Editorial

Journal of Derivatives & Hedge Funds (2012) **18**, 1. doi:10.1057/jdhf.2011.30

I have recently surveyed some research on correlation trading. This broad area is one of great interest and can be summarised as to how to define, trade and price, some notion of average correlation. This is clearly a very difficult problem, and I was surprised to see how far the industry had progressed this. Given the vogue for financial history, I tried to reconstruct the history of average correlation. In the exposition that follows, I will present no quotations or citations. Readers are most welcome to contact us and challenge my views, which are not held with deep conviction. It is also topical given financial contagion and suitable, therefore, for an editorial for *JDHF*.

In the beginning, early versions of portfolio theory assumed constant correlations in the covariance matrix because it was then possible to calculate, in closed form, the matrix inverse, and hence get formulae for portfolio weights and portfolio variance. The latter approximation turns out to be surprisingly accurate for an FTSE-100 portfolio because virtually all stock have moderately large positive correlations most of the time.

Then the credit literature started modelling credit portfolios of many loans all with the same correlation. This became rather popular when the regulators used the same constant correlation as part of regulatory capital calculations and a whole range of institutions had to worry about average correlation.

The market followed soon after. Riskmetrics Group created an implied correlation index in December 1998. Investors started trading over the counter versions of average correlation. Finally, in 2009, the Chicago Board Option Exchange offered an exchange-traded version of average correlation and thus the process was complete. While this history is possibly incomplete in many respects, it does suggest a passage of events that is probably repeated in a wide range of different situations.

It is considerations such as the above, which makes me think we will still be doing mean variance optimisation for large portfolios in 20 years time. I will be delighted if I am proved wrong.

Stephen Satchell
Editor