of exchange rate movements. Accounting for those, the revenues of all three are similar to economic conditions in the respective mixes of countries.



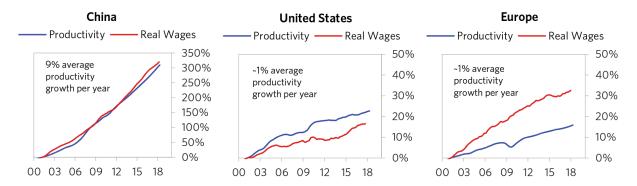
Moving to earnings, the earnings of Chinese companies have grown much faster than those of US or European companies over the past decade. As shown below, Chinese earnings-per-share growth has been double that in the US and even more relative to Europe. Most of the difference came as the Chinese economy boomed through 2011; growth in more recent years has been more similar.



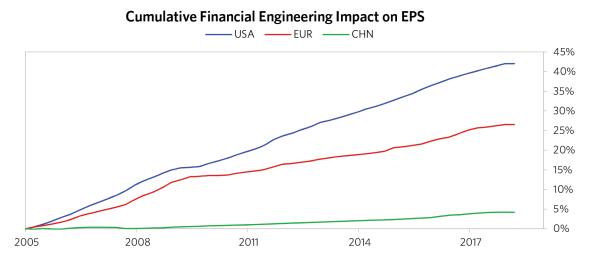
Looking at the makeup of earnings shows it's quite different across countries. As shown above, Chinese companies have had the advantage of high nominal GDP growth, nearly four times as high as US companies since 2005. US companies, on the other hand, have managed to expand their margins while the margins of Chinese companies have narrowed. One of the forces behind this has been the difference between being an "outsourcer" versus an "outsourcee." US companies have been able to arbitrage the low cost of labor in China and other countries without having to reduce their prices, widening margins. Over time this labor arbitrage was closed. And the process of closing the labor arbitrage was a squeeze on Chinese companies, which had to pay the associated ever-higher wage rates.



The charts below break down how this dynamic played out over time. Even though the productivity of Chinese labor grew much faster than the productivity of American labor, Chinese companies had to pay for this productivity. In the meantime, US companies were able to hold real wage costs down by shifting production to China and other areas where the level of labor costs was lower relative to the level of productivity. European labor was less productive and more than fully compensated for its productivity.



In addition, US earnings-per-share growth has been amplified by financial engineering to a far greater degree than China or Europe, as shown below, boosting EPS by 40% since 2005 versus only about 5% for Chinese companies and 25% for Europeans.



With respect to pricing, all three of these equity markets have tracked their earnings over time. In China's case, prices moved much more wildly around earnings up until the bubble burst in 2015, driven by rapid buying and then selling from levered retail investors. Since then, the pricing has moved more in line with earnings.



Of course, the movement of prices relative to earnings is seen in P/Es, i.e., earnings yields. China's P/E has stabilized in the past couple of years, at a lower level than the US and more similar to Europe.



In part, this has reflected higher interest rates in China, which, all else equal, would be reflected in a lower price for a given stream of earnings (lower P/Es).



Netting the earnings yield against the higher bond yield and applying the same equity risk premium across countries, discounted earnings growth rates are now similar in China and the US and lower in Europe. Given that China's nominal growth rates are likely to be higher than the US', similar discounted growth rates imply that the US can continue to make up for that by improving their margins further or continuing financial engineering. We're not optimistic about that, contributing to our assessments of relative valuation favoring China. An alternative way of looking at this is that risk premiums are now higher in China due to the past few years of tightenings in their financial system (seen most clearly in the relative return of a balanced portfolio). This would imply a higher rate of discounted earnings growth than the US, but a higher equity risk premium (either way, more attractive expected returns). Below, we show one simple way to look at how much earnings growth is implied by today's equity and bond pricing, assuming constant discount rates and risk premiums.



## More on the Underlying Structures of These Markets

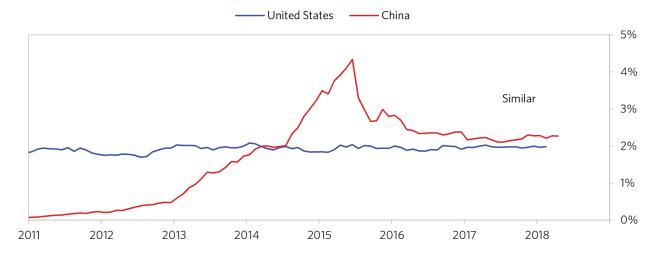
As shown above, the Chinese equity market reflects the underlying fundamentals of the country, just as the US and European markets reflect theirs. A big difference is that it is still more vulnerable to overshoots relative to fundamentals due to the lack of diversification of its investor base. As shown below, the Chinese market is dominated by retail investors. Any one type of investor group has biases, and if a particular group dominates the trading in a market these biases will manifest themselves in price action. In the case of retail investors around the world, as a very general rule they are more inclined to follow trends, thus contributing to a tendency for trends to be overdone if they are a dominant group. As the Chinese markets continue to open up, bringing others who have their own alternative biases (e.g., value managers have a bias to buy dips, the opposite of retail investors) will diversify the behavior patterns and stabilize market conditions.

**Equity Market Ownership (% Free Float Market Cap)** 

	United States	Europe	China (A-Shares)
Institutional	57%	87%	33%
Mutual Funds	26%	44%	21%
Foreign	20%	25%	1%
Pension	9%	4%	2%
Insurance	0%	2%	8%
Broker/Dealers + Others	1%	12%	1%
Households	43%	13%	67%

It is worth noting that, after getting burned in the bubble, retail investors have been much more conservative in their willingness to lever up at the same time as regulators cracked down on some of the more egregious uses. Margin balances fell after a long period of rise, and have stabilized at levels similar to the US (not to imply that the US is immune to high volatility and leveraging up).

## Margin Balance (% Mkt Cap)



The pace of opening up to both foreign and domestic institutional investors has been rapid of late, but the rate of adoption has been slower than the rate of opening up for both groups. We expect this to evolve, an important outcome to achieve. Below we outline some of the most notable changes made in recent years up through last week:

- Launched Hong Kong-Shanghai and Hong Kong-Shenzhen Stock Connect programs to allow foreigners easier access to the A-share markets and to push for their inclusion in MSCI and other major indices.
- Just this month, announced plans to increase daily quotas for cross-border Stock Connect trading.
   Although a small deal in isolation as the existing limits were rarely hit, this change will enable larger cross-border flows as China's weight in global indices increases over time.
- Announced plans to launch a China Depositary Receipt program and loosen IPO requirements to
  encourage more offshore-listed and private companies to list onshore (particularly tech giants like
  Tencent and Alibaba).
- Later this year, planning on opening a London-Shanghai Stock Connect program to complement existing Hong Kong-based programs.

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