

CORPORATE CAPITAL VEHICLES A BETTER APPROACH TO CAPITAL ALLOCATION ?

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Introduction

This paper outlines the current corporate capital structures within Lloyd's. It also considers how these structures compete for the right to participate in underwriting and suggests a method for assessing a fair price.. Lastly, consideration is given to whether the advantages of Lloyd's unique capital structure could be introduced within large insurance companies.

Background

Lloyd's has been through some dramatic changes in the last few years. These follow an unprecedented series of unprofitable years from 1989 to 1992. Following the successful restructuring agreement called Reconstruction and Renewal, Lloyd's survival is now beyond doubt. Lloyd's has however been forced to change dramatically and this pace of change looks set to continue in the future. One of the most significant and long lasting changes was the introduction of Corporate Capital into Lloyd's 1994, following a marked reduction in support from traditional Names.

For the 300 years prior until 1994 Capital to provide security for Lloyd's insurance policies was supplied solely by wealthy individuals. The commitment was similar to a sole trader and therefore carried with it unlimited liability. In effect any name could *lose everything, including his last cuff link.*

Names group together for one year in Syndicates and an underwriter writes policies on behalf of that syndicate for the period of one year. After 3 years the remaining liabilities are reinsured (usually with the group of names forming the subsequent years' syndicate and any profits distributed). This is called the annual venture. Each Name's share in the syndicate is called "Capacity".

Types of Corporate Capital Providers

In 1993 Lloyd's rules were amended to allow approved companies to provide capital to syndicates in return for receiving a share of any profits.

Set out below are the various classes of Corporate Capital Provider investing within Lloyd's at the current time :-

Spread Vehicles

These were the first type of corporate investor in 1994. These companies invested in a range of syndicates in much the same way as traditional Names. These included companies who had raised capital on the Stock Market such as LIMIT and CLM. These now represent a significant section of the market.

Dedicated Corporate Capital

Lloyd's changed their rules again to allow companies to invest in Managing Agents (Companies who provided the infrastructure and underwriters for the Syndicates) as well as providing underwriting Capital. This led Managing Agencies to set up dedicated vehicles to provide capacity to their syndicate. Typically the providers of the capital for these types of vehicle were reinsurers, investment bankers, individual Names and the Managing Agencies management.

Insurance Company

A number of Insurance companies recognised the opportunities that the changes in Lloyd's represented. For example Bermudan companies such as Terra Nova and Mid Ocean have invested in Syndicates and Managing Agencies. These companies hope to gain access to premiums within Lloyds that they would otherwise not be able to write. In addition, the Lloyd's world-wide Licences provide a means of writing business in new areas without the often high costs of obtaining local overseas licences.

Conversion Vehicles

Much consideration has been given to attempting to provide the traditional Names who have remained in the market, a method of converting the limited liability with more liquidity than they have previously enjoyed. This has led to many conversion schemes being devised and offered to Names. These include individual companies for each Name and pooled arrangements. Sometimes these will allow for an easy exit route for Names some time in the future. In previous years these have not proved very popular and despite the large number being introduced this year, I predict most traditional Names will not convert this year at least, because of the valuable tax advantages that would be lost.

Currently a Name who has been a member of a syndicate for one year has the right to continue for the subsequent year. This right can now be traded using an auction process. The competition for capacity on various syndicates and the desire for many traditional Names to exit the market has led to much debate about the value of the capacity.

I set out below a method which attempts to place a fair value on capacity, based on a number of assumptions :-

VALUING CAPACITY

It is often said that something's value is what someone is willing to pay for it. This is a particularly unhelpful phrase, especially when attempting to decide how much YOU are willing to pay.

Despite the merits of the Lloyd's auction process it does not appear to be good at determining the price of individual syndicate capacity. There are many examples of this, of which I will quote only one :-

The following trading occurred in the last three auctions for Syndicate number 47:

£1m of capacity sold for 0.1p in auction 6;
two weeks later in auction 7 £2m of capacity sold for 2.1p;
finally in auction 8 £1m sold again for 0.1p.

The Lloyd's auction season is nearly upon us once again, and the rules have been changed, so this year successful buyers will pay what they bid. It is therefore going to be imperative that bidders have a good understanding of their "fair value" of capacity to avoid potentially very expensive mistakes.

This article aims to provide a sensible approach to placing a "fair value" on capacity. The method is derived from standard financial techniques for evaluating investments. Although expectations of the future and hence prices will vary between Names, by using an auction pricing framework such as these, a much greater understanding of the relationship between auction price and the risk reward can be gained.

The example I have used shows the value at auction of a hypothetical average syndicate based on one set of assumptions, each Name would clearly choose assumptions appropriate for their individual tax circumstances, requirements and expectations.

Basic principles

Investments in Lloyd's are fundamentally simple and similar to all other investments in that one risks capital and receives a return in exchange for that capital.

Lloyd's however differs in that two types of capital are required; Risk Capital backing the underwriting (including Funds at Lloyd's F.A.L.) and the amount payable for capacity in the auction or offer.

The value of £1 of capacity will therefore depend upon the following :-

- How much capital is put at risk by underwriting.
- The underwriting profit received for placing the capital at risk.
- The required return on the capital employed.

Oversimplified model:

An easy mistake to make is to ignore the capital put at risk by underwriting and only look at the future expected profits. It is instructive to consider this oversimplification, as by ignoring the underwriting risk the method effectively gives a maximum value based on the incorrect assumption that it is guaranteed there would never be any losses.

This assumption makes calculating the value of the capacity relatively straightforward using a method called "discounting" (or Net Present Value).

I set out the method below :-

Assume an investor requires a return of say 10% per annum after tax. Hence if they invest £5,000 today, in a year's time they would require funds of £5,500. Or put another way, for an expected payment of £5,500 in a year's time they would be willing to pay £5,000. This is called discounting and £5,000 is called the current discounted value or Net Present Value of £5,500 in a year's time.

Extending this argument to more than one year and allowing for the timing in receiving funds we can calculate the value of £1,000 capacity as follows :-

For the sake for the argument assume the capacity is held for 5 years and is then worthless. Also assume the syndicate makes a 6% return on capacity and tax is paid at 34%. Clearly different tax and returns may be appropriate for different Names and would provide different values.

The cash receipts and their discounted value would be as follows :-

	Year 1998	Year 1999	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004	Year 2005	Total
Return on Capacity	6%	6%	6%	6%	6%	N/A	N/A	N/A	
Pre tax Payment				£60	£60	£60	£60	£60	£300
Post tax payment				£39.6	£39.6	£39.6	£39.6	£39.6	£198
Net Present Value				£27.0	£24.6	£22.6	£20.3	£18.5	£113

So given the above assumptions the value at auction of £1,000 of capacity would be £113 or in other words 11.3p per £, because even after paying 11.3p the investor can still make his desired return of 10% per annum.

As stated before this totally ignores the funds put at risk by underwriting and so the method clearly overvalues the capacity.

Allowing for Funds at Lloyds

By buying capacity a Name also commits himself to providing capital to underwrite. It is this capital that enables Lloyd's to underwrite. Clearly this capital will at some periods be required to pay claims (otherwise it wouldn't be needed at all), and hence will be lost by the Name.

In order to include this capital into the equation we need to evaluate :-

- How much capital is put at risk ?
- What is the cost to the investor of putting this capital at risk ?

How much capital is put at risk ?

The underwriter risks capital each time he writes a risk. So the more risks he writes the more capital is required. In addition the size and type of risk written in the syndicate's portfolio also effects the amount of capital required. For example a catastrophe risk requires more capital than a motor risk say.

So in theory we need to consider each syndicate separately and evaluate how "risky" it is. This can be achieved approximately by considering the expected amount of net premiums to be written and the type of business. This type of analysis is commonly called a risk based capital analysis. There are many methods of calculating the capital at risk, which I shall not go into in this article.

For the sake of this analysis let us assume that the capital at risk is 50% of capacity, which equals the minimum Funds at Lloyd's requirements for Corporate Names currently and is consistent with future Funds at Lloyd's requirements for all Names.

Please note for "riskier" syndicates than average, a much higher capital at risk should be assumed than for less "risky" syndicates.

The cost of providing this capital

For placing capital at risk, Names should expect a return. I shall continue to assume that the Name requires a post tax return on capital of 10% as in the above example. This equates to 15% pre tax.

If the Name invested the capital in a nearly risk free investment such as government bonds he could earn 6.25% say. So we are assuming that the required additional return for taking the risk is 8.75% (i.e. 15% less 6.25%).

So for placing say £500 capital at risk, while still being able to earn interest on it, the Name requires an additional return of £43.75 pre tax (8.75% of £500) or £28.9 after tax.

Example revisited

Based on the above, to write £1000 of capacity would require capital at risk of £500, with an annual cost of £28.9. I have assumed any losses and hence the cost would be incurred at the same time as the profits distributed.

This give revised cash receipts as follows :-

	Year 1998	Year 1999	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004	Year 2005	Total
Result % Cap.	6%	6%	6%	6%	6%	N/A	N/A	N/A	
Pre tax Payment				£60	£60	£60	£60	£60	£300
Post tax payment				£39.6	£39.6	£39.6	£39.6	£39.6	£198
Cost of capital				£28.9	£28.9	£28.9	£28.9	£28.9	£144
Net cash flow				£10.7	£10.7	£10.7	£10.7	£10.7	£53.5
Net Present Value				£7.3	£6.6	£6.0	£5.5	£5.0	£31

So given the above assumptions the value in auction of £1,000 of capacity would be £31 or in other words, 3.1p per £.

Fair value ?

The result of ignoring the cost of capital and consequently the risk of losses is excessively overvalued capacity.

The typical price in the example of 3.1p is higher than, but not inconsistent with the average price paid in the 1996 auctions of 2.4p per £. As stated above however, changing the assumptions would produce a different result. Hopefully there will be plenty of debate over the appropriateness of the assumptions to be used. It would be better still if analysts would declare the assumptions they have used in deriving a "fair value", to enable Names to make sensible investment decisions.

The above method of calculating "fair auction" values enables individual and corporate Names to be consistent in their bidding between syndicates and to provide a method of comparing the expectant returns on capacity with other forms of investment.

Although the above method is somewhat crude, it could be refined. For example the returns and capital at risk is more closely related to premium written, not capacity and this can be incorporated into the model.

A better way to allocate capital ?

The Lloyd's system of syndicates competing for limited capital resources is an effective mechanism of allocating capital between insurance lines. Arguably better than the method of allocation applied within large insurance companies.

Typically within insurance companies the senior management decide the broad areas where business should be written. This applies even in multinational insurance companies where the decision makers may be very far from the insurance market and therefore arguably not in the best position to decide.

Within Lloyd's the various functions for deciding which area to underwrite (which is similar to asset allocation for investors in the Stock exchange) and the decisions of what business within the class to write, are clearly separated. Furthermore this is meritocracy, where those who get it right prosper and those who do not wither.

A system of departments competing for capital already exists within insurance companies. However there is only one capital provider, ie. the senior management. If a system similar to Lloyd's, whereby there were competing capital selectors decided which underwriters to back, this would encourage more rapid changes in the underwriting portfolio to occur within insurance companies following changes in the market place.

Although much more work would need to be done on the significant practical problems of this system, I believe a system could be derived to replicate the better aspects of the Lloyd's market within large insurance companies.

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