LLOYD'S

# 360 MANAGING THE CYCLE

## HOW THE MARKET CAN TAKE CONTROL

# INTRODUCTION

Cycle management has seen an increasing emphasis at Lloyd's in recent years. However, despite current strong industry financials, Lloyd's believes the issue is as much of a challenge for the insurance industry as ever. Indeed, research in 2006 revealed, for the second year running, that Lloyd's underwriters still see managing the insurance cycle as the top challenge for the insurance industry, and nearly two-thirds believe that the industry at large is not doing enough to respond to the challenge[1]. UK brokers seem to agree, with the insurance cycle again emerging as the top issue in another Lloyd's research paper published with BIBA in summer 2006.

Lloyd's has therefore asked the Economist Intelligence Unit to conduct some more qualitative analysis behind the insurance cycle. This report incorporates the views and comments of a wide range of industry practitioners. In addition, data on the US non-life insurance sector were analysed to understand some of the key characteristics and drivers of insurance cycles over the past three decades. As a result, this report recommends a number of practices that insurers can adopt to help prevent cyclical behaviour and minimise its impact in areas where it still occurs. Of course, cycle management is about much more than pricing; other terms and conditions are an important part of the equation, especially at certain critical points during the cycle. We fully recognise this, but will refer to pricing trends throughout the document as a useful proxy and as shorthand to articulate the wider challenge of disciplined underwriting.

We would like to thank all those who participated in the research for their time and insights.

**November 2006**

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[1] Lloyd's Annual Underwriter Survey, 2006

# EXECUTIVE SUMMARY

**Ever since the insurance industry began to track average prices in the 1920s, insurers have come to view pricing cycles as something like a force of nature – with a somewhat erratic timetable and a largely uncontrollable impact on their business.**

**In some ways, this has become a self-fulfilling prophecy. Rather than calculating their individual risk exposures and pricing coverage accordingly, many insurers followed pricing cycles downward, hoping to maintain growth and market share and eventually to make up the difference during an upward phase of the cycle.**

**The result has been an unpredictable earnings stream for insurers and unsatisfactory performance for their investors. Insurance buyers, for their part, have faced uncertainty in their planning and budgeting, with sudden and seemingly arbitrary changes in premiums. Regulators and others evaluating the industry have also had to contend with a major unknown – the timing and magnitude of the next cycle – when assessing an insurer's solvency and profitability. These are all good reasons why it is important to understand what drives the insurance cycle, and what measures can be taken to mitigate its effect.**

**In the wake of the worst year ever for insured catastrophes in 2005, considerable uncertainty remains over the immediate direction of prices and conditions in the commercial insurance market, and the challenge of how insurers can manage the cycle remains greater than ever.**

**Key recommendations include:**

## 1 DON'T FOLLOW THE HERD

While many factors exacerbate cyclicality, there is one underlying cause: the market too often prices insurance cover according to market trends rather than a careful analysis of actual risk exposure. One expert interviewed for this report likens this behaviour to an airline pilot navigating according to the movements of the plane ahead of him, rather than using his own instrument panel. By contrast, **disciplined insurers will refuse to 'follow the herd' and are prepared to walk away from markets when prices fall below a prudent risk-based minimum.** Such an approach has the twin benefit of reducing the insurer's own income volatility and removing that insurer's contribution to a downward cycle in the industry as a whole.

## 2 INVEST IN STATE-OF-THE-ART RISK MEASUREMENT TOOLS

Risk-based pricing is the result of complex analysis, and must look at the likely future claims stream for a given product, rather than simply relying on previous experience, as has tended to be the case in the past. Catastrophe modellers have now reacted to criticisms following recent record US hurricane seasons, and there is greater acknowledgement in the industry that pricing models must be updated regularly to reflect the latest scientific evidence. The models should more easily permit sensitivity analysis to show the impact of the many assumptions that are being made by the modellers on the insurer's behalf. There are also secondary 'demand surge' effects on eventual insurance claim pay-outs, which must be taken into account. For example, a major hurricane will knock down houses and office buildings, but will also have the secondary

effect of boosting the rates charged by plumbers and contractors to repair the damage. Therefore the secondary factors, as well as the individual risk characteristics of each insured person or company, must be evaluated carefully when determining a price. **Fortunately, risk-modelling tools and claims-loss databases are becoming more sophisticated each year. Insurers must push for continuous improvement, and make full use of these tools to communicate better with customers, ratings agencies, regulators and analysts to explain their pricing and coverage decisions.**

## 3 DON'T LET SURPLUS CAPITAL DICTATE YOUR UNDERWRITING

Global capital markets are awash with cash and have been for several years, and capital is now more mobile than ever before. An excess of capital available for underwriting insurance can all too easily push an insurer to deploy the capital in unprofitable ways, as an alternative to having that capital migrate to other uses such as hedge funds and equities or returning the capital to shareholders. A trap emerges: eventually the claims from unprofitable lines of business will start rolling in, and insurers may well wish they had passed up the opportunities and allowed the funds to go elsewhere after all. **If, despite this, resources are deployed to back risky lines, insurers must at least ensure that sufficient capital is held to pay unexpected future claims. But better still, don't let a surplus of capital determine your underwriting in the first place.**

## 4 DON'T BE DAZZLED BY HIGHER INVESTMENT RETURNS

Before the stockmarket crash of the early 2000s, many insurers indulged in a practice called 'cashflow underwriting' – accepting underpricing of insurance coverage, with the idea that gains in stock and bond markets will make up the difference. Then came the stockmarket crash, and insurers were faced with the truth: pricing decisions should have been more closely based on the cost of the insurance product itself, and not over-reliant on an optimistic investment environment. Of course, if returns on the investment side turn out well, then so much the better, but shareholders will require increased returns for the additional investment risks taken. **Recently, along with insurers and reinsurers, ratings agencies and equity analysts have become more aware of the dangers of cashflow underwriting, demanding evidence that insurance prices cover the technical risk. Insurers should make sure the thinking stays that way, as base rates creep up on both sides of the Atlantic. Notionally splitting the business into insurance and asset management operations; and monitoring each separately is one way to achieve this.**

## 5 DON'T RELY ON 'THE BIG ONE' TO PUSH PRICES UPWARDS

Because of the scale and the spectacular nature of terrorist attacks, plane crashes and big storms, insurance prices are still subject to spikes in the months following such an event. **The impact of recent catastrophes, and in particular the unpredictable market conditions that we have seen post-Hurricane Katrina, suggest that insurers cannot now rely on 'the big one' – the spectacular insured loss – as an excuse to raise prices in unrelated lines of business. Regulators, ratings agencies and analysts – not to mention insurance buyers – are increasingly resisting such behaviour.** The most successful insurers are falling into line and raising prices only where appropriate due to higher risk, such as for property owners in coastal areas following a hurricane. Smart insurers are taking the principle one logical step further, and eschewing the raising of premiums in profitable businesses to subsidise lines that are showing poor results.

## 6 REDEPLOY CAPITAL FROM LINES WHERE MARGINS ARE TOO THIN

Current demand and supply patterns – in particular, the oversupply of capital and the comparative ease of entry into the insurance business, coupled with a growing tendency by commercial insureds to self-insure – mean that pressure on pricing is likely to remain a fact of life for insurers. **There is little that individual insurers can do to alter overall supply-and-demand conditions. But insurers can set up internal monitoring systems to ensure that they scale back in lines in which margins have become unsustainable and migrate to other lines.** Among the techniques to achieve that flexibility are close monitoring of prices and risks, robust internal communications, and incentive plans for management that help to ensure that capital is made available to lines where it can be used most effectively.

## 7 GET SMARTER WITH UNDERWRITER AND MANAGER INCENTIVES

A key to profitability in insurance companies is tying incentives to target shareholder returns rather than to volume growth. That, of course, is easier said than done. But some insurers have found ways to structure incentives at the company level so that individual underwriters have every reason to surrender capital to colleagues who can deploy it in more profitable ways. Senior management incentives can also be tied to results – for example, to diminishing combined ratios – although such programmes are naturally trickier to structure because the true profit picture may not be apparent for many years. **There's no 'one size fits all' approach here, and different companies will develop different approaches. But one thing is clear: it will be increasingly important for insurers to review internal incentive structures as analysts, shareholders and ratings agencies focus ever more closely on their financial results.**

# UNDERSTANDING THE INSURANCE CYCLE

**The insurance pricing cycle is the periodic rise and fall of the general level of insurance prices. It is largely a market phenomenon, driven by supply and demand rather than by the actual cost of coverage. The aim of the research is to determine what causes cyclicality in the insurance industry, why cyclicality is more pronounced in some industry sub-sectors than others, and how insurers can best protect themselves against the market tides, particularly when they threaten to drag prices below prudent levels.**

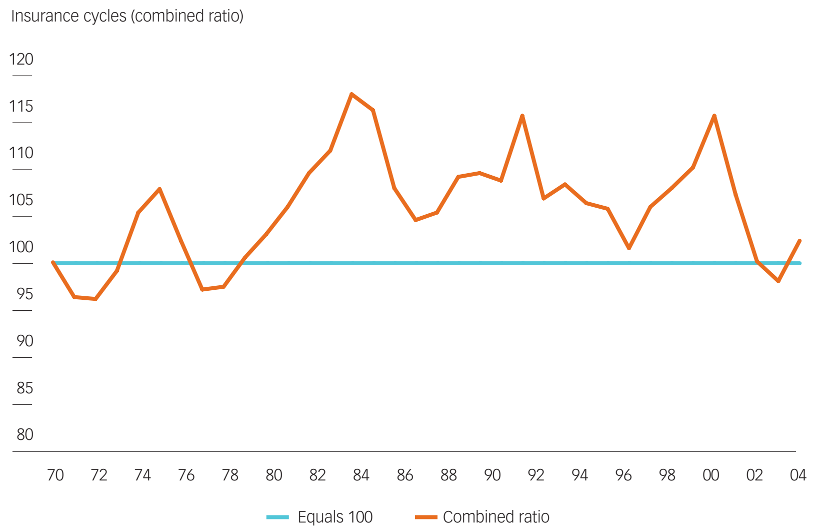
Of course, insurance is not the only industry subject to cyclicality: oil companies and semiconductor manufacturers are two other examples of sectors that face challenges in managing the cycle. The chief input for insurers is capital, and like other commodities, capital is subject to cyclicality in demand and supply. But the cyclicality in insurance is more unpredictable than for many other industries, not least because some types of coverage, such as catastrophe insurance, are priced on the basis of relatively scant data due to the infrequency of the occurrences. This adds to the uncertainty of underwriting decisions, making insurers more prone to look to other insurers or to the insurance market for price guidance rather than to the fundamentals of their business.

## THE CYCLICALITY IN INSURANCE IS MORE UNPREDICTABLE THAN FOR MANY INDUSTRIES

Chart 1, overleaf, sheds light on the impact of pricing cycles on combined ratios in the insurance industry. Consider, for example, the cycle that was initiated when Hurricane Andrew struck the Florida coast in 1992, causing unprecedented insured property damage. The spike in the chart in that year shows the immediate profit impact due to large claims pay-outs following the hurricane: the combined ratio soared even higher above the 100% line than it had risen already owing to soft market conditions. However, as the market hardened (that is, as prices rose) following the hurricane, insurers' coffers were replenished, and the combined ratio began a descent towards profitability.

The hard market pricing conditions, however, attracted new capital and new competitors to the insurance market, and from 1997 onwards the steady increase in the supply of capital started to have its effect. Premium rates became less profitable year on year until, in the 2001 accounting year, there was a sharp rise in the combined ratio due to the losses resulting from the 9/11 attacks. This was the peak of the cycle and led to rises in premium rates, causing the combined ratio to fall in the following years, eventually taking it below 100% in 2004. This full cycle took seven years.

**Chart 1: The insurance cycle**




The chart illustrates the combined ratio (the ratio of claims pay-outs and expenses divided by revenues) for the non-life insurance business in the United States. The combined-ratio cycles and the pricing cycles are mirror images of each other, so that when pricing rises the combined ratio falls; a falling combined ratio indicates greater profitability in the industry. Conversely, when the combined ratio rises above the 100% line, it means that expenses exceeded revenues.

We have defined the combined ratio as follows:

C = (L/EP) + (EX/NWP) where
C = combined ratio
L = incurred losses (including loss-adjustment expenses)
EX = incurred underwriting expenses
EP = earned premiums
NWP = net written premiums

## CYCLICALITY CREATES UNEVEN EARNINGS AND UNCERTAINTY FOR SHAREHOLDERS IN INSURANCE COMPANIES

The pattern described above is typical for other pricing cycles in the insurance industry. The upward phase of a cycle is often triggered when a major event forces insurers to make large claim payments, thereby drawing down capital. This, combined with increased demand for insurance against the risk associated with the event, pushes prices upwards. Over time, insurers' capital is replenished from the higher revenues. At the same time new entrants flock to the industry, seeking a part of the profitable business. Such a combination prompts a long slide in prices – the downward cycle – until a major insured event restarts the upward phase.

Analysis shows that hardening markets, which refer to periods when prices are rising, tend to be shorter than softening markets, in which prices are falling. An analysis of the US insurance market data, illustrated in Chart 1, shows that over the period 1970-2005 the average hardening market lasted for 3¼ years (peak to trough), whereas the softening market lasted for 4¾ years (trough to peak). This pattern of shorter peaks in pricing followed by longer troughs is driven by the supply-and-demand conditions of the industry, and in particular the oversupply and fungibility of capital. Chronic pressure on prices, meanwhile, tends to feed on itself, as insurers compete with each other on price and add to the industry-wide downward momentum.

The unpredictability of the cycle, as well as the fact of cyclicality itself, creates severe difficulties for insurers. The cyclicality creates uneven earnings, and since the timing of the onset of the next downward cycle is unknown, it also creates uncertainty for shareholders in insurance companies. For insurance buyers, a focus on managing the cycle is a good thing, but here too more predictability would be welcome. "It can be

damaging when rates suddenly spike for no apparent reason," points out Ellen Vinck, immediate past president of the US-based Risk and Insurance Management Society (RIMS), and vice-president of risk management for BAE Systems Ship Repair in San Diego. "You can't plan for this sort of thing in your budget process, and it is difficult to explain to your senior management about the sudden change."

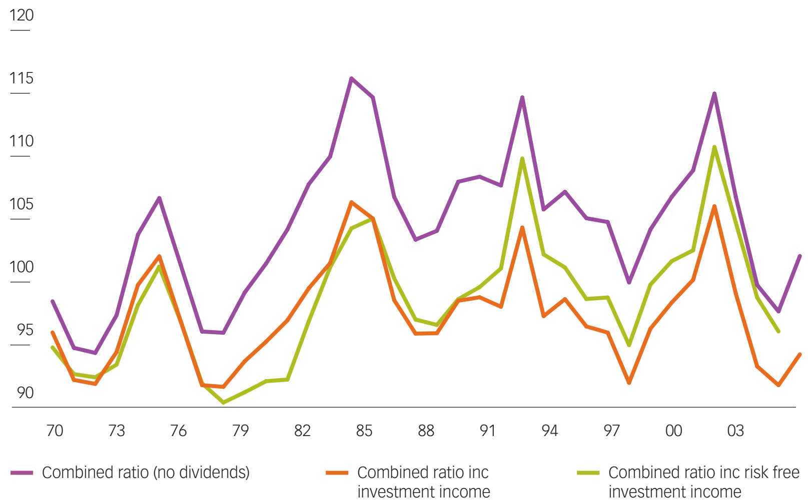
**"IT CAN BE DAMAGING WHEN RATES SUDDENLY SPIKE FOR NO APPARENT REASON"**

## Chart 2: Risk and profitability

The combined ratio in Chart 1, previous page, provides only a partial picture of the industry's performance over the past three decades. An analysis of insurance companies' profits requires us to split up the industry's performance results as follows:

1. **Underwriting results (green line)**. This includes the return on matching assets as these are factored into the underwriting decision and price. Matching assets are typically Treasury bills for short-tail business, but would ideally include an element of inflation proofing for longer-tail business.
2. **Additional investment return compared with the matching asset portfolio (orange line)**.

Chart 2 below (which is again restricted to non-life insurance business in the US) reveals the joint operations of insurers as underwriters and investment companies.




Analysing insurance data is difficult, and the green line is only an approximation of risk-free returns in the industry over the past three decades[2]. Nevertheless, it suggests some interesting points. First, after 1983 the addition of matching assets is still not enough to push the industry into profit very often. In past times, the industry has been much more profitable. This suggests that it is now more important than ever to get the underwriting right.

Second, even when the industry is profitable, the returns are not as high as they should be given the level of risk that shareholders are now taking on. Holding more risky assets gears up the overall risk of a company, leading to higher capital requirements and higher required shareholder returns. Performance should therefore be measured against returns targets that are consistent with the risk. Although consumers may believe that the industry is doing well, the returns indicated are lower than shareholders might expect given the increased risk that they are bearing.

[2] The premiums and claims are not really consistent, and a full analysis would look at an underwriting cohort, whereas we have had to rely on accounting data.

## CAUSES OF INSURANCE CYCLES

Like the price of any other commodity in a free market, insurance premiums rise and fall in response to market forces. There is every expectation that they will continue to do so. But in the case of insurance, the usual market volatility is exacerbated by several unique factors.

Uncertainty over future claims pay-outs makes it difficult to price risk correctly. Without a firm handle on the cost of the product – that is, the total to be paid in claims – many insurers end up following what the competition is doing. "Pricing discipline has become a lost art," says Dr Robert Hartwig, president elect of the Insurance Information Institute, which represents the US insurance industry. "But if you are flying an airplane, it is best to look at the instrument panel in your cockpit and not at what the pilot ahead of you is doing." The implication is that companies need to get better at quantifying and pricing their risk exposures.

**COMPANIES NEED TO GET BETTER AT QUANTIFYING AND PRICING THEIR RISK EXPOSURES**

The problem is particularly pronounced in some areas of the industry. The US liability insurance market – and to a lesser extent the regulated employers' liability market in the UK – is also subject to pricing cycles arising from the unpredictability of long-term claims. The outcome of court cases, particularly in large class actions, such as the asbestos liability case, is subject to the vicissitudes of the jury award system, which can be very expensive for defendant companies. The long duration of legal cases adds to the uncertainty surrounding final claims pay-outs. "There are widely varying degrees of severity or leniency of courts, depending on the jurisdiction, and that makes liability cases unpredictable," explains Alan Murray, vice-president of rating agency Moody's. "Also, damages often cannot be truly assessed until years after an insured event has taken place. This gives rise to psychological market factors that lead to cycles. When claims settlement is fairly rapid and predictable, you don't see pricing cycles."

Incidences of under-reserving – setting aside too little in reserves owing to a miscalculation of the extent of future pay-outs – add to the problem by creating panic-driven price spikes when shortfalls are discovered. Under-reserving also drives a downward cycle by creating the illusion that the insurer is cash-rich. "Taking reserves down gives companies a perception that current business is flush," says Murray. "At that point, insurers start to cut premiums, and they launch a competitive feeding frenzy."

Deficiencies in the tools available for insurers to assess properly the risks they underwrite have also caused problems, and it is important for underwriters to understand precisely what is and what is not modelled and to make some allowance for those areas of risk not considered. Weaknesses in some risk models became clear after the claims for hurricane damage began hitting US property insurers in late summer 2005. "What was found after Katrina was that the modelling was very wrong for a storm of that magnitude," says Vinck. "Many underwriters had relied on their models to determine their probable maximum loss (PML), and were caught very short."

**IT IS IMPORTANT FOR UNDERWRITERS TO UNDERSTAND PRECISELY WHAT IS AND WHAT IS NOT MODELLED**

A further contributory factor to cyclicality is insurers' tendency to rely on investment returns to cover shortfalls in underwriting profits – a technique known as cashflow underwriting. Life and pension insurance – where future claims pay-outs are comparatively predictable, and insurers therefore have less room to delude themselves about underwriting profitability – is not immune to cashflow underwriting either. "We saw a lot of volatility in the pricing of life and pension insurance in early 2001, when increased volatility in equity markets hit the profitability of insurers and caused many of them to start raising prices," says Joseph Streppel, CFO of Aegon Verzekeringen, the major Dutch insurance group. "This showed that, although mortality and longevity are fairly predictable, the life insurance business is not untouchable."

**TOO OFTEN INSURERS HAVE BEEN SLOW TO REDEPLOY CAPITAL INTO MORE PROFITABLE BUSINESS LINES**

Too often insurers have been slow to redeploy capital into more profitable business lines. A decision to temporarily absorb losses might make sense in some instances. "The stronger companies may feel that they can afford to keep premiums low and accept lower profitability or losses if they can gain market share," believes Graham Masters, head of pricing for non-life products at Winterthur Group. But in other cases, insurers stay in an unprofitable line of business simply because they have invested in building a market presence and hiring staff, and are reluctant to walk away from sunk costs. The problem is exacerbated by poorly structured incentive schemes. Insurers that reward top-line performance rather than sustainable underwriting contribute to cyclical (and often inadequate) pricing.

## TOO MUCH CAPITAL?

It is within an insurer's power to address the issues above to a greater or lesser degree. But there is another important driver of insurance cycles that individual insurers can do little to control – namely the challenge created by the increased availability and mobility of global capital. Throughout the late 1980s and 1990s, booming stockmarkets and falling interest rates created an excess supply of capital, which encouraged insurers to put more money into stocks. Global liquidity reached unprecedented levels in recent years as real interest rates in the US, the Eurozone and Japan became negative and money and credit growth accelerated. When combined with persistent underpricing by insurers, this environment has kept prices for some lines, such as property and liability, stuck at the lower end of the cycle.

Surplus capital ensures stiff competition in the industry because an insured company can easily find another source of capital to back its risks. "The basic problem is that we live in a world of oversupply of capital," says Rolf Tolle, franchise performance director at Lloyd's. "The capital providers behind the insurance company come to the management and say: 'I want you to sweat my capital.' Eventually, the insurance company will be forced to write the business, even if it is unprofitable, because otherwise that capital will try to find a different home."

**SINCE HURRICANE KATRINA, IT IS ESTIMATED THAT $27 BILLION OF NEW CAPITAL HAS ENTERED THE REINSURANCE INDUSTRY**

The mobility of capital in an electronic age makes the capital pool global. "During 2005, we saw insurance companies able to recapitalise immediately after a hurricane, in some cases between hurricanes," says Tolle. "That shows there is a lot of capital available, and a substantial appetite for risk." Those factors, combined with the comparative ease of establishing an insurance company in some jurisdictions, heighten the competition for incumbents.

Since Hurricane Katrina, it is estimated that $27 billion of "new" capital has entered the reinsurance industry, and not just to recapitalise existing reinsurers and fund new start-ups. Boosted by the success of the hedge fund market in particular, the reinsurance sector is attracting new investors keen to back sidecars and catastrophe bonds. While some have raised concerns about the immediate pressure that the additional capital will put on prices and market conditions, there are also broader questions about whether this new breed of investor, seen in some quarters as short-term in its outlook, could increase volatility within the marketplace rather than smooth it.

Will surplus capital continue to have such a marked impact on insurance cycles in the future? There are now signs that global liquidity has peaked, and that as a result there will be less footloose capital available to drive down prices. Until recently, Japan had been a primary source of cheap capital, allowing investors to borrow yen at virtually free rates and invest worldwide. However, in March 2006 the Bank of Japan ended its policy of quantitative easing (under which it had flooded the financial system with liquidity since 2001). As a result, between March and June $170 billion has been taken out of the global economy, and Japan has now raised

**THE INSURANCE MARKET WILL CONTINUE TO REMAIN EXTREMELY COMPETITIVE FOR THE FORESEEABLE FUTURE**

interest rates by 25 basis points – the first increase in that country since 2000. Rates in the US are also rising, from 1% in June 2004 to 5.25% in July 2006, and the European Central Bank has increased its key repo rate by 75 basis points since December 2005, to 2.75%. Looking forward, the Economist Intelligence Unit expects a further modest increase in monetary tightening around the world, with rates in the US peaking at 5.75% before falling in 2007, and with rates in Europe rising to a neutral level of 3.75%. This should begin to reduce the amount of surplus capital, and should therefore go some way towards lessening the downward pressure on prices. Even so, global liquidity conditions remain very generous by historical standards, and the insurance market will continue to remain extremely competitive for the foreseeable future, especially given its increasingly dynamic capital base.

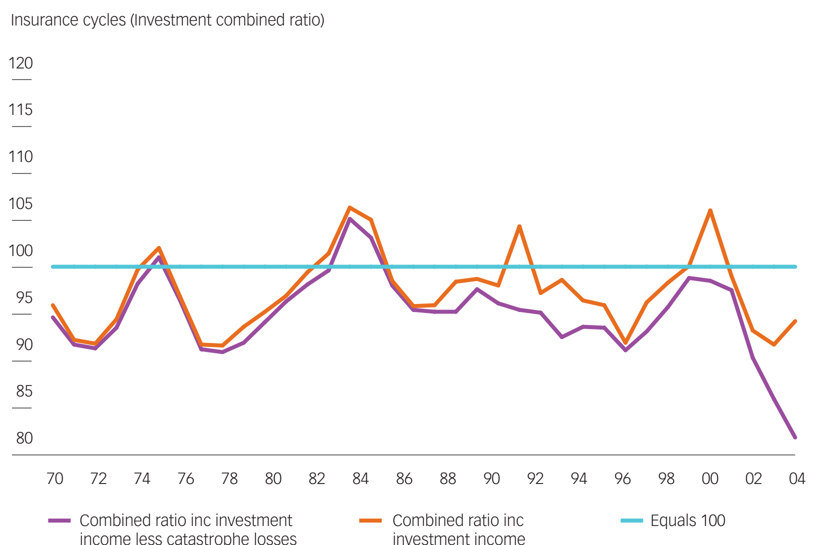
## CATASTROPHE AND CYCLICALITY

All insurers have to contend with the challenges described above to some degree, but some lines of business are more affected by cyclicality than others. Property catastrophe insurance offers a clear example of cyclical pricing because it covers policyholders against events and combinations of events that are rare and unpredictable. When a major catastrophe happens, insurers pay out huge amounts in claims, and then raise the price of that coverage. Marine, aviation and transport (MAT) insurance suffers from cyclicality for similar reasons. "Insurance in the classes that were impacted by the hurricanes in 2004 and 2005, such as offshore energy platforms, saw higher prices in 2006 with limitations in coverage for named windstorm. The early signs for 2007 are that there will be increased capacity, which should alleviate some of the recent increase in pricing," says Graham Clarke, CEO of leading independent insurance and reinsurance broker Miller. "Prices for catastrophe insurance are higher today, especially in the Gulf of Mexico. The marine business, on the other hand, has not seen a major accident in several years, and is therefore on a downward cycle."

**"SOME LINES ARE NO LONGER ACHIEVING AN ADEQUATE LEVEL OF TECHNICAL PRICING"**

Lloyd's regards this 'tale of two markets' as dangerous. Says Tolle, "We think there is currently a real risk that positive market conditions for US catastrophe business are covering up deteriorations in other areas – to the point that some lines are no longer achieving an adequate level of technical pricing."

**Chart 3: Combined ratio including investment income**




[3] Our analysis removes the losses relating to the catastrophe in the year it occurred, but does not attempt to account for any increase in profitability which takes place afterwards as premium rates hardened in response.

## CATASTROPHE HAS BECOME ONE OF THE PRIMARY DRIVERS OF THE CYCLE

The catastrophe market has had a particularly pronounced impact on pricing and profitability cycles over the past 15 years. The effect of catastrophe losses can be seen in Chart 3 (previous page)[3]. When investment returns and catastrophe losses are both counted, the combined ratio tends to remain in the profitability zone. The only exceptions are in 1992, following pay-outs for Hurricane Andrew, and in 2002, following the September 11th terrorist attacks. However, if catastrophe losses are removed from the calculation, it can be seen that the industry would have been in profit for all of the previous decades. For the property catastrophe and MAT insurers that have primarily suffered these losses, this is a clear indication that risks have frequently been underpriced.

It is also interesting to note that over the past 15 years the combined ratio is significantly shallower once catastrophe losses are removed, a fact that suggests that catastrophe has become one of the primary drivers of the cycle. Prior to the late 1980s, it can be seen that catastrophe losses do not change the industry's overall profitability record substantially, whereas after that point their impact becomes much more pronounced. With climate change expected to increase the frequency and impact of severe weather events in the future, the role of catastrophe in driving cyclicality is likely to persist. Insurers must plan for those catastrophes, but will no longer be able to rely on them as an excuse to raise prices across the board.

However, many executives feel that the insurance cycle should be shallower in the coming years. For example, Clemens Muth of the planning department of Munich Re points out that more sophisticated pricing of risk will encourage a trend towards shallower pricing cycles. "The world knows much more about the insurance and reinsurance industries than it did 15 years ago," he explains. In addition to the progress in techniques for assessing risk and pricing insurance, there is a developing awareness – among insurers, investors and ratings agencies – of the long-term consequences for insurers that follow a pricing cycle downwards and underprice their product.

## PRESSURE ON PRICING AND ON TERMS AND CONDITIONS IS INTENSIFYING IN NON-CATASTROPHE LINES OF BUSINESS

Right now, industry performance is strong. First-half results in 2006 brought the US property casualty industry its best combined ratio for 20 years, at 92%. The European insurance industry has performed much better over the past few years, in stark contrast to the late 1990s. In Australia, the four largest general insurers all announced record profits during the last reporting season. For the first time in years, the industry is well capitalised with strong cashflows. But premium growth is sluggish, pressure on pricing and on terms and conditions is intensifying in virtually all non-catastrophe lines of business, and the capital infrastructure is becoming ever more dynamic. Experience shows that it is at such a time that the market begins to soften. So has the industry learnt its lesson, and will it really be different this time?

# MANAGING THE INSURANCE CYCLE

**Despite these issues, some insurers manage to beat the odds and achieve above-average results. Their strategies typically involve structuring their businesses to avoid undisciplined underwriting. This is far from easy, however. It requires insurers to manage their internal information flows better, to improve risk assessment, and to structure reward systems to ensure that they are not drawn into pricing below a sustainable level. This is in the interests of both policyholders and insurers.**

## PRUDENT PRICING

Good news for insurers: one of the main factors driving cycles in the past – the clamour on Wall Street for top-line growth – is surely diminishing. Regulators, ratings agencies and equity analysts are also becoming more aware that volume and market-share growth are not necessarily success indicators. This should help insurers to focus on earnings growth, and to price with a view towards sustainable underwriting despite weak market conditions. "If the price is inadequate, don't write the business," advises Stephen Catlin, CEO of Catlin Group. "I don't subscribe to the theory that capital will go elsewhere if the top line doesn't grow. On the contrary, growing the top line during a downturn in the pricing cycle is a sign of bad management."

**VOLUME AND MARKET-SHARE GROWTH ARE NOT NECESSARILY SUCCESS INDICATORS**

According to Christoph Menn, head of product development and strategy at Swiss Re, a first step towards ensuring correct and unbiased pricing is to separate technical pricing from selling and to track them independently. This contributes to greater clarity in price-setting by minimising the influence that marketing and sales may have on your technical pricing. You don't want market information or trends to influence your technical price level, he explains.

The second step, he adds, is to set up a price-information tracking system, which indicates where market prices diverge from the technical risk-based prices, and by how much. Cycle management then entails allocating or reallocating capital and capacity quickly to the most profitable uses. Consistent internal renewal messages support this process, says Menn.

For example, when Swiss Re came to offer its directors and officers (D&O) liability insurance at renewal, the company determined that pricing was falling below a prudent level and reduced its capacity in that segment. However, as Menn points out, companies can only do that if they know in advance where their technical or walk-away point is.

This will become increasingly commonplace in the industry, according to Rob Jones, managing director of financial services ratings for Standard & Poor's, the ratings agency. "A lot of companies are establishing walk-away prices, so there is an indication of pricing discipline. There is also a lot more pricing transparency within insurance and reinsurance companies, and within the marketplace. For example, it is now common for reinsurers to do a public presentation of the impact of the renewal season on their business. That kind of transparency didn't happen at all, five or more years ago."

**"THERE IS A LOT MORE PRICING TRANSPARENCY WITHIN INSURANCE AND REINSURANCE COMPANIES"**

Insurers and reinsurers are better able today to segment their markets finely, and to assign prices based on a close inspection of the risks involved. Some insurers take market segmentation a very long way. "It is not uncommon for a direct writer of insurance to have very granular underwriting, down to the level of the individual policyholder," notes Jones. "If you take motor insurance as an example, some insurers even factor in the colour of a car, since data show that drivers of red cars are more accident-prone than drivers of white cars."

Greater use of these techniques should make pricing less subject to cycles, although not entirely free of them. "Insurers are no longer putting their finger in the

air to arrive at pricing," says Graham Clarke at Miller. But he also acknowledges that this can be only a partial solution. "There are more sophisticated techniques available to underwriters now but, in my view, this hasn't really changed the cycles to date. Where there is an excess of supply, insurers and reinsurers will still compete on price."

**THERE IS A GREATER ACCEPTANCE OF THE REQUIREMENT FOR INSURERS TO PRICE ACCORDING TO RISK**

More positively, some believe that an evolution in the thinking of insurance buyers will help to reduce the amplitude of insurance pricing cycles. There is a greater acceptance of the requirement for insurers to price according to risk, on the basis that this will help them to stay in business and honour their commitments in the long term. "Risk managers can't have the best of both worlds," says Vinck of RIMS. "They can't laugh all the way to the bank when their risks are underpriced, and then complain when they feel they have been overcharged."

Equally, there is a growing recognition on the insurer's part that frequent and transparent communication is critical for well-managed broker and client relationships. As Steve Quick, business development director at UK insurer Hiscox, explains, "If there is a need to tighten up on pricing, the strategy should be to start dialogue early, and communicate fully, to ensure no surprises. It's all about managing the relationship."

## REALLOCATING CAPITAL

Capital allocation is another area where insurers are trying to raise their game. For example, Brit Insurance has established an internal capital-auction system that allows underwriters to track market conditions in their lines and surrender capital to the system if it appears that the market is softening and underwriting at previous levels is unsustainable. The internal reward scheme buttresses the system, believes Dane Douetil, CEO of the company. "If your colleague can make better use of the capital than you can at this point in time, then you let your colleague use it and your own bonus – based on group results – will be bigger because of that."

Such techniques will become more widespread, according to Standard & Poor's. The major reinsurers, and many of the larger insurers, have set up tracking systems for internal and market prices for their lines of business, including the terms and conditions of coverage offered. Along with more sophisticated risk-assessment tools, these systems enable reinsurers and insurers to determine which lines of business are likely to show the best results, on average, over the lifetime of each policy sold. "Big global players are the strongest practitioners of this," notes Jones. "They can steer capital to the optimum position, using these tracking and pricing tools."

**"IF YOUR COLLEAGUE CAN MAKE BETTER USE OF THE CAPITAL, THEN LET HIM USE IT"**

According to Rolf Tolle at Lloyd's, the potential uses for reallocated capital extend beyond the insurer's own product portfolio: "Insurers can say, for example, that instead of using that capital to underwrite risk, they will invest it in stocks and bonds. That transfers the risk from underwriting markets to stock and bond markets." Of course, a strategy of investing significant amounts of excess capital in this way over the longer term may be less appropriate: if a shareholder wishes to invest in the financial markets, there are often other more efficient means of doing so.

The long-awaited Solvency II regulations, initiated by the European Commission, could also encourage the trend to reallocate capital. These regulations look at whether insurers are adequately capitalised for the risks they underwrite, and will require them to be prepared to account for levels of capital in the case of inadequately priced policies. "Solvency II focuses on the quality of a company's internal risk-assessment model," explains Clemens Muth at Munich Re. "Naturally this includes ensuring that companies have the correct pricing tools and that they continually improve them, and – in this context – that they also monitor the cycle."

## SMART INCENTIVES

Internal incentive schemes play an important role in ensuring that capital is redeployed to its best uses. While such programmes tend to work at the underwriter level, however, they have proved more difficult to structure and implement at the senior management level.

During the 1990s, senior managers were often rewarded for volume growth, even if this involved sacrificing profitability in the long term. "By the time the financial results were in, four or five years later, the management that caused the problem had received their large bonuses and gone off to retire," comments Dr Hartwig of the Insurance Information Institute.

**INTERNAL INCENTIVE SCHEMES PLAY AN IMPORTANT ROLE IN ENSURING THAT CAPITAL IS REDEPLOYED TO ITS BEST USES**

The main problem with senior management incentive plans is determining the correct timeframe for measuring results. A brief timeframe – for example, a year – encourages exactly the kind of short-termism that such schemes are intended to avoid. But if a scheme is too long-term – for example, a decade – the pay-off will be barely visible over the horizon, thereby making it difficult to attract top talent. Moreover, for some lines of insurance, such as long-tail liability policies, claims will trickle in for years and perhaps decades, making a proper assessment of the product line's profit record difficult to determine.

With long-term coverages, where claims can be filed a decade or more after an insured event, the insurer normally has an indication after the first four or five years what the ultimate claims record will look like. "But even that shorter period is too long for many management compensation plans," says Tolle. "In the US, CEOs have an average expectancy of life in office of three to five years. Few CEOs are in office long enough to receive compensation from policies written a decade earlier. A CEO who knows he will be in office for three to five years may not actually be thinking long-term."

There is no 'one size fits all' solution here, and different approaches will suit different companies. But those that bite the bullet and align their incentive schemes more closely with their underwriting strategy could not only make an important difference to their bottom line, but also send out an important message to the market about what they stand for.

## TAKING RISK-MODELLING TOOLS TO THE NEXT LEVEL

Discipline in pricing is, of course, only as good as the information systems that support it. In recent years, the insurance industry has made great strides towards improving these tools. New risk-modelling techniques, and claims and loss databases, are facilitating more precise assessment and pricing of risk.[4]

**DISCIPLINE IN PRICING IS ONLY AS GOOD AS THE INFORMATION SYSTEMS THAT SUPPORT IT**

For example, factors such as 'superimposed inflation' (also known as 'demand surge') are now being added to overall risk assessments. This takes account of unusual price spikes arising from the insured event, such as a sudden rise in medical costs following a nuclear-plant explosion. Muth notes that there is a wide range of potential sources of ancillary risk: "There are social risks associated with catastrophic events, such as major floods, and there are 'superimposed inflation' risks that go beyond mere changes in the general price level. As scientists become more knowledgeable about the pattern of disasters, they can better assess the risk profiles in many lines of business."

[4] For more information on the role of risk modelling in managing the cycle, please also refer to the report 'Combating the Insurance Cycle – a modelling approach', published by The Committee of Actuaries in the Lloyd's Market (CALM) in April 2006.

**THE INDUSTRY NEEDS A COMMON UNDERSTANDING OF WHAT THE MAIN RISK FACTORS ARE**

Some are now arguing for a single, industry-wide database with aggregated loss information per line of insurance, which could help individual underwriters to price more accurately. "Often, in commercial lines, there is significant judgment, perception and experience involved in deriving a price, and that won't change, but a single source of quality data in this industry would help," says Edward McLaughlin of the risk consulting division of Marsh, the global insurance brokerage and risk consultancy. "In personal lines, for example, there is a sharing of individual companies' data on rating zones and household claims. On the corporate side, information gathering and claims processing are typically insurance company-specific. The data are not aggregated anywhere. There is no single database with all the claims and exposure factors for a particular sector. There have been some attempts to do this, but so far none have completely succeeded."

The industry also needs a common understanding of what the main risk factors are. "On the natural catastrophe side, the industry developed an agreement on what to track in terms of exposure information, but it is far from such an agreement and understanding on the casualty side," states Christoph Menn of Swiss Re. "It needs a common understanding of what the crucial exposure factors are, and an agreement to collect such information in a consistent way across the industry."

## BEWARE THE BULL MARKET

The stockmarket correction of the early 2000s made it clear that robust returns from booming equity investments cannot be relied on as a substitute for underwriting profits. The problem caused major dislocation in the insurance industry, with a corresponding amount of turnover at senior management levels.

The shake-up may still be fresh in the minds of senior management, but this does not mean the mistakes will not be repeated: "If we have another period of robust stockmarket returns," warns Dr Hartwig, "a new lack of [underwriting] discipline could emerge." Whether insurers pass the test remains to be seen. But ratings agencies are more likely to have their eye on the ball next time, as are regulators and equity analysts. "The standard of ratings agencies' work is significantly better now than it was five to ten years ago," says one senior insurance executive. "They are more proactive and less reactive."

## THE DRIVE TOWARDS GREATER TRANSPARENCY

**IN ADDITION TO MAKING THEIR RESERVING MORE ACCURATE, INSURERS ARE MAKING IT MORE TRANSPARENT**

Too much reliance on investment returns has also led to inadequate reserving in the past. One way to improve the accuracy of reserving is to shorten the feedback loop between pay-out on previously sold policies and pricing of new ones in the same line. Prompt payment of claims has a double advantage, says Brit's Douetil: "It gets your actual cost of sales sorted out, and the clients like it, so it's a double win." It may also reduce the cost of claims, for example by cutting down on legal fees.

In addition to making their reserving more accurate, insurers are making it more transparent, as some of the vehicles used in the past are no longer allowed. For example, ten years ago it was common to set aside reserves in off-balance-sheet items. Now, International Financial Reporting Standards make it more difficult to create off-balance-sheet items. Similarly, insurers used to be able to use finite insurance – a multi-year contract involving minimal risk transfer to a reinsurer – to reduce the amount of reserving necessary, but US industry investigations have changed both perception and practice in this regard.

## THE CALL FOR GREATER TRANSPARENCY WILL UNDOUBTEDLY CONTINUE, SUPPORTED BY THE RATINGS AGENCIES

We must view this in the context of a continuing trend towards greater transparency, especially in the reinsurance sector. Good capital management, like virtue, may be its own reward. Still, it can benefit insurers to tell customers, ratings agencies, shareholders, regulators and other stakeholders all about their capital-allocation and pricing policies. Indeed, insurers may have little choice but to be clear and transparent about these matters. Stakeholders are increasingly aware of the importance of risk-based pricing, and are demanding better information on the basis for insurers' pricing decisions.

The call for greater transparency will undoubtedly continue, supported by the ratings agencies, which ultimately determine the terms and conditions under which insurers can raise capital. "Ratings agencies have become much better enforcers of good capital management," says Dr Hartwig. "During the 1990s they were asleep at the switch, as were many regulators. They have awakened now and are quick to downgrade a company for poor capital management."

Insurance buyers will also continue to ask questions about the prices they are asked to pay. The tide began to turn in that direction early in the new millennium, says Ellen Vinck from RIMS: "Insurance buyers wanted to see a real underwriting process, rather than having prices based strictly on supply and demand in the market. Buyers want prices to reflect their actual loss history and their particular risk profile. A decade ago, when an insured company went up for renewal, the first thing you would hear is: 'It's been a bad year, we have had bad results, so your rates are going up.' Insured companies have stopped accepting that kind of message. Now they're saying: 'We had no changes to our risk profile, and you had better have a good reason to give me a rate increase.' " Being able to demonstrate a robust underwriting process, based on a credible assessment of risk, will therefore become an even more important step to winning trust in the marketplace.

# CONCLUSIONS

**With the insurance press full of headlines reporting strong – even record – profits over recent months, it is tempting to think that the problem of volatile performance in the insurance industry has gone away.**

**In fact, market behaviour following two record hurricane seasons and the current difference in market conditions between US catastrophe business and other lines only emphasise the need for discipline at this stage of the cycle.**

## 1 THE INSURANCE CYCLE IS HERE TO STAY

Looking forward, we cannot escape the conclusion that insurance cycles will continue to be a major challenge for the industry. Global liquidity remains very high, and the insurance market will continue to remain extremely competitive for the foreseeable future, boosted by an increasingly flexible menu of capital options.

## 2 THE INDUSTRY IS NOW BETTER EQUIPPED TO MANAGE THE CYCLE

There are clear grounds for optimism that the industry will become more adept at managing the insurance cycle in the coming years. In particular, access to better information and analysis should help insurers to price risk correctly.

## 3 ONLY A CHANGE OF CULTURE CAN REDUCE COMPETITIVE PRESSURE

There are several steps that insurers can take to minimise the impact of competitive pressure. In particular, insurers need to create a culture that puts a greater focus on the prudent setting of terms and conditions, including pricing, for the benefit of insurers and policyholders, and that avoids undisciplined underwriting just to retain market share.

## 4 IMPROVED PROCESSES AND MODELS ARE KEY

Improved processes will play a key role in helping insurers manage the cycle. Risk-based pricing, in turn, depends on using state-of-the-art risk modelling tools and loss data, and on robust internal communication systems that enable underwriters to gain access to this information. Proper pricing and reallocation of capital to its best uses also depend on incentive schemes that encourage underwriters to adopt this practice.

## 5 CURRENT TRENDS TOWARDS TRANSPARENCY CAN ONLY HELP CYCLE MANAGEMENT

We hope that the current trend towards transparency in the insurance and reinsurance sector can only help cycle management as it bolsters the confidence and understanding of a variety of stakeholders, particularly ratings agencies and insurance buyers.

**Through a combination of these tools and trends, we believe that insurers can go a long way to shield themselves from some of the more damaging aspects of the cycle. The question, as always, is whether the theory will translate into reality this time.**

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