Best's Credit Rating Effective Date
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Best's Credit Rating Methodology

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Financial Data Presented

The financial data in this report reflects the most current data available to the Analytical Team at the time of the rating. Updates to the financial exhibits in this report are available here: Best's Financial Report.

Convex Group Limited

AMB #: 044173
Ultimate Parent: AMB # 044173 - Convex Group Limited

Best's Credit Ratings - for the Rating Unit Members

Financial Strength Rating (FSR)	Issuer Credit Rating (ICR)
A-	**a-**
Excellent	**Excellent**
Outlook: **Positive**	Outlook: **Positive**
Action: **Affirmed**	Action: **Affirmed**

Assessment Descriptors

Balance Sheet Strength	**Very Strong**
Operating Performance	**Adequate**
Business Profile	**Limited**
Enterprise Risk Management	**Appropriate**

Rating Unit - Members

Rating Unit: Convex Group Limited | AMB #: 044173

AMB #	Rating Unit Members	AMB #	Rating Unit Members
074790	Convex Europe S.A.	071499	Convex Insurance UK Limited
074789	Convex Guernsey Limited	071498	Convex Re Limited

Rating Rationale - for the Rating Unit Members

The Issuer Credit Ratings and Financial Strength Ratings of the member operating companies of the rating unit are determined in accordance with Best's building block rating methodology as applied to the consolidated group's financial statements, and the supporting analytics and results are described in the following sections of this report.

Balance Sheet Strength: Very Strong

- Convex Group Limited's (Convex) risk-adjusted capitalisation was comfortably at the strongest level at year-end 2021, as measured by Best’s Capital Adequacy Ratio (BCAR). Convex's risk-adjusted capitalisation is expected to remain at the strongest level over the medium term, taking into account AM Best's additional capital requirements for new company formations.
- The group's balance sheet strength is supported by good financial flexibility, notably demonstrated in the fourth quarter of 2020 by an equity capital raise of USD 1 billion and the issuance of perpetual preference shares of USD 500 million, of which USD 400 million remains undrawn.
- A partially offsetting rating factor is Convex’s material exposure to catastrophe risk and its dependence on reinsurance to manage this risk.

Operating Performance: Adequate

- The assessment considers Convex's current business plan, taking into account its competitive environment.
- The likelihood of successful execution of the business plan is enhanced by the strong track record of senior management and underwriters that have extensive experience in the (re)insurance industry and the group’s demonstrated market acceptance to date.
- Potential earnings volatility is expected to be mitigated by prudent use of reinsurance.

Business Profile: Limited

- Convex entered the very competitive specialty (re)insurance sector shortly after its creation in 2019. The group writes insurance and reinsurance from its London, Luxembourg and Guernsey platforms and reinsurance from its Bermuda platform.
- The group has demonstrated good market acceptance since its inception, exceeding USD 2 billion of consolidated gross written premium in 2021, its second full year of operation. Profitable growth is expected over the medium term.
- The group has a focused and scalable operating model that incorporates a modern IT infrastructure with no legacy systems as well as considerable use of outsourcing.

Enterprise Risk Management: Appropriate

- The group's enterprise risk management (ERM) framework is considered to be appropriate for its risk profile.
- With operating entities domiciled in the United Kingdom, Luxembourg, and Bermuda, the group has to comply with Solvency II and Bermuda Solvency requirements, which has assisted in expediting the formalisation of the ERM framework.
- Catastrophe risk is recognised as a key risk and managed with a combination of internal and external models.
- As the group executes its business plan, its ERM capabilities are expected to develop in tandem to remain commensurate with its risk profile.

Outlook

- The positive outlooks reflect the expectation that Convex’s portfolio of business will continue to grow and diversify in a sustainable manner as it develops its operations, which could lead to an improved business profile assessment. The group's balance sheet strength assessment is expected to be supported by BCAR scores comfortably in excess of the minimum required for the strongest assessment. The execution of the group's business plan is expected to result in adequate operating performance over the medium term, supported by the effective use of reinsurance to reduce earnings volatility and protect capital.

Rating Drivers

- Positive rating pressure could arise should the group successfully deliver its business plan and become an established player in the specialty market, demonstrating its ability to grow profitably.

- Negative rating pressure may arise should the group not be able to execute its business plan, resulting in weaker-than-anticipated operating performance and/or risk-adjusted capitalisation.

Key Financial Indicators

Best's Capital Adequacy Ratio (BCAR) Scores (%)

Confidence Level	95.0	99.0	99.5	99.6
BCAR Score	77.7	65.8	61.1	60.0

Source: Best's Capital Adequacy Ratio Model - Global

Key Financial Indicators	2021 USD (000)	2020 USD (000)	2019 USD (000)	2018	2017
Net Premium Written:					
Non-Life	1,323,687	674,474	26,154	...	...
Composite	1,323,687	674,474	26,154	...	...
Net Income	-147,501	-179,263	-38,257	...	...
Total Assets	5,330,250	3,840,888	1,829,294	...	...
Total Capital and Surplus	2,400,313	2,478,283	1,634,128	...	...

Source: BestLink® - Best's Financial Suite

Key Financial Ratios (%)	2021 USD (000)	2020 USD (000)	2019 USD (000)	2018	2017	Weighted 5 Year Average
Profitability:						
Net Income Return on Revenue	-14.2	-44.0	-85.7	...	...	...
Net Income Return on Capital and Surplus	-6.1	-8.7	...	...	...	...
Balance on Non-Life Technical Account	-175,386	-251,344	-80,835	...	...	...
Non-Life Combined Ratio	117.3	175.2	999.9	...	...	...
Net Investment Yield	0.6	1.2	...	...	...	...
Leverage:						
Net Premium Written to Capital and Surplus	55.2	27.2	1.6	...	...	...

Source: BestLink® - Best's Financial Suite

Credit Analysis

Balance Sheet Strength

The BCAR scores presented under the "Best's Capital Adequacy Ratio (BCAR) Scores (%)" section of this report are based on financial year-end consolidated data as at December 2021.

Capitalization

Convex's balance sheet strength is underpinned by consolidated risk-adjusted capitalisation comfortably in excess of the minimum required for the strongest assessment, as measured by BCAR, taking into account AM Best's additional capital requirements for new company formations.

Convex's risk-adjusted capitalisation benefitted from low underwriting leverage and a conservative asset management strategy at year-end 2021, when consolidated capital and surplus reached USD 2.4 billion, a 3% decline against 2020. The modest reduction was primarily driven by a net loss for the year of USD 148 million, before payment of dividends on the drawn preference shares

Convex is in its start-up phase and AM Best expects BCAR scores to stabilise at circa 50% at the 99.6% confidence level at the end of the group's first five years of operation.

The group's largest investor is Onex Corporation, a private equity investor and manager with a track record of investing in the insurance industry. At inception, the Convex management team also personally invested USD 50 million into the group thereby aligning interests with other capital providers.

Balance Sheet Strength (Continued...)

The investment horizon for the group's principal investor is 10 years, which is longer than is typical for private equity funds. This longer-term view should allow Convex's management to take a disciplined approach to growth. In addition, shareholders' expectations are not considered overly aggressive in the initial years of operation. Surplus capital, as defined by the Board, can be distributed to shareholders via annual dividends once the business has achieved a steady state and scale.

Although the group is not listed, financial flexibility is considered good, as Convex has demonstrated a track record of successful capital raises since its inception. Most recently in 2020, the company secured USD 1 billion of additional equity capital, as well as USD 500 million of preferred equity capital - of which USD 100 million was drawn down. AM Best considers that the addition of fresh capital demonstrates Convex's financial flexibility and investor confidence in the venture.

Capital Generation Analysis	2021 USD (000)	2020 USD (000)	2019 USD (000)	2018	2017
Beginning Capital and Surplus	2,478,283	1,634,128	...	...	...
Net Income after Non-Controlling Interests	-147,501	-179,263	-38,257	...	...
Change in Paid-In Capital	79,964	1,023,418	1,672,385	...	...
Stockholder Dividends	-10,433	...	...	...	...
Net Change in Capital and Surplus	-77,970	844,155	1,634,128	...	...
Ending Capital and Surplus	2,400,313	2,478,283	1,634,128	...	...
Net Change in Capital and Surplus (%)	-3.2	51.7	...	...	...

Source: BestLink® - Best's Financial Suite

Liquidity Analysis	2021 USD (000)	2020 USD (000)	2019 USD (000)	2018	2017
Net Operating Cash Flow	359,442	228,789	-56,687	...	...
Liquid Assets to Total Liabilities (%)	113.6	214.5	836.3	...	...

Source: BestLink® - Best's Financial Suite

Asset Liability Management - Investments

The group maintains a conservative and liquid investment portfolio, consisting primarily of high quality assets with an average duration of one year at the end of 2021. In particular, the group operates with sufficient liquidity to withstand a 1-in-200 year combined risk event and be able to pay its obligations while maintaining a surplus against regulatory capital requirements.

As at year-end 2021, the investment portfolio primarily consisted of investment-grade USD fixed income securities. The portfolio was well diversified across treasuries (56% of total investments), corporate bonds (33%), and high-grade structured securities, with no issuer exceeding 3% of the portfolio. The company held a small amount of equity investments which accounted for 2% of total investments.

Over the course of 2021, the group broadened the requirements for internal reporting of risks and considerations emanating from environmental, social and governance (ESG) factors to senior management, and embedded this into the selection process for any new asset managers. The group also revised their investment risk framework to capture inflation sensitive cashflows and have introduced explicit stresses within their capital management framework.

Balance Sheet Strength (Continued...)

Composition of Cash and Invested Assets	2021 USD (000)	2020 USD (000)	2019 USD (000)	2018	2017
Total Cash and Invested Assets	3,326,930	2,923,242	1,632,156	...	...
Composition Percentages (%):					
Unaffiliated:					
Cash and Short Term Investments	21.3	47.4	10.3	...	...
Bonds	75.6	50.7	89.7	...	...
Stocks	3.2	1.9	...	...	...
Total Unaffiliated Cash and Invested Assets	100.0	100.0	100.0	...	...
Total Cash and Invested Assets	100.0	100.0	100.0	...	...

Source: BestLink® - Best's Financial Suite

Reserve Adequacy

Currently, Convex outsources certain aspects of the reserving process to a third party who carries out quarterly US GAAP reserve reviews as well as both Solvency II and Bermuda technical provisions and solvency capital requirements reporting.

The reserving process involves a high level of interaction between claims, underwriting, the wider portfolio optimisation functions and the third party partner. Reserves for attritional losses are determined using standard actuarial techniques, using market data. For large, catastrophe and complex losses there is significant input from the exposure management and claims teams where their evaluation of a realistic outcome guides the reserving process. Reviews performed by the outsourced actuarial function are presented to the Convex Reserve Committee where findings are discussed and challenged.

Holding Company Assessment

Financial Leverage Summary - Holding Company	
Financial Leverage Ratio (%)	4.20
Adjusted Financial Leverage Ratio (%)	1.20
Interest Coverage (x)	-14.80

Holding Company Analytics	2021 USD (000)	2020 USD (000)	2019 USD (000)	2018	2017
Liquid Assets to Total Liabilities (%)	113.6	214.5	836.3	...	...

Source: BestLink® - Best's Financial Suite

Operating Performance

The operating performance assessment of adequate considers Convex's five-year business plan, taking into account its competitive environment and heightened execution risk during the start-up phase. For the year ended 2021, the group reported a net loss of USD 148 million (2020: USD 179 million loss).

Underwriting Performance

For the year ended 2021, the group reported a 117% combined ratio (2020: 175%). While the company's attritional loss ratio was broadly in line with plan, major events exceeded expectations and drove the underwriting loss. Among other events, Texas Winter Storms, European Floods and Hurricane Ida were the major contributors.

Given the lack of Convex specific data due to its short operating history, the group relies on market benchmark loss ratios in order to adequately calculate best estimate reserves. The average market benchmark loss ratios used in the reserving process are greater than Convex's target loss ratios, and management feel that there is a considerable buffer within booked reserves. In addition, the combined ratio continues to be negatively impacted by management's decision to book an explicit margin over the best estimate to build up a reserve buffer. Over the medium to long term, AM Best expects that both of these factors should result in reserve redundancies, therefore having a favourable impact on underwriting results.

Operating Performance (Continued...)

Over the past two years, the company has broadly met its top line projections; however, the composition of the underlying portfolio has been a little different to initial expectations due to Convex's view of the rate environment. In particular, the company has deliberately remained underweight in casualty reinsurance (just 4% of 2021 gross written premium [GWP]). Consequently, growth in the initial years has principally come from property (re)insurance (42% of 2021 GWP) where Convex views the rate adequacy to be more appropriate. Over the medium-to-long run, Convex’s business mix is expected to diversify both by line of business and by geography, which should dilute the impact of catastrophe losses on results.

The operating expense ratio - as calculated by AM Best - amounted to 38% in 2021 (2020: 64%), which is broadly consistent with Convex’s London Market peers. Considering that 2021 was the group’s second full year of operations, and that it is still in its start-up phase, a sub-40% expense ratio is considered by AM Best to be excellent. Given the rapid scaling up of the business, economies of scale are expected to significantly reduce the expense ratio over the medium term.

For the first three months (Q1) of 2022, the group wrote USD 971 million of GWP, a significant increase against the same period in 2021. The combined ratio showed a material improvement against the prior year, falling to 91%.

Investment Performance

Convex achieved an investment yield including gains of 1% in 2021 (2020: 2%). Given Convex’s highly conservative asset management strategy, the group is expected to report modest but stable investment income.

Financial Performance Summary	2021 USD (000)	2020 USD (000)	2019 USD (000)	2018	2017
Pre-Tax Income	-151,091	-178,596	-39,634	...	...
Net Income (after Non-Controlling Interests)	-147,501	-179,263	-38,257	...	...

Source: BestLink® - Best's Financial Suite

Operating and Performance Ratios (%)	2021	2020	2019	2018	2017
Overall Performance:					
Return on Assets	-3.2	-6.3	...	...	...
Return on Capital and Surplus	-6.1	-8.7	...	...	...
Non-Life Performance:					
Loss and LAE Ratio	78.9	108.9	165.0	...	...
Expense Ratio	38.4	66.3	999.9	...	...
Combined Ratio	117.3	175.2	999.9	...	...

Source: BestLink® - Best's Financial Suite

Business Profile

Convex is a specialty (re)insurance group headquartered in Bermuda with subsidiaries in the UK, Bermuda, Luxembourg and Guernsey. Insurance and reinsurance is written from the UK, Luxembourg and Guernsey, and reinsurance from Bermuda.

2021 represented the group's second full year of operations in the very competitive specialty (re)insurance market. To date, Convex has successfully raised USD 3.2 billion of capital and wrote more than USD 2 billion of GWP in 2021, despite declining a material portion of business which did not meet the group’s underwriting risk criteria. 2022 renewals reflect a continuation of the positive market acceptance experienced by Convex during the prior year, with the group expected to surpass USD 3 billion of top line in the year.

2021 GWP was split as follows: property reinsurance 33% (2020: 36%), casualty 16% (13%), energy & marine 15% (16%), aerospace 10% (16%), property 9% (8%), specialty 7% (5%), specialty reinsurance 5% (4%), and casualty reinsurance 4% (3%). As evidenced by the split of 2021 GWP, the group has remained underweight on casualty reinsurance lines, reflective of management's view that casualty reinsurance rates have generally been inadequate. Approximately half of the group's risks lie in North America, with the bulk of the remaining exposures in the UK, Europe, Japan and Australasia.

As a new entrant in the specialty (re)insurance sector, Convex faces strong competition from well-established peers and is highly reliant on brokers to access business. In recent years, market conditions, particularly in the reinsurance sector, have been strained given excess capacity and pressure on rates. However, Convex has entered the market at a time when strong rate increases have been noted

Business Profile (Continued...)

on a range of specialty lines, with good momentum expected to last at least in the short to medium term. Regardless, it is still a difficult market in which to establish a new company. For Convex, market acceptance is likely to have been aided by senior management and underwriting teams that have an excellent network and proven track record in its target markets.

Enterprise Risk Management

Convex's enterprise risk management is considered supportive of an appropriate assessment. The obligation of subsidiaries to comply with either Solvency II or Bermuda Solvency requirements has assisted in expediting the formalisation of the ERM framework.

In 2021 and 2022 to date, Convex's focus has begun to shift from recruiting teams, implementing systems, and building an effective control environment, to enhancing the group's risk management capabilities. Some of these enhancements include: refining the group's risk appetite, capturing and quantifying emerging risks such as inflation and climate risk, and the inclusion of further stress tests within the liquidity risk framework.

Looking ahead, AM Best expects that Convex's risk management capabilities will continue to develop to remain aligned with the expanding risk profile of the group, supported by a clear sponsorship from the senior management team.

Reinsurance Summary

The key objective of the reinsurance programme is to protect the group's capital, particularly in the start-up phase, by reducing the exposure to large single risk losses, catastrophe losses and an adverse aggregation of losses. A combination of proportional, non-proportional, and alternative capital cover has been used in the reinsurance programme.

Intra-group quota share agreements are in place between Convex Insurance UK Limited and Convex Re Limited (CRL), and between Convex Europe SA and CRL, in order to optimise the group's capital allocation. Additionally, there is a 100% intra-group quota share between Convex Guernsey Limited and CRL.

The use of external reinsurance will be high during the 'build-up' phase. The majority (99%) of the reinsurance panel are rated A- or above, with the remainder made up of exposures to collateralised reinsurers (collateral held by trustees of a strong credit quality). Concentration risk is closely monitored to ensure it remains in line with risk appetite.

Environmental, Social & Governance

As a writer of global property (re)insurance, Convex is exposed to the impacts of changing climate trends, namely increased severity and frequency of natural catastrophe losses. Natural catastrophe losses have been the main driver for underwriting losses in the first two full years of operations.

Catastrophe modelling and accumulations are closely managed to ensure that the group's exposure to natural catastrophes is maintained within its risk appetite.

Convex also writes a growing book of US casualty business which is susceptible to adverse social inflation trends. AM Best defines social inflation as the risk in current or future claims caused by higher court awards and legislated rises in claims payments driven by changing social behaviour. Given that Convex is a new entrant in to the casualty space, to date, it has not experienced any material reserve strengthening due to the effects of social inflation, though the group monitors this risk closely.

Financial Statements

Balance Sheet	12/31/2021 USD (000)	%	12/31/2020 USD (000)
Cash and Short Term Investments	708,135	13.3	1,386,261
Bonds	2,513,700	47.2	1,482,483
Equity Securities	105,095	2.0	54,498
Total Cash and Invested Assets	3,326,930	62.4	2,923,242
Reinsurers' Share of Reserves	681,513	12.8	247,817
Debtors / Amounts Receivable	882,986	16.6	443,932
Other Assets	438,821	8.2	225,897
Total Assets	5,330,250	100.0	3,840,888
Gross Technical Reserves:			
Unearned Premiums	1,014,008	19.0	513,581
Non-Life Reserves	1,183,990	22.2	417,723
Total Gross Technical Reserves	2,197,998	41.2	931,304
Other Liabilities	731,939	13.7	431,301
Total Liabilities	2,929,937	55.0	1,362,605
Capital Stock	124,915	2.3	124,272
Paid-in Capital	2,650,852	49.7	2,571,531
Retained Earnings	-375,454	-7.0	-217,520
Total Capital and Surplus	2,400,313	45.0	2,478,283
Total Liabilities, Mezzanine Items and Surplus	5,330,250	100.0	3,840,888

Source: BestLink® - Best's Financial Suite

Income Statement	Non-Life USD (000)	Life USD (000)	Other USD (000)	12/31/2021 Total USD (000)	12/31/2020 Total USD (000)
Gross premiums written	2,114,853	...	...	2,114,853	1,095,258
Net Premiums Earned	1,014,693	...	...	1,014,693	334,297
Net Investment Income	...	...	19,369	19,369	26,481
Net realized gains/(losses)	...	...	1,951	1,951	16,372
Net unrealized gains/(losses)	...	...	4,483	4,483	12,529
Non-operating revenue	...	...	...	...	17,366
Total Revenue	1,014,693	...	25,803	1,040,496	407,045
Losses and Benefits	800,283	...	...	800,283	363,876
Net Operating Expense	389,796	...	...	389,796	221,765
Other Expense	...	...	1,508	1,508	...
Total Losses, Benefits, and Expenses	1,190,079	...	1,508	1,191,587	585,641
Earnings before interest & taxes (EBIT)	-175,386	...	24,295	-151,091	-178,596
Income Taxes Incurred	...	...	...	-3,590	667
Net income before Non-Controlling interests	...	...	...	-147,501	-179,263
Net income/(loss) from continuing operations	...	...	...	-147,501	-179,263
Net Income	...	...	...	-147,501	-179,263

Source: BestLink® - Best's Financial Suite

Statement of Cash Flows	12/31/2021 USD (000)	12/31/2020 USD (000)
Net cash provided/(used) in Operating Activities	359,442	228,789
Net cash provided/(used) in Investing Activities	-518,497	-1,015,220
Net cash provided/(used) in Financing Activities	69,531	1,023,418
Effect of Exchange Rates/Discontinued Operations on Cash	-6,188	12,591
Total increase (decrease) in cash	-95,712	249,578
Cash, beginning balance	293,525	43,947
Cash, ending balance	197,813	293,525

Source: BestLink® - Best's Financial Suite

Related Methodology and Criteria

Best's Credit Rating Methodology, 11/13/2020

Catastrophe Analysis in A.M. Best Ratings, 10/13/2017

Available Capital & Holding Company Analysis, 10/13/2017

Rating New Company Formations, 10/13/2017

Scoring and Assessing Innovation, 03/05/2020

Understanding Global BCAR, 07/22/2021