Lloyd's of London

Assigned	Type	Rating	Outlook
Lloyd's of London	IFSR	AA-	Stable

Methodology

Insurer & Insurance Holding Company Global Rating Methodology

Analytical Contacts

Garret Tynan, Senior Director
+353 1 588 1235
garret.tynan@kbra.com

Carol Pierce, Senior Director
+1 (646) 731-3307
carol.pierce@kbra.com

Peter Giacone, Managing Director
+1 (646) 731-2407
peter.giacone@kbra.com

Executive Summary

Kroll Bond Rating Agency Europe Limited (KBRA) has assigned an insurance financial strength rating (IFSR) to Lloyd's of London (Lloyd's or the Lloyd's market). The rating reflects Lloyd's sound risk-adjusted capitalisation, unique capital structure, conservative underwriting leverage, sound technical reserves, strong liquidity profile, diversified earnings sources, broad distribution channels and comprehensive risk management programme overseen by a highly experienced management team. Balancing these strengths are recent unfavourable underwriting performance, an elevated expense ratio, heavy reliance on reinsurance and exposure to event risk.

Outlook

The Stable Outlook reflects KBRA's expectations that Lloyd's will continue to maintain sound capitalisation while prudently executing its Future at Lloyd's strategy. Additionally, KBRA expects Lloyd's to continue its focus on performance management to improve underlying underwriting results over the medium term.

Key Credit Considerations	+/−
Sound Risk Adjusted Capitalisation and Favourable Capital Trends Market Wide Solvency II ratio of 147% at end-2020. Market capital has grown at a compound annual growth rate (CAGR) of 6.5% from end-2014 to end-2020 despite elevated catastrophe and attritional loss activity after 2016. The Lloyd's market has limited debt in its capital structure (0.9% debt-to-capital at end-2020) and primarily backs its underwriting liabilities with high credit quality liquid assets.	+
Capital Structure Enhances Lloyd's Financial Strength Lloyd's capital structure consists of successive layers that either respond severally or mutually to policyholder claims. The ability to request members to bring their capital in line with losses after major events enhances Lloyd's financial position. The Society of Lloyd's Central Solvency II ratio of 209% at end-2020 provides a strong backstop to the Lloyd's market in the event certain members cannot pay their losses. Over the past 7 years, Lloyd's has had limited need to use Central Fund resources to pay member obligations.	+
Conservative Net Underwriting Leverage and Sound Technical Reserves Lloyd's net premium leverage of 0.8x at end-2020 compares favourably to the industry at 1.1x and peers at 2.1x. Net reserve leverage edged lower to 1.3x at end-2019 (from 1.4x at end-2018) and remained stable at end-2020. At end-2019, Lloyd's net carried reserves were in excess of the best estimates from syndicates as well as Lloyd's central best estimate for the market.	+
Strong Liquidity Profile and Asset/Liability Management Eighty-two percent of invested assets were held in cash and liquid investment grade fixed income securities at end-2020. The fixed income securities' average credit quality was AA. Average asset duration was 2.4 years with average liability duration of 3.0 years. In addition, aggregate assets are reasonably well matched to technical provisions by major currency.	+
Diversified Earnings Sources Lloyd's writes business in every sector and covers more than 60 lines of insurance and reinsurance in more than 200 countries and territories. Approximately 53% of 2020 gross written premium of £35.5 billion emanated from the US, with Europe and the UK following at 15% and 12%, respectively. At slightly more than one-third, reinsurance comprised the largest line of business, followed by property insurance and casualty insurance at 26% each.	+

Factor	Impact
Insurance Industry Market Leader Lloyd's is among the top 10 global (re)insurers, writing 4.4% of global reinsurance and commercial insurance premium of ~ £0.8 trillion at 30 September 2020. As an industry leader in underwriting specialty risks, Lloyd's provides thought leadership to the insurance industry and continues to provide coverage for many emerging, complex, and unique risks.	+
Broad, Multi-channel Distribution Sources At end-2020, Lloyd's had 4,807 distribution sources comprised of brokers, coverholders and service companies. Combined these sources grew at a CAGR of 1.7% since end-2016, although not evenly across channels. Lloyd's is a broker market. Accordingly, the number of brokers grew by 7.9% CAGR over the same period while coverholders grew by 1.1% CAGR and service companies by 3.0% CAGR. Coverholders serve as important distributors for Lloyd's as they offer local access across the globe.	+
Comprehensive Risk Management Programme Lloyd's has a robust risk management framework and processes. Risks are well articulated. Risk tolerances are conservative and monitored by the Risk and Regulatory function. Lloyd's is required by the Prudential Regulatory Authority (PRA) to perform an Own Risk and Solvency Assessment (ORSA). Various stress tests using Realistic Disaster Scenarios, including reverse stress testing of the Central Fund, are embedded in the framework.	+
Future at Lloyd's Programme Intended to Modernise the Market, but Carries Execution Risk In 2020, Lloyd's launched the Future at Lloyd's programme. This is an ambitious, collaborative, medium-term project among all stakeholders in the Lloyd's market to address historical operational shortcomings and build an advanced global marketplace for insurance risk. Changes implemented to allow Lloyd's to continue operating during pandemic lockdowns were positively received by stakeholders. However, execution risk remains as the programme is large and complex and Lloyd's cannot mandate that managing agents adopt the new automated, digital processes and practices.	+/–
Indirect Influence Over Market Participants' Behaviour While the Lloyd's Council governs the activities of the market to achieve the Society's goals, in contrast to traditional insurance company organizations, the Lloyd's management team lacks the authority to mandate direct specific actions by market participants. This lack of direct management control is partially mitigated through minimum standards and the ability to restrict a member's ability to trade forward which indirectly influences market participants' behaviour. The system relies heavily on shared goals among all market participants to maintain the viability of the market.	–/+
Unfavourable Underlying Underwriting Performance While Lloyd's has reported a cumulative result before tax from 2015 – 2020 of £2.9 billion, the result has been driven solely by investment income as underwriting losses for the same period were £4.5 billion. While much of the underwriting loss is attributable to major and catastrophe events, more concerning are the elevated attritional losses since 2017. To reverse the unfavourable performance trend Lloyd's is capitalising on the current price firming across the industry by increasing rates, reducing exposures in unprofitable classes, growing the best performing syndicates and remediating, or removing, the worst ones. In 2020, attritional loss experience moved in line with targets, but a longer underlying trend over the medium term is needed to support a return to sustained underwriting profitability.	–
Elevated Expense Ratio Lloyd's expense ratios compare unfavourably to the industry and peers. Improvements in 2019 and 2020 are due to improved pricing levels combined with a 20% decrease in premium volume since 2018 as part of Lloyd's performance improvement initiative. The benefits from digitalisation as part of the Future at Lloyd's programme should improve the expense ratio further over the medium term.	–
Heavy Reliance on Reinsurance Since each syndicate structures and purchases its own reinsurance programme, Lloyd's is more heavily dependent on reinsurance than peers who utilise reinsurance more holistically across their entire organizations. Based on Pro Forma Financial Statements, Lloyd's syndicates have increased their reinsurance spend from 21% of gross written premium (GWP) in 2015 to 27% in 2020 (inclusive of intra-Lloyd's cessions of ~4% of GWP), while the industry and peer average reinsurance spends have remained level during this time period. This elevated reliance on reinsurance is partially offset by central oversight and selected management of counterparty credit risk across the Lloyd's market by monitoring detailed metrics regarding scale of premium, amount of losses recoverable, concentration, financial strength, and the amount of aged debt/disputes. Lloyd's reinsurance risk profile at nine months 2020 was substantially within its risk appetite although the amount of losses recoverable was elevated compared to the industry and peers but reflected the nature and extent of reinsurance purchased by Lloyd's syndicates.	–
Exposure to Event Risk Due to the broad lines of business it writes and its wide geographic footprint, Lloyd's pays claims for most catastrophe events across the world. Net exposure is mitigated somewhat through reinsurance and a systematic reduction in catastrophe risk appetite since January 2018. In addition, despite a high credit quality fixed income portfolio, Lloyd's remains exposed to financial market volatility, especially in its equity and alternative investments. De-risking of the Central Fund equity and alternative investments during the second half of 2020 has lowered the exposure but is offset by increased vulnerability to inflation/interest rate risk from the higher allocation to fixed income securities.	–

Rating Sensitivities	
▪ Meaningful reduction in the number of syndicates subject to increased oversight and intervention ▪ Consistent net attritional underwriting profitability over the medium term ▪ Successful execution of the Future at Lloyd's programme	+
▪ Continued unfavourable, or inconsistent, underlying underwriting performance over the medium term ▪ Meaningful reduction in capital ▪ Drop in Solvency II ratios below Lloyd's minimum targets	−

ESG

A variety of direct and indirect Environmental, Social and Governance (ESG) factors impact KBRA's credit assessment of Lloyd's. Lloyd's proactive efforts to manage these factors are discussed in the ESG Management section.

Overview

Lloyd's is a society of members, both corporate and individual, that underwrite insurance via syndicates. Each syndicate can comprise one single member or any number of members, underwriting severally for their own account. The Society of Lloyd's oversees the members and through the Corporation of Lloyd's manages the day-to-day operations of the managing agents. Collectively, this constitutes the Lloyd's market.

Impact of COVID-19

Lloyd's global staff began working from home on 17 March 2020, closely followed by the Lloyd's underwriting room closing its doors on 19 March 2020 for the first time in Lloyd's history. In order to minimise market disruption, Lloyd's quickly put in place an emergency trading protocol and moved many systems online. The underwriting room reopened on 1 September 2020 with strict policies and procedures regarding face coverings, social distancing, and contact tracing. At the same time Lloyd's opened a virtual underwriting room. Following the government's decision to place the UK in a second national lockdown, the physical underwriting room closed again on 5 January 2021 and remained closed until its recent reopening on 17 May 2021. The virtual room continues to be an option for market participants as well. Lloyd's successfully adapted its underwriting operations seamlessly due to the work already undertaken as part of the Future at Lloyd's programme.

Lloyd's estimates a COVID-19 overall gross ultimate loss of £6.2 billion (£3.6 billion net). Two-thirds of the gross losses are IBNR reflecting the continuing uncertainty surrounding the pandemic. Of the £2.0 billion in claims submitted to date, £1.2 billion have already been paid, including £530 million in response to the UK and Australia Business Interruption (BI) test cases. Three quarters of Lloyd's reinsurance recoveries correspond to "follow the fortune" and "back-to-back" covers, dramatically mitigating the risk of non-recovery.

In order to pay all valid claims as quickly as possible, including those related to COVID-19, Lloyd's implemented a number of changes to claims processes to facilitate remote work by managing agents, brokers, and delegated agents. Lloyd's also installed a dedicated point of contact for policyholder assistance and claims support.

At 31 December 2020, Lloyd's reported £3.4 billion of incurred losses, or 13.3 points of the 110.3% calendar year combined ratio (97.0% excluding COVID-19). While significant, this level of losses represents an earnings event on the scale of Lloyd's 2017's Harvey, Irma, Maria losses or Lloyd's 2001's 9/11 loss and appears in line with peers.

Lloyd's investment return for 2020 declined to £2.3 billion, representing an investment return of 2.9% (2019: £3.5 billion, return of 4.8%) as a result of the effects of COVID-19 on global financial markets in March 2020, with some recovery due to improved performance from government bonds as well as credit and equity markets.

In response to the impact from COVID-19 on both assets and liabilities, Lloyd's members injected £3.5 billion of additional capital to cover their funding shortfalls arising from the pandemic. In addition to supporting the marketplace during the pandemic, Lloyd's has put policies, procedures, and programmes in place to support its people and the communities they live in, including a wide range of wellbeing resources.

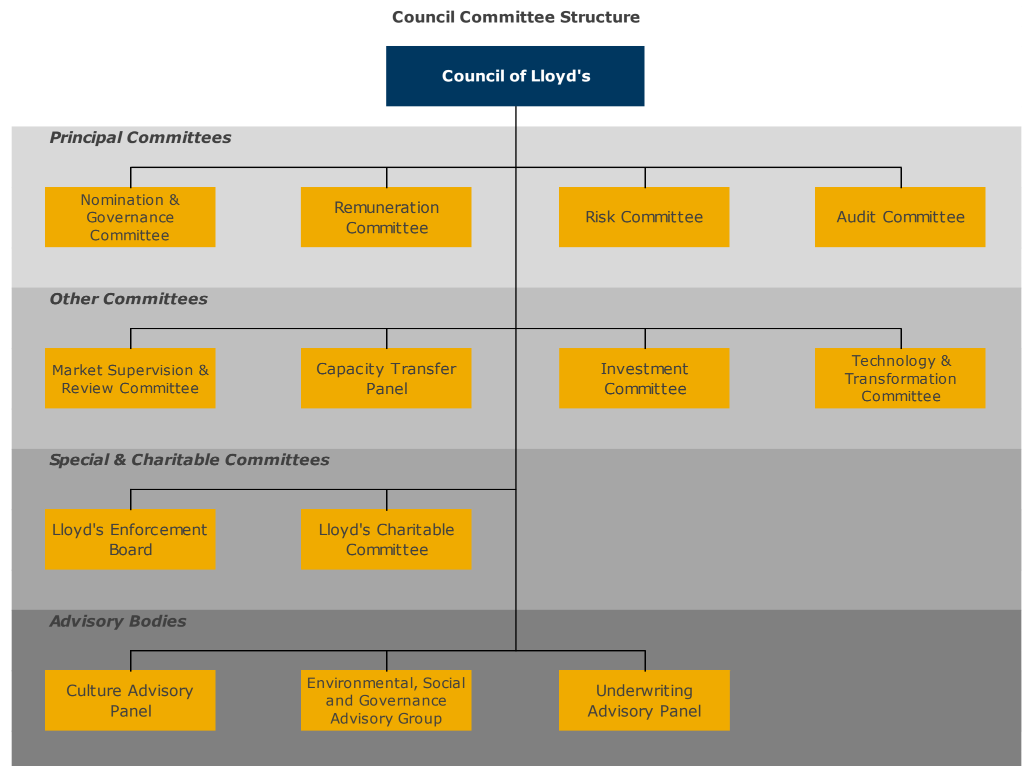
KBRA continues to monitor the direct and indirect impacts of COVID-19 on the insurance sector. Please click here for more details on all of KBRA's research on the impact of COVID-19.

Organizational Structure

In 1871, the then existing association of Lloyd's underwriters was incorporated by Lloyd's Act 1871 as "the Society and Corporation of Lloyd's" (Society). Accordingly, all activities of Lloyd's are governed by statute. Lloyd's operates through a number of subsidiaries and representative offices in various juristictions to comply with local regulatory requirements.

Governance Structure

While legally "The Corporation of Lloyd's" (Corporation) and the Society refer to the same incorporated body and can be used interchangeably, in practice the Society refers to the collection of Lloyd's members while the Corporation describes the day-to-day management of Lloyd's which works towards achieving the Society's goals. The Society's purpose is to faciliate the execution of insurance business by members of Lloyd's and the advancement and protection of their interests in that context.



Since 1982, the Society has been managed by the Council of Lloyd's (Council) pursuant to Lloyd's Act 1982 which defines the governance structure under which Lloyd's operates. Under the Act, the Council is responsible for the affairs of the Society and for management and supervision of the market. The Council normally meets eight times per year and is comprised of 15 members: six independent nominated members (including the Chairman), three working elected members, three external elected members, and three executive nominated members.

Certain functions are reserved to the Council, such as making, amending, or revoking byelaws; setting of Central Fund contribution rates; and appointing the Chairman and Deputy Chairman of the Council. Beyond these specific functions the Council may delegate authority to the Chairman and Deputy Chairman, Council committees, the Chief Executive Officer, or any other person within the Lloyd's ecosystem. The current committees of the Council are shown above.

Two noteworthy committees and advisory panels established in 2020 represent discrete steps to execute on key strategic priorities at Lloyds:

Technology & Transformation Committee oversees the Future at Lloyd's programme, an ambitious, collaborative, medium-term programme among all stakeholders in the Lloyd's market to build the most advanced global insurance marketplace. Blueprint One set out four key goals: offer better solutions to protect customers from emerging, more challenging, and, in many cases, currently uninsured risks; deliver better products and services to customers and capital providers; simplify the way Lloyd's works and thereby reduce costs; and build an inclusive and innovative culture that attracts leading talent to Lloyd's. Blueprint Two sets out to deliver on some of the key goals of Blueprint One, namely, to simplify the way Lloyd's works focusing on two core placement types – open market and delegated authority. The placement, accounting, payment, endorsements, claims, renewals, and reporting redesign is expected to deliver seamless end-to-end processes.

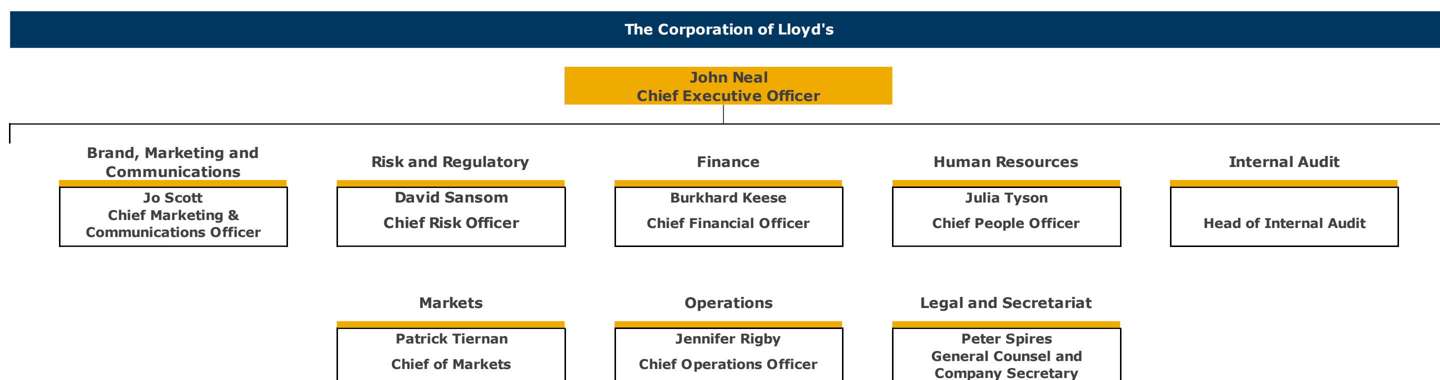
Culture Advisory Panel was set up in response to the Market Culture Survey and is charged with providing thought leadership, advice, and guidance to ensure improvement of the culture across the Lloyd's market. See the Management Profile and Strategy section for more details.

Management Structure

The Corporation is responsible for the day-to-day oversight of the Lloyd's market. It provides the market's infrastructure, including services to support its operations, and protects and maintains Lloyd's reputation. The Corporation's role

includes managing Lloyd's network of international licences; agreeing syndicates' business plans and capital requirements and evaluating performance against those plans; monitoring syndicates' compliance with Lloyd's minimum standards; and continuing to raise standards and improve performance across two main areas of the market: (1) overall risk and performance management, and (2) maintaining and developing its favorable position with capital providers, distributors and clients while preserving diversity.

The Corporation is headed by the Chief Executive Officer (CEO) who exercises the powers and functions delegated by the Council of Lloyd's. In turn, the CEO delegates certain powers and functions to the Executive Committee and other key management personnel. The Corporation's operational structure, including key functions and Executive Committee members, is shown below.



Financials

Lloyd's of London (Pro Forma Financial Statements)						
(in millions)	2020	2019	2018	2017	2016	2015
Gross Written Premiums (GWP)	£ 35,466	£ 35,905	£ 35,527	£ 33,591	£ 29,862	£ 26,690
Net Written Premiums (NWP)	£ 25,826	£ 25,659	£ 25,681	£ 24,869	£ 23,066	£ 21,023
Net Earned Premiums (NEP)	£ 25,876	£ 25,821	£ 25,178	£ 24,498	£ 22,660	£ 20,565
Net Claims Incurred	£ 18,929	£ 16,361	£ 16,438	£ 18,250	£ 12,987	£ 10,262
Net Operating Expenses	£ 9,623	£ 9,998	£ 9,870	£ 9,669	£ 9,205	£ 8,256
Net Underwriting Gain (Loss)	-£ 2,676	-£ 538	-£ 1,130	-£ 3,421	£ 1,181	£ 2,047
Result Before Tax	-£ 887	£ 2,532	-£ 1,001	-£ 2,001	£ 2,107	£ 2,122
Loss & LAE Ratio	73.2%	63.4%	65.3%	74.5%	57.3%	49.9%
Expense Ratio	37.2%	38.7%	39.2%	39.5%	40.6%	40.1%
Combined Ratio	110.3%	102.1%	104.5%	114.0%	97.9%	90.0%
GWP/Capital & Reserves	1.0	1.2	1.3	1.2	1.0	1.1
NWP/Capital & Reserves	0.8	0.8	0.9	0.9	0.8	0.8
Total Assets	£ 128,304	£ 119,878	£ 118,008	£ 108,396	£ 101,602	£ 83,629
Capital, Reserves & Subordinated Notes	£ 33,941	£ 30,638	£ 28,222	£ 27,560	£ 28,597	£ 25,098
Market Wide Solvency II Ratio	147%	156%	148%	144%	144%	146%

Stress Testing

As part of its quantitiative analysis, KBRA reviewed Lloyd's internal capital models and extensive catalogue of stress scenarios and noted the dynamic approach, extensive integration and ongoing application for performance measurement. KBRA reviewed the results of Lloyd's one year mandatory regulatory stress tests at end-Q32020 using its Realistic Disaster Scenarios (RDS), and concluded that Lloyd's market capital is sufficient to withstand a range of adverse events.

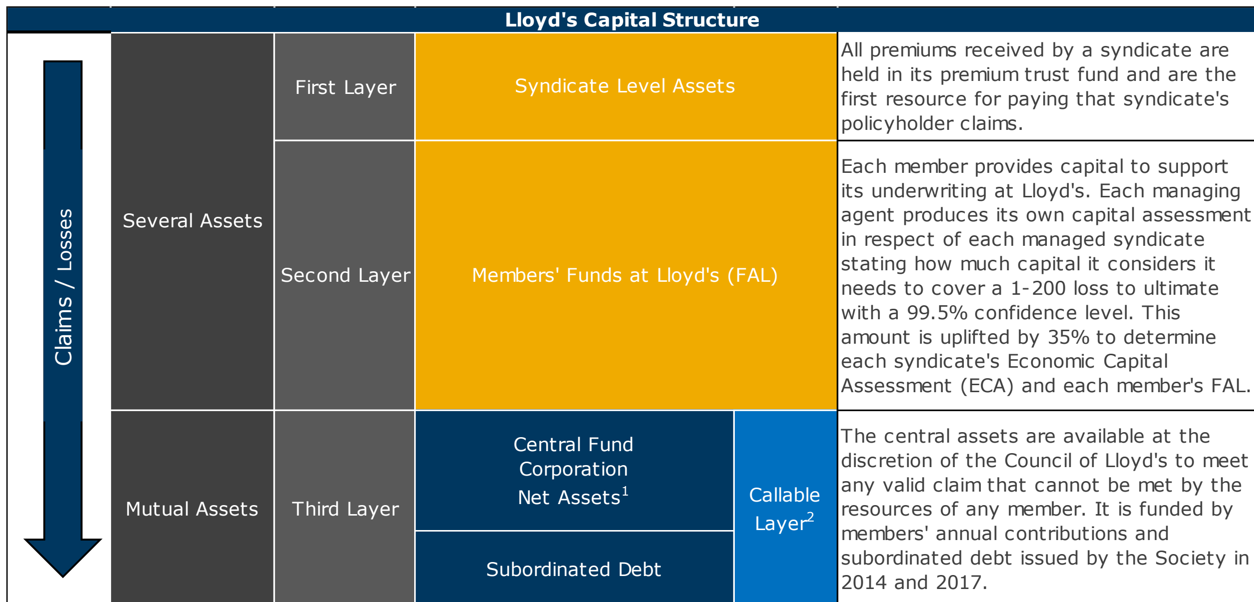
The global response to COVID-19 continues to create a high degree of risk and uncertainty. In response, Lloyd's developed a number of additional stress scenarios with probable likelihoods qualitatively assigned to better understand potential outcomes for Lloyd's and to determine what, if any, additional management actions should be taken. This work supplements the extensive stress and scenario testing routinely carried out as part of the Lloyd's Internal Model validation process.

In response to insights developed through its ongoing assessment of stress scenarios, KBRA believes that management is taking proactive actions to limit negative impacts on solvency including adjusting minimum standards, ensuring comprehensive capture of all expected losses from COVID-19 to avoid reserve deterioration, and undertaking a more detailed assessment of the impacts from climate change and very high inflation scenarios.

Balance Sheet Management

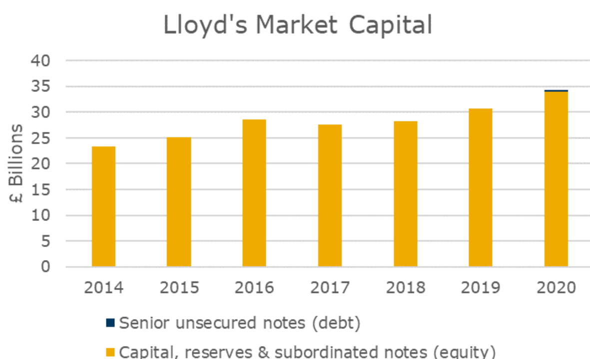
Quality of Capital/Underwriting Leverage

Lloyd's capital structure consists of successive layers that either respond severally or mutually to policyholder claims, as shown in the chart below.



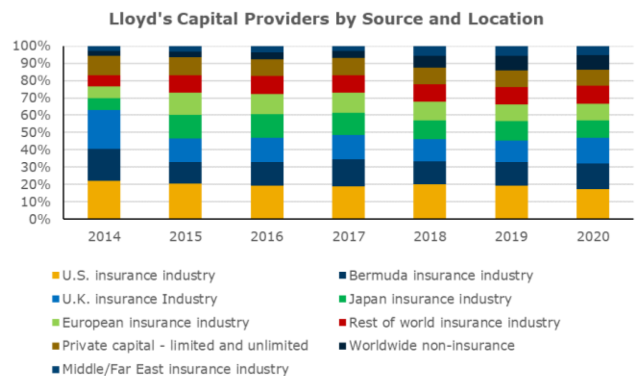
[1] Corporation net assets = Corporation Reserve, Associates Reserve, Revaluation Reserve, and Transition Reserve.
[2] Callable layer: Central Fund assets may be supplemented by a 'callable layer' of up to 3% of members' overall premium limits in any one calendar year. These funds would be drawn from premium trust funds.

KBRA views favourably the quality of Lloyd's capital as it is almost entirely equity. The subordinated notes issued by the Society are structured such that the capital raised in these issuances is available to the Central Fund prior to the repayment of note holders, thereby qualifying it for equity treatment at a market level. The proceeds from the senior unsecured notes issued on 21 January 2020 are earmarked to finance the Future at Lloyd's programme and are payable ahead of policyholder claims. Accordingly, these securities are treated as debt although KBRA notes that the Lloyd's market debt-to-capital is very conservative at 0.9% at end-2020. In addition, KBRA views the assessable features of the capital structure as a credit strength as it provides an additional and reliable source of claims paying resources to cover the liabilities at the syndicate level.



At a market level, capital has grown at a CAGR of 6.5% from end-2014 to end-2020 and, despite significantly elevated loss activity, increased by 11.8% in 2020. KBRA views Lloyd's ability to grow capital favourably as it demonstrates strong support from members. In 2020, Lloyd's collected an additional £3.5 billion from members to fund COVID-19 losses.

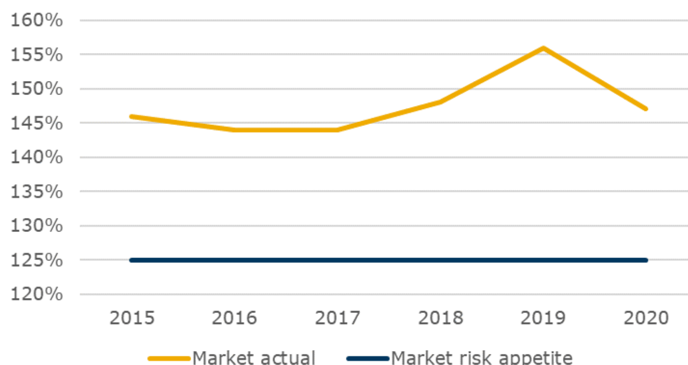
Lloyd's capital providers are geographically well distributed around the world, with the US, Bermuda and UK insurance industries accounting for slightly less than 50% of the total from 2015 onwards (63.1% in 2014). With the launch of London Bridge Risk PCC Ltd. in January 2021, insurance-linked securities funds and investors now have a streamlined way to invest capital into the Lloyd's market, potentially further diversifying Lloyd's sources of capital in the future.



Lloyd's is a regulated undertaking and is subject to supervision by the Prudential Regulatory Authority under the Financial Services and Market Act 2000. Within this construct, Lloyd's

applies capital requirements at both the member level and centrally to ensure that it complies with Solvency II as well as to meet the Society's own capital management objectives.

Lloyd's capital setting process starts at a syndicate level. Each syndicate is required to calculate its Solvency Capital Requirement (SCR) to cover a 1-200-year "loss to ultimate." Over and above that, the Society applies a capital uplift (currently 35%) to the ultimate SCR to determine the Economic Capital Assessment (ECA) for each member participating in the syndicate which becomes each member's FAL requirement. The uplift is a Lloyd's, not a Solvency II, requirement.



On a Solvency II basis, the SCR must withstand a 1-200-year loss over a "one-year time horizon." Each syndicate also calculates a SCR at a 99.5% confidence level over a one-year time horizon for each underwriting year using its own model that meets Solvency II requirements and has been approved by Lloyd's Capital and Planning Group (CPG). This calculation drives the determination of member SCRs. Each member's SCR on a Solvency II basis consists of the sum of the member's share of the syndicate's one-year SCR. Where a member participates in more than one syndicate, Lloyd's applies a diversification credit to reflect the spread of risk.

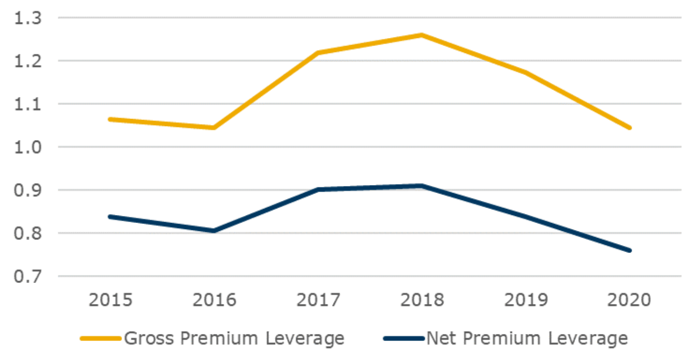
Under the Solvency II regime, there are two different SCRs that are calculated. The Lloyd's market wide SCR (MWSCR) is calculated to cover all market risks of Lloyd's at a 99.5% confidence level over a one-year time horizon. All of the capital of the component parts of the market taken together are available to meet the MWSCR. Currently the MWSCR risk appetite is 125%. The Lloyd's central SCR (CSCR) is calculated only with respect to the risks facing the Society, including the Central Fund, at the same confidence level and time horizon used to calculate the MWSCR. The major risk to the Society is that members do not have sufficient funds to meet their underwriting losses even after fully complying with Lloyd's capital setting process. Currently, the central risk appetite is 200%. The central capital solvency requirement is over and above the market wide solvency capital requirement, resulting in Lloyd's being able to withstand ~1-330-year event over a one-year time horizon at a 99.5% confidence level.

The MWSCR is promulgated by the Lloyd's Internal Model (LIM). The LIM is a purpose-built model designed exclusively to calculate Lloyd's solvency capital requirements. While syndicates calculate their own SCRs, the market wide capital requirement is derived from Lloyd's setting model parameters at a whole market level to build a view of total capital requirements and then allocating capital to syndicates (and then through to members) to meet a 1-200-year loss over a one-year time horizon. The LIM has been approved by the PRA to be used in lieu of the standard calculation provided for under the Solvency II regime. For more on the LIM, see the Risk Management section.

Due to the changes in global economic conditions during the first half of 2020, Lloyd's applied to the PRA for a voluntary capital add-on to the LIM to ensure that the current risk profile was more accurately reflected, thereby strengthening Lloyd's market wide capital requirement. The application was approved with effect from 26 August 2020 and reduced the 1H 2020 MWSCR from 155% to 144%. The capital add-on was £1.34 billion. The solvency ratio remains well within Lloyd's risk appetite of 125% and required an enhanced level of capital to be held by members during the fourth quarter 2020 planning cycle. KBRA views favourably this proactive step by Lloyd's to strengthen its capital base in anticipation of a material emerging risk.

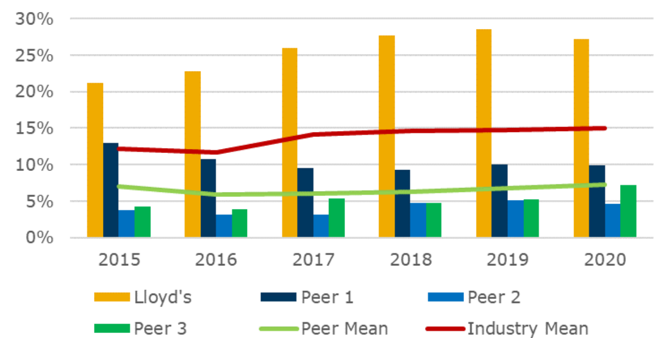
Lloyd's will finalise its Major Model Change application to the PRA to permanently incorporate the add-on to the LIM by 30 June 2021. The PRA has six months to review and approve/disapprove an application before the new LIM can be used for the next annual calculation of solvency capital requirements.

Lloyd's net leverage at end-2020 was 2.9x, materially more conservative than either industry or peer benchmarks. Net premium leverage was 0.8x at end-2020, compared to 1.1x for the industry and 2.1x for the peers, primarily reflecting Lloyd's greater overall utilisation of reinsurance.



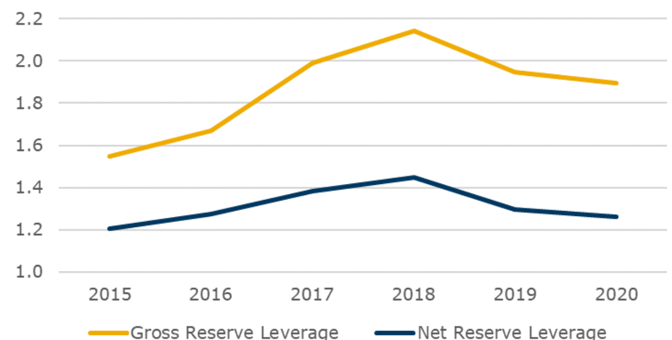
Because each syndicate structures and purchases their own reinsurance programme, there are limited economies of scale and no comprehensive reinsurance strategy. Given the cost-effective availability of reinsurance capacity to protect major losses and legacy exposures, Lloyd's syndicates have since 2016 steadily increased their reinsurance spend each subsequent year through end-2019. Reinsurance spend was down slightly in 2020, in part due to increases in risk-adjusted rates in some loss affected lines of business. Whereas the industry's reinsurance spend has remained consistent at ~15% of gross written premium, Lloyd's syndicates have increased their spend from 21% in 2015 to 27% in 2020 (inclusive of intra-Lloyd's cessions of ~4% of GWP) on a Pro Forma Financial Statement basis. KBRA believes that given the structure of the Lloyd's market that the increased reinsurance spend compared to the industry and peers is prudent. While KBRA expects some fluctuation in response to pricing conditions, KBRA anticipates that Lloyd's reinsurance as a percentage of premium will continue to remain elevated compared to industry benchmarks.

While elevated dependence on reinsurance presents greater counterparty credit risk to the Lloyd's market, the Corporation closely monitors reinsurance premiums, reinsurance losses recoverable and reinsurer financial strength around conservative risk appetites. To date, reinsurance coverage, including on COVID-19 claims, has responded as expected with few disputes.



Net reserve leverage edged lower in 2019 and stabilized in 2020. While gross leverage is down from its peak in 2018, it continues to be elevated. The scale of reinsurance dependance remains material due to the aggregate value of recoveries from catastrophe losses and legacy reinsurance protections. Recoveries are being closely monitored as the amount slightly breached Lloyd's risk appetite amber threshold at 9 months 2020.

Under Lloyd's capital structure, syndicate reserves are not fungible. To ensure that reserves across the Lloyd's market are adequate, the Lloyd's Actuarial function requires each syndicate to submit a Statement of Actuarial Opinion (SAO) attesting to the adequacy of reserves on a gross and net basis for each open year of account. The signing actuary must provide an unqualified opinion which conforms to the guidance issued by the Institute and Faculty of Actuaries and the Financial Reporting Council and confirms that the technical provisions set by the managing agent are at least equal to the signing actuary's best estimate. Syndicates employ actuaries either directly or through consulting firms to advise on the level of their technical reserves.



In addition to the bottom-up reserving approach by syndicates and their actuaries, Lloyd's Market Reserving & Capital (MRC) function utilises a sophisticated Global Central Reserving Exercise (GCRE) to produce a top-down view of best estimate, monitor trends in market-level net reserves and identify areas of focus for syndicate level reserving oversight. At end-2019, Lloyd's net carried reserves exceeded all best estimates, much improved over reserve levels four years prior, indicating that Lloyd's increased reserving oversight in recent years has been highly effective at influencing syndicate behaviors.

The GCRE also produces a range of reasonable best estimates. At end-2019, the syndicate best estimate and carried reserves were within or above the indicative range for each high-level class of business. KBRA notes that for certain classes, the syndicate best estimate and carried reserves are at the low end of the range. These classes are the focus of further investigation by MRC to better understand the drivers and to institute corrective action, as necessary.

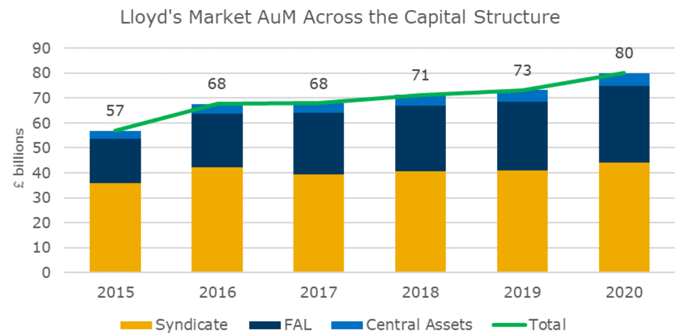
Lloyd's Market 2019 Carried Reserves v Best Estimates			
	(£ bn)	Carried Reserves	
		Over(Under) £	Over (Under) %
Carried Net Reserves at end-2019	39.8	0	0.0%
Syndicate Best Estimate	37.7	2.1	5.3%
SAO Best Estimate	37.2	2.8	7.0%

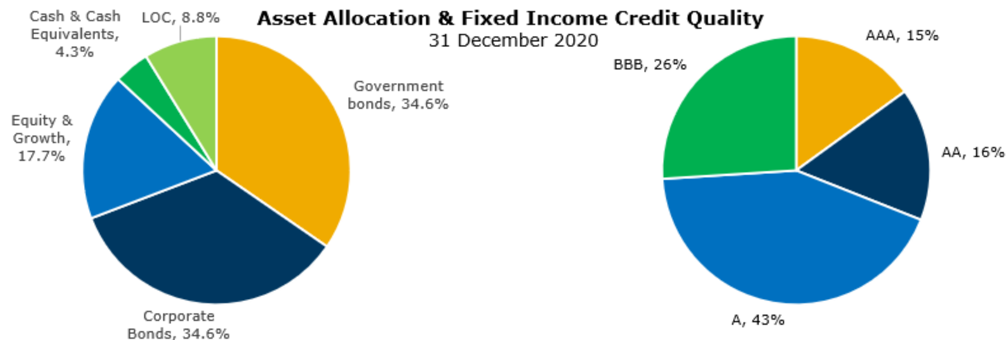
Lloyd's periodically seeks independent review of central reserving to assess the adequacy and effectiveness of its market aggregate reserving processes and outcomes. Based on its review, KBRA believes that the reserving controls in place are sound at a market level and expects that the MRC function will continue to research and refine appropriate reserving oversight in line with best practices and any further independent review recommendations.

Asset Quality and Investment Risk

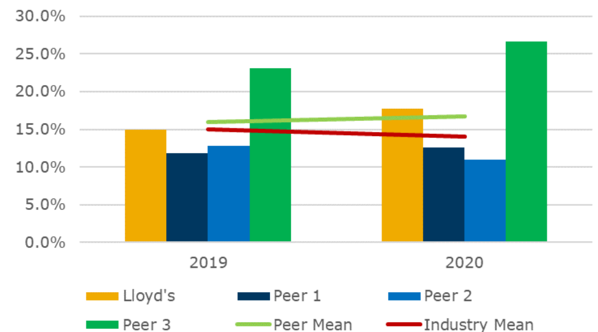
For the market as a whole, Lloyd's invested assets have grown at a 6.5% CAGR over the past 5 years. Growth has been uneven across the capital structure, with syndicate invested assets growing at 4.1% CAGR, FAL growing at 10.0% CAGR and Central Assets growing at 10.8% CAGR over the same period. The differences in growth reflect, among other things, the level of investment risk in the various portfolios.

The average credit quality of the fixed income portfolio is AA with a duration of 2.4 years.

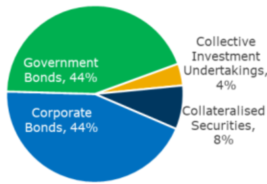


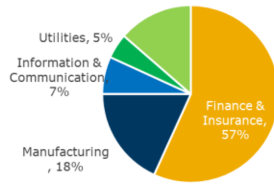


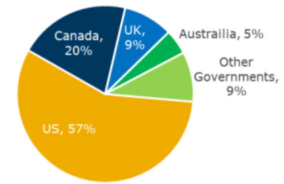
Lloyd's investment strategy is to hold predominantly high credit quality fixed income securities. Lloyd's investment risk appetite permits up to 25% of invested assets in equity and alternative investments, with a lower threshold at the syndicate level and a higher threshold at the FAL level reflecting the priority order in which assets are utilized to respond to claims. Lloyd's was below all thresholds at end-2020. KBRA notes that Lloyd's is in line with both industry and peer benchmarks with respect to equity and alternative investment allocations.



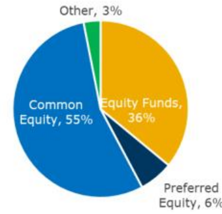
Within the fixed income portfolio, KBRA notes some concentration in the Finance and Insurance sector in the corporate bond portfolio. The concentration in US government bonds is reflective of the amount of premium written in the US and various collateral requirements surrounding that business.

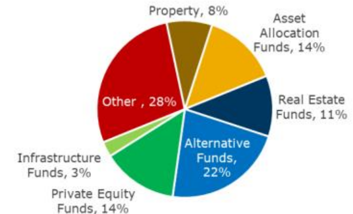






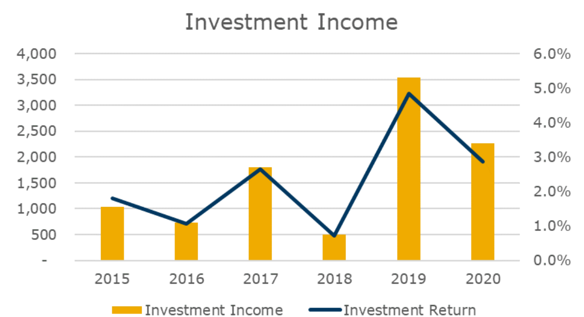
Within the equity and alternative investment portfolio, assets are generally diversified with common stock representing the largest asset class, followed by equity funds.





Lloyd's investment income is down £1.2 billion in 2020 due to the financial market volatility in March which subsequently subsided as a result of central bank interventions. In 2020, the Lloyd's market generated a 2.9% investment return, down from 4.8% in 2019. Asset values have generally recovered from March 2020 declines and credit spreads have almost returned to pre-COVID-19 levels.

The drop in return is partially due to de-risking of the Central Fund post March 2020. In order to maximise returns, the Central Fund had historically allocated a significant amount of its portfolio to equity and alternative investments. This allocation was materially reduced at the beginning of the third quarter of 2020 to better align the investment risk with the capital backstop function of the Central Fund. Because of the de-risking, the Central Fund did not fully benefit from the equity market recovery in the later part of 2020.



While KBRA views favourably the reduction in investment risk within the Central Fund, KBRA notes that the shift to fixed income securities heightens the Central Fund's vulnerability to high inflation risk.

As part of its Environmental, Social and Governance (ESG) commitment, Lloyd's has established sustainable investment targets. See ESG Management section for more details.

Financial Flexibility and Access to Capital

The Society has the right to make a call on members of up to 3% of members' premium limits (callable contributions). The callable contributions can be drawn from members' premium trust funds without the members' consent. KBRA believes that this feature of Lloyd's capital structure provides financial flexibility to Lloyd's to ensure that all policyholders' claims are paid in a timely manner in the event that a particular syndicate, or syndicates, do not have sufficient liquid assets to pay claims in accordance with contractual policy terms.

On 14 January 2021, Lloyd's received regulatory approval from the Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA) to set up London Bridge Risk PCC Ltd., a new multi Insurance Special Purpose Vehicle. The new vehicle complements the more traditional approaches to deploying capital at Lloyd's by providing additional optionality. The PCC will provide an access point for all investors, including insurance-linked securities investors, to deploy and manage funds in an efficient, tax transparent manner into the Lloyd's market. The approval was a key milestone in the Future at Lloyd's programme which, among other things, aims to create an insurance market that attracts new forms of capital.

To ensure funding was available to meet the near and medium-term cash requirements of the Future at Lloyd's, the Society took advantage of the low interest rate environment and issued £300 million of senior unsecured notes on 21

January 2020. The debt was placed privately across six different investors across four tranches, with maturities ranging from 2030 to 2045. Interest rates range from 2.48% to 2.81%, with an average rate of 2.6%.

On 7 February 2017, the Society issued £300 million subordinated notes with a first call date on 7 February 2027 and a maturity date of 7 February 2047. These notes bear interest at a rate of 4.875% per annum, payable in arrears on 7 February each year. The proceeds from these notes are available to satisfy obligations of the Central Fund in advance of repayment to the note holders.

On 30 October 2014, the Society issued £500 million subordinated notes maturing in 2024 and bearing interest at a rate of 4.750% per annum, payable annually in arrears on 30 October each year. The proceeds from these notes are also available to satisfy obligations of the Central Fund in advance of repayment to the note holders.

KBRA believes that Lloyd’s has favourable financial flexibility and access to capital, with internal access to additional funds supplemented by a proven track record of accessing debt markets.

Liquidity and Asset/Liability Management

From a quantitative perspective, KBRA views Lloyd’s market liquidity metrics as sound with current liquidity ratios above 100% between 2015-2020. Catastrophe and major losses create volatility in liquidity ratios on a year over year basis. KBRA also analyzed the percentage of assets held in cash and high credit quality fixed income assets within each layer of Lloyd’s capital structure.

Lloyd's Current Liquidity

Lloyd's % Assets in Cash and IG Fixed Income			
		9M 2020	2019
Layer 1	Syndicates	95%	93%
Layer 2	FAL	75%	75%
Layer 3	Central Fund	82%	63%

Syndicate and FAL liquidity remained stable during 2020 from end-2019. Central Fund liquidity improved substantially due to the reduction in allocation to the high-yield, equity and alternative investment sectors following the financial market volatility in March 2020. KBRA views this reduction in investment risk favourably as it better aligns the liquidity risk profile of the Central Fund with its function as a backstop in the event that members cannot meet their claims payment obligations.

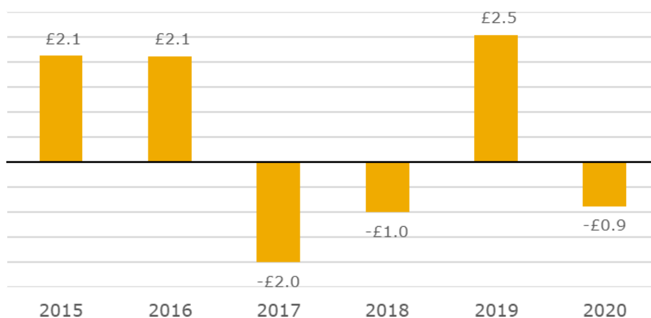
Since Letters of Credit (LOCs) make up a large percentage of FAL assets, KBRA believes that close monitoring of bank credit quality is important to the liquidity profile of these assets. Lloyd’s performs in-depth credit analysis on 27 bank entities representing ~95% of the LOCs and maintains concentration limits per bank. The top ten banks represent ~60% of the total value of LOCs at 9M 2020, down from 69% at end-2019.

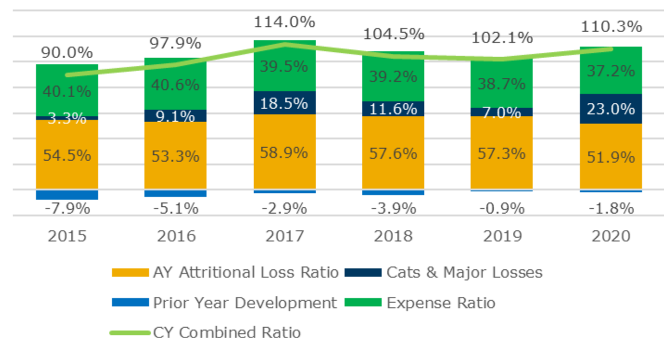
Average asset duration for the market overall is 2.4 years while average liability duration is 3.0 years. In addition, aggregate assets are reasonably well matched to technical provisions by currency. Individual syndicates may, or may not, maintain such favourable matching which reinforces the importance of the liquidity profile of the Central Fund.

The PRA’s new regulatory requirements outlined in Supervisory Statement SS5/19 – Liquidity Risk Management for Insurers will include forward-looking scenarios that not only stress capital but also liquidity. KBRA views these future stress test enhancements for the industry favourably.

Operating Fundamentals

Drivers, and Consistency, of Profitability

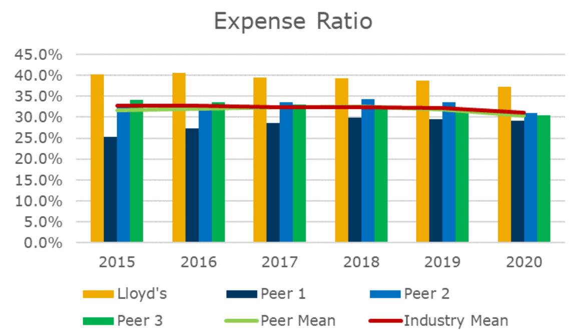




Lloyd's reported a positive cumulative result before tax[1] from 2015 through 2020 of £2.9 billion. The result was driven by cumulative net investment income of £9.9 billion offset by cumulative net underwriting losses of £4.5 billion for the same period. A significant driver of the poor underwriting results was elevated levels of major losses in 2017 (£4.7 billion), 2018 (£2.9 billion) and 2020 (£6.0 billion, of which £3.4 or 13.3% of the CY Combined Ratio relates to COVID-19). Lloyd's five-year average for major losses is £2.5 billion or 10.1% of the CY combined ratio. KBRA expects ongoing volatility in Lloyd's underwriting results due to natural and man-made catastrophes as insuring property exposed to such risks is a core component of Lloyd's business. KBRA believes that the ability of Lloyd's to recapitalise from members after such events effectively offsets the earnings volatility that catastrophe exposed risks might otherwise generate.

KBRA is more concerned about elevated attritional loss ratios as a driver of poor underwriting results. Over the past ten years, Lloyd's business has grown significantly in long-tailed classes (D&O, GL and Casualty Treaty), particularly in the US. Lloyd's expansion occurred during a period when large insurers were shedding business in these lines due to poor performance from the combined impacts of a soft pricing environment and increasing social inflation. While overall prior year reserve releases improved in 2020 to £461 million (from £232 million in 2019), casualty reserves were strengthened by £337 million or 1.4% of the carried casualty reserves. KBRA anticipates further reserve strengthening among industry casualty underwriters over the medium term.

Lloyd's expense ratios compare unfavourably to the industry and peer benchmarks, running approximately 6 and 7 points higher, respectively, in 2020. The improvements in 2019 and 2020 are due to improved pricing levels combined with a 19.8% decrease in premium volume since 2018 from syndicates exiting or severely curbing their writings in poor performing lines as part of Lloyd's performance improvement initiative. In addition, KBRA believes that the benefits from digitalisation as part of the Future at Lloyd's programme should further bring expenses more in line with the industry over the medium term.

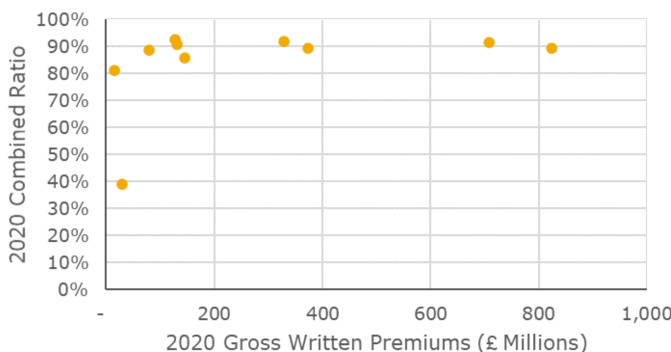


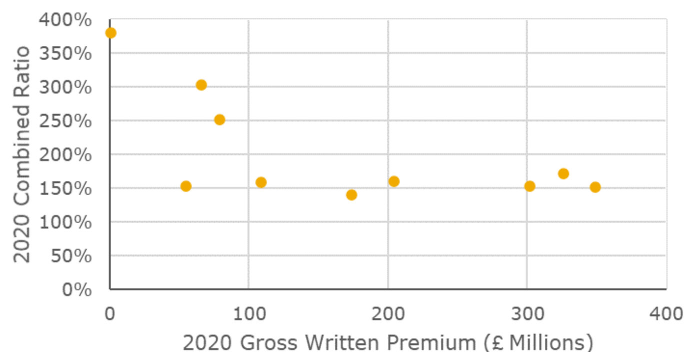
Lloyd's is addressing its sub-par underwriting performance with a multi-pronged approach to increase rates, reduce exposures, grow the best performing syndicates, and remediate, or remove, the worst ones.

For 2020, Lloyd's achieved an overall risk adjusted rate change of 10.8% on renewals on 12% less volume, an encouraging visible sign of underlying performance improvement. While every class is showing rate increases and exposure decreases, not all have become profitable yet and performance management remains Lloyd's number one priority. To date in 2021, all classes of business and geographies continue to achieve positive rate increases.

While core to its business, Lloyd's has continued to reduce its catastrophe risk appetite and plans a slight further reduction in 2021 to mitigate future losses – both attritional and catastrophe.

On a syndicate level, results across the best and worst underwriters confirms that performance varies considerably among individual syndicates due to size, lines of business and tenure in the market.





[1]The result before tax for the Lloyd's market is the equivalent of net income for traditional insurance companies and is one of two key performance indicators (KPIs) used to assess both the performance of the market and individual syndicates. The other KPI is Combined Operating Ratio, known more commonly as Combined Ratio.

Starting with the 2019 syndicate business plans, Lloyd's instituted a targeted approach to portfolio management. Each syndicate was designated as Light Touch, Standard or High Touch. In approved plans, Light Touch syndicates were allowed to grow while High Touch syndicates were reduced in size or removed from the market. Lloyd's also added metrics to its risk appetite framework to monitor High Touch syndicates. Through nine months 2020, the proportion of the market subject to increased oversight and intervention has remained relatively stable throughout the year. Lloyd's intends to maintain, and enhance, its differentiated approach to business plan approval to organically shrink the portfolio away from High Touch to better performing syndicates. During the 1Q 2021 business plan review, the number of light touch syndicates was further reduced. Lloyd's may consider additional direct short-term interventions to improve performance.

High Touch v Light Touch Oversight

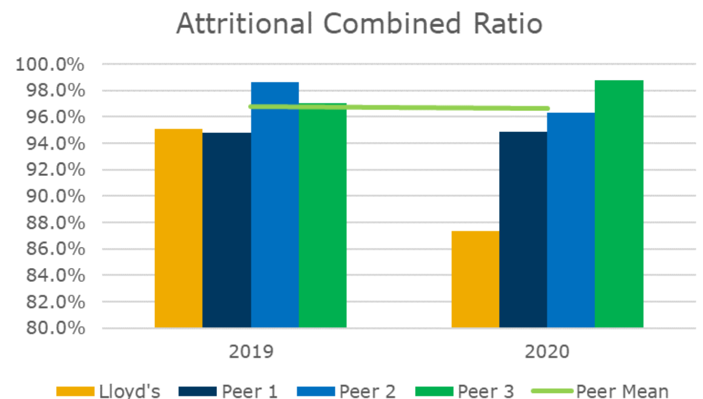
High Touch syndicates and agents:

- receive increased oversight in line with the heightened risk that they present to Lloyd's
- are subject to regular internal upwards reporting
- subject to more detailed business plan review
- are restricted on business plan growth
- must show consistent and sustained improvement before being removed from High Touch list

Light Touch syndicates and agents:

- must have operated for at least 3 years
- must be in the upper quintile for 5-year average net combined ratio
- cannot be High Touch
- must show good capability in all areas of the business
- must be well reserved
- must be compliant in all areas of Solvency II
- receive "file and use" treatment for business plan approvals
- are subject to minimal additional oversight (but still subject to core oversight activities)

Lloyd's will continue to be challenged by its need for higher technical margins to make up for increased losses whether from natural catastrophes or social inflation, lower investment income due to the low interest rate environment, and continued uncertainty over the ultimate cost of pandemic related claims. KBRA believes that the market is currently exhibiting positive pricing dynamics but that with plentiful capital the current firming may not be sustainable over the medium term.

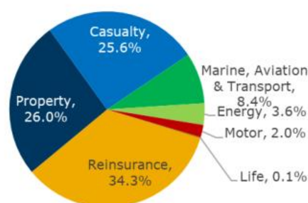


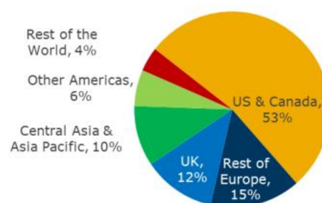
Although KBRA acknowledges Lloyd's performance activities undertaken and outcomes produced so far compared to peers, a medium-term trend of attritional loss ratios in the low 50's is likely needed to support a return to sustained underwriting profitability.

Earnings Diversification: Product/Geography

Lloyd's insures people, businesses, and communities in more than 200 countries and territories and is constantly working to lead the insurance industry into new markets and to develop products and solutions to meet complex and emerging risks. Lloyd's develops tailor-made policies for customers in every sector and covers more than 60 lines of insurance and reinsurance. KBRA believes that Lloyd's has a favourable earnings diversification profile both on a line of business and a geographic basis.

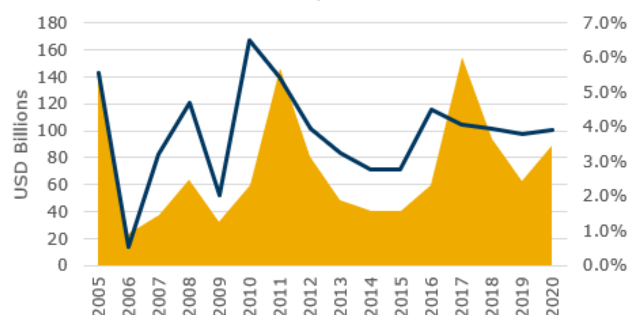
Accident & Health/ Agriculture & Hail/ Aviation BBB/ Crime/ Cargo/ Casualty/ Contingency/ Cyber/ Difference in Conditions/ Directors & Officers/ Employers Liability/ Energy/ Engineering/ Extended Warranty/ Financial Institutions/ Fine Art/ Legal Expenses/ Livestock & Bloodstock/ Marine/ Medical Expenses/ Medical Malpractice/ Motor/ General Liability/ Nuclear/ Pecuniary/ Personal Accident XL/ Political Risks, Credit & Financial Guarantee/ Power Generation/ Professional Indemnity/ Property/ Space/ Specie/ Term Life/ Terrorism/ Yacht





Exposure to Event Risk

Lloyd's pays claims for most natural and man-made catastrophe events due to its expansive lines of business and its wide geographic footprint. Net exposure is mitigated to varying degrees year-over-year through the purchase of outward reinsurance. On a net basis, Lloyd's members must "come in line" after major loss events and provide additional funds to honor claims obligations to policyholders. As a backstop, the Central Fund is available in the event a syndicate's member(s) are unable to provide funds to pay claims owed to policyholders. Lloyd's monitors its exposure to catastrophes through minimum standards for syndicates and extensive modelling of disaster scenarios. While KBRA believes that appropriate and robust controls are in place to manage catastrophe exposure across the market, it notes that Lloyd's share of insured 2020 industry losses is slightly above, but in line with, its peers. Despite any efforts to contain catastrophe exposures, KBRA believes that Lloyd's will continue to provide material protection for global catastrophes.



Industry losses are from Swiss Re Institute's Sigma Explorer and include both man-made and natural catastrophes.
Lloyd's share was determined by converting industry losses to GBP at end of year exchange rates.

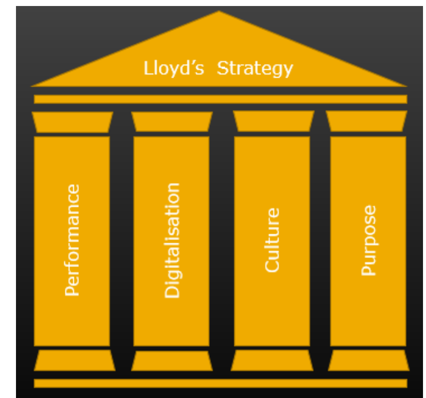
Lloyd's maintains an investment portfolio comprised primarily of cash and fixed income securities, with approximately 18% of the portfolio in equity and alternative investments at end-2020 (15% at end-2019). While the equity and alternative investments are meant to boost returns, the market volatility during March 2020 resulted in material value erosion to this portion of the portfolio. While the credit quality of the fixed income portfolio is high and current interest rate risk is modest, KBRA notes that fixed income portfolios have increased vulnerability to interest rate risk during periods of high inflation as may develop during the economic recovery from the global pandemic. KBRA believes that Lloyd's monitoring of investment risk is appropriate relative to its financial market event exposure.

Company Profile and Risk Management

Management Profile and Strategy

Lloyd's is run by a highly experienced management team with oversight by the Council of Lloyd's. The entire Lloyd's management team has extensive experience in the (re)insurance industry. John Neal was appointed CEO in October 2018. Immediately prior to assuming his current role, Mr. Neal was Group CEO of QBE, a global insurance and reinsurance business with a significant Lloyd's footprint. Earlier in his career, Mr. Neal worked at a number of Managing Agencies and while at Bankside Managing Agency became the youngest active underwriter at Lloyd's. Burkhard Keese became CFO in April 2019 following 14 years in various finance roles at Allianz Group. Shortly thereafter, in September 2019, David Sansom joined Lloyd's as CRO. Previously, Mr. Sansom worked as a Director in the Financial Services Risk Practice at EY. Mr. Sansom also has experience working for the UK regulatory authorities, the Financial Services Authority and HM Treasury.

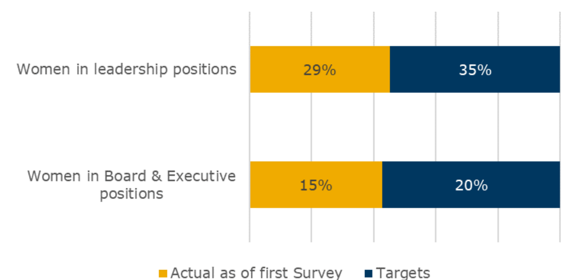
Heading into 2020, Lloyd's had three strategic priorities: (1) to continue to return the market to sustainable, profitable underwriting performance; (2) to implement the Future at Lloyd's digitalisation strategy to ensure the long-term success of the market, and (3) to build a diverse and inclusive culture. During the year, a fourth strategic priority, purpose, was added.



In the recent past, Lloyd's underwriting **performance** has been sub-par. To address this issue, a refined portfolio management approach was implemented for the 2019 planning cycle to tightly monitor and address individual syndicate performance. Between 2018 and 2020, these efforts resulted in a 5.7% improvement in underlying performance (attritional loss ratio and attritional net combined ratio). KBRA expects continued heightened focus on performance improvement given the recent announcement of a new Chief of Markets, Patrick Tiernan, who joined Lloyd's in 2021, and a stable, but higher than desired, proportion of the market subject to increased oversight and intervention throughout 2020. Going forward, management remains focused on sustainable profit with growth coming primarily from rate, not exposure. KBRA views favourably the continuing focus on performance improvement.

Lloyd's aims to be the most advanced insurance marketplace in the world. To achieve this goal, Lloyd's needs to streamline and automate many processes and practices. This is a significant undertaking but is the focus of the Future at Lloyd's programme. While COVID-19 temporarily diverted the project's focus to specific areas (improving electronic placement, enhancing Delegated Authority services, and streamlining claims handling), the pandemic itself also reenforced the overall importance of the programme. The changes made in response to government lock downs were positively received by stakeholders. KBRA believes that the result of the programme will bring Lloyd's into the **digital age** and minimise many strategic threats, but also notes that there is execution risk in delivering the programme as Lloyd's cannot mandate that managing agents adopt the new automated, digital processes and practices.

Lloyd's established a Culture Advisory Panel in 2020 to inform Lloyd's **cultural objectives** and strategy. The panel reports to the Council. Lloyd's instituted an annual culture survey , the second of which was conducted in 2020. Based on the results of the first survey, Lloyd's set market-wide gender targets to be achieved by end-2023, alongside a medium-term ambition for gender parity over the next decade. In October 2020, Lloyd's set a minimum Council diversity target of 33% female and/or a Black, Asian, or Minority Ethnic background by end-2023. These diversity and inclusion (D&I) targets were reaffirmed in Lloyd's December 2020 ESG Report.



Following the impacts of COVID-19, Lloyd's increased its focus on mental health and wellbeing for employees. A market-wide Mental Health Awareness Week was launched in May 2020. Lloyd's hosted its sixth annual Dive In[2] festival in September 2020 with 18,000 market participants in attendance. KBRA believes that Lloyd's efforts to build a more inclusive workplace align well with its strategy to be the most advanced marketplace in the world. Lloyd's seeks the best talent to develop solutions to solve the most complex risk challenges facing society, such as climate change and cybercrimes.

Lloyd's **purpose** is sharing risk to create a braver world. As part of its purpose, Lloyd's is focusing on three areas: sustainability, thought leadership and its global brand and reputation. Lloyd's published its first Environmental, Social and Governance (ESG) report in late 2020 to outline its commitment to sustainability and what it is doing to make Lloyd's more sustainable. See ESG Management section for more details. In an early response to the pandemic, Lloyd's proposed several innovative solutions that it believes the insurance industry could offer customers to better protect them against a future wave of COVID-19 or other future systemic risks, as well as subsequently outlining how the insurance industry could simplify products to improve customer understanding of their policy coverage and better manage their expectations following a loss. In February 2021, Lloyd's launched Futureset, a new global platform and community dedicated to driving greater societal and economic resilience to the world's most challenging risks. Throughout 2021 Futureset will focus on the landscape of systemic risks, including

[2] Dive In is a global movement in the insurance sector to support the development of inclusive workplace cultures. Its mission is to enable people to achieve their potential by raising awareness of the business case and promoting positive action for diversity in all its forms. Since its birth in London in 2015 by a group of firms in the Lloyd's market acting through D&I strategy steering group, Dive In has grown exponentially to include some of the world's largest insurance companies, brokers, underwriters and associated service providers across 32 countries. Dive In promotes year-round best practice in diversity and inclusion with tools and advice that culminate in an annual three-day festival in September. Various events are hosted in insurance firms around the world.

exploring lessons learned from the COVID-19 pandemic, as well as exploring the growing and global risks brought about by climate change.

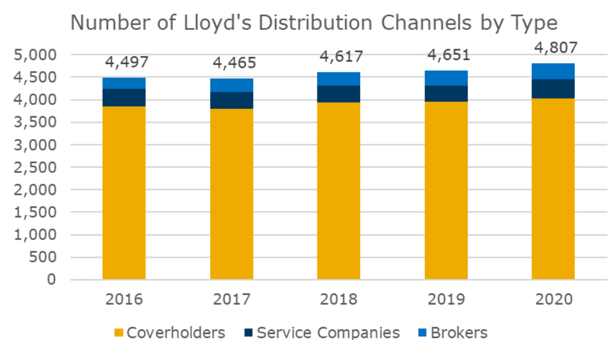
During 2020, Lloyd’s launched a new Reputation and Satisfaction Pulse Survey, designed to provide regular customer feedback to help it better understand the needs of key audiences and whether Lloyd’s is satisfactorily meeting those needs. In 2021, the Net Promoter Score from the survey will be used to measure the success of the changes Lloyd’s is delivering and improvements in customer experience and perceptions. KBRA views favourably Lloyd’s forward-looking plans in all areas within its purpose strategic priority.

Market Position

KBRA believes that Lloyd’s overall market position is favourable. Lloyd’s is ranked among the top 10 global (re)insurers, writing 4.4% of global reinsurance and commercial insurance premium of ~£0.8 trillion. Lloyd’s benefits from its strong brand recognition and reputation. As an industry leader in underwriting specialty risks, Lloyd’s provides thought leadership to the industry and continues to provide coverage for many complex and unique risks. However, historically Lloyd’s has lagged the industry from an ease of doing business standpoint and has been slightly slower than its peers to adopt digitalisation.

Distribution

Lloyd’s is a broker market. The number of brokers distributing Lloyd’s products has grown at a CAGR of 7.9% from end-2016 to end-2020 when the total number of brokers reached 350. Another vital distribution channel for Lloyd’s are coverholders. which offer local access to the Lloyd’s market around the world. There were 4,030 coverholders at end-2020, having grown at a CAGR of 1.1% over the prior four years. Finally, Lloyd’s products may be distributed by service companies. Service companies operate like coverholders but are wholly owned subsidiaries of managing agents or managing agents’ holding companies. There were 427 service companies at end-2020, up from 380 at end-2016. KBRA believes that Lloyd’s has a growing, multi-channel, multi-jurisdiction distribution network that allows it to source attractive new business opportunities.



While distribution appears concentrated in coverholders (approximately 85% of the total number), KBRA does not view this qualitative aspect of Lloyd’s distribution network unfavourably. Rather, the market knows that Lloyd’s capacity is essential for jumbo risks to secure sufficient cover and coverholders provide easy access regardless of where the risk is located. Lloyd’s also provides essential cover for risks that (re)insurance companies do not have the appetite, underwriting expertise, distribution network or financial strength to write. For example, in December 2020, Syndicate 1796 and Parsyl, Inc. (technology enabled provider of cargo insurance), in collaboration with 14 global (re)insurers, launched an initiative to insure the global distribution of COVID-19 vaccines as well as other critical health commodities, a testament to Lloyd’s global reach and market leadership.

Risk Management

Lloyd’s Risk Management Policy describes its overall framework and approach for the management of risk, including the risk strategy, internal governance arrangements, tools, processes, and reporting procedures. The relevant Solvency II requirements are also incorporated into the policy. The guiding principle of Lloyd’s risk management approach is that there is one framework which encompasses all risks at every level. The framework is also built on the principle that risk management is a continuous and dynamic process, where Lloyd’s understanding of the risks it faces is continuously evolving in light of new information. The framework is designed to be both effective and pragmatic to maximise the business benefit.

While the policy is authored and maintained by the Risk and Regulatory function, Lloyd’s views the management of risk as the responsibility of each and every employee. The Risk Management function and the various risk committees provide a secondary check and balance to ensure that the range of risks is well understood, effectively managed and in line with Lloyd’s overall strategy and risk appetite. This is achieved through the operation of the Risk Management Framework which collectively ensures that all Lloyd’s risks are effectively identified, assessed, monitored, and managed.

Lloyd’s takes a consistent approach to identifying risks through a bi-annual risk and control assessment (RCA) process. The process reassesses existing risks and identifies any new exposures. It also evaluates the performance of key controls and monitors existing risk plans.

The Risk Appetite Framework outlines the risk appetite that will achieve the goals of Lloyd’s. Risk appetite statements are organized into three pillars, with high level, delivery, and monitoring metrics.

A key risk measurement tool in Lloyd's risk management framework is Lloyd's Internal Model (LIM). The LIM is a purpose-built model, approved by the PRA, designed to calculate the Solvency Capital Requirement (SCR) for Lloyd's as required under Solvency II. The LIM is used in place of the standard SCR calculation. The LIM is comprised of a core calculation kernel and two core sub-models: the Lloyd's Catastrophe Model and the Lloyd's Investment Risk Model.

In addition to calculating the SCR, the LIM supports other aspects of risk management. For example, LIM produces various risk appetite metrics, underpins Lloyd's Own Risk and Solvency Assessment report (ORSA) and generates other stress and scenario tests.

Lloyd's has put in place a robust LIM Governance framework to ensure that change, operation, and validation of the LIM are performed in line with internal procedures and in accordance with Solvency II requirements for proprietary models. The Council has the ultimate responsibility for LIM and, through the Risk Committee, oversees the high-level governance of LIM and its operation. The Risk and Regulatory function has overall responsibility for ensuring the LIM is used in decision-making by senior management. The Risk and Regulatory function also conducts annual validation of the LIM. This process is supported by an external consultancy which reviews key model components in detail as enhancements to the model are introduced.

Lloyd's continuously seeks to identify and examine stress tests and scenarios which may adversely impact its business to ensure potential risks are clearly understood and effectively monitored and that adequate controls are in place. The outcomes/conclusions of the stress tests and scenarios form an integral part of the overall risk management system and prompt senior management to act across a range of areas such as, changes in the LIM, re-evaluation of risk appetites, syndicate business plans and capital management decisions (e.g., setting Economic Capital).

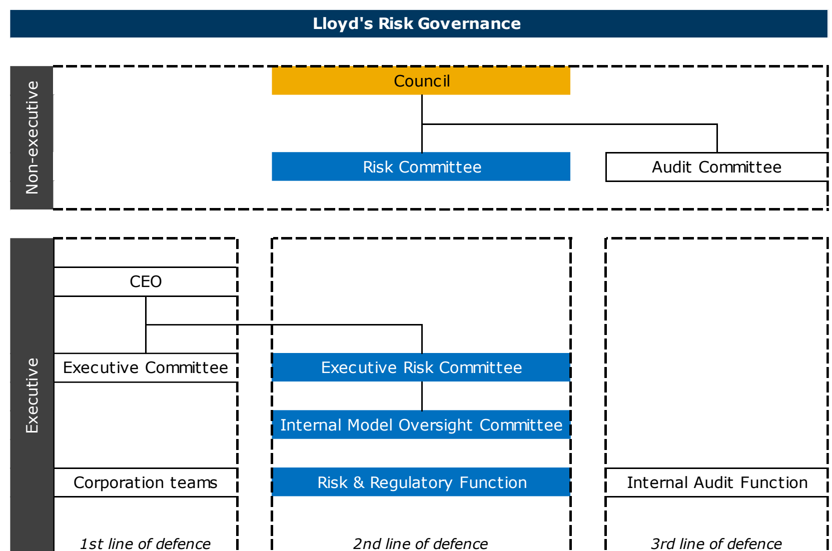
The two main applications of stress tests and scenarios are:

1. As a management tool – At least once a year the impact of extreme scenarios is evaluated, including a reverse stress test on the Central Fund. The results from both the extreme scenarios and the reverse stress test feed into the Lloyd's Recovery and Resolution Plan.
2. As a complement to the LIM – Stress tests and scenarios are used to inform the parameter revisions of certain components of the LIM (e.g., operational risk) and also to help validate the model.

In addition to stress tests and scenarios, the Risk and Regulatory function frequently undertakes thematic reviews of evolving and complex areas (e.g., cyber underwriting, operational resilience) to ensure that the risk profile is well understood and effectively managed. These reviews provide insight and thought leadership over medium- and longer-term risks to management and the Council.

All risks at Lloyd's are managed under the "Three Lines of Defence" model:

- **1st line of defence**: functions that own and manage risks
- **2nd line of defence**: functions that oversee or specialise in compliance or management of risk
- **3rd line of defence**: functions that provide independent assurance



The Lloyd's risk governance structure (shown to the left) incorporates all three lines of defence in monitoring risks facing the market based on both qualitative and quantitative risk information.

Regular reporting of the risk profile to the Risk Committee is coordinated by the Risk and Regulatory function. This includes quarterly reporting of the risk appetite metrics via a Risk Dashboard. Any breaches of appetite are accompanied by a "Get to Green" plan setting out the actions to bring the risk category back in line with appetite. Risk incidents reported to the Risk and Regulatory function are escalated in line with the Risk Incident Reporting process. Other reporting includes the annual ORSA report, an annual report setting out the outcomes of the Capital Planning Group process, as well as the biannual RCA.

During 2020, Lloyd's continued to strengthen its risk management framework. Investment in resource and technical expertise enabled Lloyd's second line oversight functions to be more proactive, performing deeper dives into areas of concern due to heightened risk. Lloyd's enhanced risk processes and tools include:

- An improved RCA process designed to drive greater accountability and reduce incidents
- The implementation of a new Governance, Risk and Compliance technology system
- Lloyd's assessment of its exposure to financial crime
- End-to-end validation of the Reserving team's projection of reserves and technical provisions by the second line Risk functions
- Further embedding the Risk function's role in business plan and capital setting

Reinsurance
Lloyd's relies heavily on reinsurance, although all purchasing decisions are made at a syndicate level. Counterparty credit risk may generate material financial losses should a reinsurer fail to pay or fail to pay in a timely manner. Lloyd's oversees reinsurance credit exposure centrally across the entire market and takes selected management action when considered necessary. Within the risk appetite framework, Lloyd's tracks detailed delivery metrics regarding scale of premium, amount of losses recoverable, concentration, financial strength of counterparties, and the amount of aged debt/disputes. Accordingly, KBRA believes that Lloyd's has low reinsurance counterparty risk.

Protection structures are dominated by traditional reinsurance products from leading players in the market. Total reinsurance recoverable balances remain substantial, mainly due to recent year natural catastrophe losses, COVID-19, and additional legacy protections put in place during 2020.

ESG Management
KBRA's ratings incorporate all material credit factors including those that relate to Environmental, Social and Governance (ESG) factors. KBRA captures the impact of ESG factors in the same manner as all other credit-relevant factors with a particular focus on viewing these issues through the lens of risk management. More information on KBRA's approach to ESG risk analysis can be found here. KBRA's approach considers the direct impacts of ESG factors on Lloyd's operations as well as the indirect impacts that may arise in a variety of ways including the policy preferences of key stakeholders. KBRA observes that Lloyd's has proactively identified, analysed and addressed many directly and indirectly impactful ESG issues in its operations. Embracing these issues has strengthened Lloyd's ability to manage them.

Direct Impacts

Governance
The setting, and continuous monitoring, of appropriate data protection and theft risk metrics to protect Lloyd's intellectual property demonstrate Lloyd's commitment to protecting its brand by incorporating specific risk management metrics into its governance structure. This aspect of Lloyd's ESG management was primarily factored into KBRA's credit assessment of Lloyd's risk management framework.

Environmental
Lloyd's insures significant property catastrophe (re)insurance limits for many companies across the globe. These businesses rely on Lloyd's claims' paying ability to rebuild post disaster. If appropriate management of natural catastrophe exposure concentration, through the setting of appropriate minimum standards and ongoing natural catastrophe scenario stress testing is mismanaged, it could have detrimental financial consequences to Lloyd's. KBRA factored this aspect of ESG management into its credit analysis as part of quantitative stress testing.

Indirect Impacts

Environmental/Climate
In December 2020 Lloyd's published its first ESG Report, with an ambition to integrate sustainability into everything that Lloyd's does. For the first time, Lloyd's also set targets for responsible underwriting and investment to help accelerate the market's transition from fossil fuel dependency towards renewable energy sources. From 1 January 2022, Lloyd's managing agents will be asked to no longer provide new insurance coverage or make investments in fossil fuel activities. To enable a smooth transition for the market and customers, managing agents will be asked to phase out existing coverage by 1 January 2030. In addition, both the market and the Corporation's existing investments in thermal coal-fired power plants, thermal coal mines, oil sands and new Artic energy exploration activities will be phased out by the end of 2025. No new investments in these activities will be made after 31 December 2021 and the Corporation will allocate 5% of the Central Fund to impact investments by 2022. Further, the Corporation has committed to becoming net zero for its operations by 2025.

Governance

Lloyd's is a market leader in both cyber insurance products and cyber risk research. Lloyd's provides access to the combined scale, expertise, and capacity of more than 77 expert cyber risk insurers in one place across a variety of products including breach response, liability, regulatory, extortion, business interruption, reputational harm and PCI DSS assessments and fines. In February 2021, Lloyd's, in partnership with cyber analytics specialist CyberCube and reinsurance broker Guy Carpenter, published new research highlighting the increasing risk Internet of Things devices pose to industrial and manufacturing businesses.

Social

In its first ESG report, Lloyd's also reiterates its commitment to the gender targets it set at all levels of the Lloyd's market in 2020 and commits to setting similar ethnicity targets in 2021. In addition, in February 2021, Lloyd's launched Futureset, a global platform and community to drive greater societal and economic resilience to the world's most challenging risks. See Management Profile and Strategy section for more details.

The above indirect impacts reflect management's commitment to addressing ESG factors that are important to its various stakeholders and, as Lloyd's makes progress in these areas, its insurance financial strength rating may become more directly influenced over the medium to longer term.

External Considerations

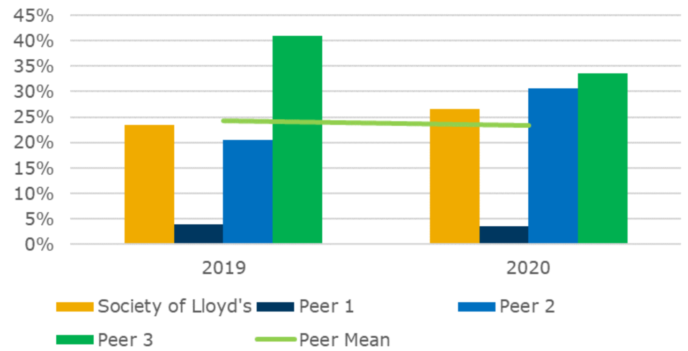
Syndicate resources for paying claims are not fungible. Therefore, during the normal course of business members inject new funds as losses emerge or following events that exhaust their capital. Likewise, members holding capital exceeding Lloyd's requirements may withdraw the excess. In the event of very severe losses, the Society may request that members "come into line" in order to trade forward and also to not withdraw any excess capital. However, KBRA notes that members are not legally obligated to recapitalise and in principle may withdraw excess capital at any time. The system works as envisioned because members are committed to maintaining the viability of the Lloyd's market.

A breach of Lloyd's market-wide solvency capital requirement would require an unprecedented and market changing scale of industry-wide losses. While the expectation is that capital providers would inject new capital into the market to cover losses as outlined above, Lloyd's capital structure provides a backstop to cover members that cannot meet their obligations to the market. KBRA views these mutual resources as covering the extreme tail risk of the market. KBRA believes that a separate assessment of the Society's financial position is appropriate to determine the adequacy of these resources as a market backstop.

Society of Lloyd's						
(£ millions)	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Total Assets	14,509	7,857	4,911	4,550	4,365	3,603
Intangible Assets	54	16	6	-	-	-
Senior Debt	299	-	-	-	-	-
Subordinated Debt	795	794	794	793	883	882
Equity	3,023	2,601	2,417	2,188	1,996	1,763
Total Capital	4,117	3,395	3,211	2,981	2,879	2,645
Central Solvency II Ratio	**209%**	**238%**	**249%**	**215%**	**215%**	**218%**
Debt/Capital	27%	23%	25%	27%	31%	33%
Intangibles/Capital	1%	0%	0%	0%	0%	0%
Total Income (Revenue)	511	483	501	476	452	350
Central Fund Claims & Provisions Incurred	-	-	-	-	8	-
Surplus before Tax (EBIT)	56	170	202	187	405	87
Surplus (Net Income)	46	137	163	156	330	74
Finance Costs	59	51	39	55	54	54
Surplus before Tax/Interest	0.9	3.3	5.2	3.4	7.5	1.6
Surplus/Interest	0.8	2.7	4.2	2.8	6.1	1.4

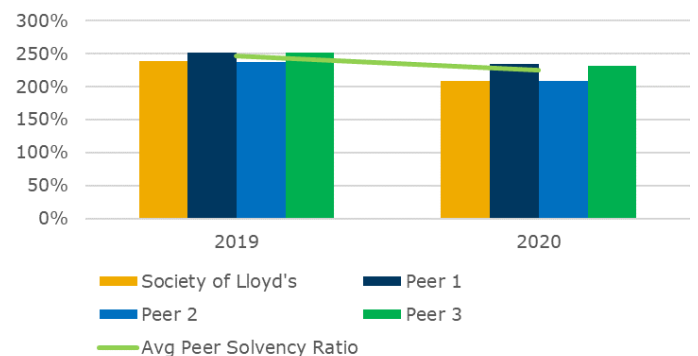
The Central Solvency II Ratio covers the risks arising centrally to Lloyd's Corporation, predominantly member deficit risk (95%) with small amounts of operational, pension and investment risks.

For the Society of Lloyd's, debt-to-capital is in line with peers and KBRA views the overall debt amount and coverage as reasonable. KBRA also views favourably the terms of the subordinated notes that make them available to the Central Fund as mutual resources for payment of policyholder claims prior to the repayment of bondholders.



On a consolidated basis, the Society underwrites Lloyd's business in the EU and China through two subsidiaries but reinsures 100% to individual syndicates.

Similar to the market, Lloyd's applied to the PRA for a voluntary capital add-on to the LIM for the central Solvency Capital Requirement due to the changes in the global economic conditions during the first half of 2020 to reflect the risk from potential additional member deficits due to the pandemic. KBRA views the add-on favourably as it demonstrates a proactive approach to address emerging risks and maintain the financial strength of the market. At end-2020, the central solvency capital requirement ratio stood at 209%, in line with peers, based on £4.4 billion in eligible assets and £2.1 billion of capital required.



KBRA notes that the Central Fund's ability to absorb a 1-200-year event is *over and above* the market's ability to absorb a 1-200-year event or ~ a 1-330-year event overall. A Central Fund loss of this magnitude would most likely be caused by systemic market wide losses or a smaller market wide loss that disproportionally impacts a small number of members. As some loss drivers are independent of others (e.g., catastrophe and non-catastrophe risks), KBRA notes that an extreme loss in one area may be offset from profits in another which would reduce the overall market wide impact. Financial drivers of losses of this magnitude are typically either systemic under-reserving issues or extremely large natural catastrophes where the Lloyd's market has greater exposure compared to peers.

KBRA believes that the standalone financial strength of the Society, its purpose as the ultimate backstop to maintain the Lloyd's market viability, and the limited need to use central resources to pay member obligations in the last seven years are significant credit strengths for the Lloyd's market.

Impact of Transfer Risk

Managing agents must identify the main currencies in which each of their managed syndicates transacts its business and hold assets in each of those currencies to match the relevant liabilities. Managing agents must ensure that the assets match liabilities and take corrective action when a mismatch occurs. The Corporation also reviews the alignment of assets to liabilities at the syndicate level as well as at the market level. In addition, many members seek to match capital disposition by currency against peak exposures.

At end-2020, the main currencies were USD, GBP, CAD, EUR, and AUD. Other currencies comprise approximately 2.0% of total assets. As exposure is predominantly to major foreign currencies in stable jurisdictions, KBRA views Lloyd's exposure to transfer risk from sovereign capital controls as immaterial.

© Copyright 2021, Kroll Bond Rating Agency, LLC and/or its affiliates and licensors (together, "KBRA"). All rights reserved. All information contained herein is proprietary to KBRA and is protected by copyright and other intellectual property law, and none of such information may be copied or otherwise reproduced, further transmitted, redistributed, repackaged or resold, in whole or in part, by any person, without KBRA's prior express written consent. Information, including any ratings, is licensed by KBRA under these conditions. Misappropriation or misuse of KBRA information may cause serious damage to KBRA for which money damages may not constitute a sufficient remedy; KBRA shall have the right to obtain an injunction or other equitable relief in addition to any other remedies. The statements contained herein are based solely upon the opinions of KBRA and the data and information available to the authors at the time of publication. All information contained herein is obtained by KBRA from sources believed by it to be accurate and reliable; however, all information, including any ratings, is provided "AS IS". No warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, or fitness for any particular purpose of any rating or other opinion or information is given or made by KBRA. Under no circumstances shall KBRA have any liability resulting from the use of any such information, including without limitation, for any indirect, special, consequential, incidental or compensatory damages whatsoever (including without limitation, loss of profits, revenue or goodwill), even if KBRA is advised of the possibility of such damages. The credit ratings, if any, and analysis constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. KBRA receives compensation for its rating activities from issuers, insurers, guarantors and/or underwriters of debt securities for assigning ratings and from subscribers to its website. Please read KBRA's full disclaimers and terms of use at www.kbra.com.