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Report & Financial Statements

Syndicate 3902

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Directors and administration

Managing agent

Ark Syndicate Management Limited

Directors

I Beaton	(Chief Executive)
N Bonnar	
N Brothers	
D Foreman	(Non-executive Chairman)
P McIntosh	
N Smith	
J Wardrop	(Non-executive)
C Watson	(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

Registered auditors

KPMG LLP

15 Canada Square

London

E14 5GL

Managing agent's report

The directors of the managing agent present their annual report and accounts for the year to 31 December 2018.

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:

	2018 YOY Estimate £'000	2017 YOY Estimate £'000	2018 Cal year £'000	2017 Cal year £'000
Marine & Energy	53,920	36,239	52,080	35,114
Property	26,438	24,257	22,941	26,371
Specialty	19,960	17,581	22,215	14,235
	100,318	78,077	97,236	75,720

Category	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.

Underwriting performance

The Syndicate began underwriting on the 2017 YOY, replacing the Incidental Syndicate that previously operated within Syndicate 4020. The YOY has been impacted by a series of catastrophe events - Hurricanes Harvey, Irma and Maria, the earthquakes in Mexico and wildfires in California. Despite these losses, a broadly break even result is currently forecast for this YOY.

A forecast is not currently required for the 2018 YOY. The YOY has also been impacted by a series of catastrophe events – Hurricanes Florence and Michael, and Californian wildfires Camp and Woolsey.

	2018 YOY	2017 YOY
Capacity	£100.0m	£100.0m
Forecast results (% of capacity)	Na	(2.6%) - 2.4%

The underwriting profit for the 2018 calendar year is £10.5m. The performance in the year has been impacted by a series of catastrophe events – Hurricanes Florence and Michael, and Californian wildfires Camp and Woolsey, although these losses has been offset by good claims experience in the majority of the remaining book. The calendar year result together with key performance indicators is shown below:

	2018	2017
(Loss) for the financial year (£'000)	(116)	(4,380)
Claims ratio (%)	53.3%	61.3%
Expense ratio (%)	47.3%	57.3%
Combined ratio (%)	100.6%	118.6%

Managing agent's report

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 101.4%.

Operating expenses

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

	2018 £'000	2017 £'000
Acquisition costs – brokerage and commissions	18,589	7,474
Acquisition costs – other	3,899	1,790
Administrative expenses	6,329	4,889
Managing agency fee	675	600
Personal expenses	-	-
Operating expenses	29,492	14,753

Cash flow

There was a net cash flow increase of £4.6m (2017: £3.3m) in the year arising from normal operating activities.

Investment return

Syndicate 4020 holds the majority of the cash and investments of the Syndicate, and allocates the appropriate share of investment income to the Syndicate. Funds are actively managed by third party investment managers. Syndicate 4020 has a diversified portfolio in corporate debt, cash, UK property funds and investment funds with an average duration that is appropriate compared to the expected liability duration.

Investment returns for the 2018 calendar year, as set out below, are considered to be adequate.

	2018	2017
Average funds available for investment (US\$'000)	563,329	636,968
Investment return for the year before allocation to Syndicate 3902 (US\$'000)	5,263	19,659
Annualised investment return (%)	0.9%	3.1%

Financial position

The main components of the balance sheet are technical provisions and investments and cash.

Technical provisions include a provision for outstanding claims of £54.0m (2017: £30.3m) and a provision for unearned premiums of £52.5m (2017: £38.8m). The reinsurers' share of technical provisions is £21.4m (2017: £15.8m) in respect of unearned premiums and £13.6m (2017: £8.8m) 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 £31.0m (2017: £8.0m).

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 intend to reappoint KPMG LLP as auditors.

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.

Managing agent's report

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 he ought to have taken as a director to make himself aware of any relevant audit information and to establish that the auditors of the Syndicate are aware of that information.

Directors

The directors of ASML served from 1 January 2018 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 2018.

Name	H Shares (2015) No.	H Shares (2016) No.	H Shares (2017) No.	H Shares (2018) No.	H Shares (2019) No.
I Beaton (Chief Executive)	386,341	494,516	494,516	494,516	494,516
N Bonnar	386,341	494,516	494,516	494,516	494,516
N Brothers	-	3,456	3,750	4,500	6,000
D Foreman (non-executive Chairman)	-	-	-	-	-
P McIntosh	-	15,825	15,825	15,825	17,000
N Smith	-	13,847	13,847	13,847	15,000
J Wardrop (Non-executive)	-	-	-	-	-
C Watson (Non-executive)	-	-	-	-	-
J Welman (Non executive)	-	-	-	-	-

I Beaton and N Bonnar also each hold the following shares in AIHL - 92,230 Preference 1 shares (2017: 92,230), 121,788 Preference 2 shares (2017: 121,788), 100 T shares (2017: 100) and 70 Z shares (2017: 70). AIHL has maintained throughout the year Directors' and officers' liability insurance for the benefit of the Ark group, the Directors and its officers.

Future developments

The capacity of the Syndicate for the 2019 YOA is £100.0m (2018 YOA: £100.0m). The capacity of Syndicate 4020 for the 2019 YOA is £300.0m (2018 YOA: £300.0m).

P Dawson
Active Underwriter
7 March 2019

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 Syndicates 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 financial statements, 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 financial statements 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 financial statements 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 company 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 financial statements may differ from legislation in other jurisdictions.

On behalf of the board

Neil Smith
Finance Director
7 March 2019

Independent auditors' report to the members of Syndicate 3902

Opinion

We have audited the financial statements of Syndicate 3902 for the year ended 31 December 2018 which comprise the Statement of Profit or Loss: Technical account – General business, Statement of Profit or Loss: non-technical account, Statement of other comprehensive income, Balance Sheet – Assets, Balance Sheet – Liabilities, Statement of Changes in Members' Balances, Statement of Cash Flows, and related notes, including the accounting policies in note 1.

In our opinion the financial statements:

- give a true and fair view of the state of the syndicate's affairs as at 31 December 2018 and of its loss for the year then ended;
- have been properly prepared in accordance with UK accounting standards, including FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland; and
- have been prepared in accordance with the requirements of the Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the syndicate in accordance with, UK ethical requirements including the Financial Reporting Council ("FRC") Ethical Standard. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

Going concern

The directors of the Managing Agent have prepared the Annual Return on the going concern basis as they do not intend to liquidate the syndicate or to cease its operations, and as they have concluded that the syndicate's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over its ability to continue as a going concern for at least a year from the date of approval of the financial statements ("the going concern period").

We are required to report to you if we have concluded that the use of the going concern basis of accounting is inappropriate or there is an undisclosed material uncertainty that may cast significant doubt over the use of that basis for a period of at least a year from the date of approval of the financial statements. In our evaluation of the directors' conclusions, we considered the inherent risks to the syndicate's business model, including the impact of Brexit, and analysed how those risks might affect the syndicate's financial resources or ability to continue operations over the going concern period. We have nothing to report in these respects.

However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the absence of reference to a material uncertainty in this auditor's report is not a guarantee that the syndicate will continue in operation.

Report of the directors of the Managing Agent

The directors are responsible for the Report of the directors of the Managing Agent. Our opinion on the financial statements does not cover that report and we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the Report of the directors of the Managing Agent and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in that report.

In our opinion the information given in the Report of the Directors of the Managing Agent is consistent with the financial statements.

Matters on which we are required to report by exception

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

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in these respects.

Independent auditors' report to the members of Syndicate 3902

Responsibilities of the directors of the Managing Agent

As explained more fully in their statement set out on page 7, the directors of the Managing Agent are responsible for: the preparation of the financial statements and for being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; 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 they either intend to cease trading, or have no realistic alternative but to do so.

Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not 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 aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities.

The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the syndicate's members, as a body, in accordance with the Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008. Our audit work has been undertaken so that we might state to the syndicate's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the syndicate's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Ben Priestley (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
15 Canada Square
London, E14 5GL
8 March 2019

Income statement

For the year ended 31 December 2018

	Notes	2018 £'000	2017 £'000
Technical account			
<i>Earned premiums, net of reinsurance</i>			
Gross premiums written	3	97,236	75,720
Outward reinsurance premiums		(29,182)	(19,095)
<i>Change in the provision for unearned premiums</i>			
Gross amount		(10,584)	(40,739)
Reinsurers' share		4,838	9,840
Earned premiums, net of reinsurance		62,308	25,726
Allocated investment return transferred from the non-technical account	4	270	423
<i>Claims incurred, net of reinsurance</i>			
Claims paid			
Gross amount		(29,756)	(3,966)
Reinsurers' share		13,130	2,921
Change in the provision for claims			
Gross amount		(21,261)	(31,222)
Reinsurers' share		4,685	16,491
		(16,576)	(14,731)
Claims incurred, net of reinsurance		(33,202)	(15,776)
Operating expenses	5	(29,492)	(14,753)
Balance on the technical account for general business		(116)	(4,380)
Non-technical account			
Investment income		270	423
Allocated investment return transferred to technical account		(270)	(423)
(Loss) for the financial year		(116)	(4,380)

Statement of other comprehensive income

	Notes	2018 £'000	2017 £'000
(Loss) for the financial year		(116)	(4,380)
Foreign exchange translation differences		(493)	(5)
	13	(609)	(4,385)

All operations are continuing. The notes on pages 13 to 27 form part of these accounts.

Balance sheet

As at 31 December 2018

		2018	2017
		£'000	£'000
Assets			
Financial assets	7	23,154	4,689
Reinsurance assets	8	35,083	24,644
Insurance receivables	10	39,525	32,560
Other debtors		1,199	466
Cash at bank and in hand	11	7,890	3,262
Deferred acquisition costs	9	13,951	10,813
Other prepayments and accrued income		-	34
Total assets		120,802	76,468
Capital, reserves and liabilities			
<i>Capital and reserves</i>			
Members' balances attributable to underwriting participations	13	(4,994)	(4,385)
<i>Liabilities</i>			
Insurance liabilities:	12	106,535	69,020
Other payables	14	19,261	7,823
Accruals and deferred income		-	4,010
Total liabilities		125,796	80,853
Total capital, reserves and liabilities		120,802	76,468

The notes on pages 13 to 27 form part of these accounts. The accounts were approved by the Board of Ark Syndicate Management Limited on 7 March 2019 and signed on its behalf by

N Smith
Finance Director
7 March 2019

Statement of cash flows

For the year ended 31 December 2018

	Notes	2018 £'000	2017 £'000
Operating result		(116)	(4,380)
Change in gross technical provisions		37,515	69,020
Change in reinsurers' share of gross technical provisions		(10,439)	(24,644)
Change in debtors		(10,803)	(43,873)
Change in creditors		7,429	11,833
Change in other assets / liabilities		-	-
Investment return		(270)	(423)
Foreign exchange		(1,222)	32
Net cash flows from operating activities		22,094	7,565
Purchase of equity and debt instruments		(22,331)	(4,453)
Sale of equity and debt instruments		4,686	-
Investment income received		289	344
Investment management fees		(110)	(194)
Net cash flows from investing activities		(17,466)	(4,303)
Distribution profit		-	-
Open year release		-	-
Net cash flows from financing activities		4,628	3,262
Net increase in cash and cash equivalents		4,628	3,262
Cash and cash equivalents at 1 January		3,262	-
Cash and cash equivalents at 31 December	11	7,890	3,262

The notes on pages 13 to 27 form part of these accounts.

Notes to the financial statements

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 a reasonable expectation that the Syndicate has adequate resources to continue in operational existence for the foreseeable future.

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 inception 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 balance sheet 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.

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.

Notes to the financial statements

1. Statement of accounting policies (continued)

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 balance sheet 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 balance sheet 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.

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.

Notes to the financial statements

1. Statement of accounting policies (continued)

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 income

Investment income 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. Cash and cash equivalents 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.

Notes to the financial statements

2. Management of risk (continued)

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.

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. 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.

Notes to the financial statements

2. Management of risk (continued)

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.

	2018 Impact on profit £'000	2018 Impact on net assets £'000	2017 Impact on profit £'000	2017 Impact on net assets £'000
Sensitivity to net claim liability movements				
5% increase in total net claim liabilities	(1,630)	(1,630)	(721)	(721)
5% decrease in total net claim liabilities	1,630	1,630	721	721

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.

	A or above £'000	BBB £'000	Lower than BBB £'000	Unrated £'000	Total £'000
2018 - Credit risk analysis					
Financial assets at fair value	21,857	1,130	5	162	23,154
Reinsurance assets	23,791	-	-	38	23,829
Cash and cash equivalents	7,890	-	-	-	7,890
	53,538	1,130	5	200	54,873

	A or above £'000	BBB £'000	Lower than BBB £'000	Unrated £'000	Total £'000
2017 - Credit risk analysis					
Financial assets at fair value	187	17	3	4,482	4,689
Reinsurance assets	19,370	-	-	2	19,372
Cash and cash equivalents	3,262	-	-	-	3,262
	22,819	17	3	4,484	27,323

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 £0.2m (2017: £0.2m).

Notes to the financial statements

2. Management of risk (continued)

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.

	Sterling £'000	Euros €'000	Canadian dollars C\$'000	Australian dollars A\$'000	US dollars US\$'000	Total £'000
2018 - Currency analysis						
Assets	(6,865)	9,642	1,719	3,055	113,251	120,802
Liabilities	9,147	8,850	2,358	6,299	99,142	125,796
Net assets / (liabilities)	(16,012)	792	(639)	(3,244)	14,109	(4,994)
2017 - Currency analysis						
Assets	(1,037)	4,662	1,580	1,657	69,606	76,468
Liabilities	5,650	5,159	1,508	1,411	67,125	80,853
Net assets / (liabilities)	(6,687)	(497)	72	246	2,481	(4,385)

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.

	2018 Impact on profit £'000	2018 Impact on net assets £'000	2017 Impact on profit £'000	2017 Impact on net assets £'000
Sensitivity to foreign exchange risk				
USD weakens by 5% against other currencies	236	236	306	335
USD strengthens by 5% against other currencies	(261)	(261)	(339)	(370)

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 are monitored on a regular basis. The duration of assets exposed to movements in market interest rates is 0.91 (2017: 0.81). 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.

	2018 Impact on Profit £'000	2018 Impact on net assets £'000	2017 Impact on profit £'000	2017 Impact on net assets £'000
Sensitivity to interest rate risk				
50 basis point increase in interest rates	(69)	(69)	(7)	(7)
50 basis point decrease in interest rates	69	69	7	7

Notes to the financial statements

2. Management of risk (continued)

c) Price risk

	2017 Impact on profit £'000	2017 Impact on net assets £'000	2017 Impact on profit £'000	2017 Impact on net assets £'000
Sensitivity to price risk				
5% increase in FTSE 100 and S&P 500	-	-	41	41
5% decrease in FTSE 100 and S&P 500	-	-	(40)	(40)

Financial assets recognised at fair value are exposed to movements in market prices.

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.

	<1yr £'000	1-2yrs £'000	2-3yrs £'000	3-5yrs £'000	>5yrs £'000	Total £'000
2018 - Maturity analysis						
Financial assets at fair value	23,154	-	-	-	-	23,154
Cash and cash equivalents	7,890	-	-	-	-	7,890
	31,044	-	-	-	-	31,044

	<1yr £'000	1-2yrs £'000	2-3yrs £'000	3-5yrs £'000	>5yrs £'000	Total £'000
2017 - Maturity analysis						
Financial assets at fair value	4,689	-	-	-	-	4,689
Cash and cash equivalents	3,262	-	-	-	-	3,262
	7,951	-	-	-	-	7,951

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

	<1yr £'000	1-3yrs £'000	3-5yrs £'000	>5yrs £'000	Total £'000	Weighted average term (years)
Net claim liability cashflow						
2018	12,870	11,167	3,839	3,184	31,060	2.69
2017	6,793	6,089	1,082	462	14,426	1.99

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.

Notes to the financial statements

2. Management of risk (continued)

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 PRA, 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, licence 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

Ark management considers that it has one segment, risks underwritten at Lloyd's in the United Kingdom.

Notes to the financial statements

4. Investment income

	2018 £'000	2017 £'000
Income on financial investments at fair value	394	172
Interest on cash and cash equivalents	76	56
Gains on the realisation of investments	124	134
Unrealised gains on investments	310	457
Losses on the realisation of investments	(306)	(18)
Unrealised losses on investments	(218)	(185)
Investment management charges	(110)	(193)
	270	423

5. Operating expenses

	2018 £'000	2017 £'000
Acquisition costs	22,488	9,264
Administrative expenses	6,329	4,889
Managing agency fee	675	600
Personal expenses	-	-
	29,492	14,753

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

	2018 £'000	2017 £'000
Audit fees, of which £34k (2017: £26k) relates to the audit of regulatory returns	81	65

6. Directors and employees

All executive directors and staff are employed and remunerated by ASML. Staff costs are included in the management fee charged by ASML and no direct salary cost is borne by the Syndicate. Salary costs and directors remuneration are disclosed in the financial statements of ASML. The Syndicate has not been charged with any performance related remuneration paid to directors of ASML.

	2018 £'000	2017 £'000
Emoluments of the Active Underwriter	620	305

No contributions were made to money purchases pension schemes in the year in respect of the Active Underwriter.

Notes to the financial statements

7. Financial assets

	Cost 2018 £'000	Value 2018 £'000	Cost 2017 £'000	Value 2017 £'000
Shares and other variable yield securities	22,331	22,331	4,444	4,444
Debt and other fixed income securities	823	823	245	245
	23,154	23,154	4,689	4,689

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

Before one year	23,154
After one year	-
	23,154

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.

All financial assets and borrowings are considered by management to be Level 2. Level 2 of the hierarchy contains corporate securities, asset backed securities and mortgage-backed securities. The fair value of these assets is based on the prices obtained from both investment managers and investment custodians.

8. Reinsurance assets

	2018 £'000	2017 £'000
Reinsurers' share of claims reported	9,481	9,929
Reinsurers' share of claims incurred but not reported	11,961	5,904
Reinsurers' share of claims liabilities	21,442	15,833
Unearned premiums	13,641	8,811
	35,083	24,644

9. Deferred acquisition costs

	2018 £'000	2017 £'000
Balance at 1 January	10,813	-
Additions	24,927	20,531
Amortisation charge	(22,488)	(9,264)
Foreign exchange movement	699	(454)
	13,951	10,813

Notes to the financial statements

10. Insurance receivables

	2018 £'000	2017 £'000
Debtors arising out of direct insurance operations	37,138	29,021
Debtors arising out of direct reinsurance operations	2,387	3,539
	39,525	32,560

	2018 £'000	2017 £'000
Due within one year	38,064	31,490
Due after one year	1,461	1,070
	39,525	32,560

11. Cash and cash equivalents

	2018 £'000	2017 £'000
Cash at bank and in hand	7,890	3,262

12. Insurance liabilities

	2018 £'000	2017 £'000
Claims reported and loss adjustment expenses	24,365	12,950
Claims incurred but not reported	29,668	17,309
Gross claims liabilities	54,033	30,259
Unearned premiums	52,502	38,761
	106,535	69,020

Movements in insurance liabilities and reinsurance assets are as follows:

	2018 Gross £'000	2018 Reinsurance £'000	2018 Net £'000	2017 Gross £'000	2017 Reinsurance £'000	2017 Net £'000
Claims and loss adjustment expenses						
At 1 January	30,259	15,833	14,426	-	-	-
Claims paid	(29,756)	(13,130)	(16,626)	(3,966)	(2,921)	(1,045)
Movement arising from current years	46,706	17,816	28,890	35,188	19,412	15,776
Movement arising from prior years	4,311	-	4,311	-	-	-
Net exchange differences	2,513	923	1,590	(963)	(658)	(305)
At 31 December	54,033	21,442	32,591	30,259	15,833	14,426

Notes to the financial statements

12. Insurance liabilities (continued)

	2018	2018	2018	2017	2017	2017
	Gross	Reinsurance	Net	Gross	Reinsurance	Net
Unearned premiums	£'000	£'000	£'000	£'000	£'000	£'000
At 1 January	38,761	8,811	29,950	-	-	-
Increase in the year	97,235	29,182	68,053	40,739	9,840	30,899
Release in the year	(86,652)	(24,345)	(62,307)	-	-	-
Net exchange differences	3,158	(7)	3,165	(1,978)	(1,029)	(949)
At 31 December	52,502	13,641	38,861	38,761	8,811	29,950

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.

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.

Notes to the financial statements

12. Insurance liabilities (continued)

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 balance sheet.

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.

	2018 £'000	2017 £'000
Gross claims		
1 year	29,313	35,691
2 years	-	58,111
Net claims		
1 year	21,700	15,764
2 years	-	27,478
	Gross All years £'000	Net All years £'000
Total claims	87,424	49,178
Less paid claims	(33,391)	(16,586)
Total claims liabilities	54,033	21,442

13. Reconciliation of members' balances

	2018 YOA £'000	2017 YOA £'000	Total £'000
At 1 January	-	(4,385)	(4,385)
Profit / (loss) for the year	(3,035)	2,919	(116)
Other recognised gains / (losses)	(6)	(487)	(493)
At 31 December	(3,041)	(1,953)	(4,994)

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.

Notes to the financial statements

14. Other payables

	2018 £'000	2017 £'000
Creditors arising out of direct insurance operations	7,260	176
Creditors arising out of reinsurance operations	12,001	7,647
	19,261	7,823
	2018 £'000	2017 £'000
Due within one year	19,261	7,816
Due after one year	-	7
	19,261	7,823

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

	2018 £'000	2017 £'000
Net cash outflow for the year	4,623	3,262
Cash flow – portfolio investments	18,225	4,689
Movement arising from cash flows	22,848	7,951
Changes in market values and exchange rates	245	-
Total movement in portfolio investments net of financing	23,093	7,951
Balance brought forward at 1 January	7,951	-
Balance carried forward at 31 December	31,044	7,951

16. Movement in cash and portfolio investments

	At 1 January 2018 £'000	Cash flow £'000	Change in market value £'000	At 31 December 2018 £'000
Cash at bank and in hand	3,262	4,623	5	7,890
Shares and other variable yield securities	4,444	17,645	242	22,331
Debt and other fixed income securities	245	580	(2)	823
Total portfolio investments	4,689	18,225	240	23,154
Total cash and portfolio investments	7,951	22,848	245	31,044

Notes to the financial statements

17. Related parties

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

Swiss Reinsurance Company Limited, which forms part of the Swiss Reinsurance group, held 11.69% of the ordinary share capital of AIHL until 30 June 2016, when the entire holding was repurchased by AIHL. The Syndicates have purchased reinsurance protection on normal commercial terms and at arms length from Swiss Reinsurance Company (UK) Limited ("Swiss Re"), which is part of the Swiss Reinsurance group. Premiums paid by the Syndicates to Swiss Re in the year amounted to £1.0m (2017: £1.0m).

C Watson resigned as a director of Validus Holdings Limited in 2018. The Syndicates have purchased reinsurance protection on normal commercial terms and at arms length from the Validus Group. Premiums paid by the Syndicates in the year amounted to £2.8m (2017: £4.5m).

C Watson is a director of Aquiline Capital Partners LLC ("Aquiline"). The Syndicates have invested funds totalling £4.8m (2017: £4.0m) in a private equity fund managed by Aquiline.

I Beaton, N Bonnar and D Foreman are partners of Elvis Capital Partners ("ECP"). GAIHL has a contingent profit commission arrangement with ECP based on the profit after tax produced by the Syndicate operations. No profit commission accrued by GAIHL under this contract (2017: £1.0m).

ECP owns Mercury Capital Limited ("Mercury"), a catastrophe risk manager. Mercury provides actuarial consultancy services to GAIHL on normal commercial terms which GAIHL then recharges to ASML. The actuarial consultant, C Griffiths, is a director of AIHL. Fees paid by GAIHL to Mercury in the year in respect of these services amounted to £0.1m (2017: £0.1m).

The Syndicates have made investments through Mercury in assets exposed to catastrophe insurance risk through various Industry Loss Warranty arrangements. At the year end, included within the investments of the Syndicates is £22.3m relating to these assets (2017: £19.1m). An investment gain of £2.5m (2017: loss of £4.4m) was generated by these assets in the year. No fee is paid by the Syndicates to Mercury in respect of these arrangements.

The Syndicates underwrite business through Cove Program Managers Limited ("Cove") under a binding authority. ASML holds 14.5% of the ordinary share capital of Cove and I Beaton serves without fee as a non-executive director. Gross premium income, excluding brokerage and commissions, due to the Syndicates under this binding authority amounted to less than £0.1m (2017: £0.1m). Commissions paid by the Syndicates in the year to Cove amounted to less than £0.1m (2017: £0.1m).

Ark Underwriting Inc. ("AUI") is a wholly owned subsidiary of ASML, which facilitates the introduction of US reinsurance business into the Syndicates through a binding authority. AUI earns commission set on normal commercial terms, the amount paid by the Syndicates to AUI was £0.7m (2017: £0.6m).

Accident & Health Underwriting Limited ("AHU") is a wholly owned subsidiary of GAIHL. N Brothers serves without fee as a director of AHU. The Syndicates underwrite business through AHU under a binding authority. Gross premium income, excluding brokerage and commissions, due to the Syndicates under this binding authority amounted to £6.3m (2017: £5.1m). Brokerage and commissions paid in the year by the Syndicates to AHU amounted to £4.3m (2017: £3.5m).

GAIHL is a member controlling 50% of Accident & Health Claims Services LLP ("AHC"), the other 50% being controlled by AHU. AHC provides claims handling services to the Syndicates. Fees paid in the year by the Syndicates in respect of these services amounted to £0.3m (2017: £0.3m).

I Beaton is a director of Innova Re Investment Services Limited ("IRIS"), an investment advisory company. GAIHL owns 55% of the share capital of the parent company of IRIS. ASML has entered into a contract on normal commercial terms and at arms length with IRIS for the provision of investment advisory services. Fees paid by ASML to IRIS in the year amounted to £1.2m (2017: £1.6m). The Syndicates have also paid investment charges to GAIHL of £1.0m (2017: £4.3m).

J Wardrop is a director of Starstone Underwriting Limited ("Starstone"). The Syndicates have purchased reinsurance protection on normal commercial terms and at arms length from Starstone. Premiums paid by the Syndicates in the year amounted to £0.4m (2017: Nil). Also, the Syndicate provided reinsurance under separate contracts to Starstone on normal commercial terms and at arms length. Gross premium income, excluding brokerage and commissions, due to the Syndicate under these contracts amounted to £0.2m (2017: Nil).