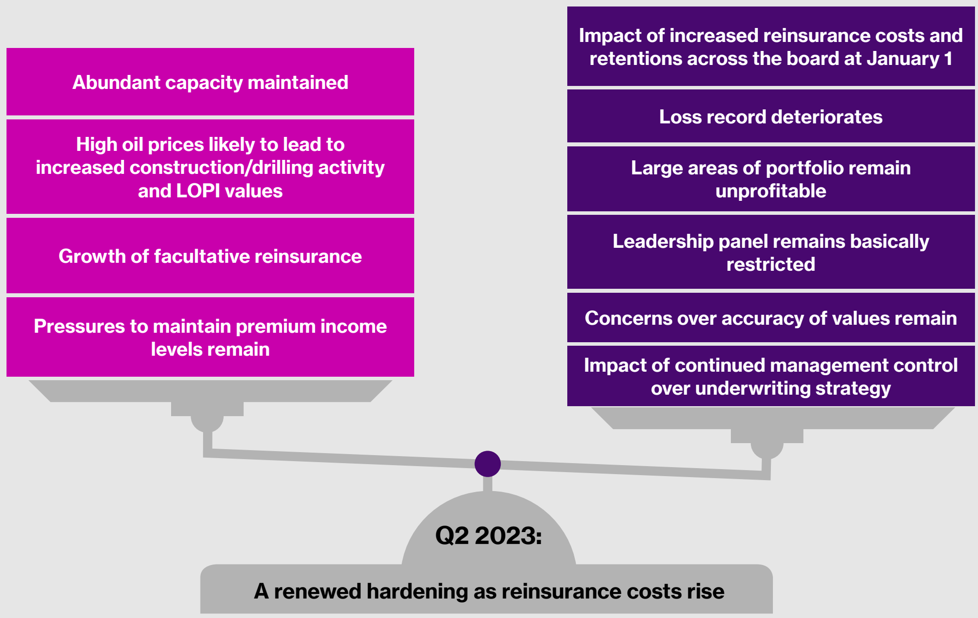
Global Upstream: An uncertain outlook as reinsurance costs bite

Introduction: confusing dynamics

As is so often the case in the global Upstream market, a lot can happen within a very short space of time. In November 2022, when we published our Energy Market Review Update, we predicted a renewed market appetite for those programmes that promised the best returns for insurers in 2023. And although we looked forward to the reinsurance renewal season at January 1 with some trepidation, not many in this market could have foreseen the ferocious nature of this season, nor indeed the lateness with which some direct insurers were able to finalise their reinsurance treaty protections.

As a result, we must now report a confusing set of dynamics operating in this market, which we have outlined in Figure 1 below. As ever, there are some trends which pertain to the advantage of the buyer (in pink) and others that do so for the insurer (in purple). However, astute readers of our Review will have spotted that the balance of these “kitchen scales” has changed again - this time, once more in favour of the insurance market. While we had hoped to be able to comment on a brighter picture from a buyer’s perspective, we must instead focus on the reasons for this renewed market hardening and what buyers can do to avoid its worst effects. Let us first focus on these negative factors before offering some reasons why we don’t think market conditions will be quite as dire as some insurers may be suggesting.

Figure 1: **Confusing dynamics — the Upstream underwriting environment, March 2023**



Increased reinsurance costs and higher retention levels have resulted in a renewed hardening of market conditions

Source: WTW

Negative factors

The impact of the January 1 reinsurance market season

The reinsurance market renewal season has impacted the Upstream portfolio in three ways:

- **Pricing:** it is important to note that reinsurance treaty costs are generally between 30-50% of Upstream insurers' overall costs. In general terms, January 1 reinsurance treaty prices across all lines of business have increased across the board, by a minimum of 10% for the best regarded business but by considerably more - upwards of 30% - for Nat Cat-exposed business. This is clearly going to have a knock-on effect on sub-sectors of the Upstream market such as Gulf of Mexico Windstorm, which will doubtless also feel the recent withdrawal of the MRS Syndicate from this line of business. We believe that most Upstream underwriters need an increase on their portfolio just to stand still (especially given the recent increased inflation levels), but much will depend on how reinsurance costs will be allocated within each underwriting operation, as well as the degree to which individual insurers have bought "specific" Upstream "towers" of reinsurance protection as opposed to an overall "whole account" reinsurance purchase (where the Upstream portfolio contributes to a common reinsurance treaty cost together with harder-hit areas of an insurer's overall portfolio, such as Political Violence, Aviation and Construction). Those insurers that have adopted the latter approach will almost certainly find that their reinsurance costs have been even steeper. There have also been some significant regional differences in pricing structures, with locations such as the Middle East achieving much more modest increases than Nat Cat-exposed areas such as the US.
- **Retention levels:** of even greater significance than the price increases have been the dramatic increase in retention levels - sometimes to double those of 2022. This is going to have a profound effect on pricing levels for small to medium sized business which will now fall entirely within most insurers' retentions, although as we will explain later there is the potential for this effect to be lessened by the purchase of facultative reinsurance. In the meantime, Upstream insurers have been faced with a stark choice – either increase retention levels significantly or have a substantial rise imposed on treaty reinsurance costs. Most have had no option but to elect the former, or a combination of the two.

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- **Difference in Conditions:** a final challenge for Upstream insurers has been the imposition of more restrictive policy clauses imposed by their reinsurers, which has left several of them wondering if some aspects of their direct business written in 2022 are no longer covered by their reinsurance treaties. These include obvious targets such as Russian and Belarussian located assets, but also state-sponsored Terrorism, which has been a matter of intense debate within the Upstream market in recent months (see separate breakout box below). Should this prove to be the case, it is possible that they are currently running a net portfolio for some exposures on programmes incepting before January 1 but where losses occur after the same date. The only silver lining from the direct market's perspective is that fears that Russian overseas interests would also be excluded have receded.

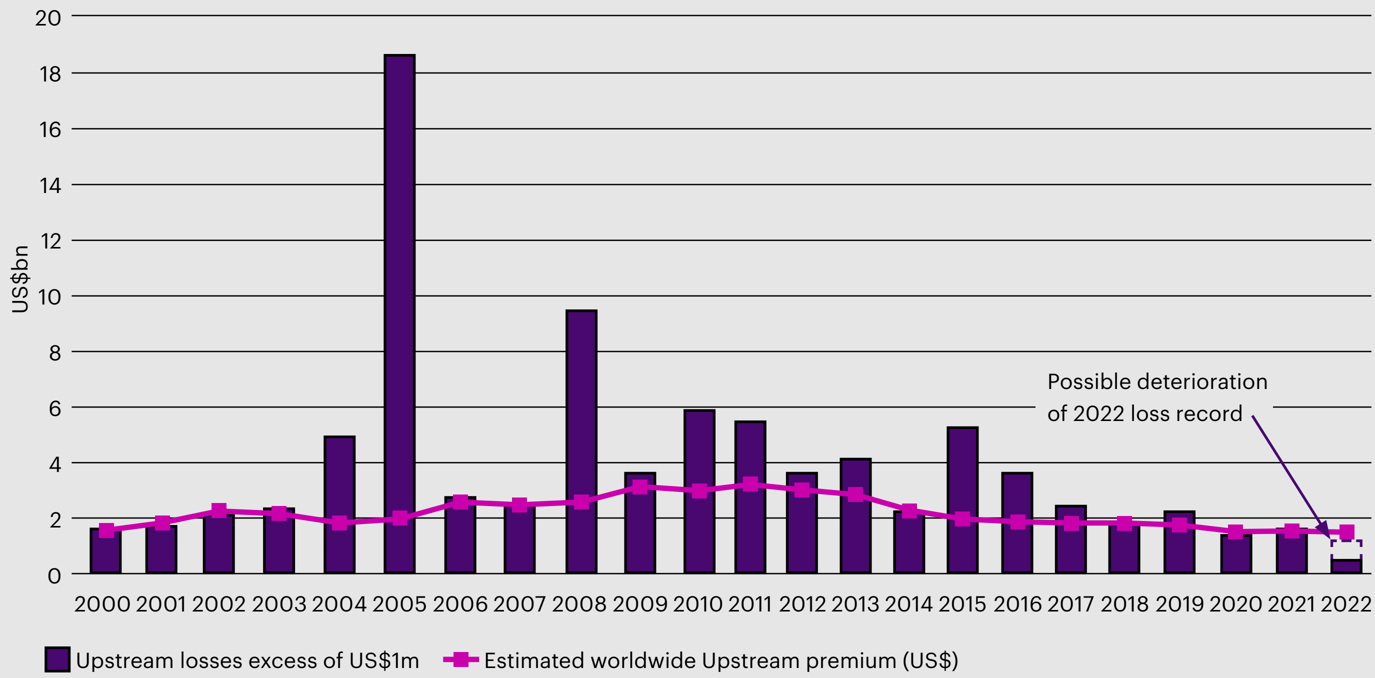
The reinsurance market Terrorism exclusion debate

Following the recent explosions relating to the Nordstream pipeline, and the potential Ukraine Political Violence losses, there has been a complete review of London market underwriters' portfolios as to how they are exposed to Terrorism and War. Primarily they reviewed assets located in Russian waters but with a focus on European infrastructure in the North Sea, the Black Sea and other offshore European locations. The reason for this review was twofold: one, because of management pressures and two, because a number of direct underwriters had already engaged with their reinsurers quite early in their treaty renewal process at the end of October. They found that they were being asked a significant number of questions from their reinsurers about their exposure to the Nordstream incident, so felt that they needed to be more pro-active on this issue. As a result some insurers decided to review their Terrorism policy wording and concluded that the established Addendum 42 b buyback and amended War clauses were no longer fit for purpose, given the perceived exposure to state-sponsored Terrorism.

Having appreciated that the existing Reinsurance market Terrorism clauses allowed reinsurers on average 14 days to cancel the policy, they were concerned that they might not have any reinsurance for War and Terrorism from January 1, and so realised that they in turn needed to be able to cancel their own policies a lot quicker.

The Joint Natural Resources Committee has now issued a new clause which makes it clear that state-sponsored Terrorism would no longer be covered. Again, there has been some pushback from brokers as there are challenges relating to such issues as cargo and contractor risks. As this Review went to press, discussions were ongoing regarding the issuance of an amended version of the original clause.

Figure 2: **WELD Upstream Energy losses 2000–2022 (excess of US$1m) versus estimated Upstream premium income**



How many losses below US$1 million are affecting the portfolio in 2022?

Source: WTW/WTW Energy Loss Database as of March 14 , 2023 (figures include both insured and uninsured losses)

The impact of these developments on the Upstream market is not difficult to imagine. What has made the situation even more challenging from a broker's perspective is that it is still very uncertain as to how this is all going to play out in terms of rating rises on direct business. Much will depend on what type of reinsurance has been purchased, and even more critically, how reinsurance costs have been allocated across the various lines of business within each insurer.

The deterioration of the Upstream loss record as premium income levels stall

Compounding the effect of the hardening reinsurance market has been the deterioration of the Upstream loss record — at a time when premium income is also faltering. Figure 2 above shows how the 2021 loss record in particular has recently developed; in last year's Review we commented on how benign 2021 had been looking, but our database now reveals several 2021 losses in excess of US$100 million which had not been advised to the database this time last year (see Figure 3 overleaf).

Furthermore, Figure 2 also shows how premium income estimates — which we had originally thought would be increasing in the aftermath of the COVID-19 pandemic — have actually decreased for 2022. Some of this can be put down to the removal of a significant amount of premium following the onset of the Russia-Ukraine conflict, some from the adoption of increased self-insured retentions and some from the reduced CAPEX budgets of many companies as they transition towards other sustainable forms of energy. Whatever the reason, the effect has been to reduce overall global Upstream premium levels to approximately US$1.5 billion. Readers will appreciate that it would only take a medium sized loss, let alone a major loss along the lines of the Deepwater Horizon, Enchova or Piper Alpha tragedies, to obliterate the entire Upstream global premium income pool, so perhaps it is not surprising that this is increasing the market's apprehension as more losses are reported.

Figure 3: **Upstream losses excess of US$10 million, 2021**

Type	Cause	Region	PD US$	OEE US$	BI US$	Total US$
Platform	Blowout + fire	Asia Pacific	66,000,000	163,000,000	0	229,000,000
Jackup	Leg punch through	Asia Pacific	136,000,000	0	0	136,000,000
Rig	Windstorm	South Asia	118,000,000	0	0	118,000,000
FPU	Mechanical failure	Asia Pacific	102,000,000	0	0	102,000,000
Well	Blowout no fire	North America	0	70,000,000	0	70,000,000
Well	Blowout no fire	North America	0	70,000,000	0	70,000,000
Well	Blowout no fire	Africa	0	59,250,000	0	59,250,000
Platform	Windstorm	North America	54,000,000	0	0	54,000,000
Platform	Windstorm	North America	38,000,000	0	0	38,000,000
Well	Blowout no fire	North America	0	36,500,000	0	36,500,000
FPSO	Unknown	Europe	24,554,560	0	11,000,000	35,554,560
FPSO	Unknown	Latin America	31,000,000	0	0	31,000,000
Pipeline	Anchor/jacking/trawl	Asia Pacific	29,000,000	0	0	29,000,000
Well	Fire + explosion/VCE	North America	28,000,000	0	0	28,000,000
Drillship	Windstorm	North America	27,000,000	0	0	27,000,000
Pipeline	Faulty work/op error	Asia Pacific	23,000,000	0	0	23,000,000
Well	Blowout no fire	Asia Pacific	0	22,000,000	0	22,000,000
SSCS	Impact	Europe	21,433,000	0	0	21,433,000
Pipeline	Corrosion	North America	21,300,000	0	0	21,300,000
Platform	Faulty work/op error	Middle East	19,500,000	0	0	19,500,000
Platform	Supply interruption	Europe	0	0	16,400,000	16,400,000
Well	Mechanical failure	Asia Pacific	16,000,000	0	0	16,000,000
Land rig	Collapse	Eurasia	15,000,000	0	760,000	15,760,000
FPSO	Unknown	Europe	15,500,000	0	0	15,500,000
Equipment	Mechanical failure	North America	15,200,000	0	0	15,200,000
FSU	Unknown	South Asia	4,500,000	0	10,300,000	14,800,000
Well	Blowout + fire	Norht America	0	14,000,000	0	14,000,000
SSCS	Heavy weather	Europe	13,500,000	0	0	13,500,000
Pipeline	Unknown	Middle East	12,500,000	0	0	12,500,000
FPSO	Unknown	Latin America	12,000,000	0	0	12,000,000
Pipeline	Unknown	Europe	11,500,000	0	0	11,500,000
Well	Blowout + fire	North America	0	11,500,000	0	11,500,000
FPSO	Unknown	Europe	11,200,000	0	0	11,200,000
Platform	Windstorm	North America	11,200,000	0	0	11,200,000
Pipeline	Unknown	Asia Pacific	10,000,000	0	0	10,000,000
Pipeline	Anchor/jacking/trawl	Asia Pacific	10,000,000	0	0	10,000,000
Well	Blowout no fire	North America	0	10,000,000	0	10,000,000

The 2021 loss record has deteriorated recently – at a time of decreasing premium income

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

Moreover, it looks as if the loss record for 2022 might also be heading in the same direction. Although Figure 4 overleaf shows only one loss in excess of US$50 million to date, we are aware of at least one major Offshore Construction loss in the Black Sea which we understood could be as high as US$400 million, and two sizable well control incidents in North America, and inevitably (at least to some extent) the overall figure will deteriorate in the same way as 2021 has done. It should also be pointed out that our database only records losses in excess of US$1 million; it is very possible that losses beneath this figure will add to the overall detriment of insurer's own figures.

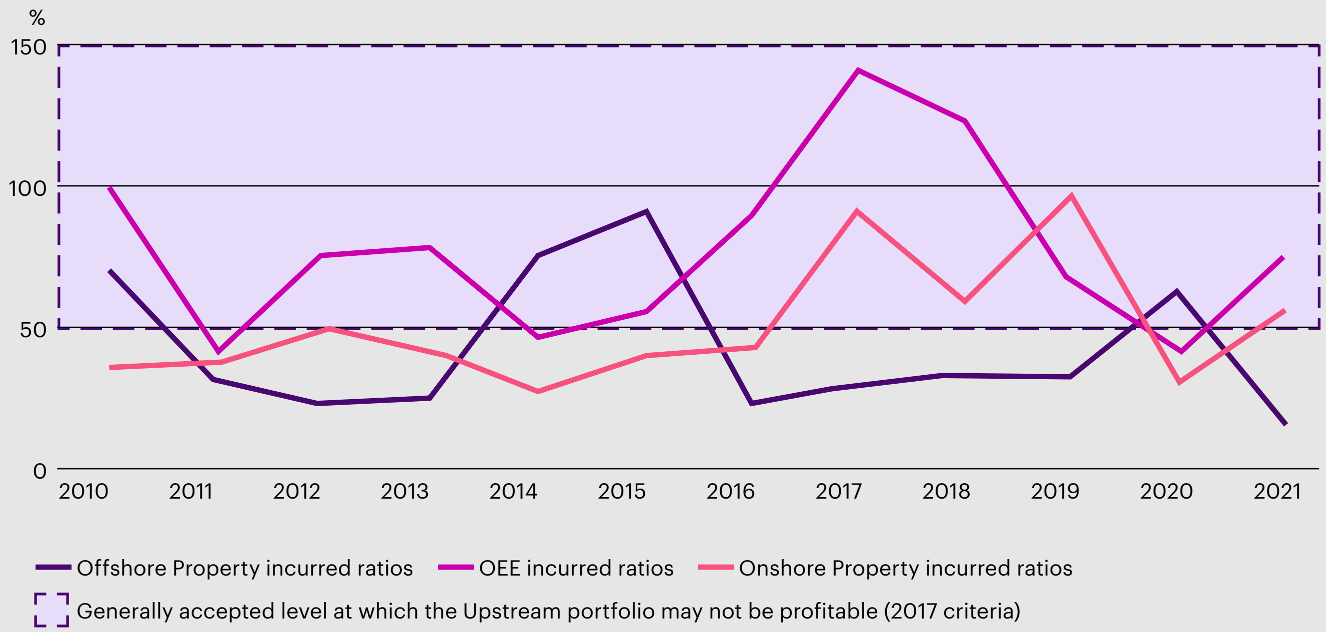
Figure 4: **Upstream losses excess of US$10 million, 2022 (to date)**

Type	Cause	Region	PD US$	OEE US$	BI US$	Total US$
Well	Unknown	Africa	60,000,000	0	0	60,000,000
Crane/pipe barge	Mechanical failure	Europe	47,000,000	0	0	47,000,000
SSCS	Anchor/jacking/trawl	Middle East	40,000,000	0	0	40,000,000
SSCS	Unknown	Europe	17,000,000	0	20,500,000	37,500,000
Platform	Mechanical failure	Europe	14,500,000	0	20,000,000	34,500,000
Well	Blowout no fire	Latin America	0	29,000,000	0	29,000,000
Well	Blowout + fire	North America	6,000,000	20,000,000	0	26,000,000
Equipment	Fire no explosion	North America	19,000,000	0	0	19,000,000
Platform	Unknown	Asia Pacific	15,000,000	0	0	15,000,000
Well	Blowout no fire	North America	0	14,500,000	0	14,500,000
Well	Blowout no fire	North America	0	11,000,000	0	11,000,000
FLNG	Mechanical failure	Asia Pacific	10,000,000	0	0	10,000,000
Pipeline	Pipelaying/trenching	Asia Pacific	10,000,000	0	0	10,000,000
Platform rig	Impact	Asia Pacific	10,000,000	0	0	10,000,000

No losses above US$100m have been reported to date in 2022, but we expect at least another US$500 million of losses to be added to the database later in the year

Source: WTW Energy Loss Database as of March 14, 2023 (figures include both insured and uninsured losses)

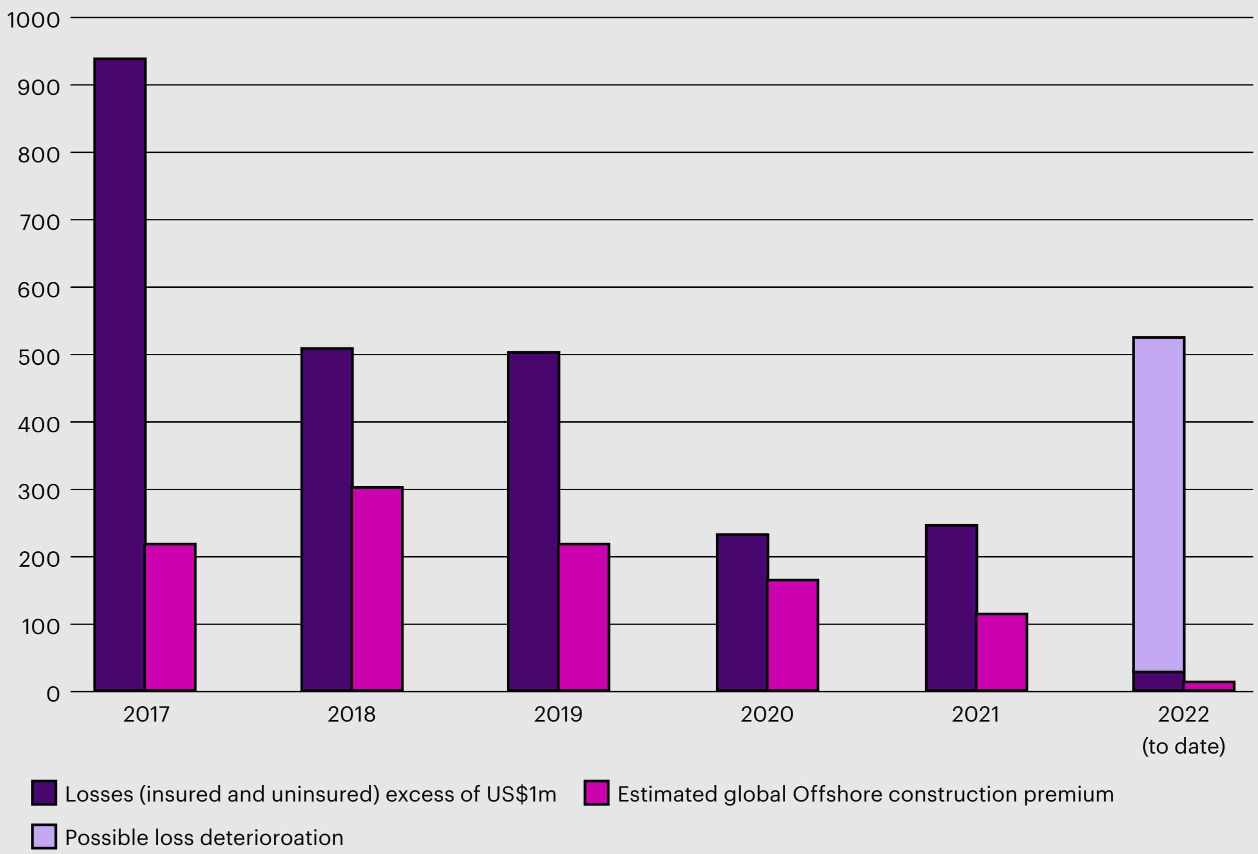
Figure 5: **Lloyd's Upstream Incurred Ratios, 2010-21**



Lloyd's OEE and Onshore Property Incurred Ratios have moved further into unprofitable territory

Source: Lloyd's Market Association Quarterly Loss Report Q4 2022. "Offshore Property" – combination of ET/EC/EM/EN Audit Codes "OEE" – combination of EW, EY and EZ Audit Codes. "Onshore Property" - EF audit code.

Figure 6: **Offshore Construction losses compared to estimated Offshore Construction premium income, 2017-22**



This sub-class has been thrown into turmoil by the advice of a major pipeline loss offshore Turkey

Source: WTW/WTW Energy Loss Database as at February 13, 2023

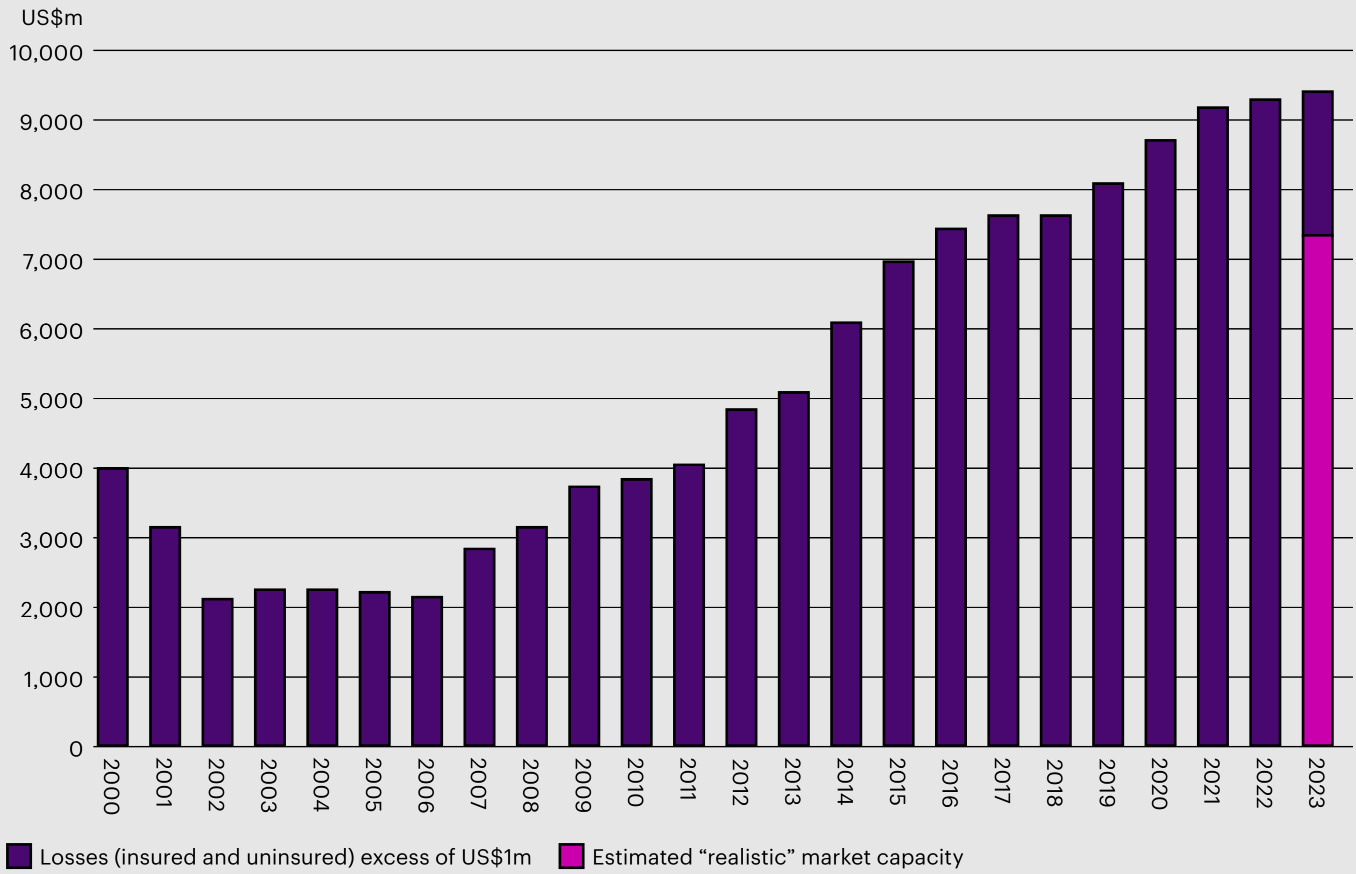
Large areas of the portfolio remain unprofitable

What effect have these losses had on recent profitability levels? To obtain an impartial view, Figure 5 on the previous page shows the latest Incurred Ratios (net premiums versus paid and outstanding claims) as reported to Lloyd's for the fourth quarter of 2022 (which of course do not include individual reinsurance costs). The shaded area above 50% represents potentially unprofitable underwriting results, given the increasing costs of reinsurance and other operating costs. It can be seen that while the Offshore Property portfolio potentially strayed into unprofitable territory with a 63% Incurred Ratio during 2020, the figure for 2021 (now mature) shows a heathy return to an Incurred Ratio of 18% for this well-regarded sub-sector. However, the same can hardly be said for OEE and Onshore Property business, which have moved into +50% territory for 2021. And if the last 12 years are reviewed as a whole, it can be seen that Onshore Property (which includes Midstream assets such as pipelines and LNG plants) has hardly ever slipped below the 50% figure, whereas apart form a brief spell in the middle of the previous decade the Offshore portfolio has consistently made money, apart from 2021.

These statistics do much to explain the continuing polarisation of the overall Upstream portfolio, with the choicest offshore operating programmes attracting far greater interest than lower value, onshore based drilling and midstream operations.

However, what this chart does not show is the continued unprofitability of the Offshore Construction portfolio (which is wrapped into the overall Offshore Property figures). Figure 6 above shows the current relationship between the Offshore Construction losses recorded by our database and the estimated premium income for this sub-sector of the Upstream portfolio. If the Black Sea loss recently reported to the market is factored into the 2022 figures already on our database (although this loss may fall into a prior year of account), it clearly indicates that this sub-sector remains inherently unprofitable — especially as the quantum of the loss falls within Upstream insurers' retention levels. Smaller projects will also become increasingly difficult to place due to the lack of premium income. However, not all Upstream insurers will be affected by this; many of them essentially do not write Offshore Construction and their involvement is often limited to small lines only.

Figure 7: **Upstream Operating insurer capacities 2000-2023 (excluding Gulf of Mexico Windstorm)**



Both theoretical and realistic capacity levels have increased in recent years – thwarting the efforts of insurers to accelerate the hardening process

Source: WTW

Leadership panel remains basically restricted

Despite the recent turmoil in the reinsurance market, and the differing levels of reinsurance cost allocations which have yet to work their way through to direct insurer underwriting strategies, the Upstream market remains a subscription market; in other words, the market coalesces around a given leader's terms and will either follow them in their entirety or decline to participate. In previous underwriting eras, a period of profitability has often been accompanied by the injection of fresh capital and new insurers have sought to provide fresh competition for the established market leaders. As we have alluded in previous Reviews, in this underwriting era this dynamic has yet to materialise; indeed, the withdrawal of the MRS Syndicate last year has only served to restrict the choices of leader even further. With no new entrants, the existing leaders have no incentive to offer more competitive terms or a different underwriting strategy; a much simpler option for them is simply to increase their line on the choicest business and take advantage of the continuing upturn in rating levels.

Furthermore, should an experienced underwriter elect to move to a new insurer and begin to build a new book of business — as has often happened in the past — the likelihood is that it will be much easier for that individual to take advantage of the rising rates and adopt a moderate strategy rather than incur the wrath of fellow underwriters (and probably their senior management as well) by adopting a more aggressive approach.

Concerns over accuracy of values remain

A further concern for the market, especially given its reducing premium income pool, is the accuracy of the values that are being presented to them in this renewed inflationary era. Although we have mentioned this last year in our November 2022 update, it is worth re-emphasising that insurers are very focused on this issue and the feedback we have received suggests that only a handful of buyers have employed a third party to conduct an independent valuation exercise in the last 12 months or so. Indeed, we understand that some buyers are even submitting a reduced set of values to insurers without an adequate explanation or justification for such a reduction. Insurers could potentially respond to this by applying more punitive rating increases to those programmes; it is fair to say that these increases are almost always resulting in even more premium being charged to the buyer than would have been the case had a more accurate submission been made to the market. We would therefore suggest that arbitrarily reducing or maintaining existing values in this economic climate is likely to be counterproductive in two ways; first, it may mean a higher rating increase than normal and two, should a loss materialise, it is equally likely that insurers will apply average (if such a provision exists), meaning that the buyer may not receive a full indemnity from the market.

Impact of continued management control over underwriting strategy

A final reason for the continued market hardening in this sector is the maintenance of managerial scrutiny over individual Upstream underwriters. A good illustration of this trend was made clear in recent weeks in the aftermath of the advice of the Black Sea Offshore Construction loss referred to earlier. We understand that the loss had only been made public for a short time before individual Upstream underwriters across the market were being contacted by their senior management, enquiring firstly as to whether the insurer was on the programme in question and secondly if so, why the underwriter had decided to write such a risk. It seems to increasingly be the case that underwriters do not have the same flexibility and ability to make individual underwriting decisions that many in the market have become accustomed to, making the possibility of further competitive pressures in this market even more remote.

Positive factors

These, then, are the reasons why the Upstream market is continuing to harden, albeit at different rates depending on the sub-sector and insurer in question. But are there any other factors in play which are restraining the extent of the hardening process and offering any hope for the buyer? Interestingly enough, there are quite a few.

Abundant capacity maintained

The basic laws of supply and demand are still doing something to ease the overall hardening dynamic in this market. Figure 7 on the previous page shows capacity levels at a continuing record high, with just over US$7 billion of "realistic" market capacity still available for the most attractive programmes. The implications for those programmes are clear — there is still a marked underwriter appetite for those offshore programmes featuring significant premium income, spread of risk and clean loss records. Despite the withdrawal of the MRS syndicate last year, there is still plenty of capacity available and, given the pressure on signings that the market experienced towards the end of 2022, we do expect the best business to be over-subscribed once again during the remainder of 2023, which should minimise any further rating increases.

High oil prices likely to lead to increased construction/drilling activity and LOPI values

Since the beginning of the Russia-Ukraine conflict, it has become increasingly apparent that western economies have had to step up their own fossil fuel production levels in order to offset the termination of supplies from Russia and meet domestic demand. This in turn has led to an acceleration of fossil fuel prices (although in recent weeks this has somewhat been scaled back) and an increase in drilling activity, for example in the Permian basin in Texas and Arizona. Logic suggests that this is going to result in further increases in Loss of Production Income (LOPI) values and additional premium generation as a result of increased drilling and exploration activity. Should this additional premium income materialise still further in 2023, this may go some way to mitigating the need to increase rates more significantly during the remainder of the year.

Growth of facultative reinsurance market

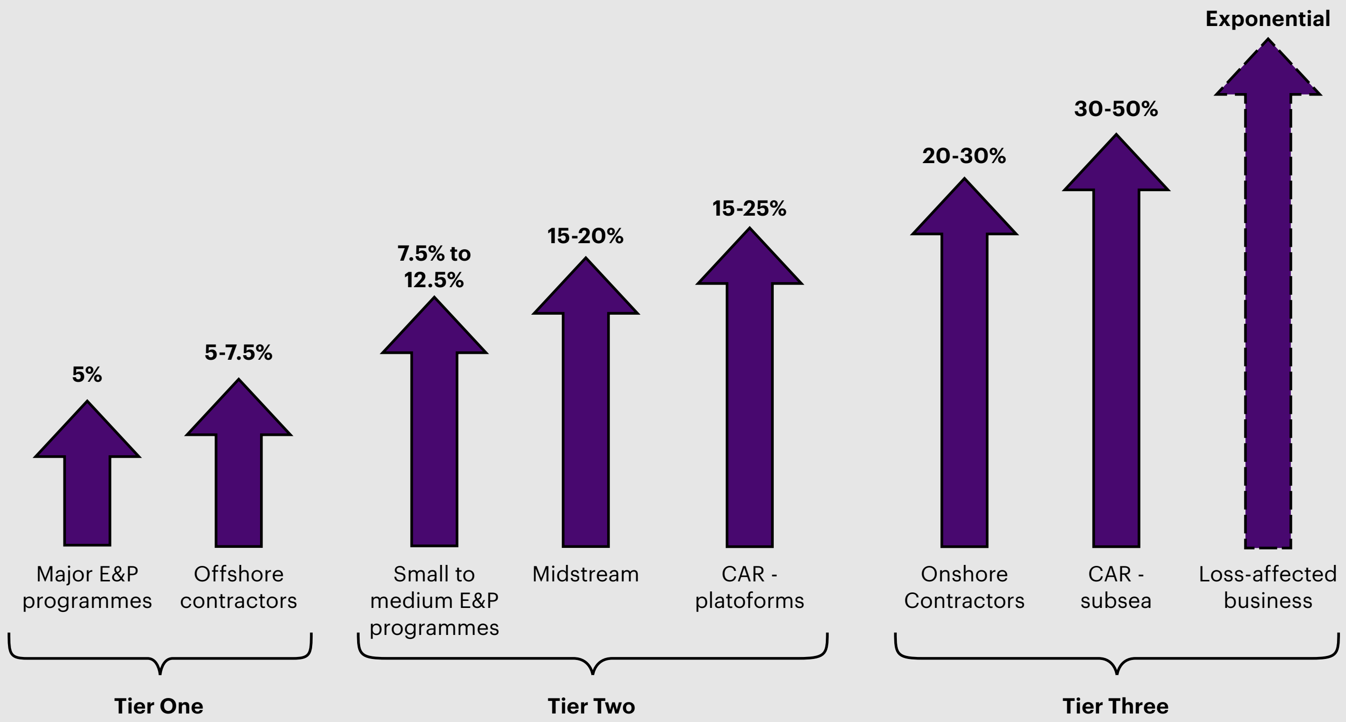
During the recent reinsurance renewal season, the largest reinsurers sought to maximise their positions in a hardening market by insisting on minimum signed lines in exchange for their terms. This in turn has led to several smaller reinsurers being left off some major reinsurance treaties and therefore short of much needed premium income. At exactly the same time, the direct Upstream market is facing much larger retentions, potentially leaving themselves dangerously over-exposed on certain programmes. We believe that this will result in a potential growth of the facultative reinsurance market which may contribute to offsetting some of the increase in the hardening dynamic brought about by the increased treaty retention levels discussed earlier.

Pressures to maintain premium income levels will remain

A final positive factor for buyers to consider is a somewhat obvious one – the need for insurers to secure sufficient premium income to pay for their reinsurance costs, not only in terms of their treaties but also in terms of any facultative reinsurance purchases. As a result, it is quite possible that the market may become more competitive later in the year, when the full impact of the reinsurance treaty season has played out and the need to pay for reinsurance costs becomes clearer.

> **"There is still a marked underwriter appetite for those offshore programmes featuring significant premium income, spread of risk and clean loss records."**

Figure 8: **Three-tier market differentials: Average rating increases, April 2023**



The recent market bifurcation has now morphed into a trifurcation, given evident the range of rating increases now being offered by insurers

Source: WTW

Current rating increases

Where have all these competing factors left the Upstream insurance market? In our November 2022 Update we pointed to an increased bifurcation in this market, whereby the most sought-after business was attracting a markedly different underwriter response from the rest of the portfolio. 6 months on, this bifurcation seems to have morphed into a trifurcation, with three readily identifiable tiers within it:

- **Tier one** continues to represent the most sought-after business, including major offshore assets, offshore contractor business and other offshore E&P companies. This tier is where almost every insurer is wanting to participate in more heavily, not only because the business is seen to be inherently profitable but because it offers an opportunity to make up for lost Russian premium income.
- **Tier two** consists of smaller E&P programmes, Midstream business and conventional Offshore Construction business. Conditions in these sub-classes are a hardening more intensely, with insurers apprehensive about the possibility of increased loss activity in during 2023.
- **Tier three** consists of the least attractive areas of the Upstream portfolio – subsea construction, land rigs and other onshore drilling operations (especially “one shot wells”) and other loss-impacted business. With the demise of certain underwriting facilities for this business becoming apparent during the last 12 months, it seems difficult to imagine anything but more punitive rating increases for traditional onshore E&P business, while the Offshore Construction market continues to reel from the impact of the recent Black Sea loss.

It should always be remembered that these rating increase should be taken as a general guide only. Not every large Upstream programme will be regarded as Tier One business and not every loss-impacted programme will necessarily fall into Tier Three. As ever, much will depend on individual underwriting submissions and the state of buyers’ long-term relationships with key market leaders.

Figure 9: **Upstream Capacity versus rating levels, 1993–2023 (excluding Gulf of Mexico Windstorm)**

Capacity has flattened out, while rates are still well below where they were 10 years ago

Source: WTW

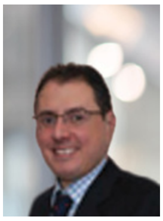
Conclusion: the outlook for the remainder of 2023

What can buyers expect from the remainder of 2023? Our 31-year-old chart in Figure 9 above, depicting the relationship between market capacity and overall price increases and decreases year on year, shows that rating levels in this market are still nowhere near those enjoyed by the market some ten years ago — despite a gradual hardening process since 2016. However, despite capacity remaining plentiful, overall levels have flattened out after a sustained period of increases since 2006 and the aftermath of hurricanes Katrina, Rita and Wilma. This somewhat rudimentary analysis suggests that Upstream insurers will continue to push for rating increases; given the lack of competition for leadership of this class, it is quite possible that this hardening process may continue for some time yet.

However, we have shown that this is a market which is increasingly differentiating in favour of the most sought-after business. It is entirely possible that later in the year the pressure to meet premium income targets — if only to pay for expensive reinsurance programmes — may allow some buyers and their brokers to drive improved terms from the market in return for increased line sizes and positions on the best programmes. Furthermore, the potential expansion of the facultative reinsurance market may allow for more attractive terms from a buyer perspective as 2023 unfolds.

How can buyers ensure that they derive optimum terms from this market? As ever, we encourage upstream energy companies to:

- start the renewal process early
- develop and communicate effective underwriting submissions to the market
- answer the questions posed by the JNRC ESG questionnaire as comprehensively as possible
- obtain more than one indication and support any "leader-only" terms, as placements are likely to require more than one insurer to generate sufficient support
- ensure that insurers have every possible ammunition to convince their senior management that preferential terms should be offered - if necessary, for an increased participation in the programme



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