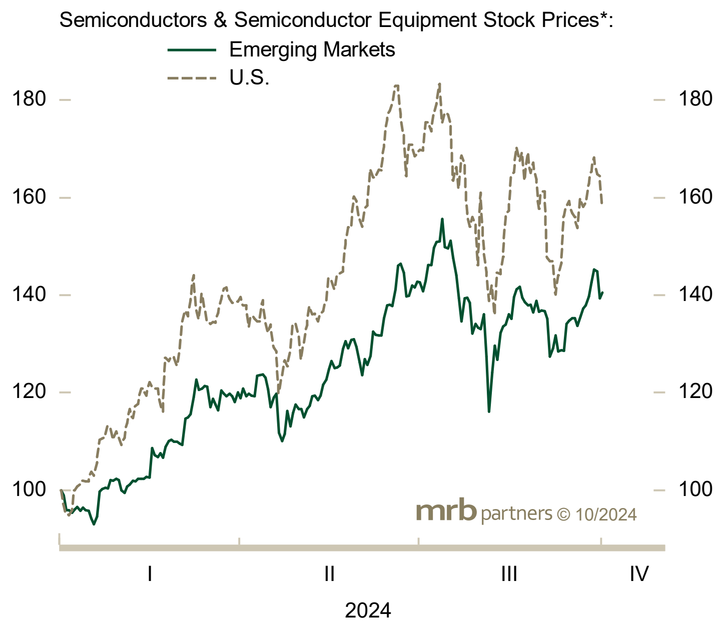
MacroResearchBoard
mrb partners
Independent Investment Strategy
RESEARCH HIGHLIGHT
EM EQUITIES
October 3, 2024

Why We Prefer EM Over U.S. Semiconductor Stocks

- EM semiconductor stocks offer a diversified revenue base and attractive multiples.
- The semiconductor space in the U.S. has become highly concentrated and dependent on A.I. plays, with significantly more demanding multiples compared to EM peers.
- The A.I. investment boom has led to the outperformance of the U.S. semiconductor sub-group so far this cycle, but EM semiconductor stock prices and earnings are now outperforming their U.S. counterparts and will continue to do so as the expansion of semiconductor sales broadens.

The close correlation between the performance of EM and U.S. semiconductor stocks during July's sell-off in U.S. tech shares (**chart 1**) has raised questions about the vulnerability of EM chip stocks to a correction in their U.S. brethren, should doubts about the pace and timing of A.I. monetarization grow in the coming months.

Chart 1 Close Correlation Between EM And U.S. Semiconductor Stock Prices



* U.S. dollars; rebased; source: MSCI

In this report, we compare the EM semiconductor sub-group with its U.S. counterpart and conclude that EM chip stocks offer a more diversified revenue and earnings base at significantly more attractive valuation multiples. This should insulate them (relative to the U.S.) from A.I. or other sector-specific risks.

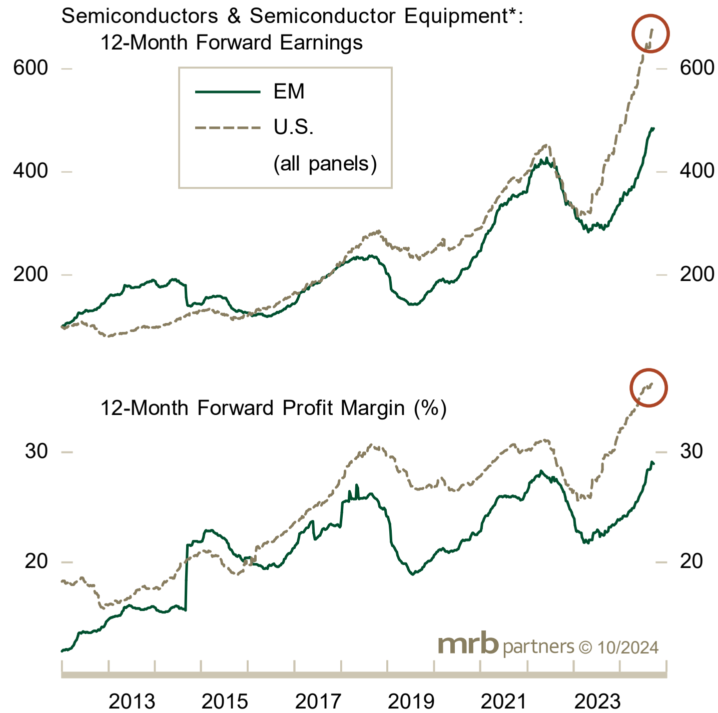
The boom in A.I. spending over the last year has disproportionately benefited a small handful of listed chip companies in the U.S. and driven the outperformance of the broader semiconductor sub-group versus its EM counterpart. However, there are signs that relative performance drivers are shifting in favor of EM semiconductor stocks as earnings of the EM semiconductor group are starting to outperform. This improvement will likely continue as global growth and trade firm, and the expansion of semiconductor sales broadens across end-markets.

Diversified Revenue Base

Korean and Taiwanese technology stocks have also benefited from the sharp rise in A.I. investments over the past couple of years, both in terms of sales and stock prices. However, as "pick-and-shovel" plays in the A.I. space, their revenue base is more diversified than their U.S. peers.

In Korea, the tech sector is a major producer of memory chips with a diverse customer base. Moreover, the largest stock in the sector in terms of market capitalization generates approximately half of its revenue from the sales of consumer electronics including mobile phones, PCs, and televisions.

Chart 2 Earnings Of U.S. Semiconductor Stocks Are Stretched Relative To EM



* Source: I/B/E/S Global Aggregates
Note: Panel 1 is shown in U.S. dollars and is rebased

Taiwan's technology sector is seen as a more direct beneficiary of AI and as a result, its earnings have outperformed its EM counterparts. Still, it has a wide customer base including producers of consumer electronics, automobiles and industrial applications.

This diversification has limited the positive impact of the A.I. spending boom on the sales of EM chip companies. As a result, the upside in their earnings has been less impressive than for the U.S. semiconductor sub-group. Although the 12-month forward earnings of Korean and Taiwanese chip stocks are near their historic highs, the forward earnings for the U.S. semiconductor sub-group are 50% above their previous cyclical peak (**chart 2**).

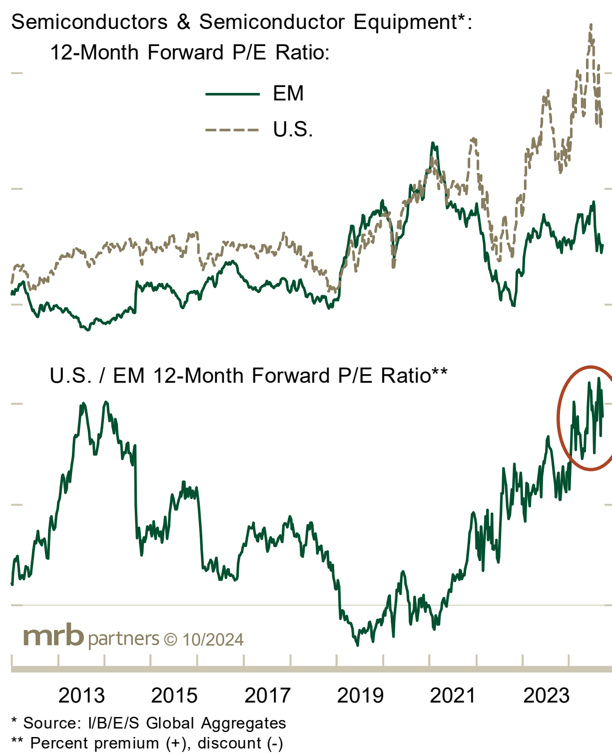
As "pick-and-shovel" plays in the A.I. space, the earnings base of Korean and Taiwanese chip stocks are more diversified than their U.S. peers

By the same token, diversification and less stretched earnings imply that there is more scope for the profits of Korean and Taiwanese semiconductor companies to positively surprise, with less downside risks should spending on A.I. infrastructure unexpectedly moderate.

Valuation Cushion

While the global semiconductor industry group has re-rated, there is a large gap between U.S. and EM valuations in this space. U.S. semiconductor stocks have re-rated more substantially and now trade at a historically elevated 26 times 12-month forward earnings (versus a long-term average of 18). Meanwhile, valuations for EM semiconductor stocks are not as demanding. The EM industry trades at 15 times 12-month forward earnings, which is only slightly higher than the long-term average of 14, and lower than the high of 23 reached during the previous upcycle (**chart 3**).

Chart 3 **Valuations Of EM Semiconductor Stocks Are More Attractive**



While U.S. semiconductor stocks have always traded at higher multiples than their EM counterparts, partly due to geopolitical risks in Taiwan and the "Korea discount[1]", the 12-month forward price/earnings and price/sales ratios in the U.S. are now at historic highs relative to EM peers.

These lofty relative valuation multiples could be partly justified by the faster earnings growth expected for U.S. chip companies compared to their EM peers, but the price/earnings-to-growth (PEG) ratio for the U.S. semiconductor sub-group is 0.8, which is higher than 0.7 for its EM counterpart. Put differently, U.S. semiconductor stocks are more expensive in the U.S. even after accounting for aggressively high earnings growth forecasts.

The U.S. semiconductor sub-group is expensive compared to its EM counterpart even after accounting for faster earnings growth

For context, the long-term EPS growth forecast for the U.S. semiconductor industry is currently 37%, which is significantly above its long-term average of 15% and the prior peak of 26%. Conversely, long-term EPS growth forecasts for EM semiconductor stocks are currently 22%, compared to a long-term mean of 14% and the peak of the prior cycle of 30%.

The combination of lofty multiples ***and*** historically elevated earnings growth forecasts in the U.S. semiconductor sub-group leaves those stocks vulnerable to future sales/earnings disappointments compared to their EM peers. It also implies that further relative upside for those stocks will be limited in the absence of further upgrades to their already-sky-high sales and earnings estimates.

[1] The Korea discount refers to the tendency of South Korea's market to trade at a discount to global peers because of poor corporate governance practices prevalent among chaebols, or family-controlled conglomerates. The mean of the 12-month forward P/E ratio discount is approximately 30% with a standard deviation of +/- 10%.

Relative Earnings Are Shifting In Favor Of EM

EM semiconductor companies have historically been the higher beta play on the semiconductor cycle, i.e. their earnings and stock prices tend to outperform their U.S. counterparts when global semiconductor sales are in an upswing (**chart 4**).

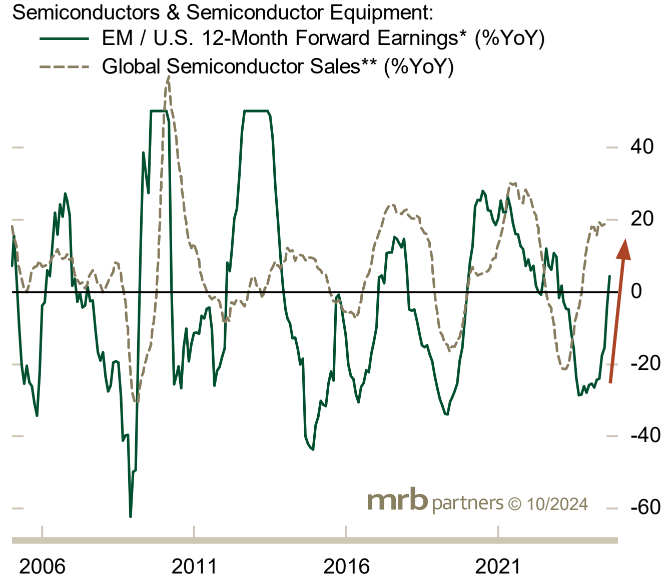
However, this has not yet been the case during this cycle. Global semiconductor sales are in an uptrend but since most of the expansion has been driven by the increase in A.I.-spending over the last two years, the U.S. (mainly NVIDIA) has been the clear winner with the most improvement in earnings and profit margins so far. As a result, EM semiconductor earnings have, until very recently, lagged their U.S. peers.

But the tide is now turning. Relative earnings and profit margins for the industry in the U.S. are historically stretched, and both earnings and margins (proxied by 12-month forward earnings/sales) in EM are now outperforming (**chart 5**). As semiconductor demand is highly cyclical and correlated with global trade, our constructive outlook on the latter suggests that there is plenty of demand upside for non-A.I. segments for the semiconductor market, to which Korea and Taiwan have more beta.

Thus, while we see no imminent threat to investment on A.I. infrastructure, relative earnings of EM semiconductors versus the U.S. are likely to improve, as has historically been the case during periods of a global trade upcycle.

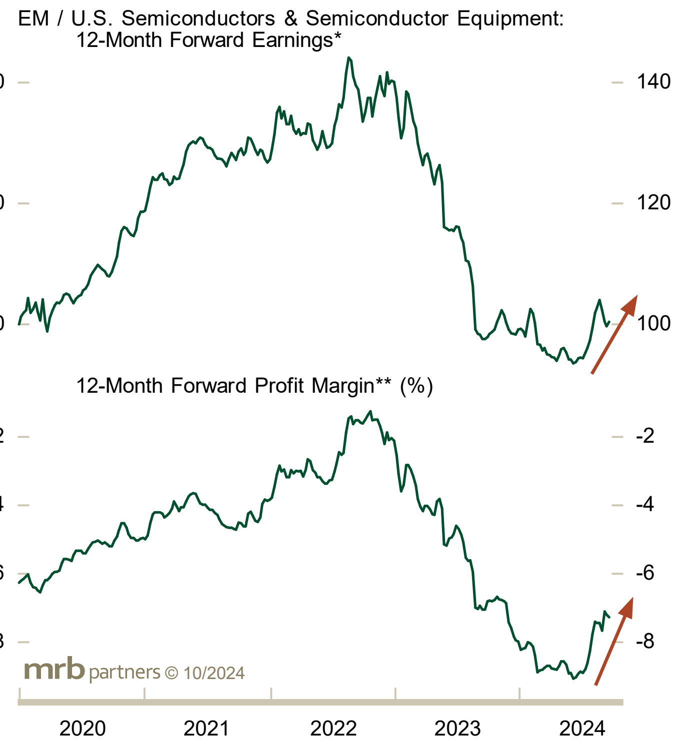
Final Word: *Our more constructive outlook on EM semiconductor stocks relative to their U.S. counterparts is justified by their diversified revenue base and attractive multiples, which should provide protection against A.I. or other sector-specific risks.*

Chart 4 EM Chip Stocks Offer Higher Beta To Semiconductor Upcycles



* U.S. dollars; source: MSCI
** Source: Semiconductor Industry Association

Chart 5 EM Semiconductor Relative Forward Earnings And Profit Margins



* U.S. dollars; rebased; source: I/B/E/S Global Aggregatres
** EM minus U.S.; 12-month forward earnings divided by 12-month forward sales; source: I/B/E/S Global Aggregatres

Moreover, the tide is now turning for relative earnings. The expansion in A.I. chip sales has taken profits and margins for U.S. semiconductor stocks to historically stretched levels, at a time when demand for non-A.I chips should recover more meaningfully along with the budding expansion in global trade. This is an environment in which EM semiconductor earnings have historically outperformed their U.S. counterparts.

Amr Abdel Khalek
Strategist, Emerging Markets

Where is this "expansion in global trade"?

MacroResearchBoard

mrb partners

Independent Investment Strategy

MRB - The Macro Research Board is a privately-owned independent top-down research firm that provides integrated, global, multi-asset investment strategy as well as actionable absolute and relative return ideas. Our views incorporate a long-term outlook based on in-depth thematic research, together with a rigorous set of frameworks and forecasting models/indicators that drive 6-12 month asset market performance. MRB's team of analysts and strategists leverage the firm's robust research engine and their extensive experience to form one cohesive house view and ensure that investment strategy is articulated in a client-friendly manner.

London
24 Old Bond Street, 3rd Floor,
London, W1S 4AP, United Kingdom
Tel (+)44 (0) 20 3523 9618

Montreal
1275 Ave. des Canadiens-de-Montréal, Suite 500
Montreal, Quebec H3B 0G4, Canada
Tel +1 514 558 1515

New York
1345 Avenue of the Americas, FL 2
New York, NY, 10105, United States
Tel +1 212 390 1148

For more information, please contact:
Client Relations
clientrelations@mrbpartners.com

MRB Research Coverage

Weekly Macro Strategy	Global Equity Strategy
Global Macro & Investment Themes	U.S. Equity Sectors Strategy
Tactical Asset Allocation Strategy	Global Fixed Income Strategy
Absolute Return Strategy	Foreign Exchange Strategy
Developed Market Strategy	Commodity Strategy
Emerging Market Strategy	Weekly Webcasts