

Global Downstream: Hardening re-intensifies — for now

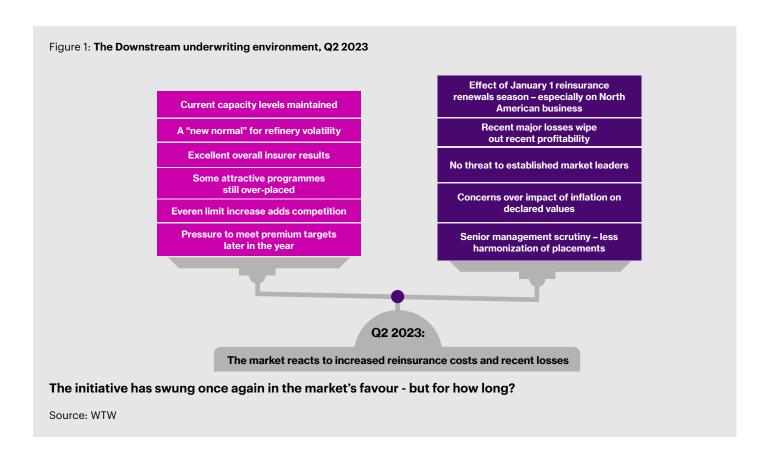
Introduction: January is always such a gloomy month!

In our November 2022 Update to last year's Energy Market Review, we did our best to remain upbeat about the prospects for Downstream buyers as the January 1 reinsurance market renewals season approached. January is always a gloomy month in London but this year it was made much worse for Downstream insurers by an extremely late and punitive reinsurance market renewal season. Most had realised quite early on in proceedings that matters were not going to be straightforward, and the Christmas break arrived with many reinsurance deals not yet over the line. Even as this Review was going to press in March, it was still not clear as to the full impact of the reinsurance treaty rate rises, nor indeed how the increased treaty costs would be allocated within individual insurer operations.

One thing, however, has been clear: this has been one of the toughest reinsurance renewal seasons on record. We therefore have little alternative but to advise Downstream buyers of a re-hardening of this market for all but the most sought-after business — just when buyers had hoped that the turning point of the old market cycle had been reached last year. It must be said that this is an unusual phenomenon in this market; history shows that after a period on rating increases, new capacity usually floods into the market and the next phase of the underwriting cycle begins. Instead, nothing of the kind has happened; in essence, we are left with a very similar market to the one buyers have had to cope with for the past four years or so.

But is this all bad news for the buyer? In the short term yes, but in the long term, perhaps not. As ever in this complicated and diverse market, things are never quite what they seem, and it may be that some chinks of light will appear for buyers before the year is out.

Let's first tun to our "kitchen scales" graphic in Figure 1 overleaf to identify the various positive and negative factors affecting this market. We'll take the negative factors first, and then show why some of the positive factors may change existing market conditions later in the year.



Negative factors

Effect of January 1 reinsurance renewals season

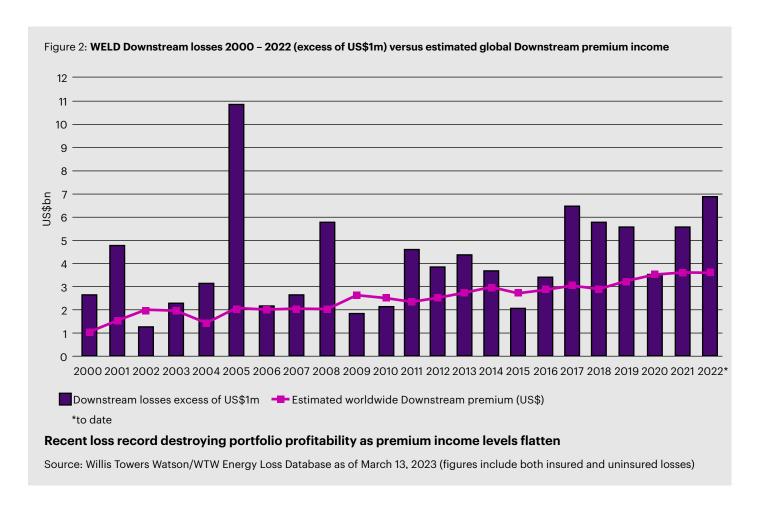
Even at the end of the first quarter of 2023, there is still a degree of confusion as to the full ramifications of this year's reinsurance renewal season. Depending on who one speaks to in the market, reinsurance costs have risen by as much as 70% for some buyers but by only 10% for others. However, it was not simply the range of rate increases which caused some consternation in the Downstream market, but also the scale of the retention increases — for some, up to double the same figure for the previous year — together with the uncertainties relating to the actual allocation of reinsurance costs across the full range of individual insurers' Property & Casualty portfolio. In effect, some members of the Downstream market are currently underwriting without knowing exactly how much they will be contributing to overall reinsurance treaty costs. Furthermore, the decreases in reinsurance capacity for Natural Catastrophe (Nat Cat) have meant costs increasing even further for this sought-after protection — particularly for North American risks.

No wonder the reaction in the market since January 1 has been a heady mix of unease and apprehension. Reinsurance costs are generally between 30-50% of all insurer costs and with the rating increases these figures may well be even more for this year. As a result, insurers have insisted that they have had little choice but to pass these increased costs on to the buyer in most instances; what is less clear is how many are taking advantage of the current confusion in the market to insist on the same

increases in rate as those whose costs have increased the most. What we have seen is a significant part of the market taking a bold approach as the year began, insisting on minimum rating increases and pointing to the conditions in the reinsurance market as a rationale.

We have also seen reinsurers imposing more restrictive conditions on their treaty policy wordings. For example, it is now much more challenging to include Strikes, Riots and Civil Commotion (SRCC) cover for reinsurance programmes, although most Downstream insurers' portfolios would suggest that they are not significantly exposed for this risk above their retentions. Reinsurers have also imposed the more restrictive Cyber exclusion clause LMA 5400 (which excludes the malicious event) as opposed to the NMA 2195, which buys the malicious event back on all placements, whereas in the past the NMA 2195 had been able to be used for the most attractive business. Logic suggests that the direct market will be forced to mirror the terms of their reinsurance treaties and impose the same exclusions on their direct business.

In such a market, where the full effects of the reinsurance renewal season have yet to be made manifest, brokers have had to keep a very close eye on individual insurers and know exactly who to approach to secure the most favourable terms. What will also be critical as 2023 progresses is whether regional capacity that has been vital to placement structures for buyers in some parts of the world (especially the Middle East) will still be in play for the remainder of 2023.



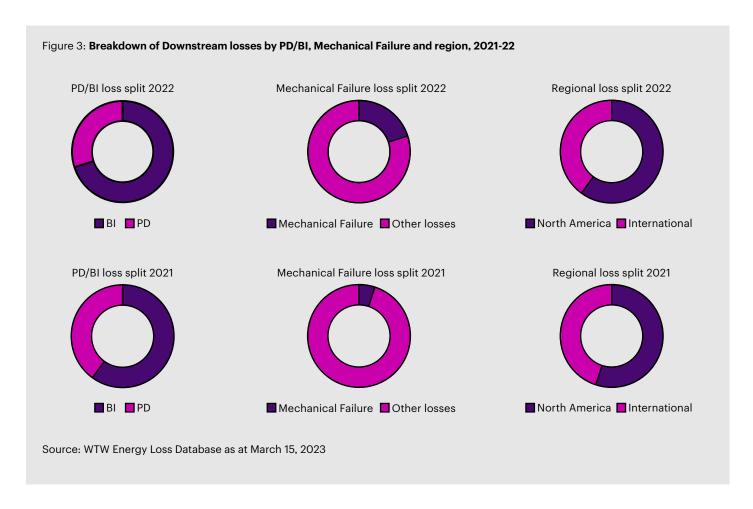
Recent major losses wipe out recent profitability

It is not just the punitive reinsurance terms that are concerning Downstream insurers; the recent loss record has also taken a significant turn for the worse. In recent Reviews we have spoken of a possible improvement in the loss record for this line of business; however, one glance at our updated database shows a distinct deterioration, particularly for 2022 (see Figure 2 above).

It can be seen from Figure 2 that the optimism generated by the 2020 loss result has now evaporated, as our overall database total now stands at nearly US\$7 billion, a record for this century with the exception of 2005, the year of the record hurricane season (Katrina, Rita and Wilma). However, this does not mean that 100% of these losses have been paid by the insurance market; these loss totals reflect gross losses (both insured and uninsured) supplied to our database by various loss

adjusters. Some of these losses will be retained, some will be paid by the industry mutual Everen and some of them may well end up being settled for a smaller amount once the claims process has been finalised. Be that as it may, insurers are almost certainly going to be paying out significantly more in claims than they will be receiving in premiums, as our latest global estimate suggests a small decline in the overall premium pot to US\$3.4 billion.

We have itemised the major losses for both 2021 and 2022 in Figures 4 and 5 on pages 51 and 52 for reference purposes, but a simple listing of the losses does not in itself tell the full story of why the loss record has deteriorated to this extent. However Figure 3 overleaf shows three reasons that we think are mainly responsible for the figures for the last two years.



Three discernible trends can be borne out from Figure 3. The first is the continuing increases in the overall share of the loss total taken by BI losses; in 2021 BI losses represented 61.58% of to the total, but that has increased to 70.94% in 2022, which may well be attributable to the rise in fossil fuel prices since the beginning of the Ukraine conflict. Secondly, there has also been a notable increase in the portion of the overall loss total taken by mechanical failure losses, from just 4.96% in 2021 to 20.50% in 2022. Without wishing to oversimplify matters, we do think there is some correlation between these statistics and the increased refinery and plant utilisation rates we have seen as the global economy emerged from the COVID-19 pandemic; it seems that the ramp up on production, from dormant or near dormant utilisation. may well have contributed to the increased loss activity. Finally the market will have noticed a continuing increase in the share of the loss total pertaining to the North American region, from 52.68% in 2021 to 59.19% in 2022. As we will discuss later, this trend is having a marked effect on the rating increases now being charged by the market for risks from this region, compared to the rest of the world.

What effect have these losses had on Downstream profitability? As ever, without access to individual insurer figures no market observer is in a position to produce definitive proof one way or another. However, Lloyd's most recent Onshore Energy figures (see Figure 6 on page 53) do suggest that this portfolio probably remains in unprofitable territory. It is generally agreed that these Incurred Ratios (net premiums versus paid and outstanding claims) need to be below 50% if overall profitability is to be achieved, if reinsurance and other operating costs are to be factored in. It can be seen from the mature years (i.e. excluding 2022) that the Ratio has never been much below 50% over the last 12 years or so; given the current WELD figures for 2022, we can expect the final figure for last year to be well in excess of 50% once again.

Figure 4: Downstream losses excess of US\$50 million, 2021

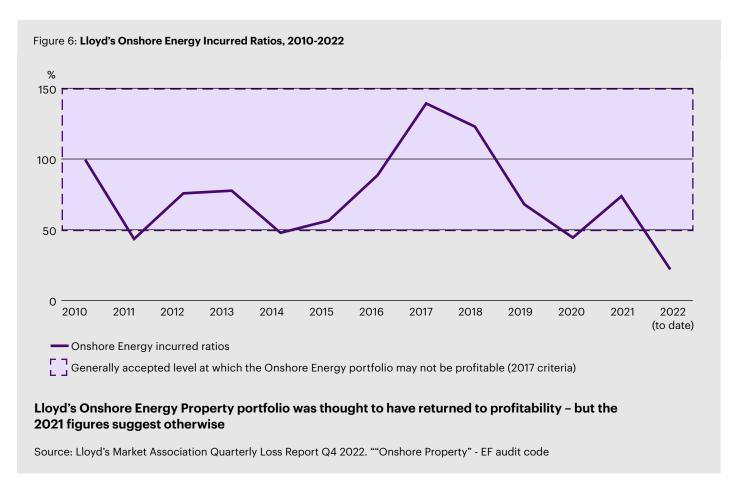
Туре	Cause	Region	PD US\$	BI US\$	Total US\$
Olefins	Ice/snow/freeze	North America	202,328,100	621,433,621	823,761,721
Olefins	Windstorm	North America	40,000,000	341,000,000	381,000,000
Olefins	Supply interruption	Europe	81,000,000	169,000,000	250,000,000
Fertilizer/agrochemical	Fire no explosion	North America	14,000,000	188,300,000	202,300,000
Chemical	Fire no explosion	North America	160,000,000	18,000,000	178,000,000
Olefins	Unknown	Middle East	14,297,950	146,876,712	161,174,662
Pipeline	Flood	Europe	17,000,000	130,000,000	147,000,000
Petrochemical	Fire no explosion	North America	20,000,000	126,000,000	146,000,000
Gas processing	Fire + explosion/VCE	Eurasia	140,000,000	0	140,000,000
Secondary process	Unknown	Eurasia	0	130,000,000	130,000,000
Pipeline	Anchor/jacking/trawl	North America	73,300,000	30,500,000	103,800,000
Refinery	Lightning + fire	Asia Pacific	100,000,000	0	100,000,000
Olefins	Ice/snow/freeze	North America	56,595,656	41,427,000	98,022,656
Petrochemical	Ice/snow/freeze	North America	24,000,000	65,000,000	89,000,000
Fertilizer/agrochemical	Misc	Middle East	19,968,102	67,235,579	87,203,681
Olefins	Unknown	Middle East	45,000,000	42,100,000	87,100,000
Refinery	Ice/snow/freeze	North America	27,000,000	58,277,981	85,277,981
Isomerisation	Fire no explosion	North America	10,000,000	74,880,000	84,880,000
Chemical	Windstorm	North America	5,350,000	77,667,500	83,017,500
Pipeline	Flood	North America	74,990,000	7,190,000	82,180,000
Olefins	Mechanical failure	Latin America	0	80,982,000	80,982,000
LNG	Unknown	Latin America	8,515,329	72,207,578	80,722,907
Plant	Ice/snow/freeze	North America	80,000,000	0	80,000,000
GTL	Fire + explosion/VCE	Caribbean	12,500,000	62,000,000	74,500,000
Petrochemical	Fire no explosion	Middle East	17,158,775	55,073,972	72,232,747
Inorganic Chemicals	Supply interruption	North America	20,750,000	50,000,000	70,750,000
Inorganic Chemicals	Fire + explosion/VCE	Africa	2,400,000	64,440,000	66,840,000
Secondary process	Faulty design	Europe	10,000,000	56,000,000	66,000,000
Olefins	Supply interruption	Middle East	30,453,000	33,800,000	64,253,000
LNG	Unknown	Middle East	12,599,642	51,000,000	63,599,642
Chemical	Ice/snow/freeze	North America	15,535,916	46,151,621	61,687,537
Secondary process	Fire + explosion/VCE	North America	25,300,000	35,750,000	61,050,000
Olefins	Ice/snow/freeze	North America	54,000,000	0	54,000,000
LPG	Ice/snow/freeze	North America	11,000,000	42,000,000	53,000,000
Crude unit	Fire + explosion/VCE	South Asia	50,000,000	0	50,000,000

Source: WTW Energy Loss Database as of March 13 2023 (figures include both insured and uninsured losses)

Figure 5: Downstream losses excess of US\$50 million, 2022 (to date)

Туре	Cause	Region	PD US\$	BI US\$	Total US\$
Olefins	Ice/snow/freeze	North America	202,328,100	621,433,621	823,761,721
Olefins	Windstorm	North America	40,000,000	341,000,000	381,000,000
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No threat to established market leaders

It seems a while ago now but back in the summer of 2022, we did detect sings of competition being generated in the market as it seemed that the Downstream loss ratio had improved. However, this dynamic did not last long; as soon as two major losses from North America were reported to the market (see Figure 5 on the previous page) this competition rapidly dissolved, to be replaced with an overriding concern not to be seen to be "rocking the boat". As a result, we are seeing a retrenchment in almost every area of the Downstream portfolio, with insurers preferring to focus on negotiating increased line sizes for preferred business rather than to compete directly against the incumbent market. And although we understand that some new ventures are planned to enter the market in the near future, it is not expected that these new ventures will in any way add to the existing competitive pressures in the market.

What would it take for a completely new set of competitors to challenge the existing market orthodoxy? From our discussions in the market, nobody can be entirely sure. However, given the recent loss record it would seem to be very unlikely that any serious threat to the existing market leaders will emerge in any form in the near future.

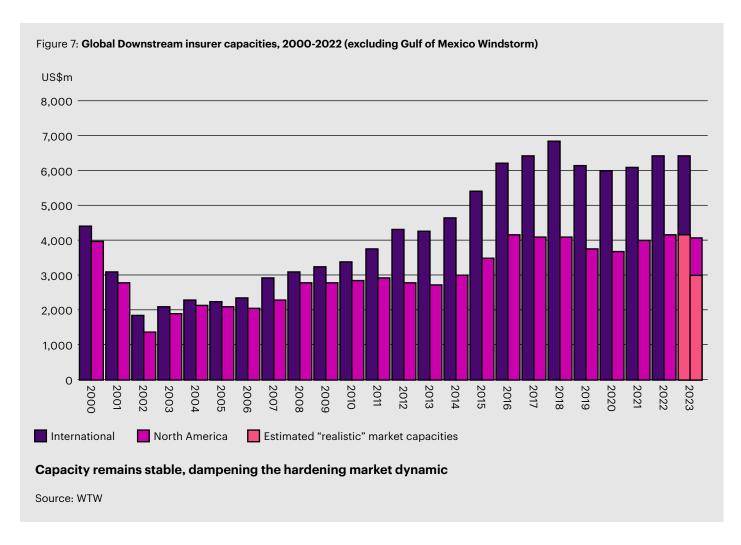
Concerns over impact of inflation on declared values

In our November 2022 Update we highlighted the challenge of submitting accurate valuations to insurers at a time of increasing inflationary pressures. However,

the reality is that to the best of our knowledge very few buyers have since elected to have independent valuations carried out on their assets to ensure that they are being insured for the correct amount. Moreover, at a time of economic volatility, it is difficult to predict where inflation levels will be in say two years' time, making the possible calculation of future BI losses in particular somewhat challenging. As always, obtaining an accurate understanding of the overall exposure is not an exact science, but those buyers who continue submit outdated value data to their insurers, in respect of both Property and Business Interruption, may be in for something of a shock.

To say that this issue is making insurers apprehensive is something of an understatement; as a result, there is now a real danger that the market may over-react to submissions that repeat existing value schedules by not only charging a disproportionate rating increase but also apply average in the event of a loss, thereby reducing the overall claim figure. This challenge for buyers has not been helped by either the maintenance of inflationary pressures around the world nor the deterioration of the Downstream loss record and provides an extra rationale for the market to impose even further rating rises across the market.

We would therefore continue to advise buyers to do all they can to ensure that the values submitted to insurers are as up-to date and accurate as possible. While it is appreciated that circumstances do not always allow this to happen overnight, in the long-term buyers are



not likely to gain from a policy of seeking to keep the values submitted as low as possible to limit any increase in rating levels. Insurers are now focusing on this issue intently and are unlikely to hesitate to apply punitive rate increases where they believe that values have not been updated.

Senior management scrutiny - less harmonization of placements

Another positive development that we reported in our November 202 Update was the increasing ease with which brokers were being able to align their programmes, enabling a much more consistent set of terms and conditions to be presented to the buyer. Following the impact of both the recent reinsurance market renewal season and the deterioration of the loss record, we have to report that this dynamic has faded significantly; instead, individual underwriters are now more concerned about "stepping out of line" and failing to adhere to management directives. As a result, brokers have found it particularly challenging to persuade underwriters to follow the terms and conditions of the market leaders; just as was the case from 2018 to 2021, the increased interest from senior management is ensuring that the hardening dynamic in the market is once more being accelerated.

Positive factors

Despite these challenging market dynamics, there are now some signs that insurers will not have everything entirely their own way in the months ahead. So what are the reasons why buyers can take some signs of encouragement from recent developments?

Current capacity levels maintained

A glance at Figure 7 above shows an interesting trend that continues to act as a break on the current hardening dynamic — the fact that capacity levels for Downstream have remain remarkably consistent over the last five years or so. Indeed, if we look back to the beginning of the century, and the dramatic collapse of capacity following the end of the old 1990s soft market and the events of 9/11, we can see that this has by no means always been the case. Even as recently as ten years ago, total capacity was only a shade over US\$4 billion, and yet only eight years later a further US\$2.8 billion had been added. Since then capacity levels have been relatively consistent, and for 2023 we can advise theoretical levels of US\$6.2 billion for International business, with US\$4 billion for North American risks. In realistic terms (i.e. what insurers will provide in practice), we still believe that US\$4 billion is available for International risks and US\$3 billion for North American risks.

Why does this matter? Simply because capacity needs a return on capital, and that places an obligation on insurers to ensure that there is a minimum premium flow from the deployment of this capital to make the investment worthwhile. In general terms then, insurers cannot simply walk away from the business and not provide a return on capital, and so premium income targets are likely to be maintained — or even increased. This in turn is likely to ensure that there will remain a healthy appetite within the market for the most wellregarded business at least.

A "new normal" for refinery and other plant volatility

We have shown evidence earlier in this article that some of the increased level of losses might be attributable to mechanical failures at several plants following the acceleration of utilisation rates post COVID-19 and the escalation of the conflict in Ukraine. However, as this Review went to press oil and gas prices have seemed not only to have stabilised but have found a significantly lower level than the extraordinary highs reached early last year, now that the initial shock following the beginning of the conflict. Logic would suggest that if prices continue to stabilise at this lower level, then refinery and other plant utilisation rates will also begin to follow suit, which may in turn lead to a return to more normal levels of loss frequency and severity. This in turn should encourage insurers to offer more preferential terms in exchange for increased premium income.

Excellent overall insurer results

A further factor which may come into play as the year progresses is the general positive overall underwriting results reported by major insurers in 2022. Although as we have seen the Downstream sector itself is very unlikely to produce an overall profit for 2022, the same cannot be said for the insurers who make up the market in more general terms. We have seen Combined Ratios well beneath 100% reported from a number of key (re)insurers in recent weeks, which should help prompt more aggressive premium income strategies. At the very least, it should serve to prevent more didactic management approaches from being adopted that would have served to accelerate the existing hardening dynamic still further.

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Some attractive programmes still over-placed

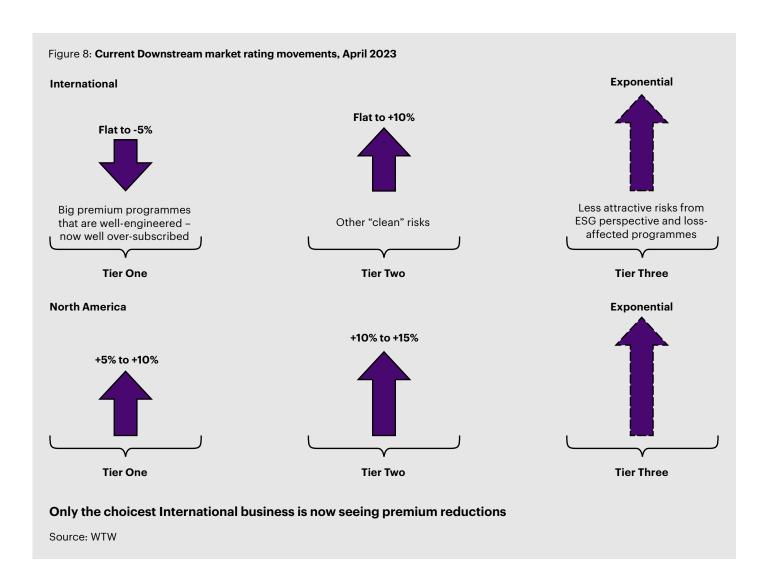
Despite the overall hardening market conditions, it must be remembered that the very best programmes, featuring well-engineered risks, loss-free records and significant premium income, remain over-subscribed from last year. As ever, premium attracts capacity and as we pointed out in our November 2022 Update, the market continues to differentiate strongly in favour of the best business. From our own review of our current programmes, we can see that there is already some underwriting "slack" that can be taken up by brokers without materially affecting these programmes' current terms. Given the market's appetite for such business, brokers will use all their market acumen to secure insurers participation in a wider range of programmes should this business be seen to have contributed to meeting 2023's premium income targets.

Everen limit increase may add to competitive pressures

Many readers will be aware of the increase in the Everen (formerly OIL Insurance Limited) Property limit to US\$450 million from US\$400 million in 2022. While it might be reasonable to assume that all members would take advantage of the increase in limit, it appears that this has not proved to be the case in at least some instances, as certain members continue to elect to declare lower limits to Everen than the US\$450 million maximum. Commercial market insurers may therefore face an interesting dilemma should Everen members react to the more challenging market conditions and elect to retain more of their risk within the mutual than they do at present. At the very least, it represents an alternative that may well secure increased leverage to limit the extent of insurers' drive towards increased rating levels.

Pressure to meet premium targets later in the year

All of the above factors may help to ease the hardening process. However, a factor of even greater significance may well materialise later in the year, as the choicest business comes up for renewal and opportunities to secure increased premium income become more limited. One truism that is well appreciated by the market is that their increased reinsurance costs have to be paid for somehow; while they will be hoping this can be achieved simply by applying rate rises on their existing portfolio, history would suggest that their appetite for premium income tends to increase as the year progresses and targets still need to be met. There are therefore good reasons to suggest that, should the 2023 loss record turn out to be more benign than for the past couple of years, insurers may be prepared to soften their current underwriting stances somewhat to secure the premium income that they need.



Current rating levels

Where do all these competing factors leave current rating levels? Figure 8 above outlines, in very general terms, what buyers can expect from the market in April 2023.

For the reasons that we have already outlined, it is now important to distinguish between North American business and "International" (i.e. non-North American) business. Not only has the North American loss record been particularly disappointing over the last two years but there remains crucial domestic market capacity in certain regions such as the Middle East and Asia that allow brokers to drive more competitively priced programmes. This is the reason why the most wellregarded programmes can still be placed at improved terms from last year — despite the overall prevailing hardening market dynamic.

It can be seen that the market "trifurcation" into three tiers has been maintained. Other than the most soughtafter business (Tier One) we have identified a second Tier that consists of reasonably well-regarded business that perhaps does not offer the same degree of premium income and the genuine Tier One business. This Tier will almost universally have to pay more for their programmes this year, albeit not at the kind of punitive rate rises that we have seen at the onset of the hard market in 2018-19.

For the third Tier, which includes loss-impacted programmes as well as unfavourably regarded business form an ESG perspective, we have been unable to provide a premium increase range, as so much will depend on the buyer's relationship with the market, the extent of any losses and the extent of the buyer's journey towards the energy transition. However, those buyers should expect a much tougher renewal than they may have experienced in the recent past.

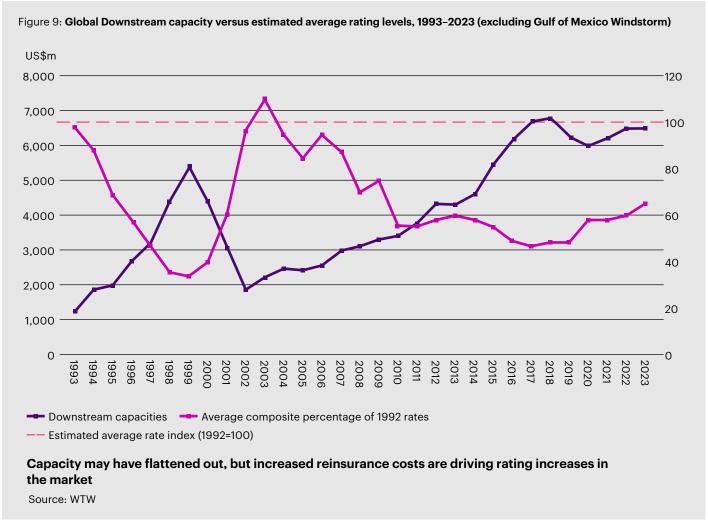


Figure 9 above puts today's market into a comprehensive historical context. It can be seen that the most recent years (since 2010) have been characterised by much less volatility than was experienced in the heady days of the 1990s soft market, the rapid hardening after 9/11 and the equally rapid softening in the latter part of the first decade of the new century. At least today's buyers do not have to cope with such volatility, and we certainly don't expect a return to it any time soon.

However, our chart does show increased rating levels at a time when capacity is still plentiful. History suggests that this state of affairs cannot be sustained indefinitely; although insurers can point to increased reinsurance costs, heavier claims records and an unprofitable year to justify increasing rating levels, there may come a time when capacity providers require a better return, while buyers may decide that there are now other ways to manage their risk than the simple purchase of insurance.

Most insurers in the market know this all too well. They are already aware of a handful of major energy companies that have elected to retain their Downstream risk rather than to continue with a Downstream insurance programme, and as alternatives to conventional insurance become more financially realistic, there is always the possibility that others may elect to follow in their wake. Of course, should others exit the market they

will almost certainly be Tier One buyers - buyers that the market usually relies on to enable then to write a worthwhile portfolio.

So will the Downstream market overplay its hand as the rest of 20023 unfolds? Insurers will be hoping that they can rely on their most coveted long-term relationships to ensure that this does not materialise, even as they seek to impose still further rating rises on their clients.



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