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Mining Market Update

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Introduction

In 2018 there was an unusually high frequency of relatively severe insured loss events in the mining sector — compounded by further natural catastrophe loss events. There was increasing pressure by insurers upon rating, but the market remained vibrant, with no material reduction in capacity available to insurance buyers.

Five non-catastrophe events are likely to result in losses exceeding US$100 million, with a significant number of additional property damage/business interruption (PDBI) losses measured in tens of millions. Loss events exhibited no particular trend or theme, with events including seismicity, transformer explosion, tailings dam failure, underground mud-rush, underground flood, and critical conveyor fires. Furthermore, 2018 was the fourth-worst year recorded for insured natural catastrophe losses (following the worst-ever in 2017 — see figure 3). The period 2017-2018 represented the worst two-year period on record for insured losses attributable to natural catastrophes.

Subsequently, 2019 has seen tragic events in Brazil, with the failure of the Córrego do Feijão dam highlighting again the risks associated with tailings dams. This event has had a notable impact on casualty insurers in particular, and may lead to further capacity reduction for mining liability risks.

The extended period of soft-market conditions, which prevailed from 2013, weighed heavily on (re)insurers' results — but it has now transitioned to a somewhat firmer market (figure 2). More companies experienced a PDBI rate increase than a decrease in 2018, and the magnitude of increases were typically greater than the magnitude of decreases (see figures 4 and 5). Decreases were concentrated in the first half of the year and, in several cases, reflected pre-agreed reductions for long-term arrangements.

For those insurers underwriting a broad portfolio of international mining operations, 2018 still remained profitable, although several insurers — particularly those focused on specific sectors or geographies, primary risk only, or with narrower books of business — saw loss reserves exceed premium income.

In general, PDBI capacity for mining risks reduced by a nominal amount in 2018, with the withdrawal of certain Lloyd's syndicates the only exit from this class of insurance. While casualty capacity remained stable in 2018, the Córrego do Feijão tailings dam failure has had an immediate impact upon the market in 2019, driving reductions in capacity deployed, and immediate cost increases for risks with tailings dam exposure.

FIGURE 1

Global insurance rates declined between 2013 and 2017

SOURCE: MARSH DATA, INSURER ANNUAL REPORT AND ACCOUNTS

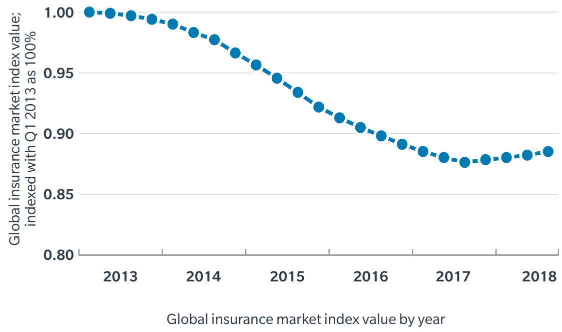


FIGURE 2

(Re)insurers' return on equity declined between 2013 and 2017

SOURCE: MARSH

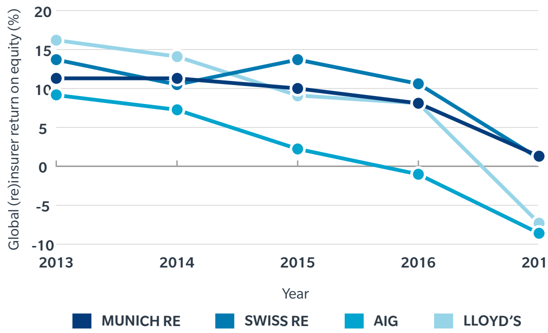


FIGURE 3

The two-year period 2017-18 was the worst on record for insured natural catastrophe losses

SOURCE: SWISS RE SIGMA DATABASE

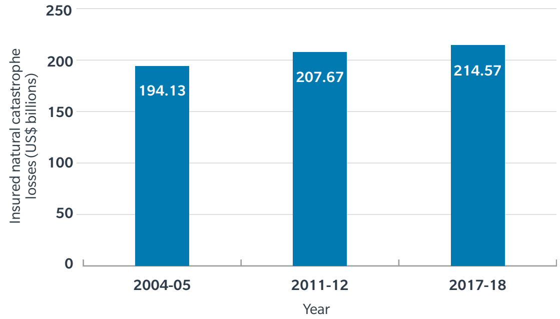


FIGURE
4
PDBI rate increases outnumbered decreases in 2018

SOURCE: MARSH

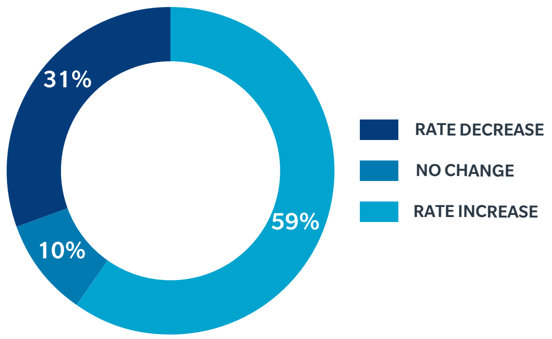
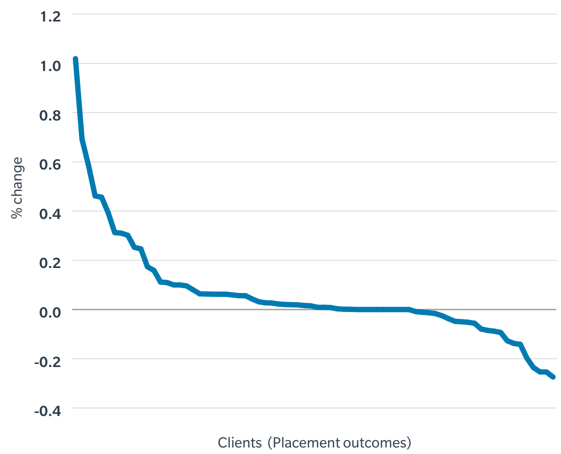


FIGURE
5
PDBI rate change (%) by placement, ordered from largest increase to largest decrease

SOURCE: MARSH



Córrego do Feijão dam failure

At the time of writing, the Córrego do Feijão dam failure is a recent event and at the forefront of underwriters' minds.

No immediate restriction in PDBI capacity available for tailings dams has been seen, on the condition that high-quality, detailed information can be provided on key aspects of dam design, management, risk controls, and inspection/audit. However, a a materially increased degree of information disclosure is now essential and an inability to provide strong information may result in restricted coverage. For liability risks, there has been a more notable impact upon capacity available, with several key insurers preferring to compress their participation in mining risks to "shorter stretches" — that is, layers with lower limits per insurer. Details of flood impact assessments and early warning systems and disaster response plans are particularly important to casualty insurers.

Within PDBI programs, there is limited insurer appetite to increase tailings risk within existing placements; however, restructuring programs by introducing or enhancing "layering" may facilitate increases in limits — but at increased cost. Insurers are unlikely to reduce current information demands lightly; the requirement for significantly enhanced exposure is a crucial change for 2019.

International Property Market

Following the soft market conditions that prevailed since 2013, three factors were expected to characterize 2018:

- Increases in commodity prices, leading to heightened business interruption values at risk.
- Increased insurer discipline in response to catastrophe events.
- Broader poor underwriting results.

While most renewals were flat or saw modest rate increases (less than 5%), the number of rate increases significantly outweighed decreases, and each of the above three factors featured heavily in placement negotiations.

For the second year running, business interruption (BI) declarations increased as a proportion of total declared exposure for mining companies. As BI recoveries for mining risk events are typically a multiple of property damage losses, underwriters are sensitive to this change.

Underwriter discipline

At the beginning of 2018, a small number of insurers, and several Lloyd's of London syndicates in particular, pushed for substantial premium increases (approximately 7.5%) in a small series of important placements. Given the importance to the mining sector of controlling the costs of production, buyers' typical response was to seek alternatives rather than sustain these increases. While sufficient alternative options were available, and cost increases could be mitigated, this came at the expense to existing market relationships, with a relatively high degree of turnover of existing markets for new participants.

Lloyd's of London, in particular, adopted a strong approach to underwriting governance and business planning in 2018 to drive the remediation of a poor result in 2017. The potential for forced closure of loss-making portfolios within syndicates, or entire loss-making Lloyd's syndicates, to protect the "central fund" and safeguard the reputation of Lloyd's, achieved the desired result of increasing underwriter discipline within the corporation.

The changing approach of Lloyd's also affected international insurers that have historically used facultative reinsurance to reduce their exposure to a particular share or aspect of a risk, thereby enabling larger lines to be deployed. Because Lloyd's is a significant facultative reinsurance market, the changing behavior of its underwriters has affected some international insurers' ability to maintain the capacity they deploy, maintain their stable ratings, or adhere to placement timelines. Controlling the impact of facultative reinsurance purchasing came to the fore in the latter half of 2018, and will remain an important issue throughout 2019.

Available capacity

Overall, reductions in capacity have been limited to a gradual consolidation of the capacity deployed by the merged entities AXA and XL, and the closure of the property damage/business interruption portfolios of syndicates, such as Standard and Tokio Marine Kiln. Although there have been no notable new market entrants in the last 12 months, several continental European, American, and Chinese (re)insurers have increased their participation in international mining, although the latter typically require a strong connection to Chinese interests to participate on a "direct" basis. Bermudan insurers have also remained committed to the sector, growing their share of capacity deployed to mining risks in 2018. In general, capacity remains abundantly available.

Looking forward

Balancing the competing pressures of improving profitability and maintaining market share will remain underwriters' key challenge in 2019.

As competitive pressure between insurers will play a more direct role in controlling costs, longer negotiating periods are, and will be, required to ensure the best is delivered from international markets.

Obtaining coverage enhancements on a cost-neutral basis will become increasingly difficult; reductions in deductible, increases in sub-limits, or any general enhancements in wording, are far more likely to have a price implication.

In addition to changing market conditions, careful attention needs to be paid to BI sums insured. As BI can be priced at multiples of the physical damage rate, where BI sums insured have increased, the starting point in premium negotiations will reflect this differential. This issue can be mitigated by the size of a higher premium volume placement, but does need to be factored into budgets for future premium costs.

As always, a clear placement strategy with reasonable lead times, and a high-quality articulation of the make-up of the exposure, risk engineering programs, and specific risk mitigation measures, remain central to achieving the best outcome from a transitional market.

International Casualty Market

The London and Dublin casualty markets are also at a point of change. While capacity and alternative options are available, pricing and terms and conditions are hardening somewhat. Rate increases, in addition to exposure increases, range from flat to 5%, and up to 10% for mining risks with notably heavy casualty exposures (for example, risks with exposure to the US or Chile). Certain accounts are seeing major corrections, especially those with loss activity or wildfire exposures.

Lloyd's of London's consolidated underwriting result for 2017 showed a combined ratio of 114% for all lines; the consolidated casualty result was 103.1%, following on from a 103.6% combined ratio in 2016. Casualty risks are subject to the same portfolio review as all classes written in Lloyds, with consequences including account-specific non-renewals, capacity restrictions and pricing adjustments. Larger syndicates are cutting back on line size or "ventilating" capacity if the limits provided are not offering adequate rates, especially in relation to excess capacity.

Competitive terms on new business still exist, but few underwriters are willing to extend attractive offers for longer-term programs, in contrast to 2017. New limits for excess capacity for the mining industry start at US$2,000 per million of limit, regardless of existing underlying pricing.

On a macro level, there is still a surplus of capacity in the Lloyd's market, with more than 20 syndicates offering casualty solutions and more than US$1 billion of available capacity. However, the recent exits of Starstone and Ironshore from the casualty market are evidence of some reduction in London capacity.

In 2018, the markets adjusted rating models and leaned towards tonnage as a sound rating measure, accurately reflecting changes in activity — that is, rock broken, moved, crushed, and ultimately deposited to tailing storage areas. Particular attention is paid to tailings reports (for active and closed sites) and, certainly where US exposures are involved, workers' compensation claim figures.

The casualty market for mining remains healthy and insurers are generally supportive. However, differentiating risk, providing a high level of detail, explaining changes in traditional exposure metrics (for example, an increase in sales, payroll, or tonnage does not necessarily mean a commensurate increase in exposures), is even more important in today's market in order to sustain competitiveness.

Market Conditions in Key Mining Hubs

In casualty markets, underwriters continue to focus on contractor management and tailings dam risk factors and mitigations in all regions. Detailed, independent dam audit reports are essential in all regional markets and international markets. Rates of flat to 5% or more are typical, with **Australia** seeing particular pressure on casualty ratings, with several more extreme outcomes seen.

Chile, in particular, has seen upward pressure on contractor injury deductibles, particularly for underground mines (these deductibles having reduced due to underwriter competition in recent years).

Canada has had the most stable casualty market, with "as-is" renewals the norm barring material changes in risk profile. Canadian mining companies still face a relative dearth of domestic markets, particularly those with multiple and foreign assets and local policy placement requirements. Where foreign markets are accessed to achieve the desired limit of liability, there is greater pressure on rates.

Meanwhile, the **Australian** property insurance market in 2018 saw a continuation of poor underwriting results, sustaining two major mining losses. This has led to significant scrutiny of underwriters' portfolios from senior management, who are insisting on strict adherence to underwriting guidelines in order to return portfolios to profitability. Capacity deployed per underwriter is being generally reduced on chemical, metal processing, and mining risks in particular.

The **South African** market also sustained notable, large mining losses in 2018, including underground fires and transformer explosions. This has resulted in reduced domestic market capacity, and increased deductibles and premiums, in an already challenging marketplace. The proportion of risk ceded to the international market is increasing as a result, and international rating is an increasing influence on South African terms. Meanwhile, new regulations relating to sprinkler protection for underground conveyor belts have changed the mitigation of this risk from a management decision to a regulatory requirement.

The **US** mining insurance marketplace saw property rates continue their upward movement throughout 2018. Rate increases range from low single digits to more than 30% for "distressed" placements, with evidence that companies are being reviewed based on their risk characteristics and loss history.

Despite the marketplace's appetite to increase rates, enough capacity remains available to provide companies with alternative options, instead of sustaining costs associated with a specific insurer's pricing strategy. For US hard and soft rock producers, there remains approximately US$200-250 million of underground capacity available, and US$1 billion of surface capacity.

In general, insurers are watching the mining sector carefully, given the increase in mergers and acquisitions, with some small start-ups buying sites from larger miners that are restructuring their global portfolios. However, capacity is being deployed cautiously and is largely dependent on the new management's operational and financial track record.

Brazilian mining companies received some positive news in 2018, with a new government and mining ministry in office. Analysts predict a period of continued growth and enhanced project approvals, tempered by a strong focus from environmental agencies and regulators following recent environmental impairment events.

The Brazilian insurance marketplace, however, continues to show little appetite for mining and steel risks (both property and casualty insurance), with few options for risk transfer or the fronting of international insurance capacity in Brazil. International markets underwrite most Brazilian mining risk, and there is limited prospect for change following the major tailings dam failure of January 25, 2019.

Unlike their counterparts in other regions, **Canadian** insurers were not materially exposed to the 2017-2018 catastrophic losses, which caused insurers in Europe and elsewhere to press for meaningful rate increases. That said, there are few lead insurers in Canada that are not foreign subsidiaries of European or American insurers. To the extent that the parent organization has experienced greater losses, Canadian subsidiaries might be pressed to support efforts to rehabilitate group-level results.

As was the case in 2017, Canadian mining companies with foreign assets, underground assets, or assets exposed to natural catastrophes and requiring high limits of liability, are seeing more challenging renewals. These programs continue to rely on international markets to provide required capacity; in some situations, this has also required a restructuring of the program and the introduction of new insurers.

In **Chile**, earthquake exposure and the accumulation of mines in relatively concentrated geographical areas (especially in the Antofagasta region) ensure that international market capacity features heavily in regional risks. Reinsurers' negative results, and poor natural catastrophe results in particular, are therefore directly influencing pricing.

In conclusion, 2018 has seen high insured losses serve as stark reminders of the hazards associated with the mining sector. While the market remains relatively benign in historical terms, a clear change is evident from the market-softening experience of 2013-17. High-quality risk information, in relation to tailings risk in particular, will be essential to a satisfactory insurance renewal outcome in 2019.

Risk Analysis Modelling Platform

The size and diversity of our global portfolio has enabled us to develop a market-leading Risk Analysis Modelling Platform (RAMP). This helps us benchmark property damage and business interruption insurance programs.

Using data points such as critical catastrophes, deductibles, key sub-limits, loss limits, loss ratios, principal ores, and types of risk (open pit or underground), we can provide important in-depth management information on a confidential basis.

Feature	Benefit
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Access to terms and conditions offered by both local and international markets.	The ability to compare local programs (in the same region as the insured) to those available from international markets.
Provision of real time average and median rate analysis for any given timeframe (i.e. comparing specified quarters and/or years).	The ability to provide quick “ball-park” estimates for either new or renewing business based on historical trends.
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Historical record of renewals for customers.	Enables elements of premium increases/decreases for divestitures/acquisitions.

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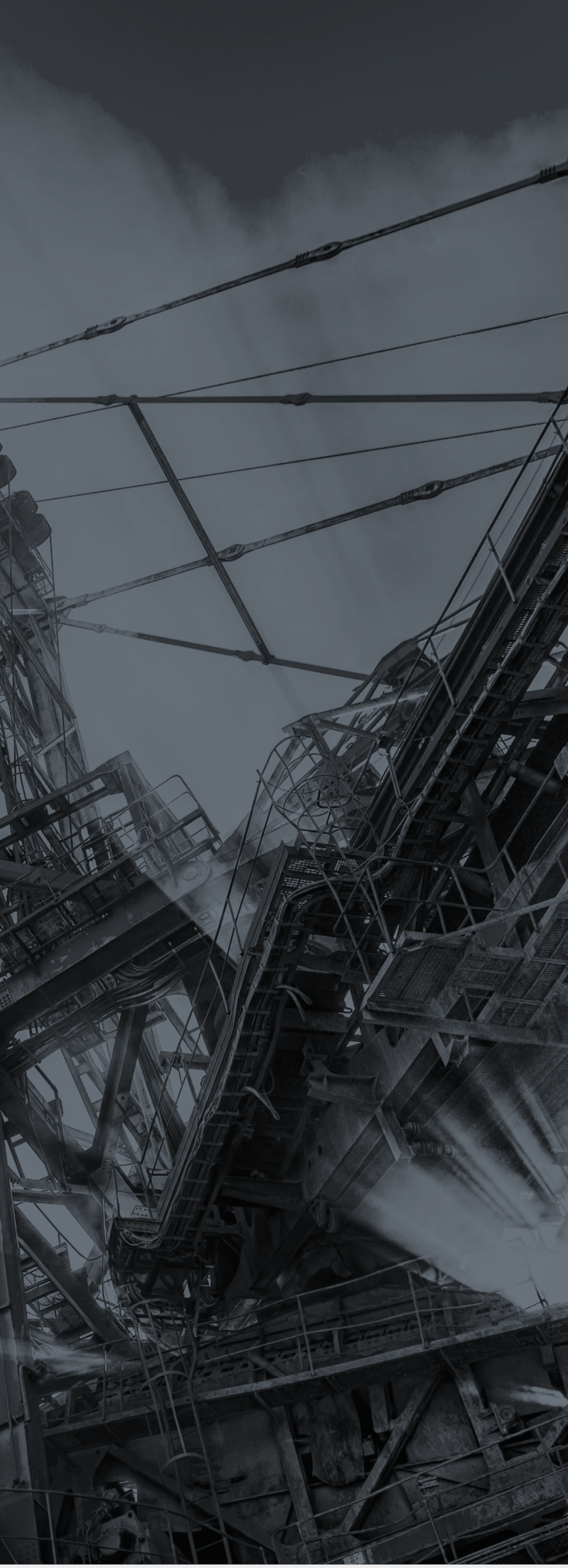
Detailed information on the above facilities is available from your usual Bowring Marsh contact, or from elizabeth.howe@marsh.com.



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