Active Risk Management for Asian Equity Portfolios in Weak Market Conditions

An impressive group of senior product gatekeepers and fund selectors from global and boutique private banks and multi-family offices met in Singapore in early December for a closed-door discussion on using dynamic risk management to improve investment performance while smoothing risk in Asian equity portfolios.

Executive summary

The invitation-only event was co-hosted by Hubbis and Neo Risk Investment Advisors, whose CEO Dr Harold Kim outlined how Neo Risk uses dynamic risk management to improve equity portfolio performance in weak markets such as 2018.

Asia lags in key areas

Despite the rapid growth in Asia's capital markets, the region still lags major developed markets in understanding and implementing advances in quantitative financial technology, including quantitative and systematic risk management, to help portfolio managers and investors manage risk.

Realized risk more than doubled in 2018

Realized risk of Asian equities as measured by volatility ranged from 8% to 10% through most of 2017, representing all-time historical lows. In 2018, realized risk increased dramatically throughout the year, reaching over 20% in October.

Managing risk is the key to better investment performance

Managing risk means reacting to structural increases in risk by proactively changing investment allocations. Because risk is more predictable than returns, focusing on risk in portfolio allocations results in more consistent investment performance.

Investors should have reduced equity risk in 2018

Reducing equity allocations as equity market risk rose in February and October improved investor performance by several percentage points in 2018 versus keeping allocations static.

The road ahead - bumpy at best

The discussion concluded with attendees providing their views on the year ahead. While the assembled experts were not excessively negative, there was little consensus and general caution about the prospects for developed and emerging markets in 2019.

THE ROUNDTABLE DISCUSSION event on December 4 was co-hosted by Hubbis and Neo Risk Investment Advisors, whose CEO Dr Harold Kim shared some of his insights on the current downturn in Asian equity markets and how active risk management improves performance during such periods. The discussion covered year-to-date performance of Asia's equity markets and how use of dynamic risk management impacted returns, as well as the outlook for 2019.

Kim began by explaining that he had founded Neo Risk several years ago with two colleagues after leaving a 20-year career at Citibank, where he had been responsible for the investor derivatives business in Asia. "The premise behind the creation of Neo Risk is our observation that Asian investors lag in terms of understanding many of the advances in quantitative finance, including derivatives, factor investing, dynamic risk management and asset allocation. Our mission at Neo Risk is to apply these skills and approaches in our advisory business and within our fund on behalf of our clients."

He expanded by explaining that Neo Risk has two core businesses. The first business is investment advisory, working with a range of investors, such as family offices, hedge funds, and other institutional investors. "We help our clients think about risk systematically in a variety of ways," Kim explained, "such as strategic portfolio allocation and how to make the risk element more dynamic, or better ways to implement a long/short hedge strategy including how to determine net exposure more quantitatively." Neo Risk's second business is managing the two-year old REAP Asia Equity Fund, which uses a risk-focused investment strategy to deliver outperformance.

Managing volatility

Kim then moved on to the main topic of discussion for the roundtable, which was Asia's weak equity market performance and how dynamic risk management could improve performance.

He noted that realized risk of Asian equities for much of 2017 was in the 8% to 10% volatility range, which represented unprecedented lows in terms of actual realized volatility. "Starting at the end of January 2018, however, risk has risen dramatically," he said, "with realized volatility

Hubbis - Neo Risk roundtable in Singapore surpassing 20% during the fourth quarter and representing a doubling of risk from 2017."

Kim continued: "The question is, have investors recognized that the risk regime has changed, which we believe they have, and if so, have investors' portfolios adjusted in terms of allocation in response to the doubling of market risk? If so, how and when did they adjust?"

With that, Kim threw the debate open to the floor.

Forecasting volatility

The first question came from a participant who asked about forecasting risk. Kim responded: "As is common in finance, we use volatility and risk interchangeably. So, the question translates to: how can we forecast future volatility?"

Kim mentioned that Neo Risk uses proprietary statistical models to estimate near-term volatility, and that their models use quantitative inputs only, such as market returns and implied volatilities. "There is a rich academic literature with regard to forecasting volatility, going back several decades," Kim added.

Kim noted that: "Unlike returns, which are impossible to predict in the short run, volatility is very persistent, by which we mean that if volatility is high today, then volatility will most likely be high tomorrow; similarly, if volatility is low today, then most likely it will be low tomorrow. Persistence implies short-term predictability."

The discussion returned back to the Asia risk environment, Kim explaining that: "It is clearly a higher risk environment this year, and sometime between February and October this year investors should have recognized that risk had increased and acted accordingly. The sooner you were able to reduce your risk after February, the better your investment performance since then."

The key, then, is to recognize when markets are in a high volatility or low volatility state, and to be reactive when markets are transitioning from one state to the other. "A model provides a systematic, rigorous framework for thinking about risk and transition changes in risk regimes," Kim asserted.

Model shortcomings

A participant asked Kim if there were instances when investors can realistically be a step ahead in terms of forecasting changes in volatility. Kim was quick to acknowledge that it is virtually impossible to forecast the first jump in volatility. "If an investor could have predicted the first increase in risk (which accompanied the market correction) in early February and allocated accordingly, they would have done very well. If anybody knows a way to forecast such moves before they happen, please let me know!" he quipped.

"It may be possible to design a model with more predictive capability," Kim continued. "In the US market, for example, the VIX adds

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some forecasting power. However, our point here is that even if you cannot perfectly predict the volatility jumps in advance, the key is to respond when it happens in a systematic and rigorous way. By doing so, you benefit greatly versus doing nothing."

Model impact

By reacting quickly to the February jump in volatility with a reduced risk allocation, Kim's prototypical investor would have done better than by keeping a full allocation to equity. "For example, our Asian equity model reduced its allocation from 100% to 70% in early February, and our

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model outperformed the Asian equity benchmark by over 700 bps as markets fell from February through October, with 30% less realized risk."

"Our estimate now for Asian equity risk is around 20%, or roughly double the realized risk from 2017, so our models again indicate the need to recalibrate allocation between Asian equities and cash."

Constant vigilance required

Kim elucidated further by explaining that dynamic risk management means measuring, monitoring and managing risk continuously to ensure that realized (and not theoretical) risk is optimal for the investor.

A benefit of dynamic risk management is that incremental losses decrease as risk climbs further. "For example, October was a terrible month for the Asian equity market, which was down about -11%; similarly, our model was down about -7.7%, giving significant outperformance that month alone. But due to our asymmetric response to risk, if markets had fallen another roughly -10%, we would have lost only about -3% because of the way the model deallocates as risk changes."

Kim also remarked that Asia is still a high-cost market to trade, making it difficult for investors to rebalance continuously. "We set reasonably large rebalance bands," he reported, "in order to reduce transactions costs, whereas in markets where it costs very little to trade like Japan or the US, the rebalancing bands can be tighter."

The road ahead

The discussion concluded with some of the attendees providing their views on the year ahead.

"2019 should be better," commented one expert, "but the challenge will be to wean people away from too much US exposure and refocus them to Asia where they have been burnt this year. All in all, I expect next year to be more positive."

Another guest said he has a fairly negative view on global/US credit and fixed income, although in 2018 his firm had run a very aggressive credit book that performed decently because of low duration. "However, we have laid off risk and moved to 60% cash and frankly we do not know what to do next."

Another participant pointed to the expected continuance of Fed tightening in 2019, combined with the ECB in tightening mode. "The result is that things really cannot get better. If the Chinese stay in tightening mode, I am afraid you will want to cash up and just go on holiday for one year."

Another guest at the event commented that Europe appears to be heading gently downwards, although perhaps not into recession territory. "Very tough to normalize the ECB's balance sheet under current circumstances, but they have announced that they plan to do so," he observed. "How therefore to maintain liquidity conditions and financial conditions in Europe given what the ECB has telegraphed?"

"I think there is a possibility of Asia bouncing if the US consumer stays OK and if Asia remains steady, as the regional markets are down 20% or more this year," another expert contributed.

Concerns outweigh the positives

"I am frankly still worried," added another guest. "After a decade of quantitative easing, we are still talking about policymakers giving us a positive story for 2019. If the US does not mess up its economy and rates settle at fairly low levels, there is some chance for Asian equities. But as to the Eurozone, the ECB will have to backtrack on its policy statements. As to bank loans and guarantees, these are tough to obtain nowadays, as the banks are frightened, and think what happens when further tightening occurs."

The final guest comment came from an investor who said that they are doubling down on Asian equities for next year. "We are totally focused on this region, especially resource sector stocks that are good value. We will also be long Australian real estate as that market continues to correct. We are also starting reallocation to certain market neutral hedge funds that we like." ■