ASPEN INSURANCE HOLDINGS LTD Form 424B5 September 13, 2016 Table of Contents

> Filed Pursuant to Rule 424(b)(5) Registration No. 333-212898

SUBJECT TO COMPLETION, DATED SEPTEMBER 13, 2016

The information in this preliminary prospectus supplement relates to an effective registration statement under the Securities Act of 1933, as amended, and is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell nor do they seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS SUPPLEMENT

(To Prospectus Dated August 4, 2016)

Shares

Aspen Insurance Holdings Limited

% Perpetual Non-Cumulative Preference Shares

(Liquidation Preference \$25 Per Share)

We are selling of our % Perpetual Non-Cumulative Preference Shares, with a liquidation preference of \$25 per share (the Preference Shares).

Upon liquidation, dissolution or winding-up, the holders of the Preference Shares will be entitled to receive from our assets legally available for distribution to shareholders a liquidation preference of \$25 per share, plus declared and unpaid dividends, if any, to, but excluding, the date fixed for distribution. Dividends on the Preference Shares will be payable on a non-cumulative basis only when, as and if declared by our board of directors, quarterly in arrears on January 1, April 1, July 1 and October 1 of each year, commencing on January 1, 2017, at a rate equal to % of the liquidation preference per annum (equivalent to \$ per share for a full dividend period).

Dividends on the Preference Shares are not cumulative. Accordingly, in the event dividends are not declared on the Preference Shares for payment on any dividend payment date, then those dividends will not accumulate and will not be payable. If we have not declared a dividend before the dividend payment date for any dividend period, we will have

no obligation to pay dividends for that dividend period, whether or not dividends on the Preference Shares are declared for any future dividend period.

On January 1, 2027 and any dividend payment date thereafter, we may redeem the Preference Shares, in whole or in part, at a redemption price of \$25 per share, plus declared and unpaid dividends, if any, to, but excluding, the date of redemption. At any time prior to January 1, 2027, we will have the option to redeem the Preference Shares in whole at a redemption price of \$26 per Preference Share, plus declared and unpaid dividends, if any, to, but excluding, the date of redemption, only if we submit to the holders of our ordinary shares a proposal for an amalgamation or merger or if we submit any proposal for any other matter that requires, as a result of a change in Bermuda law after the date of this prospectus supplement, for its validation or effectuation an affirmative vote of the holders of the Preference Shares at the time outstanding. In addition, on any dividend payment date following the occurrence of a tax event or on the dividend payment date following the occurrence and determination of a capital disqualification redemption event, in each case, as described in this prospectus supplement, we may redeem the Preference Shares, in whole or in part, at a redemption price of \$25 per share, plus declared and unpaid dividends, if any, to, but excluding, the date of redemption.

The Preference Shares will not have any voting rights, except as set forth under Description of the Preference Shares Voting, Director Appointing and Other Rights in this prospectus supplement.

The Preference Shares have no stated maturity and will not be subject to any sinking fund or mandatory redemption and will not be convertible into any of our other securities or property.

The Preference Shares are a new issue with no established trading market. We intend to apply to list the Preference Shares on the New York Stock Exchange under the symbol AHLPRD. If the application is approved, trading in the Preference Shares is expected to commence within 30 days after the initial delivery of the Preference Shares.

Investing in the Preference Shares involves risks. See <u>Risk Factors</u> on page S-7 in this prospectus supplement and on page 4 in the accompanying prospectus.

None of the United States Securities and Exchange Commission (the SEC), any state securities commission, the Registrar of Companies in Bermuda, the Bermuda Monetary Authority (the BMA) or any other regulatory body has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total(2)
Public Offering Price ⁽¹⁾	\$	\$
Underwriting Discount	\$	\$
Proceeds to us (before expenses)	\$	\$

- (1) The public offering price does not include accumulated dividends, if any, that may be declared. Dividends, if declared, will accumulate from the date of original issuance, which is expected to be 2016.
- (2) Assumes no exercise of the underwriters option to purchase additional shares.

The underwriters may also purchase from us up to an additional Preference Shares at the public offering price, less the underwriting discount payable by us on the closing date of this offering to cover over-allotments, if any.

The underwriters expect to deliver the Preference Shares to purchasers on or about , 2016, which is the business day following the date of this prospectus supplement. See Underwriting.

Joint Book-Running Managers

BofA Merrill Lynch Morgan Stanley Wells Fargo Securities

CitigroupThe date of this prospectus supplement is
, 2016

TABLE OF CONTENTS

Prospectus Supplement

	Page
About This Prospectus Supplement	S-ii
Cautionary Statement Regarding Forward-Looking Statements	S-iv
<u>Summary</u>	S-1
Risk Factors	S-7
<u>Use of Proceeds</u>	S-12
Ratio of Earnings to Fixed Charges and Preference Share Dividends	S-13
Capitalization	S-14
Description of the Preference Shares	S-15
Book-Entry; Delivery and Form	S-27
Material Tax Considerations	S-29
Certain Benefit Plan and Individual Retirement Plan Considerations	S-41
<u>Underwriting</u>	S-44
<u>Legal Matters</u>	S-50
<u>Experts</u>	S-50
Where You Can Find More Information	S-50
Incorporation of Certain Documents By Reference	S-50
Prospectus	
About This Prospectus	1
Aspen Insurance Holdings Limited	3
Risk Factors	4
Cautionary Statement Regarding Forward-Looking Statements	4
<u>Use Of Proceeds</u>	7
Ratio of Earnings to Fixed Charges and Preference Share Dividends	7
General Description of the Offered Securities	7
Description of Share Capital	9
Description of the Depositary Shares	30
Description of the Debt Securities	33
Certain Provisions Applicable to the Senior Debt Securities	46
Certain Provisions Applicable to the Subordinated Debt Securities	48
Description of the Warrants to Purchase Ordinary Shares or Preference	
<u>Shares</u>	50
Description of the Warrants to Purchase Debt Securities	52
Description of the Purchase Contracts and the Purchase Units	53
Plan of Distribution	54
Where You Can Find More Information	57
Incorporation of Certain Documents by Reference	57
Legal Matters	59
<u>Experts</u>	59

Enforcement of Civil Liabilities Under United States Federal Securities Laws and Other Matters

60

S-i

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus relate to the offer and sale by us of the Preference Shares. You should rely only on the information contained or incorporated by reference into this prospectus supplement and the accompanying prospectus. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. Neither we nor the underwriters are making an offer to sell the Preference Shares in any jurisdiction where the offer or sale is not permitted. You should assume that the information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference is accurate only as of their respective dates. Our business, results of operations, financial condition and prospects may have changed since those dates.

This prospectus supplement contains basic information about us and the Preference Shares. This prospectus supplement may add, update or change information contained in or incorporated by reference into the accompanying prospectus. In addition, the information incorporated by reference into the accompanying prospectus may have added, updated or changed information in the accompanying prospectus. If information in this prospectus supplement is inconsistent with any information in the accompanying prospectus or any information incorporated therein by reference, this prospectus supplement will apply and will supersede such information. It is important for you to read and consider all information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus in making your investment decision. You should also read and consider the additional information under the caption. Where You Can Find More Information in this prospectus supplement and the accompanying prospectus.

Securities may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003, the Exchange Control Act 1972, and related regulations of Bermuda that regulate the sale of securities in Bermuda. In addition, specific permission is required from the BMA, pursuant to the provisions of the Exchange Control Act 1972 and related regulations, for all issuances and transfers of securities of Bermuda companies, other than in cases where the BMA has granted a general permission. The BMA in its policy dated June 1, 2005 provides that where any equity securities of a Bermuda company are listed on an appointed stock exchange (the New York Stock Exchange (the NYSE) is such an exchange), general permission is given for the issue and subsequent transfer of any securities of the company (which includes the Preference Shares described herein) from and/or to a non-resident of Bermuda, for as long as any equity securities of the company remain so listed. Notwithstanding the above general permission, we have obtained from the BMA its permission for the issue and free transferability of our shares and other securities, as long as the shares are listed on the NYSE or on an appointed stock exchange, to and among persons who are non-residents of Bermuda for exchange control purposes and of up to 20% of our securities, including our shares, to and among persons who are residents in Bermuda for exchange control purposes.

Under the Insurance Act 1978 of Bermuda, as amended (the Insurance Act), where the shares of a parent company, like Aspen Insurance Holdings Limited (Aspen Holdings), of an insurer registered under the Insurance Act (our wholly-owned subsidiary, Aspen Bermuda Limited (Aspen Bermuda, formerly Aspen Insurance Limited), being such an insurer and registered as a Class 4 insurer) are traded on any stock exchange recognized by the BMA (the NYSE is so recognized), not later than 45 days after a person becomes, directly or indirectly (through its shareholding in the parent company), a 10%, 20%, 33% or 50% shareholder controller of such insurer, that person shall file with the BMA a notice in writing stating that he has become such a controller. Further, such shareholder controller shall serve on the BMA a notice in writing that he has reduced or disposed of his holding where the proportion of voting rights in the insurer held by him will have reached or has fallen below 10%, 20%, 33% or 50%, not later than 45 days after such disposal.

This prospectus supplement will be filed with the Registrar of Companies in Bermuda in accordance with Bermuda law. In granting such consent and in accepting this prospectus supplement for filing, neither the BMA nor the Registrar of Companies in Bermuda accepts any responsibility for our financial soundness or the correctness of any of the statements made or opinions expressed in this prospectus supplement.

S-ii

In this prospectus supplement, unless otherwise indicated, references to we, us or our refer to Aspen Holdings or Aspen Holdings and its subsidiaries, Aspen Insurance UK Limited (Aspen U.K.), Aspen (UK) Holdings Limited (Aspen U.K. Holdings), Aspen (US) Holdings Limited, Aspen Insurance UK Services Limited (Aspen U.K. Services), AIUK Trustees Limited (AIUK Trustees), Aspen Bermuda, Aspen Underwriting Limited (AUL , corporate member of Lloyd s Syndicate 4711, Syndicate 4711), Aspen European Holdings Limited (Aspen European), Aspen Managing Agency Limited (AMAL), Aspen Singapore Pte. Ltd., Aspen U.S. Holdings, Inc. (Aspen U.S. Holdings), Aspen Specialty Insurance Company (Aspen Specialty), Aspen Specialty Insurance Management, Inc., Aspen Re America, Inc., Aspen Insurance U.S. Services Inc., Aspen Re America CA, LLC, Aspen Specialty Insurance Solutions LLC, Aspen Re America Risk Solutions LLC, Acorn Limited, APJ Continuation Limited (APJ), APJ Asset Protection Jersey Limited, Aspen UK Syndicate Services Limited (AUSSL , formerly APJ Services Limited), Aspen Risk Management Limited (ARML), Aspen American Insurance Company (AAIC), Aspen Recoveries Limited, Aspen Capital Management, Ltd., Silverton Re Ltd., Aspen Capital Advisors Inc., Peregrine Reinsurance Ltd., Aspen Cat Fund Limited, AG Logic Holdings, LLC and any other direct or indirect subsidiary collectively, as the context requires. Aspen U.K., Aspen Bermuda, Aspen Specialty, AAIC and AUL, as corporate member of Syndicate 4711, are our principal operating subsidiaries and each referred to herein as an insurance subsidiary and collectively referred to as the insurance subsidiaries.

All information in this prospectus supplement assumes no exercise of the underwriters option to purchase additional shares, unless otherwise noted.

S-iii

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus may include, and we may from time to time make other verbal or written, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act), and are made pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties, including statements regarding our capital needs, business strategy, expectations and intentions. Statements that use the terms believe, do not believe, anticipate, expect, assume, objective, targe project. continue, intend, outlook, trends, estimate. seek. will. may, aim, likely, guidance, on track and similar expressions are intended to identify forward-looking statements. These statements reflect our current views with respect to future events and because our business is subject to numerous risks, uncertainties and other factors, our actual results could differ materially from those anticipated in the forward-looking statements. The risks, uncertainties and other factors set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC and other cautionary statements made in this prospectus supplement and the accompanying prospectus, as well as the following factors, should be read and understood as being applicable to all related forward-looking statements wherever they appear in this prospectus supplement and the accompanying prospectus.

All forward-looking statements rely on a number of assumptions, estimates and data concerning future results and events and are subject to a number of uncertainties and other factors, many of which are outside our control that could cause actual results to differ materially from such statements.

All forward-looking statements address matters that involve risks and uncertainties. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in these statements. We believe that these factors include, but are not limited to, those set forth under Risk Factors in Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC and the following:

our ability to successfully implement steps to further optimize the business portfolio, ensure capital efficiency and enhance investment returns;

the possibility of greater frequency or severity of claims and loss activity, including as a result of natural or man-made (including economic and political risks) catastrophic or material loss events, than our underwriting, reserving, reinsurance purchasing or investment practices have anticipated;

the assumptions and uncertainties underlying reserve levels that may be impacted by future payments for settlements of claims and expenses or by other factors causing adverse or favorable development, including our assumptions on inflation costs associated with long-tail casualty business which could differ materially from actual experience;

the impact of the vote by the U.K. electorate in favor of a U.K. exit from the European Union in the recent in-or-out referendum and the resulting negotiations;

the reliability of, and changes in assumptions to, natural and man-made catastrophe pricing, accumulation and estimated loss models;

decreased demand for our insurance or reinsurance products;

cyclical changes in the insurance and reinsurance industry;

the models we use to assess our exposure to losses from future natural catastrophes contain inherent uncertainties and our actual losses may differ significantly from expectations;

our capital models may provide materially different indications than actual results;

S-iv

increased competition from existing insurers and reinsurers and from alternative capital providers and insurance-linked funds and collateralized special purpose insurers on the basis of pricing, capacity, coverage terms, new capital, binding authorities to brokers or other factors and the related demand and supply dynamics as contracts come up for renewal;

our ability to execute our business plan to enter new markets, introduce new products and teams and develop new distribution channels, including their integration into our existing operations;

our acquisition strategy;

changes in market conditions in the agriculture industry, which may vary depending upon demand for agricultural products, weather, commodity prices, natural disasters, and changes in legislation and policies related to agricultural products and producers;

termination of, or changes in, the terms of the U.S. Federal Multiple Peril Crop Insurance Program or the U.S. Farm Bill, including modifications to the Standard Reinsurance Agreement put in place by the Risk Management Agency of the U.S. Department of Agriculture;

the recent consolidation in the (re)insurance industry;

loss of one or more of our senior underwriters or key personnel;

changes in our ability to exercise capital management initiatives (including our share repurchase program) or to arrange banking facilities as a result of prevailing market conditions or changes in our financial results;

changes in general economic conditions, including inflation, deflation, foreign currency exchange rates, interest rates and other factors that could affect our financial results;

the risk of a material decline in the value or liquidity of all or parts of our investment portfolio;

the risks associated with the management of capital on behalf of investors;

evolving issues with respect to interpretation of coverage after major loss events;

our ability to adequately model and price the effects of climate cycles and climate change;

any intervening legislative or governmental action and changing judicial interpretation and judgments on insurers liability to various risks;

the risks related to litigation;

the effectiveness of our risk management loss limitation methods, including our reinsurance purchasing;

changes in the availability, cost or quality of reinsurance or retrocessional coverage;

changes in the total industry losses or our share of total industry losses resulting from events, such as catastrophes, that have occurred in prior years or may occur and, with respect to such events, our reliance on loss reports received from cedants and loss adjustors, our reliance on industry loss estimates and those generated by modeling techniques, changes in rulings on flood damage or other exclusions as a result of prevailing lawsuits and case law;

the impact of one or more large losses from events other than natural catastrophes or by an unexpected accumulation of attritional losses and deterioration in loss estimates;

the impact of acts of terrorism, acts of war and related legislation;

any changes in our reinsurers credit quality and the amount and timing of reinsurance recoverables;

the continuing and uncertain impact of the current depressed lower growth economic environment in many of the countries in which we operate;

S-v

our reliance on information and technology and third-party service providers for our operations and systems;

the level of inflation in repair costs due to limited availability of labor and materials after catastrophes;

a decline in our insurance subsidiaries ratings with Standard & Poor s Ratings Services, a Standard & Poor s Financial Services LLC business, A.M. Best Company, Inc. or Moody s Investors Service Inc.;

the failure of our reinsurers, policyholders, brokers or other intermediaries to honor their payment obligations;

our reliance on the assessment and pricing of individual risks by third parties;

our dependence on a few brokers for a large portion of our revenues;

the persistence of heightened financial risks, including excess sovereign debt, the banking system and the Eurozone crisis;

changes in government regulations or tax laws in jurisdictions where we conduct business;

changes in accounting principles or policies or in the application of such accounting principles or policies;

increased counterparty risk due to the credit impairment of financial institutions; and

Aspen Holdings or Aspen Bermuda becoming subject to income taxes in the United States or the United Kingdom.

In addition, any estimates relating to loss events involve the exercise of considerable judgment and reflect a combination of ground-up evaluations, information available to date from brokers and cedants, market intelligence, initial tentative loss reports and other sources. Due to the complexity of factors contributing to losses and the preliminary nature of the information used to prepare estimates, there can be no assurance that our ultimate losses will remain within stated amounts.

The rate changes described in Management s Discussion and Analysis of Financial Condition and Results of Operations Market Conditions, Rate Trends and Developments in 2015 and Early 2016, included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 and incorporated by reference in this prospectus supplement and the accompanying prospectus, reflect management s assessment of changes in exposure-adjusted rates on renewals only. This does not include contracts with fundamental changes to terms and conditions. The calculation involves a degree of judgment in relation to comparability of contracts in the different business lines. Due to changes in assumptions underlying the pricing of contracts, the trends in premium rates reflected in our outlook and trends may

not be comparable over time. The future profitability of each business line is dependent upon many factors besides the trends in premium rates.

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in this prospectus supplement and the accompanying prospectus. We undertake no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise or disclose any difference between our actual results and those reflected in such statements.

If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, actual results may vary materially from what we projected. All forward-looking statements you read in this prospectus supplement and the accompanying prospectus reflect our current views with respect to future events and are subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, growth strategy and liquidity. All subsequent written and oral forward-looking statements attributable to us or individuals acting on our behalf are expressly qualified in their entirety by the points made above. You should specifically consider the factors identified in this prospectus supplement and the accompanying prospectus which could cause actual results to differ before making an investment decision.

S-vi

SUMMARY

This summary contains basic information about us and this offering. Because it is a summary, it does not contain all of the information that you should consider before investing in the Preference Shares. You should read this entire prospectus supplement carefully, including the sections entitled Cautionary Statement Regarding Forward-Looking Statements and Risk Factors, the documents incorporated by reference into this prospectus supplement (including the risk factors set forth in Part I, Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2015), our financial statements and notes thereto incorporated by reference into this prospectus supplement, and the accompanying prospectus, before making an investment decision.

Overview of the Group

We are a Bermuda exempted limited liability holding company, incorporated on May 23, 2002, and conduct insurance and reinsurance business through our principal operating subsidiaries in the following jurisdictions:

the United Kingdom, through Aspen U.K., an insurer authorized by the Prudential Regulation Authority (the PRA) and the Financial Conduct Authority, and AUL, as corporate member of Syndicate 4711 at Lloyd s of London:

Bermuda, through Aspen Bermuda, an insurer authorized by the BMA; and

the United States, through Aspen Specialty and AAIC.

Our subsidiary, Aspen U.K., also has branches in Cologne (Germany), Dubai (United Arab Emirates), Dublin (Ireland), Paris (France), Zurich (Switzerland), Singapore, Sydney (Australia) and Canada. We operate in the global markets for property, casualty and specialty insurance and reinsurance.

We manage our business in two segments, insurance (Aspen Insurance) and reinsurance (Aspen Re), to enhance and better serve our global customer base. Aspen Insurance is comprised of property and casualty insurance, marine, aviation and energy insurance, and financial and professional lines insurance. Aspen Re is comprised of property catastrophe reinsurance (including the business written through our Aspen Capital Markets division), other property reinsurance, casualty reinsurance and specialty reinsurance.

Our principal executive offices are located at 141 Front Street, Hamilton HM 19, Bermuda. Our telephone number is (441) 295-8201.

For further information regarding Aspen Holdings, including financial information, you should refer to our recent filings with the SEC. See Where You Can Find More Information and Incorporation of Certain Documents by Reference below for more information.

The Offering

The description of the terms of the Preference Shares in this section is only a summary. Because the following summary may not contain all of the information that is important to you, you should refer to the certificate of designation relating to the Preference Shares for a complete description of the terms of the Preference Shares, which will be included as an exhibit to a report that we will file with the SEC. You should also refer to the sections entitled Description of the Preference Shares in this prospectus supplement and Description of Share Capital in the accompanying prospectus.

Issuer

Aspen Insurance Holdings Limited, a Bermuda holding company

Securities Offered

shares of % Perpetual Non-Cumulative Preference Shares, with a liquidation preference of \$25 per share plus up to an additional Preference Shares if the underwriters option to purchase additional Preference Shares is exercised in full.

Dividends

Holders of Preference Shares will be entitled to receive, only when, as and if declared by our board of directors, non-cumulative cash dividends from and including the original issue date, quarterly in arrears on January 1, April 1, July 1 and October 1 of each year, commencing on January 1, 2017, in an amount per share equal to % of the liquidation preference per annum (equivalent to \$ per share for a full dividend period). Dividends that are not declared will not accumulate and will not be payable. Assuming an initial issue date of , 2016, the dividend for the initial dividend period will be approximately \$ per Preference Share. See

Description of the Preference Shares Dividends in this prospectus supplement and Description of Share Capital Future Series of Preference Shares Dividends in the accompanying prospectus.

So long as any Preference Shares remain outstanding, no dividend shall be paid or declared on our ordinary shares or any of our other securities ranking junior to or on parity with (except in the case of the parity stock on a pro rata basis with the Preference Shares as described herein) the Preference Shares (other than a dividend payable solely in ordinary shares or in such other junior stock or parity stock, as applicable) and no ordinary shares, other junior stock or parity stock shall be purchased, redeemed or otherwise acquired for consideration by us (other than as specified), unless the full dividends for the latest completed dividend period on all outstanding Preference Shares and any parity stock have been declared and paid or provided for.

Aspen Holdings is a holding company and has no direct operations. The ability of Aspen Holdings to pay dividends or distributions depends, in part, on the ability of its subsidiaries to pay dividends or distributions to Aspen Holdings. Our insurance subsidiaries are subject to significant regulatory restrictions limiting their ability to declare and pay dividends or distributions. See Description of the Preference Shares Certain Restrictions on Payment of Dividends in this prospectus supplement.

Redemption

On January 1, 2027 and any dividend payment date thereafter, or on any dividend payment date following the occurrence of a tax event or on the dividend payment date following the occurrence and determination of a capital disqualification redemption event (each as defined in Description of the Preference Shares Redemption in this prospectus supplement), we may redeem the Preference Shares, in whole or in part, at a redemption price of \$25 per share, plus declared and unpaid dividends, if any, to, but excluding, the date of redemption.

At any time prior to January 1, 2027, if we submit to the holders of our ordinary shares a proposal for an amalgamation or merger or if we submit any proposal for any other matter that requires, as a result of a change in Bermuda law after the date of this prospectus supplement, for its validation or effectuation an affirmative vote of the holders of the Preference Shares at the time outstanding, we will have the option to redeem all of the outstanding Preference Shares at a redemption price of \$26 per Preference Share, plus declared and unpaid dividends, if any, to, but excluding, the date of redemption. See Description of the Preference Shares Redemption in this prospectus supplement and Description of Share Capital Future Series of Preference Shares Redemption and Description of Share Capital Future Series of Preference Shares Restrictions in Event of Default in Dividends on Preference Shares in the accompanying prospectus.

Variation or Exchange

At any time following a tax event or at any time following a capital disqualification change event (as defined in Description of the Preference Shares Variation or Exchange in this prospectus supplement), we may, without the consent of any holders of the Preference Shares, vary the terms of the Preference Shares or exchange the Preference Shares for new securities to maintain compliance with certain regulations applicable to us. No such variation of terms or securities in exchange shall change certain specified terms of Preference Shares. See Description of the Preference Shares Variation or Exchange in this prospectus supplement.

Intention to Replace

If we redeem or repurchase the Preference Shares for any reason as described under Description of the Preference Shares Redemption, we intend to do so only if we have received an amount of net proceeds at least equal to the applicable redemption or repurchase price of such Preference Shares from the issuance by us of any class of shares or any class of securities, the conditions of which are substantially similar to the Preference Shares so replaced in relation to maturity, settlement, deferral of payments and replacement, such that these shares or securities are as or more equity-like than the Preference Shares, within six months prior to the applicable redemption or repurchase date.

Ranking

The Preference Shares:

will rank senior to our junior stock with respect to the payment of dividends and distributions of assets upon our liquidation, dissolution or winding-up. As of the date of this prospectus supplement, our ordinary shares comprise the only class of shares that would be considered junior stock;

will rank equally with each other series of our capital stock ranking on parity with the Preference Shares as to dividends and distributions of assets upon our liquidation, dissolution or winding-up, which we refer to as parity stock. As of the date of this prospectus supplement, our 7.401% Perpetual Non-Cumulative Preference Shares (the 7.401% Preference Shares), our 7.250% Perpetual Non-Cumulative Preference Shares (the 7.250%) Preference Shares) and our 5.95% Fixed-to-Floating Rate Perpetual Non-Cumulative Preference Shares (the 5.95% Preference Shares) comprise the only classes of shares that would be considered parity stock with the Preference Shares; and will rank junior to any series of shares ranking senior to the Preference Shares as to the payment of dividends and distributions of assets upon our liquidation, dissolution or winding-up. As of the date of this prospectus supplement, we do not have shares that would be considered senior stock.

We currently have 22,727,500 preference shares issued and outstanding in the forms of 5,327,500 shares of the 7.401% Preference Shares, 6,400,000 shares of the 7.250% Preference Shares and 11,000,000 shares of the 5.95% Preference Shares.

Liquidation Rights

Upon any liquidation, dissolution or winding up of Aspen Holdings, holders of the Preference Shares are entitled to receive from our assets legally available for distribution to shareholders, before any distribution is made to holders of our ordinary shares or other junior stock, a liquidation preference in the amount of \$25 per share, plus declared and unpaid dividends, if any, to, but excluding, the date fixed for distribution. See Description of the Preference Shares Liquidation Rights in this prospectus supplement and Description of Share Capital Future Series of Preference Shares Liquidation, Dissolution or Winding Up in the accompanying prospectus.

Voting, Director Appointing and Other Rights

Except as required by Bermuda law and except with respect to rights to vote as a class, the holders of Preference Shares will have no voting

rights.

Whenever dividends on any Preference Shares shall have not been declared and paid for the equivalent of any six dividend periods, whether or not consecutive (a nonpayment), subject to

S-4

certain conditions, the holders of the Preference Shares, acting together as a single class with holders of any and all other series of preference shares having similar appointing rights then outstanding (including any 7.401% Preference Shares, any 7.250% Preference Shares and any 5.95% Preference Shares), will be entitled, at a special meeting called at the request of record holders of at least 20% of the aggregate liquidation preference of the Preference Shares or of any other series of appointing preference shares then outstanding (including any 7.401% Preference Shares, any 7.250% Preference Shares and any 5.95% Preference Shares), to the appointment of two directors, and the number of directors that comprise our board will be increased by the number of directors so appointed, provided that the appointment of any such directors shall not cause us to violate the corporate governance requirements of the NYSE as applied to U.S. issuers (or any other securities exchange or automated quotation system on which our securities may be then listed or quoted) that listed companies must have a majority of independent directors. These appointing rights and the terms of the directors so appointed will continue until dividends on the Preference Shares and any such series of voting preference shares following the nonpayment shall have been fully paid for at least four consecutive dividend periods.

In addition, the affirmative vote or consent of the holders of at least 66 \(\frac{2}{3} \)% of the aggregate liquidation preference of outstanding Preference Shares and any series of appointing preference shares (including any 7.401% Preference Shares, any 7.250% Preference Shares and any 5.95% Preference Shares), acting together as a single class, will be required for the authorization or issuance of any class or series of share capital (or security convertible into or exchangeable for shares) ranking senior to the Preference Shares as to dividend rights or rights upon our liquidation, winding-up or dissolution and for amendments to our memorandum of association or bye-laws that would materially adversely affect the rights of holders of the Preference Shares.

If all preference shares are not equally affected by any such proposed amendment and if the Preference Shares would have diminished status compared to other preference shares as a result, then the approval of holders of at least 66 \%% of the outstanding Preference Shares, voting together as a single class, shall also be required.

The Preference Shares do not have any maturity date, and we are not required to redeem the Preference Shares. Accordingly, the

Preference Shares will remain outstanding indefinitely, unless and until we decide to redeem them.

Maturity

Additional Amounts

We will make all payments on the Preference Shares free and clear of and without withholding or deduction at source for, or on account of, any present or future taxes, fees, duties, assessments or governmental charges of whatever nature imposed or levied by or on behalf of any

S-5

relevant taxing jurisdiction (as defined in Description of the Preference Shares Redemption in this prospectus supplement), unless such taxes, fees, duties, assessments or governmental charges are required to be withheld or deducted. If a withholding or deduction at source is required, we will, subject to certain limitations and exceptions, pay to the holders of the Preference Shares such additional amounts (as defined in Description of the Preference Shares Additional Amounts in this prospectus supplement) as may be necessary so that every net payment made to such holders, after the withholding or deduction, will not be less than the amount provided for in the certificate of designation to be then due and payable. See Description of the Preference Shares Additional Amounts in this prospectus supplement.

Additional Preference Shares

We may in the future from time to time, without notice to or consent of the holders of the Preference Shares, issue additional shares of the Preference Shares; provided, that any such additional shares are not treated as disqualified preferred stock within the meaning of Section 1059(f)(2) of the Internal Revenue Code of 1986, as amended (the Code) and such additional shares are otherwise treated as fungible with the Preference Shares for U.S. federal income tax purposes. The additional shares would form a single series with the Preference Shares.

Listing

We intend to apply to list the Preference Shares on the NYSE under the symbol AHLPRD. We expect that, if the application is approved, trading of the Preference Shares on the NYSE will commence within a 30-day period after initial delivery of the Preference Shares. See Underwriting in this prospectus supplement.

Use of Proceeds

The net proceeds to us from this offering, after deducting the underwriting discounts to the underwriters and estimated offering expenses, will be approximately \$ (\$ if the underwriters option to purchase additional shares is exercised in full).

Net proceeds from this offering are expected to be used to fund the repurchase or redemption of the 7.401% Preference Shares and the 7.250% Preference Shares, in whole or in part, after they become redeemable on January 1, 2017 and July 1, 2017, respectively. See Use of Proceeds in this prospectus supplement.

Conversion

The Preference Shares are not convertible into or exchangeable for any of our other securities or property.

Risk Factors

See Risk Factors on page S-7 in this prospectus supplement and on page 4 in the accompanying prospectus for a discussion of factors you should consider carefully before deciding to invest in the Preference Shares.

Transfer Agent

Computershare Inc.

S-6

RISK FACTORS

You should consider carefully the risks described below and you should read the full Risk Factors incorporated by reference in this prospectus supplement from our most recent Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed with the SEC for additional information on factors that may affect our future business or operating results. These risk factors could cause our actual results to differ materially from those in the forward-looking statements and other statements contained in this prospectus supplement and other documents that we file with the SEC. These risks and uncertainties are not the only ones we face or which relate to an investment in the Preference Shares. Additional risks not presently known to us or that we currently deem immaterial may also impair our future business or results of operations. Any of these risks could result in a significant or material adverse effect on our results of operations or financial condition.

Risks Relating to the Preference Shares

General market conditions and unpredictable factors could adversely affect market prices for the Preference Shares.

There can be no assurance about the market prices for the Preference Shares. Several factors, many of which are beyond our control, will influence the market prices of the Preference Shares. Factors that might influence the market prices of the Preference Shares include, but are not limited to:

whether dividends have been declared and are likely to be declared and paid on the Preference Shares from time to time;

our creditworthiness, financial condition, performance and prospects;

whether the ratings on the Preference Shares provided by any ratings agency has changed;

the market for similar securities and the interest rate environment; and

economic, financial, geopolitical, regulatory or judicial events that affect us or financial markets generally. Accordingly, if you purchase the Preference Shares, the Preference Shares may trade at a discount to the price that you paid for them.

Dividends on the Preference Shares are non-cumulative.

Dividends on the Preference Shares are non-cumulative and are payable only out of available funds under Bermuda law. Consequently, if our board of directors (or a duly authorized committee of the board) does not authorize and declare a dividend for any dividend period, holders of the Preference Shares will not be entitled to receive any such dividend for such period, and such undeclared dividend will not accumulate and be payable. We have no obligation to pay dividends for a dividend period on or after the dividend payment date for such period if our board of directors (or a duly authorized committee of the board) has not declared such dividend before the related dividend payment date, whether or not dividends are declared for any subsequent dividend period with respect to the Preference Shares.

Our ability to pay dividends and to make payments on indebtedness may be constrained by our holding company structure.

We are a holding company and, as such, we do not expect to have any significant operations or assets other than our ownership of the shares of our subsidiaries, including our insurance subsidiaries. Dividends and other permitted distributions and loans from our insurance subsidiaries are expected to be our sole source of funds to meet ongoing cash requirements, including our debt service payments and other expenses, and dividend payments, to our preference and ordinary shareholders, as appropriate, including dividend payments relating to the Preference Shares. Our insurance subsidiaries are subject to capital, regulatory and other requirements that inform their ability to declare and pay dividends and make loans to other Aspen group companies. In line with

common market practice for regulated institutions, the PRA, the regulatory agency which oversees the prudential regulation of insurance companies in the U.K. such as Aspen U.K., requested on October 21, 2013 that it be afforded the opportunity to provide a non-objection prior to all future dividend payments made by Aspen U.K. These and other requirements may mean that our insurance subsidiaries are unable to pay sufficient dividends to enable us to meet our ongoing cash requirements. See Business Regulatory Matters Bermuda Regulation Restrictions on Dividends, Distributions and Reduction of Capital, Business Regulatory Matters U.K. and E.U. Regulation Restrictions on Dividend Payments, and Business Regulatory Matters U.S. Regulation State Dividend Limitations in Item 1 and Management s Discussion and Analysis of Financial Condition and Results of Operations Liquidity in Part II, Item 7 in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

Our ability to pay dividends may be limited by regulatory law and limitations imposed by our credit facilities.

We are subject to Bermuda regulatory constraints that will affect our ability to pay dividends on the Preference Shares and make other payments. Under the Bermuda Companies Act 1981, as amended, we may declare or pay a dividend out of retained earnings, or make a distribution out of contributed surplus only if we have reasonable grounds for believing that we are, and would after the payment be, able to pay our liabilities as they become due and if the realizable value of our assets would thereby not be less than the aggregate of our liabilities and issued share capital and share premium accounts. In addition, the terms of our bank credit facility prohibit us from declaring or paying any dividends if a default or event of default has occurred and is continuing at the time of such declaration or payment or would result from such declaration or payment. Under Bermuda law, no redemption of the Preference Shares may be effected if on the date that the redemption is to be effected, there are reasonable grounds for believing that we are, or after the redemption would be, unable to pay our liabilities as they become due. Any financing arrangements that we may enter into in the future may further limit our ability to pay dividends on our share capital, including the Preference Shares.

We are able to redeem the Preference Shares at our option on January 1, 2027 and any dividend payment date thereafter and under certain other circumstances but are under no obligation to do so.

The Preference Shares have no maturity date or mandatory redemption date. We may, at our option, on January 1, 2027 and any dividend payment date thereafter, redeem some or all of the Preference Shares at a redemption price of \$25 per share, plus declared and unpaid dividends, if any, to, but excluding, the date of redemption. We may also redeem the Preference Shares under certain circumstances as described in this prospectus supplement before January 1, 2027 in whole at a redemption price of \$26 per Preference Share, plus declared and unpaid dividends, if any, to, but excluding, the date of redemption. In addition, on any dividend payment date following the occurrence of a tax event, or on the dividend payment date following the occurrence and determination of a capital qualification redemption event, each as described in this prospectus supplement, we may redeem the Preference Shares, in whole or in part, at a redemption price of \$25 per share, plus declared and unpaid dividends, if any, to, but excluding, the date of redemption.

We do not need your consent in order to redeem the Preference Shares as described in the paragraph above. If we redeem your Preference Shares, you may not be able to invest the proceeds in an investment with a comparable return. You may not require us to redeem or repurchase the Preference Shares under any circumstances. However, our ability to redeem the Preference Shares may be subject to regulatory approval depending on the size of the redemption in relation to overall capital and issues of solvency.

The Preference Shares are equity and are subordinate to our existing and future indebtedness.

The Preference Shares are equity interests and do not constitute indebtedness. Consequently, the Preference Shares will rank junior to all of our indebtedness and other liabilities with respect to assets available to satisfy claims, including in the event of our liquidation, dissolution or winding up. As of June 30, 2016, our consolidated

S-8

indebtedness was \$549.3 million. We may incur additional indebtedness in the future. In addition, our existing and future indebtedness may restrict payments of dividends on the Preference Shares. Additionally, unlike indebtedness, where principal and interest would customarily be payable on specified due dates, in the case of the Preference Shares (i) dividends are payable only if and when declared by our board of directors and (ii) as a corporation, we are subject to restrictions on payments of dividends and redemption price out of lawfully available funds (i.e., after satisfaction of indebtedness and other liabilities).

The Preference Shares may not have an active trading market.

The Preference Shares are a new issue with no established trading market. We intend to apply to list the Preference Shares on the NYSE; however, we cannot assure you that the Preference Shares will be approved for listing. If the application is approved, trading of the Preference Shares on the NYSE is not expected to begin until after a 30-day period from the date of the initial delivery of the Preference Shares. If the Preference Shares are approved for listing, an active trading market on the NYSE may not develop, or, even if it does develop, may not continue, in which case the trading prices of the Preference Shares could be adversely affected and your ability to trade your shares may be limited. Even if a trading market does develop, it may not have significant liquidity, and transaction costs in such a market could be high. We have been advised by the underwriters that they intend to make a market in the Preference Shares, but the underwriters are not obligated to do so and may cease market-making activities, if commenced, at any time.

There is no limitation on our issuance of securities that rank on parity with the Preference Shares.

We may issue securities that rank on parity with the Preference Shares without limitation. The issuance of securities ranking on parity with the Preference Shares may reduce the amount recoverable by holders of the Preference Shares in the event of our liquidation, dissolution or winding-up.

We currently have outstanding 5,327,500 7.401% Preference Shares (representing \$133.2 million aggregate liquidation preference), 6,400,000 7.250% Preference Shares (representing \$160.0 million aggregate liquidation preference) and 11,000,000 5.95 Preference Shares (representing \$275.0 million aggregate liquidation preference), each of which rank on parity with the Preference Shares.

Market interest rates may adversely affect the value of the Preference Shares.

One of the factors that will influence the price of the Preference Shares will be the dividend yield on the Preference Shares (as a percentage of the price of the Preference Shares, as applicable) relative to market interest rates. An increase in market interest rates, which are currently at low levels relative to historical rates, may lead prospective purchasers of the Preference Shares to seek a higher dividend yield and higher interest rates would likely increase our borrowing costs and potentially decrease funds available for distribution. Accordingly, higher market interest rates could cause the market price of the Preference Shares to decrease.

The voting rights of holders of the Preference Shares are limited.

Holders of the Preference Shares have no voting rights with respect to matters that generally require the approval of voting shareholders. The limited voting rights of holders of the Preference Shares include the right to vote as a class on certain fundamental matters that affect the preference or special rights of the Preference Shares, as described under Description of the Preference Shares Voting, Director Appointing and Other Rights in this prospectus supplement. In addition, if dividends on the Preference Shares have not been declared or paid for the equivalent of six dividend periods, whether or not for consecutive dividend periods, holders of the outstanding Preference Shares, voting

together as a single class with holders of any and all other series of voting preferred shares, ranking equally with our Preference Shares either as to dividend rights or rights upon liquidation, winding-up or dissolution and upon which like appointing rights have been conferred and are exercisable, will be entitled to appoint two additional directors to our board of directors subject to the terms and to the limited extent described under Description of the Preference Shares Voting, Director Appointing and Other Rights in this prospectus supplement.

S-9

Holders may not be able to appoint directors to our board of directors in the event of nonpayment of dividends.

In the event that we fail to make dividend payments for any six dividend periods, whether or not consecutive, holders of the Preference Shares and any other series of appointing preference shares then outstanding (including the 7.401% Preference Shares, the 7.250% Preference Shares (unless earlier redeemed) and the 5.95% Preference Shares), acting together as a single class, are entitled to the appointment of two directors to our board of directors. We cannot assure you that a court will find that holders are entitled to appointing rights if the conditions necessary for the exercise of such rights have not been satisfied. In such event, holders may not be able to appoint directors to our board of directors in the event of a nonpayment of dividends. These appointing rights and the terms of the directors so appointed will continue until dividends on the Preference Shares and any such series of voting preference shares following the nonpayment shall have been fully paid for at least four consecutive dividend periods.

The Preference Shares ratings may be downgraded.

We have sought to obtain a rating for the Preference Shares. However, if any ratings are assigned to the Preference Shares in the future or if we issue other securities with a rating, such ratings, if they are lower than market expectations or are subsequently lowered or withdrawn, could adversely affect the market for or the market value of the Preference Shares. Ratings only reflect the views of the issuing rating agency or agencies and such ratings could at any time be revised downward or withdrawn entirely at the discretion of the issuing rating agency. A rating is not a recommendation to purchase, sell or hold any particular security, including the Preference Shares. Ratings do not reflect market prices or suitability of a security for a particular investor and any future rating of the Preference S