Lloyd's Lite

Insurance is a simple business – how much did you take in premium, how much did you pay in claims (including reserves on unsettled claims), and what did it cost you to do all that? Express the costs and claims as a percentage of the premium received and you have got a 'combined ratio'. A percentage less than 100% shows that the previous twelve months – the 'accident year' - traded profitably.
Insurance is not a fungible commodity. Attempts to trade it as a standardised commodity include the Chicago Board of Trade 'Cat' options, the Bermuda Commodity Exchange - both of the 1990s - and Eurex, and IFEX (Insurance Futures Exchange) this century.
The contracts were effectively catastrophe reinsurance in derivative form that failed to catch the attention of insurers who had been brought up on, and spoilt by, indemnity contracts that provide a perfect hedge – secondary markets rarely do that. Liquidity was elusive and capital markets protection sellers were effectively shut out as the reinsurance empire struck back with weapons of indemnity, leverage, rated paper, and impenetrable lingo. Warren Buffett warned that derivatives were weapons of mass financial destruction – Berkshire Hathaway and professional reinsurers are able to sell unfunded bespoke protection with the benefit of strong ratings.
The Barbarians were stopped at the Gate.

Investor access to insurance risk is limited. Equity carries the baggage of insurers' huge investment portfolio, and Insurance Linked Securities (ILS) are concentrated on peak catastrophe risk in the US, Europe, and Japan. ILS investors have expensive risk modelling teams evaluating output from the major catastrophe risk modellers such as AIR, RMS, and EQE. Barriers to entry can be high – not only is the science demanding, but getting into the magic investor circle is hard – Lane Financial reports 2013 average secondary market prices are historically high at 103.67 as new capital chases yield as well as diversification.

The best known insurance exchange is Lloyd's of London – celebrated for assuming diverse risks ranging from in-orbit satellite recovery to barratry and bottomry – that's fraud and using a ship as collateral, to you and me. Most of Lloyd's business now reflects big-ticket risks in infrastructure, property, energy, marine, and aviation, as well as underwriting reinsurance of accumulations of all the aforementioned. It does however represent the best globally diverse portfolio of risk and as such is a good bellweather of how insurance as an asset class performs.

But how do you go long insurance?

Access to Lloyd's is closely guarded by a rigorous guardian of the franchise. New entrants have to buy capacity on syndicates and prices at auction trade at around 25%. Collateral requirements are onerous. Exiting the market is even harder – collateral is held until all liability is extinguished or reinsured in successor syndicates to the satisfaction of Lloyd's.

Trading an index negates the requirement for holding the underlying asset or commodity, so trading an index of Lloyd's underwriting results will put the investor at the insurance coalface without the entry hurdles, will be uncontaminated by investment risk, and provide certain exit by closing/trading out.

So the sell side is easily explained – the buy side …. ?

Investors (capital providers) in Lloyd's have no market hedge other than via the reinsurance market, and often this is imperfect as liability remains with the primary carrier in the event of reinsurer default. Reinsurance is rarely all encompassing – even the 1993 Lloyd's lifeboat, Equitas (now within Berkshire Hathaway) was hedged about with requirements for reinsured capital providers to leave a forwarding address.
Investors/capacity/capital providers at Lloyd's are able to measure their exposure and performance to Lloyd's market capacity and performance, so basis risk can be minimised, particularly if a hedge using a weighted portfolio of Lloyd's business sectors was constructed.

For three centuries Lloyd's only reported it's annual trading result after 36 months - it's origins in 17th century marine insurance requiring long elapsed time for losses to be reported when ships failed to return from the far side of the world. The rapid change in Lloyd's capital base post 1993 from individuals' private wealth to institutional investors brought about a change in Lloyd's financial reporting in line with international accounting conventions – reporting revenue, costs, and claims on a calendar year basis, instead of putting all these items back into the year in which the business was actually written (which it has to do for individual members of Lloyd's who may have ceased underwriting and would not therefore be liable for claims occurring in a subsequent year.) The new breed of institutional investor in Lloyd's no longer wanted all premiums and claims put in a box marked '2012' , they run their businesses on a calendar year basis, so Lloyd's produces annual accounts on the same basis, aggregating the calendar year results of the whole Lloyd's market.

Lloyd's calculates the market combined ratio each year at the end of March. It also shows how the previous twelve months either benefitted from, or deteriorated by, changes in the reserves needed to run off the inherited book. At the start of each business year the first risk accepted by each syndicate is whether the inherited reserves from the previous book are adequate. By the end of the year more old claims will have been paid and others crept out of the woodwork – if the inherited reserves were more than adequate, and you don't need to increase them for late reported old claims, you can take the surplus reserve into profit – but if you have to throw more cash into the bucket it will be a drag on your calendar year result.

Lloyd's has averaged a calendar year combined ratio over the last five years (2008 to 2012) of 94%, ranging from 86.1% to 106.8%. Fortune tellers can examine the entrails and project trends – we chose to fit a distribution to the last twelve years and look at probabilities – 75% of the time Lloyd's trades profitably. Further, we can look at fair value for trading a future result based on the probability of being at the chosen result, or above or below it – a futures trade.
A Lloyd's investor might well hedge some or all of his future years result for a fixed price today, and a non-Lloyd's investor could acquire that position and gain access to insurance risk on a high profile, diversified, transparent market. The new investor would win if the result was better than the agreed strike, and have to pay the difference between the strike and actual result if it went against him.

Derivatives are often more widely traded than futures – the number of options traded on equities usually exceed the number of shares many times over – many contracts will settle for cash as a contract for difference and will not require actual delivery of the underlying share. Many options will expire worthless.
So what do options do for us? – they can turn a view into a position, at a much lower cost than actually acquiring the underlying asset or commodity – so if you think something may increase in value you may be able to acquire an option to buy at a price agreed now. The price of the option will depend on the current value and the duration, so if you buy an option to buy a share at say 80% of its current value you may pay dearly for that option – but at 120% of current value the option could be cheap.

Reinsurance is often traded on a layered or tranched basis – excess of loss – the protection buyer hedging a loss greater than the agreed strike, laying off sufficient to cover his book and hoping that the layer is deep enough so that the loss does not come back to him if it exceeds the top of his cover. Options could be traded on an index of Lloyd's calendar year combined ratios – Lloyd's investors could hedge against a bad year and buy, say, an out-the-money option spread between say 105% to 125% calendar year combined ratio. Aggressive non-Lloyd's investors may offer in-the-money options at strikes well below the perceived result – positions can be dynamically adjusted. Non Lloyd's investors could short the market, buying out-the-money protection, reselling it when the result deteriorates. Despite rapid information about world events, the financial consequences are not always obvious - severe floods in Thailand in 2011 unexpectedly turned the Lloyd's market into a loss year, it wasn't appreciated that there was sufficient insurance penetration in Thailand to generate the large losses that fell to Lloyd's through its reinsurance underwriting.

Trades can be made more granular by reference to the sector trading results – from aviation to reinsurance, and sector weighting would allow a greater choice of risk and an ability to reduce basis risk by aligning the protection bought to the individual syndicates' portfolios.

It took three hundred years to change Lloyd's capital base from illiquid assets such as Scottish moorlands, to a modern financial footing with 'corporate' capital now supplying over 85% of its capital base. This step change in 1993 allowed the market to survive and Lloyd's thrived as a result. For investors it remains a complicated and illiquid investment, no doubt barriers to entry provide a form of protectionism in good times so that fixed capital will not easily increase competition.
It does however leave investors up the beach when events drive change – reinsurance rates only adjust in the major annual contract renewal cycles (typically year end; April for far eastern catastrophe risk; or June for US wind risk). US universities and business schools are now educating highly numerate graduates who will turbo-charge the information race to instantly capture change and execute price adjustments in deep and liquid markets. Insurance is still a rock-pool on the shores of the financial ocean so as the ocean level rises and its liquidity absorbs the insurance capital pool these capital providers will seek liquid hedging mechanisms to adjust exposure.

An annual Lloyd's index is unlike real-time indices in stocks, bonds, and fungible commodities, but events and market perceptions will constantly change the expected value of the Lloyd's calendar result, so a traded market will create instant pricing for a future result – in just the same way as commodity futures or stock index futures perform. Insurers at Lloyd's must lock up long-term fixed capital and hope to achieve good returns over many cycles – external investors seek access to insurance risk uncorrelated with other investments and trading futures or options in a cash on the barrel-head market will give them access – Lloyd's underwriters, the natural longs and insurance trend setters, could benefit from some new-style shorts.