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Report & Financial Statements

Syndicate 4020

Contents

Directors and administration

Managing agent

Ark Syndicate Management Limited

Directors

I Beaton	(Chief Executive)
N Bonnar	
N Brothers	
D Foreman	(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

N Bonnar

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

The directors of the managing agent present their report and accounts for the 2014 year of account ("YOA") of Syndicate 4020 ("the Syndicate") as closed at 31 December 2016 and their annual report and accounts for the year to 31 December 2016.

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. Gross written premium income by class of business for the year was as follows:

	2016 YOA Estimate £'000	2015 YOA Estimate £'000	2014 YOA Closed £'000	2016 Cal year £'000	2015 Cal year £'000
Accident & Health	40,353	43,001	40,036	35,827	38,780
Cargo & Specie	18,431	19,565	12,766	16,368	16,998
Casualty Reinsurance	14,663	14,982	15,327	16,605	10,936
Energy Upstream	32,019	41,310	37,983	25,622	35,658
Marine & Energy Liability	6,087	7,666	8,998	6,088	6,253
Marine Hull	17,477	19,049	12,138	16,080	14,875
Property Reinsurance	22,668	26,446	37,131	20,957	21,401
Specialty Programmes	70,469	93,464	102,399	73,335	80,463
Specialty Reinsurance	15,120	16,331	14,362	10,416	7,900
War, Terrorism & Political Risk	20,432	30,916	35,578	25,503	31,204
Property Direct & Facultative	27,903	25,228	19,089	25,070	20,973
Property Programmes	20,933	21,842	22,975	20,000	16,404
Contingency	8,940	8,724	8,067	7,649	7,569
Fine Art & Specie	8,260	9,983	10,559	8,200	8,706
Package Programmes	4,097	24,383	30,997	4,191	18,738
	327,852	402,890	408,405	311,911	336,858

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 6105, a syndicate supported by traditional Lloyd's Names' capital which has written a quota share of the 2015 and 2014 YOA of the Syndicate, and with effect from 1 January 2017, Syndicate 3902 which had previously operated as an Incidental Syndicate.

Set out below is a brief description of each class of business.

Class of business	Description
Accident & Health	Includes a spread of exposure across war, key man, disability, credit card personal accident insurance and reinsurance catastrophe.
Cargo & Specie	Syndicate 4020 - Cargo is made up of general cargo transit and storage as well as higher value and more complex risks such as satellites, heavy lift, tows and project cargo. Specie includes fine art, metals, securities and vault risk written on an excess basis. Incidental Syndicate 3902 - Focus on small /medium sized accounts, excludes cash in transit, war on land and jewellers block.
Casualty Reinsurance	Predominantly Medical Malpractice, Professional Liability and some General Liability.
Energy Upstream	Syndicate 4020 - Insurance of exploration and production property (on and offshore), control of well, removal of wreck, business interruption, construction and renewable energy from a broad geographic spread. Incidental Syndicate 3902 - Upstream oil and gas focussed with a broad geographical spread.
Marine & Energy Liabilities	Marine includes the reinsurance of the International Group of P&I Clubs. Energy is only offered in conjunction with Upstream Energy packages.

Class of business	Description
Marine Hull	Syndicate 4020 - Insurance of low profile, smaller fleet business and specialised tonnage, with some vessel construction, marine property and marine war. Incidental Syndicate 3902 - Emphasis on smaller brown water tonnage and older vessels on limited conditions.
Property Reinsurance	Predominantly non-proportional, balanced between US and Rest of World ("ROW") exposures.
Specialty Programmes	There are three parts - Professional liability, Contingency and Crisis management. Contingency and Crisis management were discontinued in 2015. Professional liability includes architects and engineers, insurance professionals and real estate agents E&O, Allied Health, Cyber Liability and Miscellaneous E&O.
Specialty Reinsurance	Consists of Aviation and Specialty reinsurance, including crop and satellite. Very little Marine is written.
War, Terrorism & Political Risk	Syndicate 4020 - Aviation War consists of airline hull war and excess AV52. This class was discontinued in 2016. Terror is primarily pure Terrorism physical damage and business interruption, with a small amount of broad-form political violence, including war on land. Political risk focus is contract frustration and confiscation / expropriation. War on land is also written. Peak exposures are in emerging countries and include China, Ivory Coast, Angola and Cameroon. Incidental Syndicate 3902 – Aviation War consists of airline, general aviation (including rotor wing), hull war and excess of loss / space.
Property Direct & Facultative	Syndicate 4020 - Mostly low fire hazard occupancies, avoiding higher risk exposed classes such as mining, mineral processing and other heavy industries. Incidental Syndicate 3902 - 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.
Property Programmes	US and Canadian binding authorities, avoiding middle market / larger commercial property accounts which are highly competitive.
Contingency	Predominantly short tail with event cancellation the largest part.
Fine Art & Specie	Includes jewellers block, cash in transit, general specie and fine art written both primary and excess.
Package Programmes	Mostly Ark-led US binding authorities. Balanced between Property and Commercial General Liability. Target risks are small commercial low-medium hazard occupancy. This class was discontinued in 2016.

Underwriting performance - YOA

The 2014 YOA has been closed with a profit of £19.7m after all standard personal expenses, equivalent to a profit on stamp capacity of 5.8%. This includes an improvement on the RITC brought forward of £9.7m. The liability reserves of the Specialty Programmes and Package Programmes accounts have been strengthened in recognition of incurred and potential future claim development. Major loss estimates have proven to be adequate.

The 2015 YOA is forecast at the 24 month stage to produce an adequate return on stamp capacity. There have been no major catastrophe losses reported that impact the 2015 YOA although the year has been impacted by a number of mid-size losses such as the Brussels terrorist attack, and the wildfires affecting Alberta and Tennessee. This YOA also has exposure to the liability sections of the Specialty Programmes and Package Programmes mentioned earlier.

There have been no major catastrophe losses reported that impact the 2016 YOA. The Package Programmes liability account was discontinued in 2016.

	2016 YOA	2015 YOA
Capacity	£400.0m	£340.0m
Forecast results (% of capacity)	Na	2.8% - 7.8%

Seven year summary – closed years	2014 YOA	2013 YOA	2012 YOA	2011 YOA	2010 YOA	2009 YOA	2008 YOA
Syndicate allocated capacity (£m)	340.0	381.0	389.4	389.0	345.0	221.8	170.0
Number of Underwriting Members	3	1	426	434	2	4	2
Aggregate net premiums (£'000)	219,227	221,235	223,590	197,550	212,046	198,185	175,210

Results for illustrative share of £10,000	%	%	%	%	%	%	%
Gross premium written (% of illustrative share)	91.9	73.9	72.2	62.4	78.4	117.0	131.0
Net premium written (% of illustrative share)	63.5	58.0	57.8	50.8	61.5	89.4	103.1
Profit (% of gross premium)	6.3	13.3	23.3	18.5	3.9	19.0	3.0
Profit (% of capacity)	5.8	9.8	16.9	11.5	3.1	22.3	4.0

Results for illustrative share of £10,000	£	£	£	£	£	£	£
Gross premiums written	9,192	7,389	7,223	6,235	7,836	11,703	13,100
Net premiums	6,351	5,801	5,783	5,079	6,146	8,937	10,306
RITC from an earlier year of account	9,333	7,491	6,759	6,361	4,235	4,268	1,941
Net claims	(4,935)	(4,288)	(3,137)	(3,153)	(3,292)	(3,660)	(5,506)
Reinsurance to close	(8,871)	(7,254)	(7,110)	(6,590)	(6,668)	(6,339)	(5,568)
Underwriting profit	1,878	1,750	2,295	1,697	421	3,206	1,173
Other syndicate operating expenses	(813)	(569)	(550)	(504)	(465)	(617)	(792)
Movement on foreign currency translation	(271)	(61)	(26)	(6)	81	(9)	39
Net investment income	75	249	511	343	483	424	447
Illustrative personal expenses:							
Managing agent's fee	(77)	(75)	(75)	(75)	(75)	(75)	(75)
Profit commission ("PC")	(130)	(245)	(419)	(241)	(65)	(472)	(85)
Other personal expenses	(81)	(68)	(51)	(60)	(70)	(228)	(308)
Profit after illustrative personal expenses / PC	581	981	1,685	1,154	310	2,229	399

Underwriting performance – 2016 calendar year

The underwriting profit for the calendar year 2016 is £47.8m. As with 2015, major catastrophe losses were considerably down on the long term average with little activity in the US although the year has been impacted by a number of mid-size losses such as the Brussels terrorist attack, and the wildfires affecting Alberta and Tennessee. The liability section of the Specialty Programmes account has been strengthened in recognition of incurred and potential future claim development. The calendar year result together with key performance indicators is shown below:

	2016	2015
Claims ratio (%)	51.8%	43.6%
Expense ratio (%)	45.6%	47.5%
Combined ratio (%)	97.4%	91.1%

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 noted above, and the expense ratio is broadly in line with expectations. The combined ratio including all foreign exchange movements is 99.0% (2015: 91.7%)

Operating expenses

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

	2016 £'000	2015 £'000
Acquisition costs – brokerage and commissions	84,417	82,224
Acquisition costs – other	6,688	5,960
Administrative expenses	37,274	29,398
Managing agency fee	2,973	2,637
Personal expenses	2,170	8,132
Operating expenses	133,502	128,351

Cash flow

There was a net cash flow decrease of £15.1m (2015: decrease £1.1m) in the year arising from normal operating activities. Profit releases on open years of £11.2m (2015: £19.6m) were made during the year. On 11 February 2017, the ASML board approved a profit release of £7.1m for the 2015 YOA.

Investment return

Syndicate funds are actively managed by third party investment managers and the returns compared to benchmarks agreed as part of the investment guidelines. The Syndicate 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.

The investment return for the 2014 YOA was £2.6m and the average return over the three years was 1.51%. Investment returns for the 2016 calendar year, as set out below, have been impacted by mark to market losses on the UK commercial property portfolio following the Brexit referendum result in June.

	2016	2015
Average funds available for investment (US$'000)	668,224	726,200
Investment return for the year before allocation to Syndicate 6105 (US$'000)	826	10,717
Annualised investment return (%)	0.1%	1.5%

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 £512.3m (2015: £448.4m) and a provision for unearned premiums of £214.3m (2015: £198.3m). The reinsurers' share of technical provisions is £68.8m (2015: £51.1m) in respect of unearned premiums and £28.8m (2015: £39.8m) 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 £510.7m (2015: £485.5m) the majority of which are actively managed by third party investment managers.

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 re-appoint 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 calendar year accounts.

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 2016 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 2016.

Name	Date of appointment / resignation	AIHL B Shares No.	AIHL G Shares No.	AIHL H Shares (2015) No.	AIHL H Shares (2016) No.	AIHL H Shares (2017) No.
I Beaton (Chief Executive)		*92,230	*121,788	386,341	494,516	494,516
N Bonnar		*92,230	*121,788	386,341	494,516	494,516
N Brothers	Appointed 15 November 2016	312	-	1,961	3,456	3,750
N Deshpande	Resigned 15 November 2016	4,886	23,787	3,863	4,945	-
D Foreman (Chairman)		23,526	123,689	-	-	-
P McIntosh		3,611	17,086	12,363	15,825	15,825
R Oakes (Non-executive)	Resigned 16 May 2016	-	-	-	-	-
N Smith		2,921	13,457	10,818	13,847	13,847
V Southey (Non-executive)	Resigned 31 July 2016	-	-	-	-	-
J Wardrop (Non-executive)	Appointed 1 January 2016	-	-	-	-	-
C Watson (Non-executive)		-	-	-	-	-
J Welman (Non executive)	Appointed 1 April 2016	-	-	-	-	-

In 2016, the B and G shares of I Beaton and N Bonnar were converted into Preference 1 and Preference 2 shares. The rights of these shares are materially the same as those they replaced.

Future developments

The capacity of the Syndicate for the 2017 YOA is £300.0m (2016 YOA: £400.0m). Syndicate 3902, previously an incidental syndicate within the Syndicate, commenced underwriting as a full syndicate for the 2017 YOA with a capacity of £100.0m.

N Bonnar
Active Underwriter
8 March 2017

Underwriting Year Distribution Accounts

2014 Year of Account

Statement of managing agent's responsibilities

The managing agent is responsible for preparing the syndicate annual report and accounts in accordance with applicable law and regulations.

The Insurance Accounts Directive (Lloyd's Syndicates and Aggregate Accounts) Regulations 2008 require the managing agent to prepare Syndicate underwriting year accounts at 31 December in respect of any underwriting year which is being closed by reinsurance to close which give a true and fair view of the result of the underwriting year at closure. Detailed requirements in respect of the underwriting year accounts are set out in the Lloyd's Syndicate Accounting Byelaw (No 8 of 2005).

In preparing the Syndicate underwriting year accounts, the managing agent is required to:

1. select suitable accounting policies which are applied consistently and where there are items which affect more than one year of account, ensure a treatment which is equitable as between the members of the Syndicate affected. In particular, the amount charged by way of premium in respect of the reinsurance to close shall, where the reinsuring members and reinsured members are members of the same Syndicate for different years of account, be equitable as between them, having regard to the nature and amount of the liabilities reinsured;

2. take into account all income and charges relating to a closed year of account without regard to the date of receipt or payment;

3. make judgements and estimates that are reasonable and prudent; and

4. state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in these accounts.

The managing agent is responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Syndicate and enable it to ensure that the Syndicate underwriting year accounts comply with Lloyd's Regulations and Syndicate Accounting Byelaw. It is also responsible for safeguarding the assets of the Syndicate and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Independent auditors' report to the members of Syndicate 4020 for the 2014 closed Year of Account

We have audited the Syndicate underwriting year accounts for the 2014 year of account of Syndicate 4020 for the three years ended 31 December 2016, as set out on pages 13 to 20 and 43. The financial reporting framework that has been applied in their preparation is applicable law and UK Accounting Standards (UK Generally Accepted Accounting Practice), including FRS 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland*, as modified by the Insurance Directive (Lloyd's Syndicate and Aggregate Accounts Regulations 2008) and the Lloyd's Syndicate Accounting Byelaw.

This report is made solely to the members of the Syndicate, 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 syndicate and the Syndicate's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of the managing agent and the auditor

As explained more fully in the statement of managing agent's responsibilities set out on page 11, the Managing Agent is responsible for the preparation of the syndicate's underwriting year accounts and for being satisfied that they give a true and fair view. Our responsibility is to audit, and express an opinion on, the Syndicate underwriting year accounts in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the Syndicate underwriting year accounts

An audit involves obtaining evidence about the amounts and disclosures in the syndicate underwriting year accounts sufficient to give reasonable assurance that the syndicate underwriting year accounts are free from material misstatements, whether caused by fraud or error.

This includes an assessment of whether the accounting policies are appropriate to the syndicate's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the managing agent; and the overall presentation of the syndicate underwriting year accounts. In addition, we read all the financial and non-financial information in the annual report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or consistencies we consider the implications for our report.

We have audited the syndicate underwriting accounts, which comprise of the profit and loss account, the balance sheet as at 31 December 2016, the statement of cash flows and the related notes.

The underwriting year accounts relate to the 2014 year of account which has been closed by reinsurance to close at 31 December 2016. As a consequence of this, the residual risks to the members on the closed year have been minimised. Management have deemed the following risk disclosure requirements of FRS 102 to be not applicable to these underwriting accounts:

- Insurance risk
- Financial risk
- Credit risk
- Liquidity risk
- Market risk
- Capital management
- Fair value hierarchy disclosure on investments

Opinion on Syndicate underwriting year accounts

In our opinion the Syndicate underwriting year accounts:

- give a true and fair view of the profit for the 2014 closed year of account;
- have been prepared in accordance with the requirements of the Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008 and the Lloyd's Syndicate Accounting Byelaw.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008 require us to report to you if, in our opinion:

- adequate accounting records have not been kept; or
- the Syndicate underwriting year accounts are not in agreement with the accounting records; or
- we have not received all the information and explanations we require for our audit.

Ben Priestley

For and on behalf of KPMG LLP, Statutory Auditor, Chartered Accountants

15 Canada Square

London, E14 5GL

8 March 2017

Distribution accounts

Profit and loss account

2014 closed YOA for the three years ended 31 December 2016

	Notes	2014 £'000
Syndicate allocated capacity		340,000
Technical account		
Earned premiums, net of reinsurance		
Gross premiums written	3	312,531
Outwards reinsurance premium		(96,614)
Reinsurance to close premium received, net of reinsurance	5	317,307
Allocated investment return transferred from the non-technical account		2,556
Claims incurred, net of reinsurance		
Claims paid - gross amount	3	(182,014)
Reinsurer's share		14,225
Reinsurance to close premium payable, net of reinsurance	6	(301,613)
Operating expenses	4	(46,641)
Balance on the technical account for general business		19,737
Non-technical account		
Investment income		2,556
Allocated investment return transferred to technical account		(2,556)
Profit for the 2014 closed YOA		19,737

The notes on pages 16 to 20 and 43 form part of these accounts.

Distribution accounts

Balance sheet

2014 closed YOA as at 31 December 2016

	Notes	2014 £'000
Assets		
Financial assets	8	360,603
Debtors arising out of reinsurance operations		2,978
Other debtors		1,619
Cash at bank and in hand		(7,326)
Other prepayments and accrued income		1,408
Total assets		359,282
Liabilities		
Amounts due to members	7	8,535
Reinsurance to close premium payable to close the account	6	301,613
Creditors arising out of insurance operations		950
Creditors arising out of reinsurance operations		2,349
Other creditors		21,558
Accruals and deferred income		24,277
Total liabilities		359,282

The notes on pages 16 to 20 and 43 form part of these accounts. The accounts were approved by the Board of Ark Syndicate Management Limited on 8 March 2017 and signed on its behalf by

N Smith
Finance Director
8 March 2017

Statement of cash flows

2014 closed YOA for the three years ended 31 December 2016

	Notes	2014 £'000
Reconciliation of operating profit to net cash inflow from operating activities		
Operating profit on ordinary activities		19,737
Open year profit release		(11,202)
(Decrease) in cash and investments		(8,535)
Net cash inflow from operating activities		-

The notes on pages 16 to 20 and 43 form part of these accounts.

Notes to the accounts

1. Basis of preparation

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 2014, and Financial Reporting Standard 103 *Insurance Contracts* ("FRS 103") as issued in March 2014.

The Lloyd's Syndicate Accounting Byelaw requires the aggregation of movements in each of the three calendar years' for any Underwriting Year account. For the 2014 YOA each calendar year is aggregated using the closing rate of exchange as at 31 December 2016.

Members participate on a syndicate by reference to a YOA and each syndicate YOA is a separate annual venture. These accounts relate to the 2014 YOA which has been closed by reinsurance to close at 31 December 2016; consequently the balance sheet represents the assets and liabilities of the 2014 YOA and the profit and loss account and cash flow statement reflect the transactions for the YOA during the three year period until closure.

2. Accounting policies

The underwriting accounts for each YOA are normally kept open for three years before the result on that year is determined. At the end of the three year period, outstanding liabilities can normally be determined with sufficient accuracy to permit the YOA to be closed by payment of a reinsurance to close premium to the successor year of account.

Premiums written

Gross premiums are allocated to each YOA on the basis of the inception date of the policy. 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. Premiums written are treated as fully earned at 36 months.

Claims Paid

Gross claims paid include claims settlement expenses and are attributed to the same YOA as the original premium for the underlying policy.

Reinsurance to close premium payable

The reinsurance to close premium is determined on the basis of estimated outstanding liabilities and related claims settlement costs, including claims incurred but not reported ("IBNR") relating to the closed YOA.

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 which 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 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.

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 amounts 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.

Profit commission

Profit commission is charged by ASML in accordance with the managing agent's agreement.

2. Accounting policies (continued)

Foreign currencies

Transactions in US dollars, Euros, Canadian dollars and Australian dollars are translated at the closing rate of exchange for the closing year. Underwriting transactions denominated in other foreign currencies are included at the rate of exchange ruling at the date the transaction is processed. Assets and liabilities denominated in US dollars, Euros, Canadian dollars and Australian dollars, where the assets and liabilities in the currency ledgers are broadly matched, are translated at the closing rate of exchange for the year. Assets and liabilities denominated in other foreign currencies are translated into sterling at the rates of exchange at the balance sheet date.

The following rates of exchange have been used in the preparation of these accounts; US dollars 1.24, Canadian dollars 1.66, Euros 1.17 and Australian dollars 1.71.

Investment return

Investment return represents all investment income, realised investment gains and losses and movements in unrealised gains and losses, net of investment expenses, charges and interest. The returns on assets arising in a calendar year are apportioned to each open YOA during the calendar year in proportion to the average funds available for investment for the Syndicate. Investment return is initially recorded in the non-technical account. A transfer is made from the non-technical account to the general business technical account to reflect the investment return on funds supporting underwriting business. Investment return has been wholly allocated to the technical account as all investments relate to the technical account.

Taxation

Under Schedule 19 of the Finance Act 1993 managing agents are not required to deduct basic rate income tax from trading income. In addition, all UK basic rate income tax deducted from syndicate investment income is recoverable by managing agents and consequently the distribution made to members or their members' agents is gross of tax. Capital appreciation falls within trading income and is also distributed gross of tax. No provision has been made for any United States Federal Income Tax payable on underwriting results or investment earnings. Any payments on account made by the Syndicate during the year have been included in the balance sheet under the heading 'other debtors'. No provision has been made for any other overseas tax payable by the members on underwriting results.

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.

2. 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.

3. Segmental Analysis

	Gross premiums written £'000	Gross claims incurred £'000	Operating expenses £'000	Reinsurance balance £'000	Total £'000
Accident & Health	26,442	(20,337)	(3,936)	(2,277)	(108)
Cargo & Specie	9,383	(10,890)	(1,397)	(122)	(3,026)
Casualty Reinsurance	14,590	(21,635)	(2,172)	(1,718)	(10,935)
Energy – Upstream	32,510	(13,820)	(4,839)	(10,771)	3,080
Liability – Marine & Energy	7,874	(3,191)	(1,172)	(2,850)	661
Marine Hull	9,147	(4,627)	(1,361)	(2,510)	649
Property Reinsurance	32,131	(10,176)	(4,782)	(14,847)	2,326
Specialty Programmes	72,541	(47,147)	(10,796)	(7,058)	7,540
Specialty Reinsurance	11,132	(5,586)	(1,657)	(853)	3,036
War, Terrorism and Political Risk	29,889	(8,744)	(4,449)	(10,267)	6,429
Worldwide Property – Direct and Facultative	15,933	(5,619)	(2,371)	(4,887)	3,056
Worldwide Property Programmes	15,853	(9,657)	(2,359)	(2,645)	1,192
Contingency	5,625	(3,433)	(837)	(894)	461
Property Treaty	53	(686)	(8)	(34)	(675)
Fine Art & Specie	7,990	(3,472)	(1,189)	(2,113)	1,216
Package Programmes	22,280	(12,994)	(3,316)	(3,189)	2,781
RITC adjustment	(842)	-	-	(15,354)	(16,196)
	312,531	(182,014)	(46,641)	(82,389)	1,487
RITC premium	319,344	(325,362)	-	21,712	15,694
Total	631,875	(507,376)	(46,641)	(60,677)	17,181

All premiums were concluded in the UK.

Notes to the accounts

4. Operating expenses

	2014 £'000
Personal expenses	9,776
Loss on currency sales	9,201
Other expenses	27,664
	46,641

Personal expenses comprise Lloyd's subscriptions, central fund contributions, and a managing agent's fee and profit commission paid to ASML. All other expenses, including audit fees, are charged to and borne by the Syndicate.

All executive directors and staff are employed and remunerated by ASML. Salaries and related costs are included within the management fee charged by ASML and accordingly no direct salary cost is borne by the Syndicate. Details of salary cost and directors remuneration are disclosed in the financial statements of ASML.

5. Reinsurance to close premium received

	2014 £'000
Gross outstanding claims	169,516
Reinsurance recoveries anticipated	(11,383)
Provision for gross claims incurred but not reported	106,571
Reinsurance recoveries anticipated	9,515
Unallocated loss adjustment expenses	4,828
Foreign exchange movement	38,260
	317,307

6. Reinsurance to close premium payable

	2014 £'000
Gross outstanding claims	191,422
Reinsurance recoveries anticipated	(18,419)
Provision for gross and net claims incurred but not reported	128,335
Reinsurance recoveries anticipated	(5,330)
Unallocated loss adjustment expenses	5,605
	301,613

The reinsurance to close is effected to the 2015 YOA of the Syndicate.

7. Reconciliation of members' balances

	2014 £'000
Profit for the year of account	19,737
Open year distribution to members	(11,202)
At 31 December	8,535

Notes to the accounts

8. Financial assets

	2014 £'000
Shares and other variable yield securities	261,870
Debt and other fixed income securities	54,356
Participation in investment pools	24,468
Other investments	19,909
	360,603

All returns from financial assets were carried through the profit and loss account.

Calendar Year Report & Accounts

2016

Ark Syndicate Management Limited
Syndicate 4020

Statement of managing agent's responsibilities

The managing agent is responsible for preparing the syndicate annual report and accounts in accordance with applicable law and regulations.

The Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008 ("the Regulations") require the managing agent to prepare syndicate financial statements at 31 December each year in accordance with UK accounting standards and applicable law (UK Generally Accepted Accounting Practice). The syndicate financial statements are required by law to 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 year.

In preparing the syndicate financial statements, the managing agent is required to:

1. select suitable accounting policies which are applied consistently, subject to changes arising on the adoption of new accounting standards in the year;
2. make judgments and estimates that are reasonable and prudent;
3. state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the syndicate financial statements; and
4. prepare the syndicate financial statements on the basis that the Syndicate will continue to write future business unless it is inappropriate to presume that the Syndicate will do so.

The managing agent is responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the Syndicate and enable it to ensure that the syndicate financial statements comply with the 2008 Regulations. It is also responsible for safeguarding the assets of the Syndicate and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Independent auditors' report to the members of Syndicate 4020

We have audited the financial statements of Syndicate 4020 for the year ended 31 December 2016, as set out on pages 25 to 43. The financial reporting framework that has been applied in their preparation is applicable law and UK Accounting Standards (UK Generally Accepted Accounting Practice), including FRS 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland*.

This report is made solely to the members of the syndicate, 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 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 syndicate and the syndicate's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Respective responsibilities of the managing agent and auditors

As explained more fully in the Statement of Managing Agent's Responsibilities set out on page 23, the Managing Agent is responsible for the preparation of the syndicate's financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit, and express an opinion on, the syndicate's financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the Financial Reporting Council's website at www.frc.org.uk/auditscopeukprivate.

Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the syndicate's affairs as at 31 December 2016 and of its profit for the year then ended;
- have been properly prepared in accordance with UK Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008.

Opinion on other matter prescribed by the Insurance Accounts Directive (Lloyd's Syndicate and Aggregate Accounts) Regulations 2008

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

We have nothing to report in respect of the following matters where the Insurance Accounts Directive (Lloyds's Syndicate and Aggregate Accounts) Regulations 2008 require us to report to you if, in our opinion:

- adequate accounting records have not been kept; or
- the financial statements are not in agreement with the accounting records; or

we have not received all the information and explanations we require for our audit.

Ben Priestley
For and on behalf of KPMG LLP, Statutory Auditor, Chartered Accountants
15 Canada Square, London, E14 5GL
8 March 2017

Income statement

For the year ended 31 December 2016

	Notes	2016 £'000	2015 £'000
Technical account			
Earned premiums, net of reinsurance			
Gross premiums written	3	311,911	336,858
Outward reinsurance premiums		(42,846)	(78,123)
Change in the provision for unearned premiums			
Gross amount		25,971	5,687
Reinsurers' share		(20,753)	(1,035)
Earned premiums, net of reinsurance		274.283	263,387
Allocated investment return transferred from the non-technical account	4	177	6,607
Claims incurred, net of reinsurance			
Claims paid			
Gross amount		(181,239)	(195,670)
Reinsurers' share		22,723	48,524
		(158,516)	(147,146)
Change in the provision for claims			
Gross amount		4,699	44,805
Reinsurers' share		11,737	(12,598)
		16,436	32,207
Claims incurred, net of reinsurance		(142,080)	(114,939)
Operating expenses	5	(133,502)	(128,351)
Balance on the technical account for general business		(1,122)	26,704
Non-technical account			
Investment income		177	6,607
Allocated investment return transferred to technical account		(177)	(6,607)
(Loss) / Profit for the financial year		(1,122)	26,704

Statement of other comprehensive income

	Notes	2016 £'000	2015 £'000
(Loss) / Profit for the financial year		(1,122)	26,704
Foreign exchange translation differences		3,942	1,648
	13	2,820	28,352

All operations are continuing. The notes on pages 28 to 43 form part of these accounts.

Balance sheet

As at 31 December 2016

	Notes	2016 £'000	2015 £'000
Assets			
Financial assets	7	498,099	471,939
Reinsurance assets			
Provision for unearned premiums	8	28,794	40,157
Claims outstanding	8	68,750	51,063
		97,544	91,220
Insurance receivables	10	133,267	126,521
Other debtors		10,034	8,936
Cash at bank and in hand	11	12,557	13,561
Deferred acquisition costs	9	60,549	54,899
Other prepayments and accrued income		2,174	2,211
		218,581	206,128
Total assets		814,224	769,287
Capital, reserves and liabilities			
Capital and reserves			
Members' balances attributable to underwriting participations	13	4,672	30,818
Liabilities			
Insurance liabilities:			
Provision for unearned premiums	12	214,300	198,269
Claims outstanding	12	512,293	448,370
		726,593	646,639
Other payables	14	78,770	73,808
Accruals and deferred income		4,189	18,022
Total liabilities		809,552	738,469
Total capital, reserves and liabilities		814,224	769,287

The notes on pages 28 to 43 form part of these accounts. The accounts were approved by the Board of Ark Syndicate Management Limited on 8 March 2017 and signed on its behalf by

N Smith, Finance Director

8 March 2017

Statement of cash flows

For the year ended 31 December 2016

	Notes	2016 £'000	2015 £'000
Operating result		(1,122)	26,704
Change in gross technical provisions		79,954	(26,778)
Change in reinsurers' share of gross technical provisions		(6,323)	11,433
Change in debtors		(13,457)	(7,103)
Change in creditors		(8,873)	13,530
Change in other assets / liabilities		-	-
Investment return		(177)	(18,904)
Foreign exchange		(65,135)	-
Net cash flows from operating activities		(15,133)	(1,118)
Purchase of equity and debt instruments		(37,554)	(162,428)
Sale of equity and debt instruments		73,215	140,301
Investment income received		7,629	7,926
Investment management fees		(196)	(399)
Net cash flows from investing activities		43,094	(14,600)
Distribution profit		(17,763)	(27,427)
Open year release	13	(11,202)	(19,557)
Net cash flows from financing activities		(28,965)	(46,984)
Net (decrease) in cash and cash equivalents		(1,004)	(62,702)
Cash and cash equivalents at 1 January		13,561	76,263
Cash and cash equivalents at 31 December	11	12,557	13,561

The notes on pages 28 to 43 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 2014, and Financial Reporting Standard 103 *Insurance Contracts* ("FRS 103") as issued in March 2014.

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.

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 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.

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.

1. Statement of accounting policies (continued)

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.

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.

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.

1. Statement of accounting policies (continued)

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.

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 maximising the expected return on equity.

2. Management of risk

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:

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.

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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 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 the second largest risk 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.

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	2016 Impact on profit £'000	2015 Impact on profit £'000	2016 Impact on net assets £'000	2015 Impact on net assets £'000
5% increase in total net claim liabilities	(31,452)	(27,771)	(31,452)	(27,771)
5% decrease in total net claim liabilities	31,452	27,771	31,452	27,771

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.

2016 – credit risk	Tier 1 £'000	Tier 2 £'000	Tier 3 £'000	Tier 4 £'000	Unrated £'000	Total £'000
Financial assets at fair value	177,931	369	3,799	-	316,000	498,099
Reinsurance assets	97,083	-	-	-	7	97,090
Cash and cash equivalents	12,557	-	-	-	-	12,557
	287,571	369	3,799	-	316,007	607,746

2. Management of risk (continued)

2015 – credit risk	Tier 1 £'000	Tier 2 £'000	Tier 3 £'000	Tier 4 £'000	Unrated £'000	Total £'000
Financial assets at fair value	217,555	1,273	3,922	-	249,189	471,939
Reinsurance assets	70,661	-	-	-	2,196	72,857
Cash and cash equivalents	13,561	-	-	-	-	13,561
	301,777	1,273	3,922	-	251,385	558,357

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 £0.8m (2015:£0.6m).

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.

2016 – currency analysis	Sterling £'000	Euros £'000	Canadian dollars £'000	Australian dollars £'000	US dollars £'000	Total £'000
Assets	2,941	55,340	33,048	18,444	704,451	814,224
Liabilities	95,133	33,834	25,889	13,902	640,794	809,552
Net assets	(92,192)	21,506	7,159	4,542	63,657	4,672

2015 – currency analysis	Sterling £'000	Euros £'000	Canadian dollars £'000	Australian dollars £'000	US dollars £'000	Total £'000
Assets	79,083	45,151	26,753	15,151	603,149	769,287
Liabilities	125,701	75,584	22,342	16,116	498,726	738,469
Net assets	(46,618)	(30,433)	4,411	(965)	104,423	30,818

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.

	2016 Impact on profit £'000	2015 Impact on profit £'000	2016 Impact on net assets £'000	2015 Impact on net assets £'000
USD weakens by 5% against other currencies	733	(3,905)	733	(3,905)
USD strengthens by 5% against other currencies	(810)	3,905	(810)	3,905

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 are monitored on a regular basis. The duration of assets exposed to movements in market interest rates is 1.29 (2015: 1.89). 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	2016 Impact on profit £'000	2015 Impact on profit £'000	2016 Impact on net assets £'000	2015 Impact on net assets £'000
50 basis point increase in interest rates	(385)	(1,029)	(385)	(1,029)
50 basis point decrease in interest rates	388	1,034	388	1,034

c) Price risk

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

Sensitivity to price risk	2016 Impact on profit £'000	2015 Impact on Profit £'000	2016 Impact on net assets £'000	2015 Impact on net assets £'000
5% increase in FTSE 100 and S&P 500	2,865	6,931	2,865	6,931
5% decrease in FTSE 100 and S&P 500	(2,796)	(8,341)	(2,796)	(8,341)

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.

2016 – maturity analysis	<1yr £'000	1-2yrs £'000	2-3yrs £'000	3-5yrs £'000	>5yrs £'000	Total £'000
Financial assets at fair value	427,452	51,495	11,845	4,105	3,202	498,099
Cash and cash equivalents	12,557	-	-	-	-	12,557
	440,009	51,495	11,845	4,105	3,202	510,656

2015 – maturity analysis	<1yr £'000	1-2yrs £'000	2-3yrs £'000	3-5yrs £'000	>5yrs £'000	Total £'000
Financial assets at fair value	429,409	28,057	4,430	7,383	2,660	471,939
Cash and cash equivalents	13,561	-	-	-	-	13,561
	442,970	28,057	4,430	7,383	2,660	485,500

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

2. Management of risk (continued)

Net claim liability cashflow timing	<1yr £'000	1-3yrs £'000	3-5yrs £'000	>5yrs £'000	Total £'000	Weighted average term of settlement (years)
2016	139,423	156,356	74,815	91,523	462,117	2.94
2015	113,199	131,410	65,004	80,796	390,409	3.05

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.

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 mange 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

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

4. Investment income

	2016 £'000	2015 £'000
Income on financial investments at fair value	5,165	6,678
Interest on cash and cash equivalents	1,328	1,502
Gains on the realisation of investments	2,325	645
Unrealised gains on investments	4,591	13,064
Losses on the realisation of investments	(1,133)	(574)
Unrealised losses on investments	(11,903)	(14,309)
Investment management charges	(196)	(399)
	177	6,607

5. Operating expenses

	2016 £'000	2015 £'000
Acquisition costs	91,085	88,184
Administrative expenses	37,274	29,398
Managing agency fee	2,973	2,637
Personal expenses	2,170	8,132
	133,502	128,351

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

	2016 £'000	2015 £'000
Audit fees	159	142
Performance related pay	5,711	3,631

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. Performance related remuneration charged to the Syndicate is set out in note 5.

Emoluments of the Active Underwriter	2016 £'000	2015 £'000
Gross emoluments excluding pension contributions	428	396
Contributions to money purchase pension schemes	-	25
	428	421

7. Financial assets

Financial assets at fair value:	Cost 2016 £'000	Cost 2015 £'000	Value 2016 £'000	Value 2015 £'000
Shares and other variable yield securities	370,128	333,106	363,901	330,570
Debt and other fixed income securities	77,969	99,361	74,669	99,106
Participation in investment pools	30,735	21,501	30,903	21,549
Other investments	28,626	20,714	28,626	20,714
	507,458	474,682	498,099	471,939

The amount expected to mature before and after one year is:		
Before one year	427,452	429,409
After one year	70,647	42,530
	498,099	471,939

2016	Level 1 £'000	Level 2 £'000	Level 3 £'000	Total £'000
Shares and other variable yield securities	-	363,901	-	363,901
Debt and other fixed income securities	-	74,669	-	74,669
Participation in investment pools	-	30,903	-	30,903
Other investments	-	28,626	-	28,626
	-	498,099	-	498,099

2015	Level 1 £'000	Level 2 £'000	Level 3 £'000	Total £'000
Shares and other variable yield securities	-	330,570	-	330,570
Debt and other fixed income securities	17,872	81,234	-	99,106
Participation in investment pools	-	21,549	-	21,549
Deposits with credit institutions	-	-	20,714	20,714
	17,872	433,353	20,714	471,939

7. Financial assets (continued)

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 values of financial assets are based on prices provided by investment managers who obtain market data from independent pricing services. These pricing services obtain actual transaction prices for securities that have quoted prices in active markets. For those securities which are not actively traded, they 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.

Included within Level 1 of the fair value hierarchy are Government bonds, Treasury bills and exchange-traded equities which are measured based on quoted prices. Level 2 of the hierarchy includes US Government agencies, corporate securities, UK commercial property funds and investment funds. The fair value of these assets is based on the prices obtained from investment managers and investment custodians. Level 3 contains loans and deposits.

8. Reinsurance assets

	2016 £'000	2015 £'000
Reinsurers' share of claims reported	38,737	22,258
Reinsurers' share of claims incurred but not reported	30,013	28,805
Reinsurers' share of claims liabilities	68,750	51,063
Unearned premiums	28,794	40,157
	97,544	91,220

9. Deferred acquisition costs

	2016 £'000	2015 £'000
Balance at 1 January	54,899	52,786
Additions	85,847	87,490
Amortisation charge	(91,085)	(82,570)
Foreign exchange movement	10,888	(2,807)
	60,549	54,899

10. Insurance receivables

	2016 £'000	2015 £'000
Debtors arising out of direct insurance operations	104,927	104,727
Debtors arising out of direct reinsurance operations	28,340	21,794
	133,267	126,521

	2016 £'000	2015 £'000
Due within one year	132,770	126,337
Due after one year	497	184
	133,267	126,521

11. Cash and cash equivalents

	2016 £'000	2015 £'000
Cash at bank and in hand	12,557	13,561

12. Insurance liabilities

	2016 £'000	2015 £'000
Claims reported and loss adjustment expenses	255,021	222,212
Claims incurred but not reported	257,272	226,158
Gross claims liabilities	512,293	448,370
Unearned premiums	214,300	198,269
	726,593	646,639

Movements in insurance liabilities and reinsurance assets are as follows:

Claims and loss adjustment expenses	2016 Gross £'000	2016 Reinsurance £'000	2016 Net £'000	2015 Gross £'000	2015 Reinsurance £'000	2015 Net £'000
At 1 January	448,370	51,063	397,307	478,888	62,811	416,077
Claims paid	(177,480)	(22,723)	(154,757)	(195,670)	(48,524)	(147,146)
Movement arising from current years	166,049	34,460	131,589	135,188	35,926	99,262
Movement arising from prior years	6,731	-	6,731	15,677	-	15,677
Net exchange differences	68,623	5,950	62,673	14,287	850	13,437
At 31 December	512,293	68,750	443,543	448,370	51,063	397,307

Unearned premiums	2016 Gross £'000	2016 Reinsurance £'000	2016 Net £'000	2015 Gross £'000	2015 Reinsurance £'000	2015 Net £'000
At 1 January	198,269	40,157	158,112	194,529	39,842	154,687
Increase in the year	311,911	42,846	269,065	336,858	78,123	258,735
Release in the year	(337,882)	(63,598)	(274,284)	(342,545)	(79,158)	(263,387)
Net exchange differences	42,002	9,389	32,613	9,527	1,350	8,177
At 31 December	214,300	28,794	185,506	198,369	40,157	158,112

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.

12. Insurance liabilities (continued)

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 (e.g. the New Zealand and Japan earthquakes in 2010 and 2011), 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 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.

Gross claims	2016 £'000	2015 £'000	2014 £'000	2013 £'000	2012 £'000	2011 £'000	2010 and prior £'000
1 year	80,622	89,471	92,569	111,919	116,352	102,660	614,673
2 years	-	180,850	181,283	216,866	178,273	182,455	743,597
3 years	-	-	199,945	227,010	184,586	196,129	771,223
4 years	-	-	-	221,943	183,681	192,206	762,150
5 years	-	-	-	-	184,146	191,305	756,094
6 years	-	-	-	-	-	195,737	749,076
7 years	-	-	-	-	-	-	755,887

12. Insurance liabilities (continued)

Net claims	2016 £'000	2015 £'000	2014 £'000	2013 £'000	2012 £'000	2011 £'000	2010 and prior £'000
1 year	76,561	71,258	76,200	108,594	108,883	95,775	549,549
2 years	-	141,546	146,596	190,824	173,848	164,098	642,527
3 years	-	-	158,990	200,629	178,571	167,373	663,433
4 years	-	-	-	195,447	174,233	158,298	651,928
5 years	-	-	-	-	173,372	156,102	642,031
6 years	-	-	-	-	-	156,450	632,744
7 years	-	-	-	-	-	-	638,962

	Gross All years £'000	Net All years £'000
Total claims	1,819,130	1,540,454
Less paid claims	(1,306,837)	(1,096,911)
Total claims liabilities	512,293	443,543

On a whole account basis, the claims experience in 2016 has been better than expected based on the prior year reserves.

13. Reconciliation of members' balances

2016	2016 YOA £'000	2015 YOA £'000	2014 YOA £'000	Total £'000
At 1 January	-	(4,387)	17,441	13,054
Profit for the year	(11,400)	11,482	(1,204)	(1,122)
Other recognised gains	401	42	3,499	3,942
Distribution	-	-	(11,202)	(11,202)
At 31 December	(10,999)	7,137	8,534	4,672

2015	2015 YOA £'000	2014 YOA £'000	2013 YOA £'000	Total £'000
At 1 January	-	2,516	19,506	22,022
Profit for the year	(3,611)	14,177	16,138	26,704
Other recognised gains	(776)	748	1,676	1,648
Distribution	-	-	(19,556)	(19,556)
At 31 December	(4,387)	17,441	17,764	30,818

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

	2016 £'000	2015 £'000
Creditors arising out of direct insurance operations	14	45
Creditors arising out of reinsurance operations	78,756	73,763
	78,770	73,808

	2016 £'000	2015 £'000
Due within one year	76,807	72,566
Due after one year	1,963	1,197
	78,770	73,763

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

	2016 £'000	2015 £'000
Net cash outflow for the year	(2,116)	1,729
Cash flow – portfolio investments	(31,592)	(44,541)
Movement arising from cash flows	(33,708)	(42,812)
Changes in market values and exchange rates	58,864	15,262
Total movement in portfolio investments net of financing	25,156	(27,550)
Balance brought forward at 1 January	485,500	513,050
Balance carried forward at 31 December	510,656	485,500

16. Movement in cash and portfolio investments

	At 1 January 2016 £'000	Cash flow £'000	Change in market value £'000	At 31 December 2016 £'000
Cash at bank and in hand	13,561	(2,116)	1,112	12,557
Shares and other variable yield securities	330,570	1,241	32,090	363,901
Debt and other fixed income securities	99,106	(41,528)	17,091	74,669
Participation in investment pools	21,549	4,625	4,729	30,903
Deposits with credit institutions	20,714	4,070	3,842	28,626
Other investments	-	28,626	-	28,626
Total portfolio investments	471,939	(31,592)	57,752	498,099
Total cash and portfolio investments	485,500	(33,708)	58,864	510,656

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 Syndicate has 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 Syndicate to Swiss Re in the year amounted to £1.7m (2015: £1.9m).

C Watson is a director of Validus Holdings Ltd. The Syndicate has purchased reinsurance protection on normal commercial terms and at arms length from the Validus Group. Premiums paid by the Syndicate in the year amounted to £1.7m (2015: £1.9m).

Until his resignation on 16 May 2016, R Oakes was a non-executive director of Cathedral Underwriting Limited, the managing agent of Syndicate 2010 and Syndicate 3010. The Syndicate has purchased reinsurance protection from Syndicate 2010. Premiums paid by the Syndicate in the year amounted to less than £0.1m (2015: less than £0.1m). Also, the Syndicate provided reinsurance under separate contracts to Syndicate 2010. Gross premium income, excluding brokerage and commissions, due to the Syndicate under these contracts amounted to £0.1m (2015: £Nil). All transactions were on normal commercial terms and at arms length.

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. Profit commission accrued by GAIHL under this contract amounted to £Nil (2015: £2.0m).

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 (2015: £0.1m).

The Syndicate has 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 Syndicate is £25.3m relating to these assets (2015: £19.3m). Investment income of £2.2m generated by these assets has been recognised in the year (2015: £1.6m). No fee is paid by the Syndicate to Mercury in respect of these arrangements.

The Syndicate underwrites business through Cove Program Managers Limited ("Cove") under a binding authority. ASML holds 14.52% 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 Syndicate under this binding authority amounted to £0.6m (2015: £1.8m). Commissions paid by the Syndicate in the year to Cove amounted to £0.3m (2015: £1.0m).

Ark Underwriting Inc. ("AUI") is a wholly owned subsidiary of ASML, which facilitates the introduction of US reinsurance business into the Syndicate through a binding authority. AUI earns commission set on normal commercial terms. In 2016 the amount paid in commission to AUI was £0.6m (2015: £0.6m).

On 3 October 2016, GAIHL acquired the entire share capital of Accident & Health Underwriting Limited ("AHU"). The Syndicate underwrites business through AHU under a binding authority. Gross premium income, excluding brokerage and commissions, due to the Syndicate under this binding authority amounted to £0.6. Commissions paid by the Syndicate in the year to AHU amounted to £1.9m and a profit commission was £0.2m. N Brothers serves without fee as a director of AHU. GAIHL also became 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 Syndicate. Fees paid in the year by the Syndicate in respect of these services amounted to £0.3m.

I Beaton is a director of Innova Re Investment Services Limited ("IRIS"), an investment advisory company. GAIHL owns 55% of the ordinary share capital of the ultimate 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 in respect of these services amounted to £1.1m.