Accounts disclaimer

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Report & Financial Statements

Syndicate 3902

2022

Contents

Directors and administration

Managing agent

Ark Syndicate Management Limited

Directors

C Atkin	(non-executive Chairman)
I Beaton	(Chief Executive)
N Brothers	
M Burch	(Non-executive)
P Dawson	
N Fox	
P McIntosh	
M Raven	
M Rountree	(Non-executive)
N Smith	
J Wardrop	(Non-executive)
J Welman	(Non-executive)

Company secretary

J Masson

Managing agent's registered office

30 Fenchurch Avenue
London
EC3M 5AD

Managing agent's company registration number

05887810

Syndicate information

Active underwriter

P Dawson

Bankers

Lloyds TSB Bank plc
Citibank NA
Royal Bank of Canada

Investment managers

Conning Asset Management Limited
55 King William Street
London
EC4R 9AD

Independent auditors

PricewaterhouseCoopers LLP
7 More London Riverside
London
SE1 2RT

Managing agent's report

The directors of the managing agent present their annual report and audited accounts for the year to 31 December 2022.

Principal activity and review of the business

The principal activity of the Syndicate is the underwriting of direct and reinsurance business in the Lloyd's market. The managing agent of the Syndicate is Ark Syndicate Management Limited ("ASML"), a company incorporated in the UK. ASML also manages the affairs of Syndicate 4020. Gross written premium income for the year is set out below, along with a brief description of each class of business:

	2022 YOA Estimate £'000	2021 YOA Estimate £'000	2020 YOA Closed £'000	2022 Cal year £'000	2021 Cal year £'000
Marine & Energy	57,601	55,127	46,651	56,705	47,673
Property	51,332	49,350	36,932	50,047	41,498
Specialty	58,870	49,142	41,832	61,989	45,123
	167,803	153,619	125,415	168,741	134,294

Line of business	Reserving class and description
Marine & Energy	Cargo & Specie: Focus on small / medium sized accounts, excludes cash in transit, war on land and jewellers block.
Marine & Energy	Marine Hull & liability: emphasis on smaller brown water tonnage and older vessels on limited conditions and P&I, charters and umbrella liability.
Marine & Energy	Energy: Upstream oil and gas focussed with a broad geographical spread.
Property	Direct & Facultative: predominately written on an excess of loss basis, and consists of a diverse mix of municipalities, real estate, heavy industry, energy, utility, transport and leisure.
Specialty	Aviation: consists of airline, general aviation (including rotor wing), hull war and excess of loss / space.
Specialty	Accident & Health: Excess of loss reinsurance makes up approximately 60% of the account, with the remainder comprising a portfolio of contracts which cover key man, disability, credit card, sports and other personal accident risks, along with a small direct and facultative account.
Specialty	Contingency: predominantly short tail with event cancellation the largest part.
Specialty	Political Risk & Violence: Covers all areas of the broad Political Risks and Political Violence suite of products capitalising on cross-class, client sector and territorial knowledge.

Principal risks and uncertainties

ASML maintains a risk register within its risk management framework. Identified risk events are grouped into major risk categories according to the nature of the potential threat they pose to the business. The risk management framework allows risks to be identified and controls to be put in place as necessary, either to prevent the occurrence of the event or to mitigate its impact. The principal risks of the Syndicate are set out in note 2 of the accounts.

Auditors and Annual general meeting

As permitted under the Syndicate Meeting (Amendment No.1) Byelaw it is not proposed to hold a Syndicate Annual General Meeting. The members of the Syndicate appointed PricewaterhouseCoopers LLP as auditors for the financial year ending 31 December 2021.

Disclosure of information to auditors

The directors of ASML who held office at the date of approval of this report confirm that, so far as they are each aware, there is no relevant audit information of which the auditors of the Syndicate are unaware; and each director has taken all the steps that they ought to have taken as a director to make themselves aware of any relevant audit information and to establish that the auditors of the Syndicate are aware of that information.

Four year summary - closed years	2020 YOA	2019 YOA	2018 YOA	2017 YOA
Syndicate allocated capacity (£m)	120.0	100.0	100.0	100.0
Number of Underwriting Members	1	1	1	1
Aggregate net premiums (£'000)	75,611	45,427	51,025	39,110

Illustrative share of £10,000	%	%	%	%
Gross premium written (% of illustrative share)	85.1	71.0	76.5	59.8
Net premium written (% of illustrative share)	63.8	47.0	49.9	41.6
Profit / (Loss) (% of gross premium)	21.4	0.9	12.6	(8.9)
Profit / (Loss) (% of capacity)	18.2	0.7	9.7	(5.3)

Results for illustrative share of £10,000	£	£	£	£
Gross premiums written	8,512	7,101	7,646	5,979
Net premiums	6,377	4,704	4,992	4,157
RITC from an earlier year of account	1,601	1,065	975	-
Net claims	(1,424)	(2,404)	(2,861)	(2,654)
Reinsurance to close	(2,956)	(1,922)	(1,065)	(996)
Underwriting profit	3,598	1,443	2,041	507
Other syndicate operating expenses	(1,065)	(1,336)	(1,005)	(1,003)
Movement on foreign currency translation	(111)	-	-	-
Net investment return	(9)	105	76	95
Illustrative personal expenses:				
Managing agent's fee	(75)	(75)	(75)	(75)
Profit commission ("PC")	(449)	-	-	-
Other personal expenses	(66)	(69)	(69)	(54)
Profit / (Loss) after illustrative personal expenses / PC	1,823	68	968	(530)

Underwriting performance

YOA:

The 2020 YOA has closed with a profit of £21.9m after all standard personal expenses, equivalent to a profit on stamp capacity of 18.2%. Large losses impacting the YOA include the COVID-19 pandemic, the Ukraine conflict, and a series of natural catastrophes – the largest being US winter storm Uri, and Hurricanes Sally, Laura and Zeta. The investment return for the YOA was below expectations, with interest rate rises in 2022 generating unrealised losses in the fixed income portfolio.

The 2021 YOA is forecast at the 24 months to make a mid-point profit of £24.0m. Large losses impacting the YOA include the Ukraine conflict, and a series of natural catastrophes – the largest being US winter storm Uri, and Hurricanes Ian and Ida. A forecast is not currently required for the 2022 YOA.

	2022 YOA	2021 YOA
Capacity	£150.0m	£150.0m
Forecast results (% of capacity)	na	13.5% -18.5%

Managing agent's report

Calendar year:

The underwriting profit for the 2022 calendar year is £47.0m, which is in line with expectations. Losses from large events such as Hurricane Ian and the Ukraine conflict have been within planned assumptions, while good loss experience has generated a healthy release from prior year reserves. The calendar year result together with key performance indicators is shown below:

	2022	2021
Profit for the financial year (£'000)	23,155	18,296
Claims ratio (%)	35.6%	35.7%
Expense ratio (%)	44.4%	46.4%
Combined ratio (%)	80.0%	82.1%

The claims ratio is the ratio of claims incurred net of reinsurance to earned premiums net of reinsurance. The expense ratio is the ratio of operating expenses and acquisition costs (excluding foreign exchange movements) to earned premiums net of reinsurance. The claims ratio reflects the underwriting issues previously noted, and the expense ratio is broadly in line with expectations. The combined ratio including all foreign exchange movements is 78.6%. (2021: 82.2%)

Operating expenses

Operating expenses, as set out below, are in line with expectations.

	2022 £'000	2021 £'000
Acquisition costs – brokerage and commissions	30,686	23,114
Acquisition costs – other	3,566	3,227
Administrative expenses	14,004	12,556
Managing agency fee	1,103	1,065
Personal expenses	6,729	3,735
Operating expenses	56,088	43,697

Cash flow

There was a net cash flow decrease of £2.6mm (2021: increase £5.4m) in the year arising from normal operating activities. Profit releases on open years of £15.7m (2021: £2.4m) were made during the year. On 24 February 2023, the ASML board approved a profit release of £19.1m for the 2021 YOA and £6.9m for the 2022 YOA.

Investment return

Syndicate 4020 holds the majority of the cash and investments of the Syndicate, and allocates the appropriate share of investment return to the Syndicate. Funds are actively managed by third party investment managers. Syndicate 4020 has a diversified portfolio in corporate debt, cash, property funds and investment funds with an average duration that is appropriate compared to the expected liability duration. As set out below, the investment portfolio has returned a loss for the 2022 calendar year, with interest rate rises generating unrealised losses in the fixed income portfolio.

	2022	2021
Average funds available for investment in Syndicate 4020 and Syndicate 3902 (US$'000)	806,954	692,049
Investment return for the year before allocation to Syndicate 3902 (US$'000)	(9,631)	3,770
Annualised investment return (%)	-1.2%	1.6%

Investment losses in the syndicate totalled £2.0m, generated from average assets of £109.3m.

Financial position

The main components of the statement of financial position are technical provisions and investments and cash.

Technical provisions include a provision for outstanding claims of £164.1m (2021: £97.5m) and a provision for unearned premiums of £91.1m (2021: £70.7m). The reinsurers' share of technical provisions is £95.3m (2021: £34.7m) in respect of unearned premiums and £6.3m (2021: £8.9m) for outstanding claims. The provision for outstanding claims is based on evaluations of reported claims and estimates for losses incurred but not reported ("IBNR"). As claims may not be settled for a number of years after they are incurred, the setting of provisions involves a degree of judgement as to the ultimate exposure to losses. Investments and cash total £146.4m (2021: £72.2m).

Directors

The directors of ASML served from 1 January 2022 to the date of this report, unless stated otherwise. Shareholdings in the ultimate parent company of ASML, Ark Insurance Holdings Limited ("AIHL") are stated as at 31 December 2022.

Name	A1 Ordinary shares No.	A2 Ordinary shares No.	A3 Ordinary shares No.	B1 Ordinary shares No.	B3 Ordinary shares No.	Z Ordinary shares No.	Z1 Ordinary shares) No.	C1 Ordinary shares No.	C2 Ordinary shares No.
C Atkin	-	-	-	-	-	-	-	-	-
I Beaton	129,803	18,309	-	78,777	-	908,621	555,439	76,894	12,857
N Brothers	-	-	6,970	-	4,230	-	-	12,726	2,127
M Burch (appointed 1 January 2022)	-	-	-	-	-	-	-	-	-
P Dawson	-	-	24,729	-	15,008	-	-	35,632	5,957
N Fox	-	-	18,079	-	10,972	-	-	22,906	3,830
P McIntosh	-	-	21,046	-	12,773	-	-	15,271	2,553
M Raven	-	-	18,079	-	10.972	-	-	22,906	3,830
M Rountree	-	-	-	-	-	-	-	-	-
N Smith	-	-	19,577	-	11,881	-	-	35,632	5,957
J Wardrop	-	-	-	-	-	-	-	-	-
J Welman	-	-	-	-	-	-	-	-	-

Going concern

The directors of ASML have reviewed the business plan, liquidity and operational resilience of the company, including the risks associated with the COVID-19 pandemic and the ongoing conflict in Ukraine. They have concluded that there are no material uncertainties that could cast significant doubt over the Syndicate's ability to continue as a going concern for at least a year from the date of approval of the Syndicate annual accounts. Management's assessment of going concern is set out in note 1 on page 15.

Future developments

The capacity of the Syndicate for the 2023 YOA is £200.0m (2022 YOA: £150.0m). The capacity of Syndicate 4020 for the 2023 YOA is £500.0m (2022 YOA: £350.0m).

P Dawson,
Active Underwriter,
24 February 2023

Statement of managing agent's responsibilities

The directors of the managing agent are responsible for preparing the Syndicate annual accounts in accordance with applicable law and regulations.

The Insurance Accounts Directive (Lloyds's Syndicate and Aggregate Accounts) Regulations 2008 requires the directors of the managing agent to prepare their Syndicate's annual accounts for each financial year. Under that law they have elected to prepare the annual accounts in accordance with UK Accounting Standards and applicable law (UK Generally Accepted Accounting Practice), including FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland.

Under Insurance Accounts Directive (Lloyds's Syndicate and Aggregate Accounts) Regulations 2008 the directors of the managing agent must not approve the annual accounts unless they are satisfied that they give a true and fair view of the state of affairs of the Syndicate and of the profit or loss of the Syndicate for that period. In preparing these annual accounts, the directors of the managing agent are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the annual accounts;
- assess the syndicate's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to cease trading, or have no realistic alternative but to do so.

The directors of the managing agent are responsible for keeping adequate accounting records that are sufficient to show and explain the Syndicate's transactions and disclose with reasonable accuracy at any time the financial position of the Syndicate and enable them to ensure that the Syndicate annual accounts comply with the Insurance Accounts Directive (Lloyds's Syndicate and Aggregate Accounts) Regulations 2008. They are responsible for such internal control as they determine is necessary to enable the preparation of Syndicate annual accounts that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Syndicate and to prevent and detect fraud and other irregularities.

The directors of the managing agent are responsible for the maintenance and integrity of the Syndicate and financial information included on the Syndicate's website. Legislation in the UK governing the preparation and dissemination of Syndicate annual accounts may differ from legislation in other jurisdictions.

On behalf of the board

Neil Smith
Director
24 February 2023

Independent auditors' report to the members of Syndicate 3902

Opinion

In our opinion, Syndicate 3902's syndicate annual accounts:

- give a true and fair view of the state of the syndicate's affairs as at 31 December 2022 and of its profit and cash flows for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, including FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland", and applicable law); and
- have been prepared in accordance with the requirements of The Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008.

We have audited the syndicate annual accounts included within the Report and Financial Statements (the "Annual Report"), which comprise: the statement of financial position as at 31 December 2022, the income statement, the statement of comprehensive income, the statement of cash flows, and the notes to the syndicate annual accounts, which include a description of the significant accounting policies.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)"), and The Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008 and other applicable law. Our responsibilities under ISAs (UK) are further described in the *Auditors' responsibilities for the audit of the syndicate annual accounts* section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the syndicate in accordance with the ethical requirements that are relevant to our audit of the syndicate annual accounts in the UK, which includes the FRC's Ethical Standard, as applicable to other entities of public interest, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided.

Other than those disclosed in note 5, we have provided no non-audit services to the syndicate in the period under audit.

Conclusions relating to going concern

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the syndicate's ability to continue as a going concern for a period of at least twelve months from when the syndicate annual accounts are authorised for issue.

In auditing the syndicate annual accounts, we have concluded that the Managing Agent's use of the going concern basis of accounting in the preparation of the syndicate annual accounts is appropriate.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the syndicate's ability to continue as a going concern.

Our responsibilities and the responsibilities of the Managing Agent with respect to going concern are described in the relevant sections of this report.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the syndicate annual accounts and our auditors' report thereon. The Managing Agent is responsible for the other information. Our opinion on the syndicate annual accounts does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the syndicate annual accounts, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the syndicate annual accounts or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the syndicate annual accounts or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Managing Agent's Report, we also considered whether the disclosures required by The Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008 have been included.

Based on our work undertaken in the course of the audit, The Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008 requires us also to report certain opinions and matters as described below.

Managing Agent's Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Managing Agent's Report for the year ended 31 December 2022 is consistent with the syndicate annual accounts and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the syndicate and its environment obtained in the course of the audit, we did not identify any material misstatements in the Managing Agent's Report.

Responsibilities for the syndicate annual accounts and the audit

Responsibilities of the Managing Agent for the syndicate annual accounts

As explained more fully in the Statement of Managing Agent's Responsibilities, the Managing Agent is responsible for the preparation of the syndicate annual accounts in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Managing Agent is also responsible for such internal control as they determine is necessary to enable the preparation of syndicate annual accounts that are free from material misstatement, whether due to fraud or error.

In preparing the syndicate annual accounts, the Managing Agent is responsible for assessing the syndicate's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless it is intended for the syndicate to cease operations, or it has no realistic alternative but to do so.

Auditors' responsibilities for the audit of the syndicate annual accounts

Our objectives are to obtain reasonable assurance about whether the syndicate annual accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these syndicate annual accounts.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

Based on our understanding of the syndicate and industry, we identified that the principal risks of non-compliance with laws and regulations related to breaches of UK and European regulatory principles, such as those governed by the Prudential Regulation Authority and the Financial Conduct Authority, and those regulations set by the Council of Lloyd's, and we considered the extent to which non-compliance might have a material effect on the syndicate annual accounts. We also considered those laws and regulations that have a direct impact on the syndicate annual accounts such as The Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008. We evaluated management's incentives and opportunities for fraudulent manipulation of the syndicate annual accounts (including the risk of override of controls), and determined that the principal risks were related to the risk of fraud in revenue recognition, journal entries, and the potential for management bias in significant accounting estimates, particularly in relation to incurred but not reported claims provisions included in insurance liabilities. Audit procedures performed by the engagement team included:

- Discussions with senior management involved in the Risk and Compliance functions, including consideration of known or suspected instances of noncompliance with laws and regulation and fraud;
- Assessment of any matters reported on the company's whistleblowing helpline and fraud register and the results of management's investigation of such matters;
- Reading key correspondence with Lloyd's, the Prudential Regulation Authority and the Financial Conduct Authority in relation to compliance with laws and regulations;
- Reviewing relevant meeting minutes including those of the Audit and Risk Assurance Committee;

- Testing journal entries identified in accordance with our fraud risk assessment; and
- Testing and challenging where appropriate the assumptions and judgements made by management in their significant accounting estimates, particularly in relation to incurred but not reported provisions included in insurance liabilities.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the syndicate annual accounts. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

A further description of our responsibilities for the audit of the syndicate annual accounts is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the syndicate's member in accordance with part 2 of The Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Under The Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008 we are required to report to you if, in our opinion:

- we have not obtained all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Managing Agent in respect of the syndicate; or
- certain disclosures of Managing Agent remuneration specified by law are not made; or
- the syndicate annual accounts are not in agreement with the accounting records.

We have no exceptions to report arising from this responsibility.

Mark Bolton (Senior statutory auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London
24 February 2023

Income statement

For the year ended 31 December 2022

	Notes	2022 £'000	2021 £'000
Technical account			
Earned premiums, net of reinsurance			
Gross premiums written	3	168,741	134,294
Outward reinsurance premiums		(26,803)	(27,347)
Change in the provision for unearned premiums			
Gross amount		(10,560)	(12,574)
Reinsurers' share		(5,142)	(219)
Earned premiums, net of reinsurance		126,236	94,154
Allocated investment return transferred from the non-technical account	4	(2,004)	1,467
Claims incurred, net of reinsurance			
Claims paid			
Gross amount		(33,115)	(39,609)
Reinsurers' share		12,834	21,496
		(20,281)	(18,113)
Change in the provision for claims			
Gross amount		(54,964)	(7,014)
Reinsurers' share		30,256	(8,503)
		(24,708)	(15,517)
Claims incurred, net of reinsurance		(44,989)	(33,630)
Operating expenses	5	(56,088)	(43,697)
Balance on the technical account for general business		23,155	18,294
Non-technical account			
Investment return		(2,004)	1,467
Allocated investment return transferred to technical account		2,004	(1,467)
Profit for the financial year		23,155	18,294

Statement of comprehensive income

	Notes	2022 £'000	2021 £'000
Profit for the financial year		23,155	18,294
Foreign exchange translation differences		1,747	(47)
	13	24,902	18,247

All operations are continuing. The notes on pages 15 to 31 form part of these accounts.

Statement of financial position

As at 31 December 2022

	Notes	2022 £'000	2021 £'000
Assets			
Financial assets	7	135,050	58,296
Reinsurance assets	8	75,168	43,510
Insurance receivables	10	81,617	73,845
Other debtors		4	8
Cash at bank and in hand	11	11,305	13,908
Deferred acquisition costs	9	20,276	16,185
Other prepayments and accrued income		80	62
Total assets		323,500	205,814
Capital, reserves and liabilities			
Capital and reserves			
Members' balances attributable to underwriting participations	13	28,789	19,425
Liabilities			
Insurance liabilities	12	255,223	168,210
Other payables	14	22,115	14,509
Accruals and deferred income		17,373	3,670
Total liabilities		294,711	183,389
Total capital, reserves and liabilities		323,500	205,814

The notes on pages 15 to 31 form part of these accounts. The accounts were approved by the Board of Ark Syndicate Management Limited on 24 February 2023 and signed on its behalf by

N Smith
Director
24 February 2023

Statement of cash flows

For the year ended 31 December 2022

	Notes	2022 £'000	2021 £'000
Operating result		23,155	18,295
Change in gross technical provisions		87,012	20,472
Change in reinsurers' share of gross technical provisions		(31,658)	8,502
Change in debtors		(7,768)	(24,778)
Change in creditors		7,608	(299)
Change in other assets / liabilities		9,594	274
Investment return		2,001	(1,467)
Foreign exchange		(9,860)	859
Net cash flows from operating activities		80,084	21,858
Purchase of equity and debt instruments		(75,739)	(49,677)
Sale of equity and debt instruments		5,420	38,913
Investment income received		2,111	1,584
Investment management fees		(54)	(1,021)
Net cash flows used in investing activities		(68,262)	(10,201)
Distribution loss / (profit)		1,295	(1,869)
Open year profit release	13	(15,720)	(4,407)
Net cash flows used in financing activities		(14,425)	(6,276)
Net (decrease) / increase in cash and cash equivalents		(2,603)	5,380
Cash and cash equivalents at 1 January		13,908	8,528
Cash and cash equivalents at 31 December	11	11,305	13,908

The notes on pages 15 to 31 form part of these accounts.

1. Statement of accounting policies

The financial statements have been prepared in accordance with the Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008 and Financial Reporting Standard 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland* ("FRS 102") as issued in August 2015, and Financial Reporting Standard 103 *Insurance Contracts* ("FRS 103") as issued in March 2015.

Basis of preparation

The financial statements are prepared using the historical cost convention except that financial investments and derivative financial instruments are stated at their fair value. All amounts presented are stated in Sterling, unless stated otherwise.

The financial statements have been prepared on a going concern basis. The directors of ASML have performed an assessment of the Syndicate's ability to continue as a going concern, including the impact of the conflict in Ukraine. A going concern assessment has been undertaken, taking into consideration availability of capital, liquidity and stress testing. The Syndicate is expected to remain a key underwriting platform for the Ark group. Ark Corporate Member Limited ("ACML") has already provided capital to support the 2023 YOA. On the basis of this and the improvement in performance as a result of rate increases, ACML is also expected to have the ability and intention to form a 2024 underwriting year. The directors of ASML have therefore concluded that there are no material uncertainties that could have cast significant doubt over the ability of the company to continue as a going concern for at least a year from the date of approval of the financial statements.

Use of judgements and estimates

In preparing these accounts, the directors of ASML have made judgements, estimates and assumptions that affect the application of the Syndicate's accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to estimates are recognised prospectively. The measurement of the provision for claims outstanding involves judgments and assumptions about the future that have the most significant effect on the amounts recognised in the financial statements.

Insurance contracts

Insurance contracts (including inwards reinsurance contracts) are defined as those containing significant insurance risk. Insurance risk is considered significant if, and only if, an insured event could cause Ark to pay significant additional benefits in any scenario, excluding scenarios that lack commercial substance. Such contracts remain insurance contracts until all rights and obligations are extinguished or expire.

Premiums written and earned

Premiums written comprise premiums on contracts incepted during the financial year as well as adjustments made in the year to premiums written in prior accounting years. Premiums are shown gross of acquisition costs such as brokerage payable and taxes and duties levied on them. Estimates are made for pipeline premiums, representing amounts due but not yet notified. Written premiums are recognised as earned according to the risk profile of the policy. Unearned premiums represent the proportion of premiums written in the year that relate to unexpired terms of policies in force at the statement of financial position date. The provision is calculated on a policy by policy basis.

Reinsurance premiums ceded

Outwards reinsurance premiums are accounted for in the same accounting year as the premiums for the direct or inwards business being reinsured.

Claims provisions and related recoveries

The provision for claims comprises amounts set aside for claims notified and claims incurred but not yet reported ("IBNR"). Claims incurred comprise claims and claims handling expenses paid in the year and the movement in provision for outstanding claims and future claims handling expenses. Recoverable amounts arising out of subrogation and salvage together with reinsurance recoveries are deducted from the cost of gross claims.

Outstanding claims consist of amounts set aside for notified claims and a provision for IBNR claims. The amount included in respect of IBNR is arrived at by considering the actuarially calculated provision, using techniques that generally involve statistical techniques of estimation applied by ASML's actuaries and reviewed by external consulting actuaries, as well as the opinion of the class underwriters and executive management. The actuarial techniques generally involve projecting from past experience of the development of claims over time to form a view of the likely ultimate claims to be experienced for more recent underwriting having regard to variations in the business accepted and the underlying terms and conditions. Large claims are generally assessed individually, being calculated on a case by case basis or projected separately to allow for the possible distortive effects of the developments of these claims on the balance of the data. The provision for claims also includes amounts in respect of internal and external claims handling costs.

1. Statement of accounting policies (continued)

Outstanding claims consist of amounts set aside for notified claims and a provision for IBNR claims. The amount included in respect of IBNR is arrived at by considering the actuarially calculated provision, using techniques that generally involve statistical techniques of estimation applied by ASML's actuaries and reviewed by external consulting actuaries, as well as the opinion of the class underwriters and executive management. The actuarial techniques generally involve projecting from past experience of the development of claims over time to form a view of the likely ultimate claims to be experienced for more recent underwriting having regard to variations in the business accepted and the underlying terms and conditions. Large claims are generally assessed individually, being calculated on a case by case basis or projected separately to allow for the possible distortive effects of the developments of these claims on the balance of the data. The provision for claims also includes amounts in respect of internal and external claims handling costs.

The reinsurers' share of provisions for claims is based on calculated amounts of outstanding claims and projections for IBNR, net of estimated irrecoverable amounts, having regard to the reinsurance programme in place for the class of business, the claims experience for the year and the current security rating of the reinsurance companies involved. The Syndicate uses a number of statistical techniques to assist in making these estimates.

Accordingly the two most critical assumptions as regards claims provisions are that the past is a reasonable predictor of the likely level of claims development and that the rating and other models used for current business are fair reflections of the likely level of ultimate claims to be incurred. Ultimate liability will vary as a result of subsequent information and events and this may result in significant adjustments to the amounts provided. Adjustments to the amount of claims provisions established in prior years are reflected in the financial statements for the year in which the adjustments are made. The methods used, and the estimates made, are reviewed regularly.

Acquisition costs

Acquisition costs, comprising brokerage and taxes and duties levied on them are deferred to the extent that they are attributable to premiums unearned at the statement of financial position date.

Foreign currency translation

a) Functional and presentation currency

Items included in the financial statements are measured using the US dollar, the currency of the primary economic environment in which the Syndicate operates ("functional currency"). The financial statements are presented in Sterling, being the presentation currency of the Syndicate. Differences arising from the translation from the functional to presentation currency are presented in the statement of other comprehensive income.

b) Transactions and balances

Foreign currency transactions are translated into the functional currency using average exchange rates applicable to the period in which the transactions take place and where the company considers these to be a reasonable approximation of the transaction rate. Foreign exchange gains and losses resulting from the settlement of such transactions and from translation at the period end of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of profit or loss. Non-monetary items recorded at historical cost in foreign currencies are translated using the exchange rate on the date of the initial transaction. For the purposes of foreign currency translation, unearned premiums and deferred acquisition costs are treated as if they are monetary items.

Financial assets

Financial assets are recognised in the statement of financial position at such time as the Syndicate becomes a party to the contractual provisions of the financial asset. Purchases and sales of financial assets are recognised on the trade date, which is the date the Syndicate commits to purchase or sell the asset. A financial asset is derecognised when the contractual rights to receive cash flows from the financial assets expire, or where the financial assets have been transferred, together with substantially all the risks and rewards of ownership. Financial liabilities are derecognised if the obligations specified in the contract expire, are discharged or cancelled.

On acquisition of a financial asset, the Syndicate is required to classify the asset into one of the following categories: financial assets at fair value through the statement of profit or loss, loans and receivables, assets held to maturity and assets available for sale. The Syndicate has classified its investments as financial assets at fair value through profit or loss because they are managed and their performance is evaluated on a fair value basis. Information about these financial assets is provided internally on a fair value basis to management, and the investment strategy is to invest and evaluate their performance with reference to their fair values.

1. Statement of accounting policies (continued)

Fair value is the price at which an orderly transaction to sell an asset or to transfer a liability would take place between market participants at the measurement date. When available, the fair value of an instrument is measured using quoted prices in an active market for that instrument. A market is regarded as active if quoted prices are readily and regularly available and represent actual and regularly occurring market transactions on an arm's length basis. If a market for a financial instrument is not active, the fair value is established using a valuation technique. Valuation techniques include using recent orderly transactions between market participants (if available), reference to the current fair value of other instruments that are substantially the same, discounted cash flow analyses and option pricing models. The chosen valuation technique makes maximum use of market inputs, relies as little as possible on specific estimates, incorporates all factors that market participants would consider in setting a price, and is consistent with accepted economic methodologies for pricing financial instruments. Inputs to valuation techniques reasonably represent market expectations and measures of the risk-return factors inherent in the financial instrument.

Where possible, valuation techniques are calibrated and tested for validity using prices from observable current market transactions in the same instrument or based on other available observable market data.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price, i.e. the fair value of the consideration given or received, unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument (i.e. without modification or repackaging) or based on a valuation technique whose variables include only data from observable markets. When transaction price provides the best evidence of fair value at initial recognition, the financial instrument is initially measured at the transaction price and any difference between this price and the value initially obtained from a valuation model is subsequently recognised in profit or loss depending on the individual facts and circumstances of the transaction but not later than when the valuation is supported wholly by observable market data or the transaction is closed out.

Upon initial recognition, attributable transaction costs relating to financial instruments at fair value through profit or loss are recognised in the statement of profit or loss when incurred. Financial assets at fair value through profit or loss are continually measured at fair value, and changes therein are recognised in the statement of profit or loss. Net changes in the fair value of financial assets at fair value through profit or loss exclude interest and dividend income, as these items are accounted for separately as set out below.

Insurance receivables and payables

Insurance receivables and payables are recognised when due. These include amounts due to and from agents, brokers and insurance contract holders. Insurance receivables are classified as 'loans and receivables' as they are non-derivative financial assets with fixed or determinable payments that are not quoted on an active market. Insurance receivables are measured at amortised cost less any impairment losses. Insurance payables are stated at amortised cost.

Other receivables

Other receivables are carried at amortised cost less any impairment losses.

Investment return

Investment return consists of dividends, interest, realised and unrealised gains and losses and foreign exchange gains and losses on financial assets at fair value through the statement of profit or loss. Dividends on equity securities are recorded as revenue on the ex-dividend date. Interest is recognised separately on an amortised cost basis using the effective interest rate method for financial assets at fair value through the statement of profit or loss. The realised gains or losses on disposal of an investment are the difference between the proceeds and the original cost of the investment. Unrealised investment gains and losses represent the difference between the carrying value at the reporting date, and the carrying value at the previous period end or purchase value during the period.

Other payables

Other payables are stated at amortised cost determined on the effective interest rate method.

Cash and cash equivalents

Cash and cash equivalents consist of cash at bank and in hand, deposits held at call with banks and other short-term highly liquid investments with maturities of three months or less from the date of acquisition. They are classified as loans and receivables and carried at amortised cost less any impairment losses.

2. Management of risk

Approach to risk management

Ark's core business relies on the assumption of internal and external risk within the appetites and tolerances established by the Board. Primarily Ark's business is the assumption of Insurance Risk and Market Risk, with the additional categories of Credit Risk, Liquidity Risk, Operational Risk and Group Risk. Managing these risks in a manner that is consistent with the strategy, appetites and tolerances established by the Board requires that Ark has in place a systematic, objective, and robust set of governance arrangements and processes for identifying and quantifying the risks to which it is exposed. This enables Ark to determine appropriate strategies and approaches for prevention and mitigation.

The effectiveness with which Ark manages risk is a key determinant of the level of capital resources required to run the business and its ability to achieve its strategic objectives including, in relation to capital efficiency and the production of acceptable levels of return.

Insurance risk

This is the risk arising from the uncertainties in timing, frequency and severity of insured losses, relative to the expectations made at the time of business planning or underwriting. Ark's business is based on the seeking and assumption of insurance risk. The Syndicate writes a balanced and diversified book of business through a team of experienced underwriters with the objective of charging appropriate premiums to cover claims and operational costs whilst optimising the expected return on equity. Target returns are assessed each year, taking into account the insurance market outlook and realistic expectations of return on equity. Insurance risk comprises the following elements:

a) Exposure management risk

This is the risk of exposure to an event, or a series of events, which causes a potential financial loss that exceeds expectations. The nature of Ark's business and underwriting portfolio includes the assumption of a high degree of catastrophe, non-catastrophe and accumulative exposure to different events. This is managed through the purchase of reinsurance and diversification of business lines and geographical areas to balance exposures, with the aim of reducing the risk that one event, or a series of events, will cause unacceptable loss to the business. Ark's catastrophe and non-natural catastrophe modelling processes incorporate Ark-specific disaster scenarios, aggregate caps and cross-class modelling which reflect the diversity of the portfolio.

b) Underwriting quality risk

This is the risk of inappropriate underwriting or the inadequate pricing of risks which can lead to unprofitable business or inefficient line utilisation and risk selection. The management of underwriting quality can be difficult in a competitive market where underwriters are often under pressure to meet premium and pricing targets. Ark operates an underwriting controls framework which includes individual underwriting authorities, continual quality monitoring and peer review of risks. The framework aims to ensure a high quality of underwriting through monitoring of pricing and rate change, contract certainty and agreement of appropriate terms and conditions.

c) Delegated underwriting quality risk

This is the risk of exposure to inappropriate risks through the delegation of underwriting authorities to third parties or the delegation of authority to inappropriate third parties. The nature of delegated underwriting naturally increases the risk of underwriting, through the ability of third parties being able to bind the Syndicate to risks without detailed review of the risk involved. This risk is mitigated through the application of strict guidelines, managed by a dedicated team within the Compliance department. This team reviews coverholder and third party authority ("TPA") approvals pre-bind and monitors a programme of audits to ensure compliance with regulations and guidelines.

d) Claims management risk

This is the risk that claims made are not managed in an appropriate manner, leading to material adverse results through an increase in claims, payments or exposure to legal issues. The management of claims is conducted in accordance with claims procedures, which are, in turn, in line with the Lloyd's Minimum Standards. This includes the management of claims workflows and response times, reviews of major claims to ensure accurate estimates, regular reserving reviews and management of complaints. These processes are enhanced through communication with underwriting teams to understand the policy or portfolio and with the Compliance department to manage coverholders and TPAs.

2. Management of risk (continued)

e) Reserving risk

This is the risk that the estimated claims reserves differ materially from the ultimate cost of the claim or event. Reserving risk is a significant category in the Internal Model and has the potential to significantly impact profitability. The potential impact is controlled through the use of a mix of actuarial models and methods, industry data and underwriter experience to produce reliable estimates that are based on up to date information, and consistently applied over time and across classes of business. Reserves for losses arising from the conflict in Ukraine are included in the normal process as a major loss. This does not pose a potential threat to the business or risk of going concern. These estimates are subject to an external review each year.

f) Reinsurance purchasing

This is the risk of purchasing insufficient or inappropriate reinsurance, or the exhaustion of reinsurance, leading to excessive or unexpected losses. The process of reinsurance purchasing forms a major part of Ark's business planning process and includes the use of the Internal Model as a tool for decision making. Reinsurance is purchased for a mixture of risk and event losses across the majority of classes, in a mixture of excess of loss and proportional cover, dependent on the scale and characteristics of the class or treaty concerned. Ark also employs controls and monitoring around the use of insurers, credit ratings and concentration risk.

g) Underwriting management

This is the risk that returns from the policies written are different from expectations or are not in line with the business plan. Examples include a failure to reduce or exit from unprofitable business or a failure of underwriters to follow the business plan which sets out the parameters, classes, limitations and profitability expectation of underwriting teams for the forthcoming year. Communication of the business plan to the underwriting teams is therefore imperative. The performance of each class and the syndicate portfolio as a whole is reviewed against the business plan on a regular basis by the Board and various committees using information available from the management information portal. Various controls are in place to ensure constant vigilance including underwriting authorities, monitoring of risk codes, geographical aggregates and data quality.

Sensitivity to net claim liability movements	2022 Impact on profit £'000	2021 Impact on profit £'000	2022 Impact on net assets £'000	2021 Impact on net assets £'000
5% increase in total net claim liabilities	(9,003)	(6,235)	(9,003)	(6,235)
5% decrease in total net claim liabilities	9,003	6,235	9,003	6,235

Credit risk

Credit risk arises when counterparties fail to meet their obligations in full as they fall due. The key areas where credit risk can arise include reinsurers, brokers, coverholders and investment counterparties.

The probability of reinsurer default is modelled by the Actuarial team as part of the Internal Model. Ark seeks to reduce this risk by avoiding over-reliance on specific reinsurers through the application of concentration limits and thresholds. This is monitored by the Security Advisory Committee ("SAC"). Prior to the transaction of business, broker and coverholder default is mitigated through the application of due diligence on new and existing counterparties, and a rolling audit schedule post-bind. Overdue premium is also monitored by class, broker and age of debt. The investment portfolio is managed in line with asset allocation guidelines which are monitored by type, counterparty, quality and duration. Ark outsources the management of a significant proportion of its investment portfolio to managers who monitor and report on performance and adherence to guidelines on a regular basis.

2022 - Credit risk analysis	A or above £'000	BBB £'000	Lower than BBB £'000	Unrated £'000	Total £'000
Financial assets at fair value	18,260	1,627	117	115,047	135,051
Reinsurance assets	81,432	-	878	7,452	89,762
Cash and cash equivalents	-	-	-	11,305	11,305
	99,692	1,627	995	133,804	236,118

2. Management of risk (continued)

2021 - Credit risk analysis	A or above £'000	BBB £'000	Lower than BBB £'000	Unrated £'000	Total £'000
Financial assets at fair value	16,630	2,456	-	39,210	58,296
Reinsurance assets	66,252	-	297	137	66,686
Cash and cash equivalents	-	-	-	13,908	13,908
	82,882	2,456	297	53,255	138,890

Insurance receivables and other receivables balances have not been impaired, based on all evidence available, and no impairment provision has been recognised in respect of these assets. Inwards premium receivables are credit controlled by third-party managers. Ark monitors third party coverholders' performance and their financial processes through the coverholder management team. A provision for doubtful debts is included within reinsurance receivables of £1.5m (2021: £0.8m).

Market risk

This is the risk that the value of assets and liabilities changes as a result of market movements e.g. foreign exchange rates, interest rates and market prices.

a) Foreign exchange risk

The functional currency of the Syndicate is the US dollar and the presentation currency in which the Syndicate reports its results is Sterling. Therefore, the Syndicate is exposed to fluctuations in exchange rates for non-dollar denominated transactions.

The Syndicate operates in five main currencies: US dollars, Sterling, Canadian dollars, Australian dollars and Euros. The underwriting capital is matched by currency to the principal underlying currencies of its written premiums. This helps to mitigate the risk that the capital required to underwrite business is materially affected by any future movements in exchange rates.

2022 - Currency analysis	Sterling £'000	Euros £'000	Canadian dollars £'000	Australian dollars £'000	US dollars £'000	Total £'000
Assets	(2,292)	26,892	9,100	5,391	284,409	323,500
Liabilities	36,228	17,646	9,048	2,716	229,073	294,711
Net (liabilities)/ assets	(38,520)	9,246	52	2,675	55,336	28,789

2021 - Currency analysis	Sterling £'000	Euros £'000	Canadian dollars £'000	Australian dollars £'000	US dollars £'000	Total £'000
Assets	(11,779)	25,260	5,605	6,252	180,473	205,814
Liabilities	24,527	18,237	5,077	4,278	134,270	186,389
Net (liabilities)/ assets	(36,303)	7,023	528	1,974	46,203	19,425

The table below gives an indication of the impact on profit after tax and net assets of a percentage change in the relative strength of the US dollar against the value of the main currencies, simultaneously.

Sensitivity to foreign exchange risk	2022 Impact on profit £'000	2021 Impact on profit £'000	2022 Impact on net assets £'000	2021 Impact on net assets £'000
USD weakens by 5% against other currencies	(2,635)	88	(2,635)	88
USD strengthens by 5% against other currencies	2,912	(98)	2,912	(98)

2. Management of risk (continued)

b) Interest rate risk

Some of the financial instruments, including certain financial assets at fair value, cash and cash equivalents and borrowings, are exposed to movements in market interest rates. Interest rate risk is managed by primarily investing in short-duration financial assets and cash and cash equivalents. The duration of assets is monitored on a regular basis. The duration of assets exposed to movements in market interest rates is 0.44 (2021: 0.60). Changes in interest rates, with all other variables constant, would result in changes in the capital value of debt securities and borrowings as well as subsequent interest receipts and payments.

Sensitivity to interest rate risk	2022 Impact on Profit £'000	2021 Impact on Profit £'000	2022 Impact on net assets £'000	2021 Impact on net assets £'000
50 basis point increase in interest rates	90	(235)	90	(235)
50 basis point decrease in interest rates	(90)	235	(90)	235

c) Price risk

Financial assets recognised at fair value are exposed to movements in market prices. The Syndicate does not have material exposure to price risk.

Liquidity risk

Liquidity risk arises where cash may not be available to pay obligations when they fall due without incurring unreasonable penalties or expense costs. The risk is minimised by holding sufficient liquid assets to enable large and unexpected payments, predominately claims, to be made in all but the most extreme scenarios. Ark's Catastrophe Event Response Plan provides information to quantify liquidity implications of losses, reinsurance recoveries, cashflows and trust funds in the event of a catastrophe or large loss. The process is stress tested using historic scenarios to determine the behaviour of the portfolio following an event or series of events.

2022 - Maturity analysis	<1yr £'000	1-2yrs £'000	2-3yrs £'000	3-5yrs £'000	>5yrs £'000	Total £'000
Financial assets at fair value	118,633	5,864	3,652	4,881	2,021	135,051
Cash and cash equivalents	11,305	-	-	-	-	11,305
	129,938	5,864	3,652	4,881	2,021	146,356

2021 - Maturity analysis	<1yr £'000	1-2yrs £'000	2-3yrs £'000	3-5yrs £'000	>5yrs £'000	Total £'000
Financial assets at fair value	41,081	3,739	5,403	4,783	3,290	58,296
Cash and cash equivalents	13,908	-	-	-	-	13,908
	54,989	3,739	5,403	4,783	3,290	72,204

In the above analysis, assets with no duration are included as "less than one year".

Net claim liability cashflow	<1yr £'000	1-3yrs £'000	3-5yrs £'000	>5yrs £'000	Total £'000	Weighted average term (years)
2022	33,357	38,740	14,185	9,006	95,288	2.79
2021	16,471	31,207	9,819	5,389	62,886	2.81

2. Management of risk (continued)

Operational risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes or systems. Risks are identified within the risk register and are modelled via operational scenarios. Ark aims to minimise its exposure to operational risk by monitoring controls and management information in the form of key indicators that indicate changes to the risk profile.

Ark outsources a number of key functions, such as investment management, inwards premium credit control and human resources. This introduces the risk that the Syndicate may be exposed to liability or may fail to achieve its objectives due to inappropriately arranged, or a failure of, outsource arrangements. This risk is mitigated through pre-contract due diligence and performance review throughout the contract life cycle.

Ark recognises that the success of a business depends on the ability to retain the services of existing key staff and to attract and retain additional people in the future, both in underwriting and support functions. This risk is managed through the provision of sufficient education and development, support for qualifications and competitive remuneration packages.

Ark is also impacted by the risk of information technology system failure or disruption. This is mitigated through a control framework which includes network security, data, hardware and applications and is complimented by detailed planning around back-ups, contingency and disaster recovery, all of which are monitored and tested on a regular basis.

Ark has limited exposure to Brexit. Less than 5% of premiums written are based in the European Union (“EU”) and in 2019, Ark commenced transacting with Lloyd's Brussels, the insurance company set up by Lloyd’s to ensure syndicates can continue to access EU business. Ark continues to manage exposure to fluctuations in market value and foreign exchange and holds a limited amount of Sterling and Euro denominated assets.

Regulatory risk

Regulatory risk is the risk of censure following a breach of regulatory or legal requirements, or a failure to respond to deadlines or information requests from regulators in a satisfactory and timely manner.

Ark is regulated, overseen or required to report to the Prudential Regulation Authority (“PRA”), the Financial Conduct Authority (“FCA”), Lloyd’s and other overseas regulators. Each body requires adherence to specific requirements and guidelines. In order to mitigate this, Ark seeks to conform to the regulations as they apply to each functional area. Much of this is operated through training and awareness to promote correct behaviour at source, as opposed to corrective action at a later stage. The overall risk is managed by the Compliance department which seeks to ensure that deadlines are met and changes in regulation are communicated in a timely manner.

Ark has put in place processes and controls to identify and manage the conduct risk associated with the business it underwrites. Ark will continue to lead high product risk business where risks are consistent with the probability targets taking into account the additional requirements for oversight and monitoring conduct risk.

Capital management risk

Capital is primarily required to support underwriting at Lloyd’s. Lloyd’s applies capital requirements at member level and centrally to ensure that Lloyd’s complies with Solvency II, and beyond that to meet its own financial strength, license and ratings objectives.

In order to meet Lloyd’s requirements, each syndicate is required to calculate its Solvency Capital Requirement (“SCR”) for the prospective underwriting year. This amount must be sufficient to cover a 1 in 200 year loss, reflecting uncertainty in the ultimate run-off of underwriting liabilities (SCR ‘to ultimate’). The syndicate must also calculate its SCR at the same confidence level but reflecting uncertainty over a one year time horizon (one year SCR) for Lloyd’s to use in meeting Solvency II requirements. The SCRs of each syndicate are subject to review by Lloyd’s and approval by the Lloyd’s Capital and Planning Group.

Each member of a syndicate is liable for its own share of underwriting liabilities on the syndicate(s) on which it is participating. Each member’s SCR is determined by the sum of the member’s share of the syndicate SCR ‘to ultimate’. Where a member participates on more than one syndicate, a credit for diversification is provided to reflect the spread of risk, but consistent with determining an SCR which reflects the capital requirement to cover a 1 in 200 year loss ‘to ultimate’ for that member. Over and above this, an uplift is applied by Lloyd’s to the member’s capital requirement, known as the Economic Capital Assessment (“ECA”).

3. Segmental analysis

An analysis of the underwriting result before investment return is set out below.

2022	Gross Premium written £'000	Gross Premium earned £'000	Gross Claims incurred £'000	Net Operating expense £'000	Reinsurance balance £'000	Underwriting profit/(loss) £'000
Direct insurance:						
Accident and health	3,702	4,448	259	(2,151)	(2,436)	120
Motor	53	53	38	(10)	(11)	70
Marine aviation and transport	68,148	62,007	(50,072)	(22,012)	15,987	5,910
Fire and other damage to property	75,667	71,559	(36,710)	(24,101)	1,991	12,739
Third party liability	280	211	(426)	(117)	(18)	(350)
	147,850	138,278	(86,911)	(48,392)	15,513	18,488
Reinsurance	20,891	19,903	(1,168)	(7,696)	(4,368)	6,671
	168,741	158,181	(88,079)	(56,088)	11,145	25,159

Commissions paid on direct business as at year end were £33.0m (2021: £25.8m)

2021	Gross Premium written £'000	Gross Premium earned £'000	Gross Claims incurred £'000	Net Operating expense £'000	Reinsurance balance £'000	Underwriting (loss)/ profit £'000
Direct insurance:						
Accident and health	4,532	3,209	(1,887)	(1,608)	90	(196)
Motor	29	158	29	(161)	(85)	(59)
Marine aviation and transport	53,409	51,052	(28,229)	(18,332)	(1,955)	2,536
Fire and other damage to property	56,789	49,883	(11,357)	(16,772)	(9,886)	11,868
Third party liability	77	169	(133)	(136)	(159)	(259)
	114,836	104,471	(41,577)	(37,009)	(11,995)	13,890
Reinsurance	19,458	17,249	(5,046)	(6,688)	(2,577)	2,938
	134,294	121,720	(46,623)	(43,697)	(14,572)	16,828

4. Investment return

	2022 £'000	2021 £'000
Income on financial investments at fair value	1,387	637
Interest on cash and cash equivalents	354	117
Gains on the realisation of investments	591	1,218
Unrealised gains on investments	1,782	1,407
Losses on the realisation of investments	(223)	(388)
Unrealised losses on investments	(5,841)	(503)
Investment management charges	(54)	(1,021)
	(2,004)	1,467

5. Operating expenses

	2022 £'000	2021 £'000
Acquisition costs	34,252	26,341
Administrative expenses	14,004	12,556
Managing agency fee	1,103	1,065
Personal expenses	6,729	3,735
	56,088	43,697

Administrative expenses are incurred on behalf of the Syndicate by ASML. These expenses include:

	2022 £'000	2021 £'000
Audit fees, of which £88k (2021: £49k) relates to the audit of regulatory returns	239	187
Performance related pay	3,559	2,820

6. Directors and employees

All executive directors and staff are employed and remunerated by ASML. The following staff and related costs were recharged to the syndicate.

	2022 £'000	2021 £'000
Wages and salaries	6,013	6,054
Social security costs	1,400	1,181
Pension costs	679	681
	8,092	7,916

Included above are the employment costs of underwriters attributable to acquisition of business and those of claims staff treated within the technical accounts as acquisition costs and claims handling costs respectively.

The average number of employees employed by ASML but working on syndicate matters during the year is set out below.

	2022 Number	2021 Number
Underwriting	100	96
Claims	19	20
Administration	47	45
	166	161

	2022 £'000	2021 £'000
Emoluments of the Active Underwriter	455	207

No contributions were made to money purchases pension schemes in the year in respect of the Active Underwriter (2021: Nil).

7. Financial assets

	Cost 2022 £'000	Cost 2021 £'000	Value 2022 £'000	Value 2021 £'000
Shares and other variable yield securities	104,631	34,560	105,053	34,560
Debt and other fixed income securities	30,229	22,194	28,633	21,989
Deposits with ceding undertakings	1,365	1,747	1,365	1,747
	136,224	58,501	135,051	58,296

The amount expected to mature before and after one year is:

Before one year	118,633
After one year	16,418
	135,051

The fair values of financial assets are based on prices provided by investment managers who obtain market data from numerous independent pricing services. The pricing services used by the investment manager obtain actual transaction prices for securities that have quoted prices in active markets. For those securities which are not actively traded, the pricing services use common market valuation pricing models. Observable inputs used in common market valuation pricing models include, but are not limited to, broker quotes, credit ratings, interest rates and yield curves, prepayment speeds, default rates and other such inputs which are available from market sources.

Level 1 includes fair values measured using quoted prices (unadjusted) in active markets for identical instruments. Level 2 includes fair values measured using directly or indirectly observable inputs or other similar valuation techniques for which all significant inputs are based on market observable data. Level 3 includes fair values measured using valuation techniques for which significant inputs are not based on market observable data.

The fair value of these assets is based on the prices obtained from both investment managers and investment custodians.

Fair value hierarchy:	2022 £'000	2021 £'000
Level 1	24,800	37,121
Level 2	21,669	19,531
Level 3	88,582	1,644
	135,051	58,296

8. Reinsurance assets

	2022 £'000	2021 £'000
Reinsurers' share of claims reported	12,549	14,034
Reinsurers' share of claims incurred but not reported	56,276	20,621
Reinsurers' share of claims liabilities	68,825	34,655
Unearned premiums	6,342	8,855
	75,167	43,510

9. Deferred acquisition costs

	2022 £'000	2021 £'000
Balance at 1 January	16,185	12,643
Additions	32,921	26,604
Amortisation charge	(30,705)	(23,096)
Foreign exchange movement	1,875	34
At 31 December	20,276	16.185

10. Insurance receivables

	2022 £'000	2021 £'000
Debtors arising out of direct insurance operations	67,022	50,669
Debtors arising out of direct reinsurance operations	14,595	23,176
	81,617	73,845

	2022 £'000	2021 £'000
Due within one year	79,593	72,660
Due after one year	2,024	1,185
	81,617	73,845

11. Cash and cash equivalents

	2022 £'000	2021 £'000
Cash at bank and in hand	11,305	13,908

12. Insurance liabilities

	2022 £'000	2021 £'000
Claims reported and loss adjustment expenses	47,127	38,888
Claims incurred but not reported	116,986	58,653
Gross claims liabilities	164,113	97,541
Unearned premiums	91,110	70,669
	255,223	168,210

12. Insurance liabilities (continued)

Movements in insurance liabilities and reinsurance assets are as follows:

Claims and loss adjustment expenses	2022 Gross £'000	2022 Reinsurance £'000	2022 Net £'000	2021 Gross £'000	2021 Reinsurance £'000	2021 Net £'000
At 1 January	97,541	34,655	62,886	89,883	43,032	46,851
Claims paid	(33,115)	(12,834)	(20,281)	(39,609)	(21,496)	(18,113)
Movement arising from current years	127,057	67,438	59,619	53,166	11,636	41,530
Movement arising from prior years	(38,978)	(24,348)	(14,630)	(6,543)	1,357	(7,900)
Net exchange differences	11,608	3,914	7,694	644	126	518
At 31 December	164,113	68,825	95,288	97,541	34,655	62,886

Unearned premiums	2022 Gross £'000	2022 Reinsurance £'000	2022 Net £'000	2021 Gross £'000	2021 Reinsurance £'000	2021 Net £'000
At 1 January	70,669	8,855	61,814	57,855	8,979	48,876
Increase in the year	168,741	26,803	141,938	134,294	27,347	106,947
Release in the year	(158,181)	(31,945)	(126,236)	(121,720)	(27,565)	(94,155)
Net exchange differences	9,881	2,629	7,252	240	94	146
At 31 December	91,110	6,342	84,768	70,669	8,855	61,814

Assumptions and processes

a) The reserving process

Ark uses a quarterly process to set its reserves. Several actuarial and statistical methods are used to estimate the ultimate premium and claims costs, with the most appropriate method selected depending on the nature of each class of business. In addition, the underwriting teams review the development of the incurred loss ratio over time, work with the claims team to set reserve estimates for identified claims and utilise their detailed understanding of both risks underwritten and the nature of the claims to establish an alternative estimate of ultimate claims cost, which is compared to the actuarially established figures. The Reserving Committee then determines the reserves held for accounting purposes. An annual independent actuarial review is undertaken to ensure that the reserves established are not lower than an independently established best estimate.

Chain-ladder techniques are applied to premiums, paid claims and incurred claims (i.e. paid claims plus case estimates). The basic technique involves the analysis of historical claims development factors and the selection of estimated development factors based on historical patterns. The selected development factors are then applied to cumulative claims data for each underwriting year that is not yet fully developed to produce an estimated ultimate claims cost for each underwriting year. The Bornhuetter-Ferguson method uses a combination of a benchmark / market-based estimate and an estimate based on claims experience. The former is based on a measure of exposure such as premiums; the latter is based on the paid or incurred claims observed to date. The two estimates are combined using a formula that gives more weight to the experience-based estimate as time passes.

The choice of selected results for each underwriting year of each class of business depends on an assessment of the technique that has been most appropriate to observed historical developments. In certain instances, this has meant that different techniques or combinations of techniques have been selected for individual underwriting years or groups of underwriting years within the same class of business. As such, there are many assumptions used to estimate general insurance liabilities.

12. Insurance liabilities (continued)

Triangulations of the paid / outstanding claim ratios are also reviewed as a way of monitoring any changes in the strength of the outstanding claim estimates between underwriting years so that adjustments can be made to mitigate any subsequent over / (under)reserving. Where significant large losses impact an underwriting year, the development is usually very different from the attritional losses. In these situations, the large loss total is extracted from the remainder of the data and analysed separately by the respective claims managers using exposure analysis of the policies in force in the areas affected. Further assumptions are required to convert gross of reinsurance estimates of ultimate claims cost to a net of reinsurance level and to establish reserves for unallocated claims handling expenses and reinsurance bad debt.

b) Major assumptions

The main assumption underlying these techniques is that the Syndicate's past claims development experience (with appropriate adjustments for known changes) can be used to project future claims development and hence ultimate claims costs. As such these methods extrapolate the development of premiums, paid and incurred losses, average costs per claim and claim numbers for each underwriting year based on the observed development of earlier years. Throughout, judgement is used to assess the extent to which past trends may not apply in the future; for example, to reflect changes in external or market factors such as economic conditions, public attitudes to claiming, levels of claims inflation, premium rate changes, judicial decisions and legislation, as well as internal factors such as portfolio mix, policy conditions and claims handling procedures.

The loss development tables below provide information about historical claims development by the identified operating segments. The tables are by underwriting year which in our view provides the most transparent reserving basis. The top part of the table illustrates how the estimate of the claims ratio for each underwriting year has changed at successive year ends. The bottom half of the table reconciles the gross and net claims to the amount appearing in the statement of financial position. While the information in the table provides a historical perspective on the adequacy of the claims liabilities established in previous years, users of these financial statements are cautioned against extrapolating past redundancies or deficiencies on current claims liabilities. The Syndicate believes that the estimate of total claims liabilities selected is adequate. However, due to inherent uncertainties in the reserving process, it cannot be assured that such balances will ultimately prove to be adequate.

12. Insurance liabilities (continued)

Gross claims	2022 £'000	2021 £'000	2020 £'000	2019 £'000	2018 £'000	2017 £'000
1 year	38,835	32,735	38,238	24,200	30,712	37,474
2 years	-	85,562	49,813	59,394	41,547	60,500
3 years	-	-	47,155	61,443	47,798	66,200
4 years	-	-	-	61,520	51,015	64,357
5 years	-	-	-	-	50,151	65,075
6 years	-	-	-	-	-	65,794

Net claims	2022 £'000	2021 £'000	2020 £'000	2019 £'000	2018 £'000	2017 £'000
1 year	29,432	29,742	24,636	18,797	22,731	16,395
2 years	-	45,405	30,343	32,338	32,845	28,448
3 years	-	-	30,609	31,438	34,112	34,864
4 years	-	-	-	29,853	34,598	33,531
5 years	-	-	-	-	34,764	33,805
6 years	-	-	-	-	-	33,951

	Gross All years £'000	Net All years £'000
Total claims	349,018	204,017
Less paid claims	(184,905)	(108,729)
Total claims liabilities	164,113	95,288

13. Reconciliation of member's balances

2022	2022 YOA £'000	2021 YOA £'000	2020 YOA £'000	Total £'000
At 1 January	-	3,963	16,757	20,720
Profit for the year	7,121	14,508	1,526	23,155
Other recognised (losses)/ gains	(203)	622	1,328	1,747
Distribution	-	-	(16,833)	(16,833)
At 31 December	6,918	19,093	2,778	28,789

2021	2021 YOA £'000	2020 YOA £'000	2019 YOA £'000	Total £'000
At 1 January	-	2,367	3,055	5,422
Profit / (loss) for the year	4,001	16,529	(2,236)	18,294
Other recognised (losses)/ gains	(38)	140	(149)	(47)
Distribution	-	(2,279)	(1,965)	(4,244)
At 31 December	3,963	16,757	(1,295)	19,425

The members participate on the Syndicate by reference to years of account and the ultimate result, assets and liabilities are assessed with reference to policies incepting in that YOA in respect of their membership of a particular year.

14. Other payables

	2022 £'000	2021 £'000
Creditors arising out of direct insurance operations	10,046	2,680
Creditors arising out of reinsurance operations	12,069	11,829
	22,115	14,509

	2022 £'000	2021 £'000
Due within one year	22,113	14,509
Due after one year	2	-
	22,115	14,509

15. Movement in opening and closing portfolio investments and cash net of financing

	2022 £'000	2021 £'000
Net cash (out) / inflow for the year	(3,315)	5,773
Cash flow – portfolio investments	70,320	10,764
Movement arising from cash flows	67,005	16,537
Changes in market values and exchange rates	7,147	(233)
Total movement in portfolio investments net of financing	74,152	16,304
Balance brought forward at 1 January	72,204	55,900
Balance carried forward at 31 December	146,356	72,204

16. Movement in cash and portfolio investments

	At 1 January 2022 £'000	Cash flow £'000	Change in market value £'000	At 31 December 2022 £'000
Cash at bank and in hand	13,908	(3,315)	712	11,305
Shares and other variable yield securities	34,560	66,245	4,248	105,053
Debt and other fixed income securities	21,989	4,470	2,174	28,633
Other investments	1,747	(395)	13	1,365
Total portfolio investments	58,296	70,320	6,435	135,051
Total cash and portfolio investments	72,204	67,005	7,147	146,356

17. Related parties

The registered office of the ultimate parent company, White Mountains Insurance Group, Ltd , is Clarendon House, 2 Church Street, Hamilton, HM11, Bermuda. The parent company of the Ark group is AIHL, and the immediate parent company of ASML is Group Ark Insurance Holdings Limited ("GAIHL").

The key management compensation charged to the syndicate is disclosed in note 6.

17. Related parties (continued)

I Beaton serves without fee as a director of Optio Group Limited (“Optio”), a managing general agent (“MGA”) focused on emerging insurance risks. In 2021, Optio acquired Northcourt Limited, a specialty MGA. In 2022, gross premium income, excluding brokerage and commissions, due to the Syndicates under this binding authority amounting to £0.3m (2021: £0.3m). Commissions paid to Northcourt during the year were £0.1m. (2021: £0.1m).

N Bonnar serves without fee as a director of Solis Re Agency Inc. (“Solis Re”), an MGA and Lloyd's Coverholder. ASML holds shares in Solis Re giving 20% of the voting rights and 6% of the capital rights. The Syndicates entered into a binding authority agreement with Solis Re. Gross premium income, excluding brokerage and commissions, due to the Syndicates amounted to £3.2m (2021: £2.0m). Commissions paid by the Syndicate in the year to Solis Re amounted to £0.5m (2021: less than £0.3m).

Until 15 March 2021, J Wardrop was a director of Inigo Managing Agent Limited (“Inigo”), formerly Starstone Underwriting Limited. The Syndicates have purchased reinsurance protection on normal commercial terms and at arms length from Inigo. Premiums paid by the Syndicates in the year amounted to £0.4m (2021: £0.6m). Also, the Syndicate provided reinsurance under separate contracts to Inigo on normal commercial terms and at arms length. Gross premium income, excluding brokerage and commissions, due to the Syndicates under these contracts amounted to less than £0.1m (2021: less than £0.1m).

In 2021 N Bonnar acquired 8% of the share capital of Phenomen, a French MGA. The Syndicates have entered into a Binding Authority with Phenomen. Gross premium income, excluding brokerage and commissions, due to the Syndicates amounted to £0.5m (2021: £0.2m). Commissions paid by the Syndicates to Phenomen amounted to £0.2m (2021: £0.1m).

C Atkin serves as a director of Alwen Hough Johnson Limited ("AHJ"), a Lloyd's broker. During the year the Syndicates wrote business with premium of £3.2m (2021: £2.0m) through AHJ. Commissions paid to AHJ in the year totalled £0.6m (2021: £0.4m).

C Atkin serves as a director of AmWins, which owns a number of insurance intermediaries acting as Brokers and Coverholders of business to the Lloyd's Market, including AmWins Global Risks Limited (AGR), who act as a Lloyd's Broker. During the year the Syndicates wrote business with premium of £11.9m through AGR (2021: £9.4m). Commissions paid to AGR in the year were £3.2m (2021: £2.7m). AGR also placed reinsurance protection for the syndicates. During the year ORI premiums paid through AGR amounted to £0.8m (2021: £1.1m). Commissions paid to AGR during the year for placing reinsurance contracts was £0.1 (2021: £0.1m).

C Atkin serves as a director of Whitespace Software Limited (“Whitespace”), a software company providing a Lloyd's recognised electronic placing system. The Syndicates use Whitespace to accept risks from brokers. License fees paid to Whitespace during the year are less than £0.1m (2021: less than £0.1m).