

Frank Holle
Quant Asset Management

By JingLin Huang

Infovest21: What went wrong with general quant performance in July and August?

Frank Holle: In July and August quant funds as a group performed poorly. Currently, too many quant managers are chasing the same trades. Generally quant funds have not been performing well all this year. When the quant funds were deleveraging in the first half of August, it was very clear that the big guys were all in the same stocks; either long or short. The market place in these strategies turned out to be clearly too crowded.

Our funds, however, were performing well this year. Our Asian fund is up 60% so far and our global fund is up around 40%. July was our best month since inception and in August our Asian fund ended the month positive. For us, this is clear proof that our strategy is absolutely different; evidenced by the fact that we own different stocks than most of the other quant funds. This really boosts our confidence in our strategy.

Infovest21: Why did some quant funds recover and others didn't -what are the general weaknesses of models?

Frank Holle: The main reason for not recovering is the fact that some managers panicked and deleveraged. Other managers were forced to sell or call in shorts due to their stop-loss limits. The managers that knew that they could rely on their model did nothing and recovered.

We actually found in our extensive back-testing that stop-loss limits are not good tools for risk management and can even exacerbate losses.

Infovest21: Why are stop-loss limits not always the right tools for risk management and can even exacerbate losses? Could you explain the process for the lay reader?

Frank Holle: Applying stop-loss limits, limits the ability to recover losses and ignores the mean reversion tendency of stock markets. If positions are selected on the basis of fundamental factors and the markets misbehave by sharply deviating from these factors it creates opportunity; stop-loss limits ignore this. A stock portfolio should be able to handle extreme volatility through diversification, controlled net exposure and prudent use of leverage.

As we saw in August, due to the absence of stop-loss limits in our investment process, we were able to recover quickly. By rebalancing our portfolio monthly and strictly not trading intra-monthly we maintain disciplined and consistent risk management.

On average we turn over 70% of our portfolio each month and that is when the rotten apples are chucked out; but based on our factor weightings and not based on stop-loss limits or price targets.

Infovest21: Will the same problem happen again?

Frank Holle: Yes, because too many quant managers are still chasing the same trades.

Infovest21: How do you differ from other quant funds?

Frank Holle: There are many types of quant funds with various different strategies depending on the level of human interference, frequency of trading, average holding period, usage of leverage etc. Most of the quant funds apply their strategies through statistical arbitrage models; they match long positions with short positions, own a huge number of stocks, leverage up their portfolios significantly and trade with a high frequency. High leverage and high gross exposure limits their tolerance to extreme volatility in the markets. Stop loss limits are therefore an important tool for their survival. These models are often static and heavily rely on human interference; they need to be improved all the time.

We are pioneers in “no-human-interference-computer-managed funds” that use mathematical formulae instead of statistics; we focus on the fundamentals, being both prospective valuations and prospective earnings. Our models are dynamic and do not need human improvement; they are programmed to learn from the market movement itself and adjust accordingly resulting in monthly changing well diversified portfolios.

The implementation of our strategy is different in the sense that we trade less frequently despite our high turnover, we have average holding periods of 4-6 weeks, we do not use stop loss limits and we do not use much leverage.

Infovest21: According to your research what are the main drivers of share prices?

Frank Holle: We use three main groups of factors. They are related to valuations, earnings and price momentum. We also use other factors like historical earnings volatility, stock market betas, dispersion in earnings forecasts and more. The biggest weightings tend to go to fundamental factors (valuations and earnings).

Infovest21: Do you take into account other expert opinions?

Frank Holle: We found that actual buy, sell and hold recommendations of equity analysts do not have a usable impact on share prices.

Infovest21: Does size matter when it comes to hedge fund performance?

Frank Holle: Yes it does; the smaller a fund, the less market impact when trading in and out of positions. We monitor liquidity in our universe constantly so that we are always able to move in and out of our positions smoothly without disrupting the markets. Our strategy has a maximum capacity that depends on market liquidity. Beyond that, performance will suffer.

Infovest21: What is the specific capacity level of your strategy? How much assets can your strategy manage?

Frank Holle: We have calculated that we can comfortably invest up to USD 2.5 billion in the Global markets. Our investment universe comprises of fifty-two countries worldwide and more than six thousand stocks.

Infovest21: How do you determine the level of exposure in your portfolio?

Frank Holle: Again it is determined by our model and not by any human interference. Our funds have either 0% or 50% net exposure; depending on a changing combination of earning momentum and price momentum indicators.

Infovest21: How many funds do you currently run? What are their specialties?

Frank Holle: We run the QAM Asian Equities Fund and the QAM Global Equities Fund. Both funds are equities long and futures short.

Infovest21: Have you refined the model or signals in any way since late summer?

Frank Holle: No. Our model is built so that market movements are taken into account. The model will always adjust to new circumstances itself, albeit within a framework of fundamental factors.

Infovest21: Do you hedge exposure to factor risks, and how do you do that?

Frank Holle: Our main edge is the process of the changing factor weightings each month. Our model uses mathematical formulae that are very good at finding which factors are contributing to share price performance. It is a well diversified group of factors that is mainly related to fundamental factors (valuations and earnings). Of the 20-30 factors that we use there is never excessive exposure to a small group of them. This is the best way of controlling factor risk.

Infovest21: How do you build your models? Tell us about the whole process from the beginning.

Frank Holle: Simply said it is a two step process: first of all we spent many years researching which factors contribute to share price performance. Once we figured that out we developed a methodology whereby it is detected which factors are influential in a certain time period. Then they are assigned the right weightings. Obviously it easier said than done.

Infovest21: How do you process the vast amounts of financial data? Where do you find your data sources? Do you factor in the analyses of other experts?

Frank Holle: We find our data in several financial data bases. Before we use these data for our models we run them through our cleaning programs. Using reliable and clean data is of paramount importance.

We use earnings estimates from experts (equity analysts) worldwide. Earnings estimates are changed regularly based on changes on a macro level and at the company level. These changes are captured in our models.

Infovest21: Who are your quant researchers and developers?

Frank Holle: Chatchai Ngampakdeepanich, the co-founder of QAM, has programmed all our models. It is his conviction that a successful computer investment model should be dynamic i.e. able to adapt to changes and operate on its own (intelligence), without needing continuous adjustments from its developer.

He now spends most of his time automating our operations, trading and front office capabilities. To illustrate that; our investors are able to communicate directly with our “QAM Automated Email System” to retrieve real time information on our net asset value, net exposure levels, country allocations and other relevant information.

Infovest21: How large is your staff right now?

Frank Holle: We are a peculiar company in the sense that technology enables us to invest large amounts of money in fifty-two countries worldwide with only two investment professionals.

Infovest21: Any plans to expand?

Frank Holle: Some staff expansion will happen with the growth of our AUM but it will be mostly on the marketing side. On the investment and operational side we will increase the number of computing units (PC's) and the number of assigned tasks to these computers.

Since all our processes are fully automated and scalable we don't have plans to become a big company in terms of the number of employees.

Infovest21: Would you call yourself a quant?

Frank Holle: Depends on the definition of a quant. It is generally used for statisticians. That we are not! We manage quant funds in the sense that we apply a systematic approach; human characteristics as greed and fear play no role. Chatchai's main skill is computer engineering and finance. His 8 years at Thomson financial helped him understanding how to systematically use financial information and build it into models. My 20 year professional background in the equity markets helped us with developing and implementing our strategy. In that respect our skills are very complimentary.

Infovest21: What would attract an investor to invest in quant funds now?

Frank Holle: Investors will invest with the quant fund that did well in the July/August period because these managers showed that they do things differently. For us, it was the best stress-test we could have wished for. So as said, we are more confident now than we have ever been.

Infovest21: How did QAM come about?

Frank Holle: I used to run a small Asian market neutral fund and was frustrated by the enormous amount of financial data and my limited capability to make good use of it. I approached Thomson Financial to see if their financial database could be helpful in systemizing our research effort. Chatchai came to see us and showed us the research he had been doing. I was amazed! Slowly we developed a professional friendship that resulted in many brainstorm sessions about the perfect equity strategy. Chatchai developed his models further and when we finally back tested the strategy; the results were fantastic. In November 2003 we set up Quant Asset Management in Singapore.

Infovest21: Explain your strategy of back testing.

Frank Holle: We back tested our strategy, after having developed it. That is important because so many back testing is done by data mining and optimization. We back tested in a database that was cleaned for survivorship bias; also important otherwise our results wouldn't be reliable. The return and volatility profile of our back testing is very similar to our actual results in the past three years.

Infovest21: Comment on QAM's geographic location. How does it fit with the rest of QAM's engagement in the markets, business operations and staffing issues?

Frank Holle: We are based in Singapore and that suits us well. To be honest we could be anywhere in the world, it really doesn't matter. Since nearly all our processes are fully automated we have few requirements in terms of staffing and business operations.

Infovest21: What is the outlook for QAM and quant funds in general for the next six months?

Frank Holle: QAM is one of the top quant fund performers this year and each of our funds yield over 30% annualized returns with 18-19 % volatility in the past 3 years. We expect that we can continue this performance.

As for the other quant funds it is not different than for any investment manager; the ones that perform well will attract more money and the ones that don't may have to rethink their strategy.

QAM	
Headquarters	Singapore
Inception	April 2004
Assets	\$160 million
Frank Holle	
Title	Co-founder and Director
Prior Experience	Academic Researcher, University of Utrecht, Investment Banking ABN AMRO (Amsterdam) Director, Institutional Sales, Merrill Lynch (London)