

FOCUS ON

SYSTEMATIC TRADING

Continuing the series of discussions for their Swiss Strategies Think Tank, alternative investment specialists Dr Guenther Dobrauz-Saldapenna of PwC, Nils Beitlich of Credit Suisse and Wolfdieter Schnee of Valartis Fund Management chat with Prof. Mark Blyth of Brown University. The quartet discusses macroeconomic developments and how to deal with non-market risk



As part of the Swiss Strategies Think Tank discussions, four experts in their field – Dr Guenther Dobrauz-Saldapenna of PwC, Nils Beitlich of Credit Suisse, Wolfdieter Schnee of Valartis Fund Management and Professor Mark Blyth of Brown University – talk about non-market risk and macroeconomic developments.

NILS BEITLICH (NB): The recent Cyprus bailout has triggered renewed investor concerns about the stability of the financial system. While the global economy seems to be steadily recovering from the financial meltdown in 2008/09, its aftershocks are still very much with us. Are these continuing market shocks something natural after such a dramatic crisis? Or are they already the early signals of the next big “tail risk event”?

MARK BLYTH (MB): If something is a signal of a tail risk event, then it is in some sense being priced in, so it’s not pure tail risk. A distinction made by Nassim Taleb between black swans and grey swans is useful here. Black swans are, as we all now know, high impact events with unknowable probabilities that hide under normal statistical methods. Grey swans are things we know can hurt us, but we still cannot price them, so we tend to (over)discount them (Cyprus, for example).

Seen in this way, three main grey swans dot the horizon. Cyprus is the first one insofar as it signals, in combination with the maturity extensions and promissory note revisions granted to Portugal and Ireland, a new method for grappling with the crisis.

The risk in this strategy lies in the threat that the bail-ins could cause anticipatory contagion and capital flight ahead of



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new crisis management measures. The second swan is related to the first. Draghi may have said that he will ‘do anything’ to save the euro. But beyond talk, he has done very little. Indeed, the failure of the banking union proposal, combined with the actual shrinkage of the ECB balance sheet over the past few months, may combine with the bail-in risks of the new regime to amplify hidden fragilities in the euro-system.

The third swan is a global macro concern. For the first time ever, the two main growth nodes of the world economy, the US and the EU, are acting without any actual (EU) or effective (US) governmental institutions. As a result, central banks are forced into doing more than they should and promising more than they can deliver. Combine these three risks and there certainly are some very grey areas ahead, which in turn suggests that rather than thinking of aftershocks (to use the earthquake metaphor) we should be thinking of the sinkholes the crisis opened up – and that we are perhaps closer to walking into them than we like to think.

GUENTHER DOBRAUZ-SALDAPENNA (GDS): In our view, systematic traders are relatively independent from tail-risk events with broader market impact; however, in connection with credit events in the banking system, even systematic traders can’t avoid credit-risk-driven losses. Is there by any chance a way for systematic traders to avoid or at least reduce these non-market risks?

MB: I wonder if the credit channel is the only channel of exposure in this case. Liquidity risk we have mentioned already, and systemic risk, as in risk that cannot be diversified away, can be generated through many channels (counterparty risk, for example). The key issue again is the notion of independence, not from a discrete macro event, but from the system itself. To be truly protected, one would have to have optionality on

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**Mark Blyth**

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the system itself – a kind of set of puts and calls on all of life’s possible outcomes – which would be hard to price, let alone find.

I tend to think of independence as the opposite of endogeneity. Consequently, any trade or position that is ‘in the market’ is endogenous to it. Hence even algobots out doing their hi-freq thing can produce systemic non-linearities that are not reducible to the programming itself. What also gets overlooked is how systematic strategies, if they are similar across funds, can lead to ‘under the radar’ correlations that can be very nasty when a discrete event hits.

If true independence in this sense cannot be taken for granted, then credit-driven losses may not be the only thing out there to worry about. Given this, one way to reduce risk (to the extent that its priceable) when you’re systematic is to focus on the strategy employed, while having a system that can dynamically adjust exposures both to sector/industry/company weightings and net exposure in advance and on a consistent basis, or to utilise a neutral strategy – be it market-neutral or a combination of sector-, industry-, country-neutral – as determined by the mandate and the strategy. However, if three grey swans come to visit all at once, then not even the most ‘independent’ systematist may be dynamic enough to avoid losses. They may however, if they can stay liquid, come back stronger, so long as the market stays liquid more than it stays irrational, which is a very long option itself.

WOLFDIETER SCHNEE (WS): Generally speaking, most systematic traders view themselves as being independent from larger macro events. What is your thinking on this?

MB: I love the line from Das, the author of the wonderful *Traders, Guns, and Money*, that the only really market-neutral strategy is to not be in the market. Giv-

en this, the independence of systematic traders from events may be more attenuated than we think. The ability to unwind positions today to protect oneself tomorrow does not mean that the same options will be around tomorrow to do so. Machines may eliminate emotional bias in the trading decision. But the reaction to those trades feed back into a system replete with biases and short on necessary liquidity, just when it is needed the most.

I asked my friend Paul Jackson of Pentucket Capital Management, LLC, here in Boston what he thought of the notion of independence in this context. Paul replied: “It depends on the strategy, the markets you’re trading, and the time at which an exogenous event occurs. For example, if you were running a systematic net-long equity strategy, then you are a lot less immune to shocks than you would be if you were running a systematic market-neutral equity strategy when Kim Jong-un starts issuing launch commands early on a Saturday morning. Yet even that scenario would have different outcomes depending on which markets were being traded and whether or not they were open. A systematic strategy can be executed cleanly (without human intervention) given the circumstances in play at the time, but that doesn’t immunise you from the strategy’s exposure to the event itself.” In other words, what I said already, but better. ■

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