CITADEL | Securities

Citadel Securities (Europe) Limited

Annual Report and Financial Statements for the year 31 December 2018

Registered Number: 5462867

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General Information

Directors
Steven Atkinson
Matthew Culek
Richard Pike
Anthony Walker
Mark Wright

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Bank of New York
1 Wall Street
New York
NY 10286
United States of America

JP Morgan Chase Bank N.A
25 Bank Street
Canary Wharf
London E14 5JP

Independent Auditors
PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
7 More London Riverside
London SE1 2RT

Registered Office
120 London Wall
London EC2Y 5ET
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Directors' Report

The Directors present their report and audited financial statements of Citadel Securities (Europe) Limited ("CSEL" or "the Company") for the year ended 31 December 2018. All amounts presented are in USD in thousands unless otherwise stated. These financial statements were authorised for issue by the Board of Directors on 4 April 2019. The Directors have chosen to disclose the Company's risk management objectives and policies, and the future outlook of the Company in the Strategic Report in accordance with Section 414C(11) of the Companies Act 2006.

DIRECTORS

The Directors of the Company who were in office during the year and up to the date of signing the financial statements were as follows:

- Steven Atkinson
- Matthew Culek, appointed on 3 January 2019
- Richard Pike (independent), appointed on 1 August 2018
- Anthony Walker (independent)
- Mark Wright, appointed on 9 July 2018

The following Directors resigned from the Board of Directors during the year:

- Remco Lenterman, resigned on 1 May 2018
- Michael Wheeler (independent), resigned on 22 June 2018
- Scott Johnston, resigned on 31 October 2018

RESULTS AND DIVIDENDS

The Company earned net revenue of $251,114 (2017 - $174,710) and made a profit before taxation of $98,559 (2017 - $73,237). During the year ended 31 December 2018, the Company paid $190,000 in dividends (2017 - $0). The Company paid an additional dividend of $70,000 in March 2019.

STATEMENT OF DIRECTORS' RESPONSIBILITIES

The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulation.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 102 "The Financial Reporting Standard" applicable in the UK and Republic of Ireland, and applicable law). Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Company and of the profit or loss of the Company for that period. In preparing these financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable United Kingdom Accounting Standards, comprising FRS 102 have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

In the case of each director in office at the date the Directors' Report is approved:

- so far as the Director is aware, there is no relevant audit information of which the Company's auditors are unaware; and
- they have taken all the steps that they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

Directors' Report

DIRECTORS' STATEMENT ON DISCLOSURE OF INFORMATION TO AUDITORS

So far as each Director is aware, there is no relevant audit information of which the Company's auditors are not aware and the Directors confirm that they have taken all the steps that they ought to have taken as Directors in order to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

INDEPENDENT AUDITORS

The auditors, PricewaterhouseCoopers LLP, have indicated their willingness to continue in office and a resolution concerning their reappointment will be proposed at the Board of Directors meeting on 4 April 2019.

FUTURE DEVELOPMENTS

Please refer to the Directors' Strategic Report.

FINANCIAL RISK MANAGEMENT

Please refer to Note 17 accompanying the financial statements.

On behalf of the Board

Steven Atkinson, Director
4 April 2019

Strategic Report

The Directors present their Strategic Report for the year ended 31 December 2018.

PRINCIPAL ACTIVITIES

The principal activity of the Company is technology-enabled liquidity provision and market making in equities, futures, options, interest rate swaps and government securities. The Company trades on a proprietary basis for its own account. Additionally the Company provides agency execution, portfolio management, trading algorithm development and other support services to affiliated Citadel Securities Group ("CS Group") entities.

BUSINESS ENVIRONMENT AND COMPETITION

The principal markets in which the Company operates, are highly competitive with competition from both incumbent players and new market entrants. These markets continue to evolve as a result of new regulation and technologies. In order to compete effectively in these markets there is continuous focus on evolving the trading strategies deployed, the product sets traded, the trading venues utilised and the technology employed combined with investment into researching potential new opportunities.

PRINCIPAL RISKS, FINANCIAL RISKS AND UNCERTAINTIES

The Company has exposure to the following risks from its use of financial instruments: market risk, credit risk and liquidity risk. The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The Company's risk management policies are established to identify the risks faced by the Company, to set appropriate risk limits and controls, and to monitor these risks. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities.

The Company's risk management policies, processes and systems seeks to minimise the potential, adverse effects of these risks on financial performance. Market risk limits are set by the Board of Directors in the risk appetite statement and are closely monitored on an intra-day basis to ensure compliance. Credit risk, including settlement risk, is monitored on a daily basis against limits set by the Board of Directors in the risk appetite statement. Liquidity risk is monitored intra-day in accordance with the liquidity risk tolerances set by the Board of Directors as part of the liquidity policy.

Further information is provided in the Company's Pillar 3 disclosure document which should be read in conjunction with these financial statements and which is available via the Citadel Securities website (www.citadelsecurities.com).

A key risk for the Company is not being able to retain key employees. This risk is addressed by human resource policies to ensure that the Company recruits and retains staff with the appropriate skills, by offering an attractive work place environment and competitive remuneration packages.

The Company is exposed to a range of operational risks including risks associated with the high volume of trading that is undertaken on an automated basis. These risks are constantly being monitored and managed. On a monthly basis these risks are formally reported on to ensure they are within agreed risk tolerances with any breaches being escalated ultimately to the Board of Directors to ensure the operational risk control framework remains appropriate and that any necessary incremental controls are implemented.

The financial markets in which the Company operates and the activities of the Company are subject to frequent regulatory and legislative changes. The Company closely monitors all proposed changes and actively engages in the consultation processes to ensure the Company is positioned to respond to any changes that are ultimately agreed.

The uncertainty around the terms of the UK's withdrawal from the European Union (the "EU") and the shape of the UK's future relationship with the EU presents significant challenges for the Company's business model and operations. In the event that the Company is unable to continue liquidity provision services on EU markets we would anticipate net revenue to reduce in the range of 50% - 70% and the capital required by the Company for the residual activity to reduce in the range of 30% - 50%. If this were to transpire we would anticipate that the Company would, where possible, ramp up its provision of services to other CS Group entities for which it earns arm's length fees under various transfer pricing agreements. As a result, we expect the Company to continue to be profitable but we would expect profitability to be reduced.

REVIEW OF BUSINESS

In 2018, the Company continued to invest in new strategies, evolve existing strategies and further enhance technology. This included the development of equity and fixed income systematic internalisers and an expansion of liquidity provision in U.S. government securities. This investment resulted in a 44% increase in the Company's administrative expenses in 2018, primarily driven by the 47% increase in headcount during the year. As a result of a restructuring within the CS Group, in 2018 the Company directly employed staff who were previously seconded from another Citadel Group entity. Additionally, the Company commenced providing agency execution, trading algorithm development and portfolio management services to affiliated CS Group entities in

Strategic Report

2018. The statement of financial position on page 2 shows a strong net asset position, enabling the Company to take advantage of any opportunities identified in the market for further business growth.

The Company and CS Group anticipate that there may be signification market changes resulting from the UK's withdrawal of the EU in 2019 and in order to ensure continuity of its businesses, flexibility will be crucial with respect to capital and resource deployment as the shape of the UK's future relationship with the EU becomes clearer.

KEY PERFORMANCE INDICATORS ("KPIs")

The Directors monitor a range of key performance indicators to oversee the development and performance of the business. These are included in net revenue, trading volume and liquidity reports, all of which are produced and reviewed on a daily basis.

The Company's principal KPIs are the following (unaudited).

- Profit for the financial year: This indicates the net profit across all business lines of the Company and it is one of the most important indicators of the Company's overall performance.
- *Liquidity ratio: This represents liquid assets as a percentage of the Company's net asset value and is indicative* of the liquidity of the Company's capital resources.
- Return on equity: This represents the profit for the financial year divided by average equity during the year on the statement of financial position. The calculation methodology has changed in 2018.

		2018		2017	
Profit for the financial year	$	75,165	$	56,168	
Liquidity ratio		35.96	%	45.94	%
Return on equity		19.71	%	17.65	%

The Company's profit for 2018 amounted to $75,165, which represents an increase of 33.8% compared to 2017. The increase in profitability is the result of strong revenue growth supported by favorable market conditions for market makers, which more than offset the increase in operating costs in 2018. During the course of 2018, the Company rationalized a number of trading strategies it deployed on a proprietary trading basis and as a result the Company returned net capital of $170,000 to its shareholder. The combination of increased profitability and lower capital resulted in a higher return on equity in 2018 compared with 2017. The Company continues to maintain a strong balance sheet with liquid assets amounting to $121,387 at 31 December 2018 and no long-term debt. The decrease in liquidity ratio as at 31 December 2018 compared to as at 31 December 2017 is the result of an increase in the working capital required to drive the business expansion.

STRATEGY AND FUTURE DEVELOPMENTS

The Company's strategy for 2019 is to continue to focus on liquidity provision, developing and supporting CS Group algorithmic trading strategies and related technologies. The Company, subject to the impact of the UK leaving the EU as outlined above, plans to continue to expand the product sets that it trades and for which it provides liquidity and brokerage services. The Directors foresee similar levels of gross trading revenue in 2019 compared to 2018, assuming the Company can continue liquidity provision services on EU markets from the UK once the UK leaves the EU, and expect some further growth in operating expenses as the Company continues to invest in potential new opportunities to drive potential future growth.

In the event of the UK leaving the EU without any agreement with respect to being able to conduct liquidity provision services from the UK on EU markets, the Company would look to cease any further regulated activity being carried out by its Irish branch.

On behalf of the Board

Steven Atkinson, Director
4 April 2019

Independent Auditors' Report to the members of Citadel Securities (Europe) Limited

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

OPINION

In our opinion, Citadel Securities (Europe) Limited's financial statements:

- give a true and fair view of the state of the Company's affairs at 31 December 2018 and of its profit and cash flows for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland" and applicable law); and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report and Financial Statements (the "Annual Report"), which comprise: the Statement of Comprehensive Income for the year ended 31 December 2018, the Statement of Financial Position as at 31 December 2018, the Statement of Changes in Equity for the year ended 31 December 2018 and the Statement of Cash Flows for the year ended 31 December 2018 and the notes to the financial statements, which include a description of the significant accounting policies.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence
We remained independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

CONCLUSIONS RELATING TO GOING CONCERN

ISAs (UK) require us to report to you when:

- the Directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the Directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

We have nothing to report in respect of the above matters.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the company's ability to continue as a going concern. For example, the terms on which the United Kingdom may withdraw from the European Union are not clear, and it is difficult to evaluate all of the potential implications on the company's trade, customers, suppliers and the wider economy.

REPORTING ON OTHER INFORMATION

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

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

Independent Auditors' Report to the members of Citadel Securities (Europe) Limited

With respect to the Strategic Report and Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on the responsibilities described above and our work undertaken in the course of the audit, ISAs (UK) require us also to report certain opinions and matters as described below.

Strategic Report and Directors' Report
In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended 31 December 2018 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the Company and its environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' Report.

RESPONSIBILITIES FOR THE FINANCIAL STATEMENTS AND THE AUDIT

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

In preparing the financial statements, the Directors are responsible for assessing the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

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

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

Use of this report
This report, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Chapter 3 of Part 16 of the *Companies Act 2006* and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

OTHER REQUIRED REPORTING

COMPANIES ACT 2006 EXCEPTION REPORTING

Under the Companies Act 2006 we are required to report to you if, in our opinion:

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

Independent Auditors' Report to the members of Citadel Securities (Europe) Limited

We have no exceptions to report arising from this responsibility.

Mike Wallace (Senior Statutory Auditor)
For and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London
4th April 2019

Statement of Comprehensive Income

(Expressed in U.S. dollars in thousands)

	Note	For the year ended 31 December 2018	2017
Net revenue:			
Income from trading	5	$ 397,487	$ 299,839
Fees and commission expense	6	(152,866)	(125,737)
Other revenue		6,493	608
Net revenue		251,114	174,710
Expenses:			
Administrative expenses	7	(142,688)	(99,345)
Operating profit		108,426	75,365
Net finance expense	8	(9,867)	(2,128)
Profit before taxation		98,559	73,237
Taxation:			
Tax on profit	9	(23,394)	(17,069)
Profit for the financial year		75,165	56,168
Total comprehensive income		$ 75,165	$ 56,168

All the results of the Company are derived from continuing operations.

The accompanying notes form an integral part of these financial statements.

Statement of Financial Position

(Expressed in U.S. dollars in thousands)

	Note		At December 31 2018		2017
Current assets					
Trade receivables	12	$	207,879	$	172,538
Financial assets at fair value through profit and loss	13		2,171,935		1,577,104
Reverse repurchase agreements	15		157,440		144,865
Receivable from affiliates			80,932		90,663
Cash and cash equivalents			37,343		66,793
		$	2,655,529	$	2,051,963
Current liabilities					
Financial liabilities at fair value through profit and loss	13	$	2,233,466	$	876,673
Other creditors	16		88,142		746,534
			2,321,608		1,623,207
Net current assets			333,921		428,756
Net assets			333,921		428,756
Equity					
Called up share capital	19		193,000		173,000
Retained earnings			140,921		255,756
Total shareholder's funds		$	333,921	$	428,756

The financial statements on pages 1 to 15 were approved by the Board of Directors on 4 April 2019 and were signed on its behalf by:

Steven Atkinson, Director
4 April 2019

The accompanying notes form an integral part of these financial statements.

Statement of Changes in Equity

(Expressed in U.S. dollars in thousands)

	For the year ended 31 December 2017		
	Called Up Share Capital	Retained Earnings	Total Shareholder's Funds
Balance at 1 January 2017	$ 8,000	$ 199,588	$ 207,588
Profit for the financial year and total comprehensive income	—	56,168	56,168
Issuance of share capital	165,000	—	165,000
Balance at 31 December 2017	**$ 173,000**	**$ 255,756**	**$ 428,756**

	For the year ended 31 December 2018		
	Called Up Share Capital	Retained Earnings	Total Shareholder's Funds
Balance at 1 January 2018	$ 173,000	$ 255,756	$ 428,756
Profit for the financial year and total comprehensive income	—	75,165	75,165
Dividends	—	(190,000)	(190,000)
Issuance of share capital	20,000	—	20,000
Balance at 31 December 2018	**$ 193,000**	**$ 140,921**	**$ 333,921**

The accompanying notes form an integral part of these financial statements.

Statement of Cash Flows

(Expressed in U.S. dollars in thousands)

	Note		For the year ended 31 December 2018		2017
Net cash inflow / (outflow) from operating activities	20	$	167,740	$	(44,107)
Taxation paid			(29,120)		(18,500)
Net cash generated from / (used in) operating activities			138,620		(62,607)
Interest received			29,994		8,433
Disbursement of loan to affiliate			(80,000)		(90,000)
Proceeds from loan repayment			90,000		—
Net cash generated from investing activities			39,994		(81,567)
Interest paid			(37,831)		(11,136)
Dividends paid			(190,000)		—
Proceeds from issuance of share capital			20,000		165,000
Net cash (used in) / generated from financing activities			(207,831)		153,864
Net (decrease) / increase in cash and cash equivalents			(29,217)		9,690
Gains / (losses) due to exchange rate changes on cash and cash equivalents			(233)		377
Cash and cash equivalents at beginning of the year			66,793		56,726
Cash and cash equivalents at end of the year		$	37,343	$	66,793

A number of disclosures in cash flow statement for year ended 31 December 2017 have been restated. These include: classifying loan activities as investing activities; classifying interest on loan to interest received and paid; disclosing gains and losses due to exchange rate changes on cash and cash equivalent; and disclosing changes in receivables from affiliates within net cash inflow from operating activities. There is no impact on the net changes in cash as a result of this restatement.

The accompanying notes form an integral part of these financial statements.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 1

General Information

Citadel Securities (Europe) Limited ("CSEL" or "the Company") is a full scope investment firm regulated by the Financial Conduct Authority ("FCA"). The principal activity of the Company is technology-enabled liquidity provision and market making in equities, futures, options, interest rate swaps and government securities. The Company trades on a proprietary basis for its own account. Additionally the Company provides agency execution, portfolio management, trading algorithm development and other support services to affiliated Citadel Securities Group ("CS Group") entities. The Company is a private company limited by shares and is incorporated and domiciled in the United Kingdom. The address of its registered office is 120 London Wall, London EC2Y 5ET. On 30 January 2017, the Company established a branch in Ireland, the address of its branch office is One Grand Canal Square, Dublin 2, Ireland.

NOTE 2

Statement of Compliance

The individual financial statements of CSEL have been prepared in compliance with United Kingdom Accounting Standards, including Financial Reporting Standard 102, "The Financial Reporting Standard applicable in the United Kingdom and the Republic of Ireland" ("FRS 102") and the Companies Act 2006 ("the Act").

NOTE 3

Accounting Policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all of the years presented, unless otherwise stated.

Basis of Preparation

The financial statements have been prepared on the going concern basis, under the historical cost convention, as modified by the recognition of certain financial assets and liabilities measured at fair value (as explained below). The Company continues to review and update its accounting policies, in accordance with the requirements of Section 10 of FRS 102 ("Accounting Policies, Estimates and Errors").

The format of the profit and loss account has been amended from that prescribed in the Act as, in the opinion of the Directors, the presentation adopted better reflects the nature and activities of the business of the Company. The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Company's accounting policies.

Foreign Currencies

The Company's functional and presentation currency is the U.S. Dollar. Transactions in foreign currencies are translated into U.S. Dollars at the exchange rate ruling on the date of transaction. Monetary assets and liabilities denominated in foreign currencies are translated into U.S. Dollars at the rate of exchange ruling at the balance sheet date. At 31 December 2018, the applicable exchange rates for GBP-USD and EUR-USD were 1.2752 (2017 – 1.3517) and 1.1457 (2017- 1.2009) respectively.

Foreign exchange gains and losses resulting from the settlement of transactions and from the translation at period-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of comprehensive income within net revenue.

Net Revenue

Net revenue has been disclosed instead of turnover as this more meaningfully reflects the nature and results of the Company's activities. Net revenues are recorded on a trade date basis.

Interest Income and Expense

Interest income (expense) is recognised on an accrual basis. Premiums (discounts) on debt obligations are amortized (accreted) over the life of the instrument using the effective yield method.

Income from Trading

Income from trading comprises: net trading interest income on swaps which is recognised as earned; foreign exchange gains or losses; and gains or losses on trading activity, net of financial transaction taxes and compression fees. Gains or losses on trading activity represents the difference between proceeds received on disposal and the initial cost of acquisition, including unrealised gains or losses on open positions. Dividends received and paid on equity securities are recognised as income or expense on the ex-dividend date, net of applicable withholding taxes.

Other Revenue

Other revenue includes revenue from contacts with affiliated entities. The Company earns service fees for trade execution, agency, relationship management and marketing, portfolio management and algorithm development services provided to affiliated customers. Other revenue is recognised on an accrual basis when the Company obtains the right for consideration.

Fees and Commission Expense

Fees and commission expense principally comprise brokerage, exchange, clearing, market intermediation and swap fees associated with trading activity. The fees are recognised in net revenue on an accrual basis as the service is provided.

Recognition and Derecognition of Financial Assets and Liabilities

The Company has chosen to adopt Sections 11 and 12 of FRS 102 in respect of financial instruments.

The Company recognises a financial asset or liability on its statement of financial position when it becomes a party to the contractual provisions of the instrument. Derecognition of financial assets occurs when the contractual rights to the cash flows from the assets expire or the Company transfers the right to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Derecognition of financial liabilities occurs when the contractual obligations are discharged or cancelled or have expired. Measurement of financial assets and liabilities is based on the fair value of the instruments.

Financial Assets and Liabilities at Fair Value through Profit and Loss

Financial assets and liabilities at fair value through profit and loss include securities owned, securities sold but not yet purchased, and derivative financial instruments. In accordance with Section 12 of FRS 102, the initial measurement is made at fair value on the trade date, which is normally the transaction price. Such financial instruments are

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

carried in the statement of financial position at fair value and any subsequent adjustments to fair values are recognised in net revenue on the statement of comprehensive income in the period in which they arise. Substantially all the Company's securities owned and carried at fair value, are held at a major financial institution which is permitted by contract or custom to sell or repledge these securities.

<u>*Valuation of Financial Instruments*</u>

The Company measures and reports financial instruments at fair value. The fair value is based on available information and all financial instruments are valued at the close of business on each date of determination.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants, at the measurement date. Where available, fair value is based on observable market prices or inputs or derived from such prices or inputs. Where observable prices or inputs are not available, other valuation techniques are applied. These valuation techniques involve some level of estimation and judgment by management, the degree of which is dependent on the price transparency for the financial instruments or market and the financial instruments' complexity.

FRS 102 has a three-level fair value hierarchy for disclosure of fair value measurements. The fair value hierarchy prioritises inputs to the valuation techniques used to measure fair value, giving the highest priority to level 1 inputs and the lowest priority to level 3 inputs. A financial instrument's level in the fair value hierarchy is based on the lowest level of input that is significant to its fair value measurement. The three levels of the fair value hierarchy are described below:

Basis of Fair Value Measurement	
Level 1	The unadjusted quoted price in an active market for identical assets or liabilities;
Level 2	Inputs other than quoted prices included within Level 1 that are observable (i.e. developed using market data) for the asset or liability, either directly or indirectly; and
Level 3	Inputs are unobservable (i.e. for which market data is unavailable) for the asset or liability.

Financial instruments which are traded on one or more exchanges, organised dealer markets or electronic trading facilities are generally valued at their closing price on the exchange upon which they are principally traded. Such financial instruments are generally classified within level 1 of the fair value hierarchy. Valuation adjustments may be applied to the quoted market prices to the extent that exchange-traded financial instruments are infrequently traded.

The following describes the valuation techniques applied to the Company's classes of assets and liabilities to measure fair value, including an indication of the level within the fair value hierarchy in which each asset and liability is generally classified. Where appropriate, the description includes details of the valuation models and the key inputs to those models.

EQUITY SECURITIES

Exchange-traded equity securities

Exchange-traded equity securities are valued using exchange quoted market prices and are categorised within level 1 of the fair value hierarchy.

Non-exchange-traded equity securities

The Company's non-exchange-traded equity securities typically represent securities that are traded in over-the-counter ("OTC") markets. These non-exchange-traded equity securities are generally valued using market price quotations obtained from vendors and are categorised within level 2 of the fair value hierarchy.

U.S. GOVERNMENT SECURITIES

U.S. government securities are valued using quoted market prices and are categorised within level 1 of the fair value hierarchy.

DERIVATIVE ASSETS AND DERIVATIVE LIABILITIES

Exchange-traded derivative financial instruments

Exchange-traded derivative financial instruments include warrants, options and futures contracts, which are valued at the closing exchange price and are classified within level 1 of the fair value hierarchy. These instruments reference various equity, interest rate and commodity contracts.

OTC derivative financial instruments

OTC derivative financial instruments include swap and forward contracts related to interest rates, foreign currencies, or equity prices. Interest rate swap contracts are valued using market-based inputs to models, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency. Valuation models require a variety of inputs, including contractual terms, yield curves and correlations of such inputs. For interest rate swap contracts that trade in liquid markets, model inputs can generally be verified and model selection does not involve significant management judgement. Interest rate swap contracts are classified within level 2 of the fair value hierarchy as all of the inputs are observable. Also, to be consistent with industry practices, the Company's valuation of interest rate swap contracts is generally based on discounting in local currency at the overnight index swap rate.

Foreign exchange forwards and total return swaps generally trade in liquid markets and are valued using market-based inputs to models. Model inputs can generally be verified and model selection does not involve significant management judgement. Significant inputs include equity prices, interest rates, foreign exchange rates and/or foreign exchange forward points. These instruments are generally categorised within level 2 of the fair value hierarchy.

<u>*Netting Arrangements*</u>

The Company enters into master netting agreements with counterparties whenever possible and, when appropriate, obtains collateral. Master agreements provide that, if an event of default occurs, all outstanding transactions with the counterparty will fall due and all amounts outstanding will be settled on a net basis. Financial assets and liabilities are offset and the net amounts presented in the financial statements when there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

<u>*Derivative Contracts*</u>

Derivative financial instruments generally reference notional amounts which are utilised solely as a basis for determining cash flows to be exchanged. Notional amounts provide a measure of the Company's portfolio commitment to such derivative financial instruments and are not necessarily indicative of economic exposure or potential risk. These derivative financial instruments are reported at fair value in the statement of financial position and any subsequent adjustments to fair values are recognised in net revenue on the statement of comprehensive income in the period in which they arise.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

Transfers of Financial Assets
In general, transfers of financial assets are accounted for as sales when the Company has relinquished control over the transferred assets. For transfers of financial assets that are not accounted for as sales, in which the transferor retains control of the financial assets, the financial assets remain on the statement of financial position and the transfer is accounted for as a collateralised transaction. Securities purchased under agreements to resell ("reverse repurchase agreements") and securities sold under agreements to repurchase ("repurchase agreements") are treated as collateralised transactions (see Note 15).

Reverse repurchase agreements and repurchase agreements are reported within operating activities on the cash flow statement. Reverse repurchase agreements and repurchase agreements are short-term in nature and are recorded at the amounts of cash paid or received, plus accrued interest, on the statement of financial position. Reverse repurchase agreements and repurchase agreements with the same counterparty are reported on a net basis when there exists a legally enforceable right to set off the recognized amounts and when certain other criteria are met in accordance with applicable accounting guidance on offsetting. Interest income or expense on reverse repurchase agreements and repurchase agreements is recognised over the term of the relevant agreement and included in net finance expense on the statement of comprehensive income.

Pension Costs and Other Post Retirement Benefits
The Company makes payments into a group personal pension plan, operating as a defined contribution pension scheme. All staff are employed by the Company or related entities, which allocates an appropriate share of pension costs to the Company (see Note 4). These costs are included in administrative expenses on the statement of comprehensive income.

Staff Costs
Compensation and benefits is comprised of salaries, benefits, payroll taxes, incentive compensation and other bonus expense granted to employees (see Note 10).

The Company grants incentive compensation to certain employees under the terms of the Citadel Employee Incentive Program (the "Program"). Pursuant to the Program, the Company grants employees deferred bonus awards; the post-tax value of the deferred awards is contributed to employee investment funds, which in turn invest in affiliated hedge funds. Incentive compensation is recorded as staff costs over the relevant service period when it is both probable and reasonably estimable.

Prepayments and Accrued Income
Certain contractual hiring, incentive compensation and bonus payments made to employees are subject to clawback terms. Amounts paid subject to clawback are included in prepayments and accrued income within debtors in the statement of financial position. The prepaid amount is charged to the statement of comprehensive income on a straight line basis over the remaining clawback period.

Related Party Transactions
The Company discloses transactions with related parties which are not wholly-owned by the same parent entity. Where appropriate, transactions of a similar nature are aggregated.

NOTE 4

Transactions with Related Parties

Pursuant to an administrative services agreement, the Company incurs allocable administrative expenses paid by Citadel Enterprise Americas LLC (formerly known as Citadel LLC) ("CEAMER"), an affiliate, on behalf of the Company. For the year ended 31 December 2018, these expenses amounted to $2,017 and are included in the statement of comprehensive income (2017 - $1,786). At 31 December 2018, a balance of $316 was payable to CEAMER (2017 - $505).

Pursuant to an administrative services agreement, the Company incurs allocable administrative expenses paid by Citadel Enterprise Europe Limited (formerly known as Citadel Investment Group (Europe) Limited) ("CEEU"), an affiliate, on behalf of the Company. As per the terms of this agreement, CEEU allocates an appropriate share of its costs to the Company. For the year ended 31 December 2018, these expenses amounted to $15,619 and are included in the statement of comprehensive income (2017 – $76,320). At 31 December 2018, a balance of $6,295 was payable to CEEU (2017 – $14,385).

Pursuant to an administrative services agreement, the Company incurs allocable administrative expenses paid by Citadel Enterprise Ireland Limited (formerly known as CSEC Management Services (Ireland) Limited) ("CEIRL"), an affiliate, on behalf of the Company. As per the terms of this agreement, CEIRL allocates an appropriate share of its costs to the Company. For the year ended 31 December 2018, these expenses amounted to $7,482 and are included in the statement of comprehensive income (2017 – $15,088). At 31 December 2018, a balance of $1,017 was payable to CEIRL (2017 – $456). At 31 December 2018, CEIRL had future minimum lease commitments of $6,875 (2017 - $8,613). The Company has also provided a guarantee in respect of the lease of CEIRL office premises.

CEAMER, CEEU and CEIRL act as paying agent for the Company in respect of all administrative expenses (see note 7).

The Company has taken an exemption available in FRS 8 Related Party Transactions not to disclose transactions with entities that are part of the group qualifying as related parties on the grounds that it is a wholly owned subsidiary.

NOTE 5

Income from Trading

	For the year ended 31 December	
	2018	**2017**
Principal transactions	$ 400,756	$ 298,114
Other revenue	8,241	5,228
Net dividend expense	(11,510)	(3,503)
	$ 397,487	$ 299,839

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 6

Fees and Commissions Expense

	For the year ended 31 December	
	2018	2017
Exchange, clearance, and regulatory fees	$ 78,137	$ 64,561
Market intermediation expense	51,551	40,918
Liquidity and order flow expense	21,312	18,805
Other expense	1,866	1,453
	$ 152,866	$ 125,737

NOTE 7

Administrative Expenses

Operating profit is stated after charging:

	For the year ended 31 December	
	2018	2017
Staff costs (Note 10)	$ 81,222	$ 53,760
Auditors' remuneration:		
Audit services pursuant to legislation	302	296
Other services	59	40
Irrecoverable VAT	6,519	5,992
Fund administration services	714	758
Other costs	53,872	38,499
	$ 142,688	$ 99,345

NOTE 8

Net Finance Expense

	For the year ended 31 December	
	2018	2017
Interest income		
Collateralised agreements	$ 10,610	$ 1,524
U.S. government securities	14,485	1,027
Bank accounts, loans and other	9,274	6,501
	34,369	9,052
Interest charges		
Collateralised agreements	(8,675)	(334)
U.S. government securities	(15,324)	(1,278)
Bank accounts, loans and other	(20,237)	(9,568)
	(44,236)	(11,180)
Net finance expense	$ (9,867)	$ (2,128)

NOTE 9

Tax on Profit

The tax charge is based on the profit for the financial year and comprises:

	For the year ended 31 December	
	2018	2017
Current tax		
UK corporation tax on profit for the financial year	$ 23,303	$ 17,283
Adjustments in respect of prior years	91	(214)
Total current tax	$ 23,394	$ 17,069

The tax assessed for the year is higher than (2017: higher than) the average rate of corporation tax in the UK. The differences are explained below:

	For the year ended 31 December	
	2018	2017
Profit before taxation	$ 98,559	$ 73,237
Profit before taxation multiplied by the average rate of corporation tax in the UK	18,726	14,098
Bank corporation tax surcharge	5,215	3,281
Timing and other differences	(1,590)	(254)
Foreign exchange differences	952	158
Adjustments in respect of prior years	91	(214)
Current tax charge for the year	$ 23,394	$ 17,069

Factors Affecting Current and Future Tax Charges

For the period 1 April 2017 through 31 December 2018, the standard rate of corporation tax in the UK was 19%. The Company is subject to a Bank Corporation Tax surcharge of 8% on profits in excess of GBP 25 million. The branch of the Company is subject to the standard rate of Ireland corporation tax of 12.5%. For the year ended 31 December 2018, the Irish tax charge was assessed to be nil (2017: nil).

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 10

Staff Costs

Staff costs are made up as follows:

	For the year ended 31 December	
	2018	2017
Wages, salaries and bonus payments	$ 68,844	$ 45,951
Social security costs	8,298	5,881
Pension costs	1,814	833
Other staff costs	2,266	1,095
	$ 81,222	$ 53,760

All staff are employed by the Company. These costs are included in administrative expenses on the statement of comprehensive income.

The monthly average number of employees during the year including directors was 109 (2017 - 74).

For the year ended 31 December 2018, the Company recognised expenses of $13,732 (2017 - $8,246) in relation to deferred bonus awards (before employment taxes). These expenses are included in wages, salaries and bonus payments.

NOTE 11

Directors' Remuneration

Total Directors' remuneration:

	For the year ended 31 December	
	2018	2017
Emoluments	$ 867	$ 189
Compensation for loss of office	468	—
Pension benefits	22	5
	$ 1,357	$ 194

Remuneration in respect of the highest paid Director:

	For the year ended 31 December	
	2018	2017
Emoluments	$ 108	$ 116
Compensation for loss of office	468	—
Pension benefits	8	5
	$ 584	$ 121

These costs are included in staff costs (Note 10).

NOTE 12

Trade Receivables

	At 31 December	
	2018	2017
Interest receivable	$ 5,122	$ 709
Amounts owed by brokers	142,469	148,669
Amounts owed by clearing house	54,626	20,635
Prepayments and accrued income	5,662	2,525
	$ 207,879	$ 172,538

Amounts owed by brokers principally include receivables for unsettled trades and cash collateral placed with the Company's brokers, principally ABN AMRO Bank N.V. (A1), Barclays Bank plc (A2), Morgan Stanley & Co. International Plc (A1), Bank of America Corporation (A2), Citibank N.A. (Aa3) and Deutsche Bank AG (A3). The ratings disclosed are the long-term issuer ratings per Moody's.

Amounts owed by clearing house include receivable for unsettled trades, cash collateral and deposits placed at LCH Clearnet Limited.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 13

Fair Value Disclosures

The tables below present by level within fair value hierarchy, financial assets and liabilities measured at fair value through profit or loss at 31 December 2018.

ASSETS AT FAIR VALUE AT 31 DECEMBER 2018

	Level 1	Level 2	Total
Securities owned			
Equity securities	$ 891,435	$ 1,985	$ 893,420
U.S. government securities	729,125	—	729,125
Total securities owned	1,620,560	1,985	1,622,545
Derivative assets			
Equity contracts	544,075	10,055	554,130
Interest rate contracts	8,335	535,075	543,410
Commodity contracts	250,887	—	250,887
Foreign exchange contracts	—	372	372
Derivative assets before netting	803,297	545,502	1,348,799
Netting	(260,636)	(538,773)	(799,409)
Total derivative assets	542,661	6,729	549,390
Total	$ 2,163,221	$ 8,714	$ 2,171,935

LIABILITIES AT FAIR VALUE AT 31 DECEMBER 2018

	Level 1	Level 2	Total
Securities sold, not yet purchased			
Equity securities	$ 843,649	$ 91	$ 843,740
U.S. government securities	854,141	—	854,141
Total securities sold, not yet purchased	1,697,790	91	1,697,881
Derivative liabilities			
Equity contracts	521,896	6,712	528,608
Interest rate contracts	5,290	549,563	554,853
Commodity contracts	249,787	—	249,787
Foreign exchange contracts	—	1,746	1,746
Derivative liabilities before netting	776,973	558,021	1,334,994
Netting	(260,636)	(538,773)	(799,409)
Total derivative liabilities	516,337	19,248	535,585
Total	$ 2,214,127	$ 19,339	$ 2,233,466

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

The tables below present by level within fair value hierarchy, financial assets and liabilities measured at fair value through profit or loss at 31 December 2017. The values for commodity derivative contracts have been restated and were presented on a net basis in the 2017 financial statements. There is no impact on the fair value of derivative assets or derivative liabilities as a result of this restatement.

ASSETS AT FAIR VALUE AT 31 DECEMBER 2017

	Level 1	Level 2	Total
Securities owned			
Equity securities	$ 1,374,383	$ 162	$ 1,374,545
U.S. government securities	39,908	—	39,908
Total securities owned	1,414,291	162	1,414,453
Derivative assets			
Interest rate contracts	1,387	586,714	588,101
Commodity contracts	437,579	—	437,579
Equity contracts	134,559	1,963	136,522
Foreign exchange contracts	—	91	91
Derivative assets before netting	573,525	588,768	1,162,293
Netting	(436,944)	(562,698)	(999,642)
Total derivative assets	136,581	26,070	162,651
Total	$ 1,550,872	$ 26,232	$ 1,577,104

LIABILITIES AT FAIR VALUE AT 31 DECEMBER 2017

	Level 1	Level 2	Total
Securities sold, not yet purchased			
Equity securities	$ 672,413	$ 24	$ 672,437
U.S. government securities	25,640	—	25,640
Total securities sold, not yet purchased	698,053	24	698,077
Derivative liabilities			
Interest rate contracts	597	560,734	561,331
Commodity contracts	436,248	—	436,248
Equity contracts	174,763	2,420	177,183
Foreign exchange contracts	—	3,476	3,476
Derivative liabilities before netting	611,608	566,630	1,178,238
Netting	(436,944)	(562,698)	(999,642)
Total derivative liabilities	174,664	3,932	178,596
Total	$ 872,717	$ 3,956	$ 876,673

NOTE 14

Derivative Financial Instruments

The Company transacted in derivative financial instruments during the year including exchange-traded options, warrants and futures as well as OTC swaps and forwards. These are instruments that derive their values from underlying asset prices, indices, reference rates and other inputs or a combination of these factors and generally represent commitments to exchange cash flows, or to purchase or sell other financial instruments at specified future dates.

Derivative financial instruments are subject to various risks similar to those related to the underlying financial instruments including market and credit risk. Derivatives are typically also subject to certain additional risks, such as those resulting from leverage and significantly less liquidity, to which the underlying financial instruments may not be exposed. The Company may use derivative financial instruments in the normal course of its business to take speculative investment positions or to manage various underlying exposures for risk management purposes. The Company's derivative financial instrument risks should not be viewed in isolation but rather they should be considered on an aggregate basis along with the Company's other investing activities.

The Company attempts to manage the risks associated with its derivative financial instruments along with its speculative investing activities in cash instruments as part of its overall risk management process (discussed in Note 17).

Futures contracts are commitments to either purchase or sell a financial instrument at a future date for a specified price. These contracts may, in general, be settled in cash or through delivery of the underlying instrument. Futures contracts can be closed out at the discretion of the Company. However, illiquidity in the market could prevent the timely close-out of any unfavourable positions or require the Company to hold those positions until the delivery date, regardless of the changes in their value or the Company's investment strategy.

Options are contracts in which the option purchaser has the right, but not the obligation, to purchase from or sell to the option writer financial instruments within a defined time period for a specified price. Options written by the Company create off-balance sheet risk, as the Company's contingent obligation to satisfy the purchase or sale of securities underlying such options may exceed the amount recognised on the statement of financial position.

Total return and interest rate derivative financial instruments are contractual agreements that require counterparties to exchange cash

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

flows as currency or interest payment streams. The amounts exchanged are based on the specific terms of the contract with reference to specified rates, financial instruments, currencies or indices. These instruments can involve market risk and/or credit risk in excess of the amount recognised on the statement of financial position.

The following tables set forth the fair value and outstanding notional of the Company's derivative contracts by underlying risk exposure. The table also presents information about the offsetting of derivative instruments. Gross derivative contracts in the table below exclude the effect of netting and do not necessarily represent the Company's actual exposure which may ultimately be reduced by netting agreements. Net derivative contracts represent the fair value of derivative assets and liabilities after the netting of positions by counterparty, when the legal right of offset exists and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

The tables below present derivative fair values and outstanding notional at 31 December 2018.

FAIR VALUE AT 31 DECEMBER 2018

	Derivative Assets	Derivative Liabilities
Equity contracts	$ 554,130	$ 528,608
Interest rate contracts	543,410	554,853
Commodity contracts	250,887	249,787
Foreign exchange contracts	372	1,746
Total gross derivative contracts	1,348,799	1,334,994
Total counterparty netting	(799,409)	(799,409)
Net derivative contracts	$ 549,390	$ 535,585

NOTIONAL VALUE AT 31 DECEMBER 2018

	Derivative Assets	Derivative Liabilities
Equity contracts	$12,396,166	$11,438,239
Interest rate contracts	74,047,150	74,221,929
Commodity contracts	4,847,043	4,832,365
Foreign exchange contracts	57,956	387,618
Total gross derivative contracts	$91,348,315	$90,880,151

The tables below present derivative fair values and outstanding notional at 31 December 2017. The values for commodity derivative contracts have been restated and were presented on a net basis in the 2017 financial statements. There is no impact on the fair value of derivative assets or derivative liabilities as a result of this restatement.

FAIR VALUE AT 31 DECEMBER 2017

	Derivative Assets	Derivative Liabilities
Interest rate contracts	$ 588,101	$ 561,331
Commodity contracts	437,579	436,248
Equity contracts	136,522	177,183
Foreign exchange contracts	92	3,476
Total gross derivative contracts	1,162,294	1,178,238
Total counterparty netting	(999,642)	(999,642)
Net derivative contracts	$ 162,652	$ 178,596

NOTIONAL VALUE AT 31 DECEMBER 2017

	Derivative Assets	Derivative Liabilities
Interest rate contracts	$79,839,250	$74,769,498
Equity contracts	4,305,789	3,819,869
Commodity contracts	7,959,108	7,905,699
Foreign exchange contracts	24,155	391,430
Total gross derivative contracts	$92,128,302	$86,886,496

NOTE 15

Reverse Repurchase Agreements

	At 31 December 2018	2017
Assets - Reverse repurchase agreements		
Gross amounts	$ 933,534	$ 155,742
Amounts offset in the statement of financial position	(776,094)	(10,877)
Net amounts presented in the statement of financial position	$ 157,440	$ 144,865
Liabilities - Repurchase agreements		
Gross amounts	$(776,094)	$ 10,877
Amounts offset in the statement of financial position	776,094	(10,877)
Net amounts presented in the statement of financial position	$ —	$ —

The Company manages credit exposure arising from reverse repurchase agreements and repurchase agreements by, in appropriate circumstances, entering into master netting agreements and collateral arrangements with counterparties.

Reverse repurchase agreements and repurchase agreements are collateralised primarily by receiving or pledging securities, respectively. Typically, the Company has rights of rehypothecation with respect to the securities collateral received under reverse repurchase agreements. The counterparty generally has rights of rehypothecation with respect to the securities collateral received from the Company under repurchase agreements.

The Company monitors the fair value of underlying securities in comparison to the related receivable or payable, including accrued interest, and as necessary, transfers or requests additional collateral as provided under the applicable agreement to ensure transactions are adequately collateralised.

At 31 December 2018, as a result of entering into reverse repurchase agreements, the Company obtained collateral with a fair value, including accrued coupon interest, of $936,740 (2017 - $155,775). Also at 31 December 2018, the Company had repurchase agreements with collateral posted having a fair value including accrued coupon interest of $778,667 (2017 - $11,059). The Company received net cash collateral of $180. The sale and purchase obligations under reverse repurchase agreements and repurchase agreements are collateralised by U.S. government securities, to the extent offsetting agreements with the same counterparty have not otherwise reduced the Company's or counterparties' gross exposure.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 16

Other Creditors

	At 31 December	
	2018	2017
Amounts owed to brokers	$ 5,443	$ 703,934
Amounts owed to related parties	12,793	19,003
Interest payable	7,284	879
Corporation tax payable	5,457	11,832
Compensation payable	47,242	—
Accruals and deferred income	9,923	10,886
Total	$ 88,142	$ 746,534

NOTE 17

Financial Risk Management

The Company is subject to various risks, including, but not limited to, *market risk, currency risk, interest rate risk, off-balance sheet risk, credit* risk, and liquidity risk. This note presents information about the Company's exposure to each of these risks, as well as its policies and processes for measuring and managing risk.

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The Company's risk management policies are established to identify the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities.

The organisational structure is designed to facilitate risk management through three lines of defence. Risk is monitored first by the trading desk, each businesses area is responsible for managing this risk, in real time and in accordance with the Company's overall risk appetite.

Secondly, risk is monitored by the Portfolio Construction Group ("PCG"), the global independent risk control function for the Citadel Group. The support functions including Treasury, Finance, Legal and Compliance help to assess and monitor significant categories of the firm's risk to ensure risk is managed holistically on a day-to-day basis. The organisation framework for risk management is designed to facilitate reporting and escalation of risks to the European Operating Committee ('EOC') and the Board of Directors depending on their severity.

The third line of defence is the firm's internal audit function. The internal audit function provides an objective and independent assessment of the adequacy and effectiveness of the internal controls across the business and reports to the Company's Board of Directors and Internal Audit Committee.

Market Risk

Market risk is the risk of loss in the value of financial instruments due to changes in market conditions. Market risk is directly impacted by the volatility and liquidity of the markets in which the related underlying financial instruments are traded. The Company attempts to manage market risk in various ways, including through diversifying exposures, placing limitations on position sizes and hedging in related securities or derivative financial instruments. Categories of market risk include, but are not limited to, equity prices, interest rates and currency prices.

Equity price risk is the risk of loss due to changes in prices and volatilities of individual equities, baskets of equities and equity indices. Risk tolerances are set for both intra-day and end of day positions and are monitored by both the trading desk and independently by PCG.

The fair value of equities and related derivatives exposed to price risk were as follows:

	At 31 December	
	2018	2017
Equity securities owned	$ 893,420	$ 1,374,545
Equity securities sold, not yet purchased	(843,740)	(672,437)
Derivatives assets	554,130	136,522
Derivative liabilities	(528,608)	(177,183)
Total	$ 75,202	$ 661,447

If the closing market price of all equities had been 5% higher or lower at 31 December 2018, the estimated increase/decrease in market value is less than $3,000 (at 31 December 2017 less than $2,000). If the implied volatilities of all equity options had been 25% higher or lower at 31 December 2018, the estimated increase/decrease in market value is less than $1,000 (at 31 December 2017 less than $1,000).

Currency Risk

Currency risk is the risk of loss due to the fluctuation of exchange rates. The Company may have exposure to non-U.S. currencies, directly or indirectly through its investments, and as such is subject to the risk that those currencies will decline in value relative to the U.S. dollar, or, in the case of hedging positions, that the U.S. dollar will decline in value relative to the currency being hedged. Currency rates may fluctuate significantly over short periods of time for a number of reasons, including changes in interest rates, intervention (or the failure to intervene) by government entities, central banks or supranational entities, or by the imposition of currency controls or other geopolitical developments. Additionally, the Company may hold balances in foreign currencies, including cash, due to/from brokers, and accrued expenses.

This risk is managed by each trading desk at the desk level and by the Treasury team at the Company level through monitoring and hedging, as appropriate, foreign exchange exposures on a daily basis. In respect of non-trading assets and liabilities denominated in foreign currencies, the Company ensures that its net exposure is maintained at an acceptable level by buying or selling foreign currencies at spot rates on a daily basis. If the closing market price of all currencies had been 5% higher or lower at 31 December 2018, the estimated increase/decrease in market value is less than $1,500 (at 31 December 2017 less than $750).

Interest Rate Risk

Interest rate risk is the risk of loss due to changes in the level, slope and curvature of yield curves. The Company is primarily exposed to interest rate risk through its interest rate swap market making activity. The business only trades cleared interest rate swaps and seeks to maintain a relatively flat risk ladder with automated hedging of the duration risk. If interest rates had been higher or lower by 50 basis points with all other variables held constant, the annualised change in total comprehensive income is estimated to be less than $5,000 (as at 31 December 2017 less than $2,000).

Off-Balance Sheet Risk

The Company enters into investment transactions which may represent off-balance sheet risk. Off-balance sheet risk exists when the maximum potential loss on a particular investment is greater than the value of such investment, as reflected on the statement of financial position. Off-balance sheet risk generally arises from the use of derivative financial instruments or short sales.

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(Expressed in U.S. dollars in thousands)

Credit Risk

Credit risk is the risk of financial loss due to the failure of a counterparty to perform according to the terms of a contract. The Company's credit risk arises mainly from cash placed with banks, derivative contracts and margin placed with brokers, clearing firms and central counterparties.

The Company clears its futures and equity derivative transactions through a highly rated clearing broker, which also maintains the Company's positions. These positions are recorded as financial assets or liabilities at fair value through profit and loss. In addition, the clearing broker provides the majority of the financing for these securities. This can result in a concentration of credit risk with the clearing broker.

The majority of the Company's interest rate swaps are self-cleared through the Company's SwapClear membership at LCH Clearnet Limited. As a requirement of being a direct clearing member the, Company has contributed to the clearing house default fund which creates a credit risk exposure for the Company.

The credit risk of exchange-traded and/or certain OTC derivatives, such as exchange traded futures and centrally cleared OTC derivative financial instruments, is reduced by the rules or regulatory requirements, such as daily margining, applicable to individual exchanges, clearing houses and clearing members through which the instruments are traded and cleared.

The Company seeks to reduce its exposure to credit risk associated with counterparty non-performance under bilateral OTC derivative financial instrument transactions by entering into master netting agreements and collateral arrangements with counterparties. These master agreements provide the Company with the right on a daily basis to demand collateral based on the Company's mark-to-market exposure to the counterparty, as well as, in the event of counterparty default, the right to liquidate collateral and offset receivables and payables covered under the same master netting agreement. In an effort to limit bilateral OTC credit risk, the Company generally enters into bilateral OTC derivative financial instrument transactions with major financial institutions. Additionally, the Company also seeks to manage credit risk by, among other factors, monitoring exposures to and reviewing creditworthiness of its counterparties and rebalancing trading and financing sources as deemed appropriate.

The maximum exposure to credit risk at 31 December was as follows:

	At 31 December 2018	At 31 December 2017
Amounts owed by brokers	$ 142,469	$ 148,669
Amounts owed by clearing house	54,626	20,635
Financial derivative assets	549,390	162,651
Net amounts receivable from brokers and clearing house	746,485	331,955
Cash and cash equivalents	37,343	66,793
Total	$ 783,828	$ 398,748

The Company provides guarantees to the securities clearinghouse, LCH Clearnet Limited. Under the standard membership agreement, members are required to guarantee the performance of other members. Under these agreements, if a member becomes unable to satisfy its obligations to the clearinghouse, other members would be required to meet the resulting shortfalls. The Company's liability under these arrangements is not quantifiable and could exceed the cash and securities it has posted as collateral. However, management believes the potential for the Company to be required to make payments under these arrangements is remote. Accordingly, no contingent liability is carried on the statement of financial position for these arrangements.

The Company has no financial assets which are past due or impaired. Cash and cash equivalents are held at JP Morgan Chase and The Bank of New York; JP Morgan Chase and The Bank of New York are rated A2 and A1 respectively, by Moody's.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its obligations as they fall due. The Company is subject to liquidity standards under Section 7 of the Prudential Sourcebook for Investment Firms ("IFPRU") and therefore assesses the adequacy of its liquid resources by reference to its Individual Liquidity Adequacy Assessment ("ILAA"). The ILAA includes an assessment of the Company's compliance with the FCA systems and controls requirements and detailed stress testing of the liquidity position. The Company seeks to maintain a high quality liquidity buffer of at least $69,000 as part of its liquid resources. The policy for managing liquidity aims to ensure that the Company will have sufficient liquidity to meet its liabilities when due, without incurring unacceptable losses or risking damage to the Company's reputation.

Substantially all of the Company's financial liabilities are payable on demand or in accordance with normal trade settlement cycles, therefore no separate disclosure of contractual maturities is made in these financial statements. The Company maintains a liquid statement of financial position with a liquidity ratio of 35.96% at 31 December 2018 (2017 – 45.78%), representing liquid assets as a percentage of net asset value.

NOTE 18

Capital Management

The Company is subject to the EU's Capital Requirements Regulation ("CRR"), supplemented by the FCA IFPRU. In accordance with CRR, the Company maintains a capital base that is appropriate to support the development of the business and ensure regulatory capital requirements are met at all times.

The Company's capital resources are entirely made up of Common Equity Tier 1 permanent capital. CSEL has no long-term debt and no intangible assets to deduct. There are no current or foreseen material practical or legal impediments to the prompt transfer of capital resources or repayment of liabilities.

At 31 December 2018, the Company's Tier 1 capital was $329,550 (2017 - $411,084). The Company's individual capital guidance was $172,810 (2017 - $251,274) and the Company's surplus total capital over individual capital guidance was $156,740 (2017 - $159,810).

NOTE 19

Called Up Share Capital

As of 31 December 2018, the Company had 193,000,000 issued and outstanding common shares, at a par value of $1.00 per share as well as 1 issued and outstanding common share at a par value of £1.00 per share. Par value is not expressed in thousands.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

Transactions in share capital (expressed in thousands) were as follows:

	For the year ended 31 December	
	2018	2017
Opening balance	173,000	8,000
Shares issued and fully paid	20,000	165,000
Shared redeemed	—	—
Ending balance	193,000	173,000

NOTE 20

Net Cash Inflow / (Outflow) from Operating Activities

	For the year ended 31 December	
	2018	2017
Operating profit	$ 108,426	$ 75,365
Gains and losses due to exchange rate changes on cash and cash equivalent	233	(377)
Increase in trade receivables	(30,928)	(95,933)
Increase in financial assets at fair value through profit and loss	(594,831)	(1,433,589)
Increase in reverse repurchase agreements	(12,575)	(13,463)
Increase in receivable from affiliate	(307)	(170)
Increase in financial liabilities at fair value through profit and loss	1,356,793	741,188
(Decrease) / Increase in other creditors	(659,071)	682,872
Net cash inflow / (outflow) from operating activities	$ 167,740	$ (44,107)

NOTE 21

Parent Undertaking and Ultimate Controlling Party

The Company's immediate parent at 31 December 2018 was CSHC Europe LLC ("CSEH"), a Delaware limited liability company. Citadel Securities Holdings LP ("CSHP") is the parent undertaking of the largest group of undertakings to consolidate these financial statements. The ultimate controlling party is Kenneth Griffin. The registered address of CSHP is: c/o The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware, 19801 USA.

NOTE 22

Subsequent Events

The Company has performed an evaluation of subsequent events through 4 April 2019, which is the date the financial statements were available to be issued.

During March 2019, the Company scaled back certain trading strategies in various EU markets in preparation for the UK's withdrawal from the EU without an agreement on the future relationship between the UK and EU. On 14 March 2019, the Company paid a dividend of $70,000 as the capital required to support its trading activity had reduced.

Appendix: Country by Country Reporting

(Expressed in U.S. dollars in thousands)

Basis of preparation

The disclosures contained in this report have been prepared in accordance with Country by Country Reporting ("CBCR") requirements under the Capital Requirements Directive ("CRD IV"). Citadel Securities Europe Limited ("the Company") is a FCA regulated IFPRU full scope investment firm and is therefore within the scope of CRD IV.

The disclosures have been prepared in compliance with United Kingdom Accounting Standards, including Financial Reporting Standard 102, "The Financial Reporting Standard applicable in the United Kingdom and the Republic of Ireland" ("FRS 102").

The Company has operations in the United Kingdom ('UK') and the Republic of Ireland ("Ireland"). The principle activity of the Company is to trade on a proprietary basis for its own account. Additionally the Company provides agency execution, portfolio management, algorithmic trading strategy development and other support services to affiliated Citadel Securities Group entities.

In the disclosures that follow:

Turnover
Turnover is reported as net revenue on the statement of comprehensive income. The geographical distribution of turnover is based primarily on the location of the office recording the transaction.

Number of Employees on a Full Time Equivalent basis
The number of employees on a full time equivalent basis is reported as an average number of employees, analysed as to geography.

Profit or Loss before Tax
Profit is reported on a consolidated basis for each country.

Tax on Profit or Loss
Tax on profit or loss, for the purposes of country-by-country reporting, is interpreted as the corporation tax paid/refunded in each geographical jurisdiction in the year.

The following table summarises information required for the purpose of CBCR:

COUNTRY BY COUNTRY REPORTING FOR THE YEAR ENDED 31 DECEMBER 2018

Jurisdiction	Number of employees	Turnover	Profit before tax	Accounting tax charge	Corporation tax paid
UK	89	$ 222,060	$ 96,322	$ 23,394	$ 29,120
Ireland	20	29,054	2,237	—	—
Total	109	$ 251,114	$ 98,559	$ 23,394	$ 29,120

Independent auditors' report to the directors of Citadel Securities (Europe) Limited

Independent auditors' report to the directors of Citadel Securities (Europe) Limited

Report on the audit of the country-by-country information

Opinion

In our opinion, Citadel Securities (Europe) Limited's country-by-country information for the year ended 31 December 2018 has been properly prepared, in all material respects, in accordance with the requirements of the Capital Requirements (Country-by-Country Reporting) Regulations 2013.

We have audited the country-by-country information for the year ended 31 December 2018 in the Annual Report and Financial Statements.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)"), including ISA (UK) 800 and ISA (UK) 805, and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the country-by-country information section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the company in accordance with the ethical requirements that are relevant to our audit of the country-by-country information in the UK, which includes the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Emphasis of matter - Basis of preparation

In forming our opinion on the country-by-country information, which is not modified, we draw attention to the final section of the Annual Report and Financial Statements containing the country-by-country information which describes the basis of preparation. The country-by-country information is prepared for the directors for the purpose of complying with the requirements of the Capital Requirements (Country-by-Country Reporting) Regulations 2013. The country-by-country information has therefore been prepared in accordance with a special purpose framework and, as a result, the country-by-country information may not be suitable for another purpose.

Conclusions relating to going concern

ISAs (UK) require us to report to you when:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

We have nothing to report in respect of the above matters.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the company's ability to continue as a going concern. For example, the terms on which the United Kingdom may withdraw from the European Union are not clear, and it is difficult to evaluate all of the potential implications on the company's trade, customers, suppliers and the wider economy.

Independent auditors' report to the directors of Citadel Securities (Europe) Limited

Reporting on other information

The other information comprises all of the information in the Annual Report and Financial Statements other than the country-by-country information and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the country-by-country information does not cover the other information and, accordingly, we do not express an audit opinion or any form of assurance thereon.

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

Responsibilities for the country-by-country information and the audit

Responsibilities of the directors for the country-by-country information

The directors are responsible for the preparation of the country-by-country information in accordance with the requirements of the Capital Requirements (Country-by-Country Reporting) Regulations 2013 as explained in the basis of preparation in the final section of the Annual Report and Financial Statements and accounting policies in note 3 to the Annual Report and Financial Statements, and for determining that the basis of preparation and accounting policies are acceptable in the circumstances. The directors are also responsible for such internal control as they determine is necessary to enable the preparation of country-by-country information that is free from material misstatement, whether due to fraud or error.

In preparing the country-by-country information, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the country-by-country information

It is our responsibility to report on whether the country-by-country information has been properly prepared in accordance with the relevant requirements of the Capital Requirements (Country-by-Country Reporting) Regulations 2013.

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

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

Use of this report

This report, including the opinion, has been prepared for and only for the company's directors in accordance with the Capital Requirements (Country-by-Country Reporting) Regulations 2013 and for no other purpose. We do not, in giving this opinion, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come, save where expressly agreed by our prior consent in writing.

PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London
4th April 2019