CITADEL | Securities

Citadel Securities (Europe) Limited

Annual Report and Financial Statements for the year ended 31 December 2020

Registered Number: 5462867

Table of Contents

General Information

Board of Directors at Date of Signing
Steven Atkinson
Richard Pike
Anthony Walker
Katrina Manson

Statutory Audit Firm
PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Audit Firm
7 More London Riverside
London SE1 2RT

Registered Office
120 London Wall
London EC2Y 5ET
England

Bankers
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

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 2020. All amounts presented are in USD in thousands unless otherwise stated. These financial statements were authorised for issue by the Board of Directors on 13 April 2021. 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
- Richard Pike (independent)
- Anthony Walker (independent)
- Katrina Manson, appointed 24 January 2020

The following Directors resigned from the Board of Directors between 1 January 2020 and the date of signing the financial statements:

- Mark Wright, resigned 30 March 2020

None of the Directors had any interests in the share capital of the Company at any time during the year.

RESULTS AND DIVIDENDS

The Company earned total income of $348,977 (2019: $302,811) and made an operating profit of $108,574 (2019: $26,628). During the year ended 31 December 2020, the Company paid $59,171 in dividends (2019: $110,000). The Directors do not recommend the payment of a final ordinary dividend in respect of the year ended 31 December 2020.

RESEARCH AND DEVELOPMENT

The Company provided trading algorithm and other software development services to an affiliated Citadel Securities Group ("CS Group") entity. The CS Group references related parties which are subsidiaries of Citadel Securities Holdings LP.

STAKEHOLDER ENGAGEMENT

Please refer to the Strategic Report.

STATEMENT OF DIRECTORS' RESPONSIBILITIES IN RESPECT OF THE FINANCIAL STATEMENTS

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 international accounting standards in conformity with the requirements of the Companies Act 2006. 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 the financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- state whether international accounting standards in conformity with the requirements of the Companies Act 2006 have been followed, subject to any material departures disclosed and explained in the financial statements;
- make judgements and accounting estimates that are reasonable and prudent; 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 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.

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.

Directors' Report

STATEMENT ON DISCLOSURE OF INFORMATION TO AUDITORS

In the case of each Director in office at the date the Directors' Report is approved, each Director confirms that:

- So far as the Director is aware, there is no relevant audit information of which the Company's auditors are unaware; and
- The Director has 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.

BRANCH

The Company has established a branch in Ireland and the address of its branch office is One Grand Canal Square, Dublin 2, Ireland. The branch employs staff providing technology support services to affiliated CS Group entities.

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 13 April 2021.

SUBSEQUENT EVENTS

Please refer to Note 20 accompanying the financial statements.

FUTURE DEVELOPMENTS

Please refer to the Strategic Report.

FINANCIAL RISK MANAGEMENT

Please refer to Note 16 accompanying the financial statements.

STREAMLINED ENERGY AND CARBON REPORTING ("SECR")

CSEL is required to report in accordance with the UK government's SECR framework for the year ended 31 December 2020.

Energy Data and Greenhouse Gas ("GHG") Emissions

	For the year ended 31 December 2020
Energy consumption to calculate emissions (kilowatt hours - kWh)	
Total energy consumption	1,124,320
Emissions (tonnes of Carbon Dioxide equivalent - tCO_2e)	
Total scope 1	49
Total scope 2 (location based)	200
Intensity ratio	
tCO2e per full time equivalent	1.80

Reported scope 1 emissions: covers direct carbon emissions from sources controlled by the leaseholder. This includes natural gas and generator fuel used in the buildings from which the Company operates as well as fuel for business travel in employee owned vehicles for which the Company has reimbursed the cost.

Reported scope 2 emissions: covers indirect carbon emissions generated from the use of electricity in buildings controlled by the leaseholder, including cooling water and purchased electricity.

Methodology

The emissions and energy data noted above has been collected, collated and calculated in line with the methodology set out in The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition). To calculate the Greenhouse Gas emissions, the appropriate years' Department for Environment, Food and Rural Affairs emissions conversion factors have been applied to all sources of energy consumption.

Directors' Report

The Company utilises office space leased by a related UK company. Headcount has been used as the basis to apportion energy usage and GHG emissions between companies which make use of the office space. The Company does not currently report on scope 3 emissions.

Performance
Key drivers of the energy consumption during the reporting period include:

- Increase in office ventilation as part of the measures taken to provide a COVID-19 secure workplace; and
- Additional flushing procedures carried out as part of the fit out and refurbishment of an additional floor.

Energy efficient actions taken
During the year, the leaseholder for the site has introduced a number of actions to reduce the scope 1 and 2 emissions by implementing energy efficiency measures at the London office, which has the largest carbon footprint from UK-based operations. This has included several initiatives to reduce electricity consumption:

- The leaseholder has fitted out and occupied a new floor during the year. This floor has complete LED lighting which is fully controlled by a Digital Addressable Lighting Interface which will switch off lighting to non-occupied areas and dim lighting when natural lighting is available; and
- The leaseholder has replaced the Computer Room air-conditioning systems on the 14th floor with new more energy efficient units over the past year. Management will gather data on this to assess the level of energy that has been saved from the upgrade.

On behalf of the Board

Steven Atkinson, Director
13 April 2021

Strategic Report

The Directors present their Strategic Report for the year ended 31 December 2020.

PRINCIPAL ACTIVITIES

The principal activity of the Company is 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 trade agency services and support, trade execution, portfolio management, trading algorithm and software development and other support services to affiliated 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.

BUSINESS REVIEW

During 2020, the global outbreak of the COVID-19 pandemic and restrictions imposed by governments tested the Company's operating model and operational resilience. In response to unprecedented market volatility and trading volumes, the Company reassessed its business plan and refocused its effort to provide liquidity in its key markets whilst at the same time provide a safe working environment for its employees. The Company's continuous investments in technology, operational resilience and business continuity planning enabled its capacity to respond to these challenges and increase its trading volumes during the period in line with demand.

Throughout the year, uncertainty continued around the final terms of the United Kingdom's withdrawal from the European Union ("Brexit") when the transition period expired on 31 December 2020. This, however, had limited impact on the Company and its performance as the CS Group had largely completed the necessary planning for Brexit during 2019. No significant business disruption occurred as a result of the transition period expiring.

The profit for the year, as shown on the statement of comprehensive income on page 2, reflects both the Company's increase in trading activity and revenues as well as the strong performance of the CS Group as a whole for whom it provides various services as outlined in the Principal Activities section above. The statement of financial position on page 1 shows a strong net asset and liquidity position and the Directors are satisfied with the levels of liquidity and regulatory capital available.

The Company has transitioned from reporting in accordance with the Financial Reporting Standard 102, "The Financial Reporting Standard applicable in the United Kingdom and the Republic of Ireland" to reporting in accordance with International Financial Reporting Standards ("IFRS") and has restated comparative period information as required. There were no material accounting adjustments required on transition. Refer to Note 19 for explanation of the principal adjustments made by the Company.

PRINCIPAL RISKS, FINANCIAL RISKS AND UNCERTAINTIES

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

The Company's risk management processes and systems seek 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 and liquidity risk, are monitored on a daily basis against limits set by the Board of Directors in the risk appetite statement.

Operational Risk

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 assessed, 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, new risks are identified and assessed and that any necessary incremental controls are implemented.

Strategic Report

The Company defines operational risk as the prospect of financial loss or damaged reputation resulting from inadequate or failed internal processes, people and systems, including conduct risk, or from external events, and holds economic and regulatory capital against such risks. Given the Company's business model, both financial and non-financial potential impacts are considered in the assessment of risks.

Management of operational risks is a prime consideration for the Company in how it conducts its business as a market maker across a range of asset classes in financial markets around the world. Given the nature of the business the Company takes a technology-centric approach to risk management, with a host of automated pre and post trade controls across the Company's trading areas, monitored by experienced financial professionals. These controls are supplemented by policies, procedures, and risk assessments as well as a robust incident management and response processes and appropriate escalation.

The Company continues to invest in developing and implementing enhanced methodologies to identify, measure, monitor and manage material operational risks in its key activities, and the Company periodically assesses operational risks in the processes that support its businesses.

The Company relies to a material extent on computer hardware and software, including both equipment and programs licensed from affiliates as well as those licensed from third parties (collectively "Computer Systems"). The Company uses Computer Systems in substantially all phases of its business operations including, but not limited to, analytics, trade execution, risk management and trade processing. The performance of the Company, including critical processes of the Company, could be severely compromised by Computer Systems disruptions and/or outages including, but not limited to, design and implementation errors, cybersecurity related threats, interference with linkages to internal and third party data centres, hardware failures, or software "crashes".

In common with other financial institutions, the Company faces an increasingly challenging cyber risk environment, including a higher active threat context and increasingly demanding compliance expectations. Accordingly, the Company is continually assessing its cybersecurity stance in line with financial services industry expectations and practices. The CS Group has recently adopted the Center for Internet Security ("CIS") 20 Control Framework. The Company also continues to focus on its preparedness to react to significant events that could disrupt its normal operations through the CS Group Business Continuity & Recovery program. In addition, the CS Group's information security function is focused on ongoing enhancements to its ability to assess and continuously monitor third party security risk.

Within the independent Risk function a dedicated Operational Risk team monitors and checks the business' risk management practices, advises on developing frameworks, processes and controls to manage and mitigate risks and issues, while independently assessing and escalating risk and control issues to senior management.

Other Risks

The Company is subject to risks associated with unforeseen or catastrophic events, including terrorist attacks, natural disasters, and the emergence of a pandemic, which could create economic, financial, and business disruptions. These events could lead to operational difficulties that could impair management's ability to manage the Company's activities.

A key risk for the Company is not being able to retain key employees or attract the best and brightest new talent from all backgrounds. This risk is addressed by human resource policies and recruiting initiatives to ensure that the Company recruits and retains staff with the appropriate skills, by offering an attractive, inclusive workplace environment and competitive remuneration packages.

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 developments.

In its capacity as service provider to CS Group companies, the Company is dependent on the continued long-term success of the CS Group. The performance of affiliated entities within the CS Group could be negatively impacted by various risks including, but not limited to, market risk, credit risk, liquidity risk and operational risk.

Legal, tax and regulatory changes could occur in the markets and jurisdictions within which the Company operates. Certain changes could have a material adverse effect on the Company.

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

Please refer to Note 16 accompanying the financial statements for further disclosure on financial risk management.

Strategic Report

KEY PERFORMANCE INDICATORS ("KPIs")

The Directors monitor a range of 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 KPIs are the following:

- Total comprehensive income: 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.

		2020		2019
Total comprehensive income	$	81,483	$	15,633
Liquidity ratio		35.13%		49.62%
Return on equity		32.50%		5.45%

The Company's profit for 2020 amounted to $81,483 (2019: $15,633) which represents an increase of 421% compared to 2019. The increase in profitability and return on equity is the result of an increase in trading volumes across all markets as well as strong performance by the CS Group as a whole resulting in increased service fees from related parties. This strong performance enabled CSEL to return net capital of $59,171 (2019: $110,000) to its shareholder. The liquidity ratio decreased in 2020 due to higher working capital requirements, but still remains strong. The Company continues to maintain liquid assets amounting to $91,981 at 31 December 2020 (2019: $118,861) and has no long-term debt.

The Company also produces a range of both financial and non-financial risk indicators monthly which are used by management to understand the performance of the business and highlight activity that may be outside of the normal operating expectations of the business or the risk appetite set by the Board. These metrics are often designed to highlight activities out of the ordinary that require further investigation to understand the root cause before assessing whether any remedial action is required, rather than simply flagging risks that are outside of tolerances. Various key risk metrics are produced by Finance, Human Resources, Compliance, Technology, Risk and Operations departments. Metrics monitored include employee turnover, operational risk incidents, and compliance monitoring.

STRATEGY AND FUTURE DEVELOPMENTS

The Company's strategy is to continue to develop its successful systematic trading businesses and leverage the CS Group's global expertise in market making and liquidity provision using advanced electronic trading technology by expanding to new markets and asset classes. The Company has a proven track record of expanding to new asset classes by focusing on market structures that are suited to automation and defined by open access, transparent pricing and centrally cleared instruments. The Company continuously evaluates both existing trading strategies and potential new opportunities as financial markets evolve and looks to adapt as necessary.

The Company will continue in its role as service provider to other CS Group entities, with the expectation that this will continue to provide a significant proportion of CSEL's total income. Services include group portfolio management, trade agency services, trade support, trading algorithm and software development, execution and other support services for which the Company is remunerated on an arm's length basis.

The UK Investment Firm Prudential Regime ("IFPR") for Financial Conduct Authority ("FCA") prudentially-regulated investment firms will be introduced in 2022. The FCA is currently consulting on the specific features around the regime. Management continue to assess the impact of these new regulations and are developing the Company's implementation plan and keeping the Directors appraised of these plans.

Strategic Report

SECTION 172(1) STATEMENT

As set out in section 172 of the UK Companies Act 2006 (the "Act"), the Directors are required to act in a way that they consider, in good faith, to be most likely to promote the success of the Company for the benefit of its members as a whole. In performing their duty under the Act, the Board is required to have regard to, amongst other matters to the likely consequences of any decision in the long term: the interests of the Company's employees; the need to foster the Company's business relationships with suppliers, customers and others; the impact of the Company's operations on the community and environment and the need to engage with key stakeholders in order to maintain a reputation for high standards of business conduct. The Directors give careful consideration to the factors set out above in discharging their duties.

BOARD ROLES AND RESPONSIBILITIES

The Company is a wholly owned subsidiary of the CS Group which is privately owned and ultimately controlled by Kenneth Griffin, its founder. Given its ownership structure and its role within the CS Group, the Board of Directors look to implement the CS Group Strategy through the Company whilst ensuring adherence with local requirements and considering the impact on key stakeholders. The Board has responsibility for decision-making with respect to matters deemed to be of significance or strategic importance for CSEL.

As at 31 December 2020, the Board comprised two independent non-executive Directors who provide oversight and constructive challenge to management and two executive Directors. The Board, in discharging its duties, delegates authority to management. The remit and responsibility of each committee is clearly defined and updated periodically as required. The principal management committee is the Executive and Operating Committee (the "EOC"), which consists of senior management of the Company and other group employees. Management presents proposals on significant matters to the Board for review, challenge and approval. This includes allowing the Board to consider whether the proposal would promote the long-term success of the Company. The Board is responsible for review and approval of recommendations made by management, including but not limited to changes to CSEL's risk appetite and tolerances.

STAKEHOLDER ENGAGEMENT

The Directors recognise the value of building strong and transparent relationships with stakeholders in promoting and achieving the long-term success of the business. In making decisions and performing its oversight role, the Directors take into account the views and interests of key stakeholders, including its shareholder, employees, regulators, trading counterparties, trading venues and suppliers. Considering the impact on a broad range of stakeholders is an important part of the decision-making process and the Board seeks to consider the interests and priorities of each stakeholder group. However, the Board acknowledges that in balancing different perspectives it is not always possible to deliver the desired outcome for all stakeholders.

<u>Shareholder</u>
The Company is a wholly owned subsidiary of a privately owned group. As a matter of course, a global business and strategy update is provided to the Board, and the Directors take due account of the interests of the ultimate owner and the strategy of the wider Group in decision making to ensure alignment.

The executive Directors are in frequent dialogue with the CS Group senior management to ensure their feedback is sought with respect to significant decisions taken by the Board.

<u>Employees</u>
The Company operates as a meritocracy and in doing so recognises the importance of hiring, developing and retaining leading professionals across each function within the Company. Robust processes are in place to attract the best talent to work in highly effective teams. Further, a culture of continual learning and development for all employees is supported to ensure they continue to remain effective in their roles.

The Company has under 150 employees, with all teams being represented on the management committees attended by the executive directors. This helps to ensure active feedback and engagement between employees and the Board. In addition, the CS Group has regular Town Hall meetings to which all employees are invited to help ensure the Citadel Securities strategy and plans are understood by the Company's employees.

Strategic Report

As a result of the COVID-19 pandemic, the Company successfully transitioned to a work from home environment for the majority of its employees with minimal disruption in trading activity or operations. Employee health and wellbeing has been a primary focus, ensuring staff are supported and have the resources to carry out their roles effectively whilst working remotely. The Company has also sought to provide a COVID-19 secure workplace for those still accessing the office space who are unable to work remotely including a testing regime, enhanced cleaning protocols and socially distanced workspaces. The Company has not claimed for employee wages through the government's Coronavirus Job Retention Scheme and has continued to hire throughout the year to support business growth, with average headcount increasing by 13% since 2019. As part of its oversight responsibilities, the Board of Directors requested and received regular updates on measures to ensure the wellbeing of employees during the course of 2020, the transition from work from home, and return to office protocols to ensure employee safety and compliance with government guidelines.

As a result of the pandemic, all Board of Directors' meetings in 2020 for the Company were held via video conference.

Regulators and Trading Venues
The Board recognises the importance of an open and constructive dialogue with regulators and the value of proactively engaging with the policymaking community to share our perspectives and recommendations on financial market legislative and regulatory development. The CS Group is committed to making markets fairer, more open, competitive and transparent. CSEL has consistently engaged with policymakers and regulators to ensure the successful implementation of key financial services regulations including The Markets in Financial Instruments Directive II ("MiFID II"), European Market Infrastructure Regulation ("EMIR"), Short Selling Regulation ("SSR"), and the Prudential Framework for Investment Firms. The CS Group is also fully devoted to initiatives to deliver the Capital Markets Union ("CMU") and to advance the Sustainable Finance agenda. This year - in the context of the UK's departure from the EU – the CS Group has remained a consistent advocate of pragmatic solutions to financial services issues as they relate to the future EU-UK relationship. The CS Group also remains a firm proponent of the G-20 reforms to the over-the-counter derivatives markets - including the trading, central clearing, transparency and margin requirements – that have already begun to, and once fully adopted will further, reduce systemic risk, enhance investor protection, and make these markets more efficient and accessible for all market participants.

In 2020, the CS Group engaged with policymakers and regulators concerning both the supervisory response to the COVID-19 pandemic as well as the ongoing development, implementation and revision of relevant financial services regulations. The CS Group responded to several public consultations by the European Securities & Markets Authority ("ESMA") and the European Commission, either independently and/or through various trade association partners. Through industry bodies, the CS Group also responded to consultations by the Financial Conduct Authority during the course of the year.

During the periods of extreme market volatility caused by the COVID-19 pandemic, the Company remained in close contact with exchanges and regulators. The market infrastructure as well as CSEL's operational risk management systems allowed the Company to continue liquidity provision and trading without disruption, contributing to the orderly functioning of financial markets. The Board was kept apprised of these matters as part of its oversight role.

Trading Counterparties and Suppliers
The CS Group strives to provide the most efficient execution and the highest caliber of services to clients and in so doing making markets more fair, transparent and accessible for all participants.

The Company is committed to supporting and developing strong relationships with suppliers and understands the importance of meeting payment terms, particularly for smaller businesses. The Directors noted that the Company had met its key performance indicators in relation to payment periods.

On behalf of the Board

Steven Atkinson, Director
13 April 2021

pwc

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 (the "Company") financial statements:

- give a true and fair view of the state of the Company's affairs as at 31 December 2020 and of its profit and cash flows for the year then ended;
- have been properly prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006; 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, which comprise: the statement of financial position as at 31 December 2020; the statement of comprehensive income, the statement of changes in equity, the statement of cash flows, for the year then ended; and the notes to 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

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

In auditing the financial statements, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

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

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

pwc

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

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.

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 our work undertaken in the course of the audit, the Companies Act 2006 requires 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 2020 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 in respect of the financial statements, 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.

pwc

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

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.

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

Based on our understanding of the Company and industry, we identified that the principal risks of non-compliance with laws and regulations related to the Financial Conduct Authority's regulations and UK tax legislation, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the financial statements such as the Companies Act 2006. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate journal entries and management bias in accounting estimates. Audit procedures performed included:

- Enquiries of management, internal audit and those charged with governance;
- Review of internal audit reports and minutes of meetings of those charged with governance;
- Review of correspondence with, and reports to regulators;
- Identifying and testing journal entries, including those posted on unusual dates, containing unusual words, posted to unusual accounts, backdated journals and those posted by unexpected users; and
- Challenging assumptions and judgements made by management in their accounting estimates, in particular in relation to the valuation of financial instruments.

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

A further description of our responsibilities for the audit of the 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.

pwc

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

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 obtained 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.

We have no exceptions to report arising from this responsibility.

MikeWall

Mike Wallace (Senior Statutory Auditor)
for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London
15 April 2021

Statement of Financial Position

(Expressed in U.S. dollars in thousands)

	Note		At 31 December 2020		At 31 December 2019		At 1 January 2019
ASSETS							
Assets:							
Cash and cash equivalents		$	27,973	$	58,487	$	37,343
Financial assets at fair value through profit or loss	4		860,237		853,716		2,186,646
Due from brokers, dealers, clearing organisation and custodian	6		170,126		518,581		197,199
Securities purchased under agreements to resell	5		215,533		103,726		157,440
Due from affiliates	18		42,988		28,359		80,932
Other receivables and prepayments	7		12,943		11,186		10,680
Total assets		$	1,329,800	$	1,574,055	$	2,670,240
LIABILITIES AND EQUITY							
Liabilities:							
Financial liabilities at fair value through profit or loss	4	$	888,242	$	905,123	$	2,248,177
Due to brokers and dealers	8		92,376		373,336		5,443
Accrued expenses	9		69,763		49,496		69,906
Due to affiliates	18		17,553		6,546		12,793
Total liabilities			1,067,934		1,334,501		2,336,319
Equity	10		261,866		239,554		333,921
Total liabilities and equity		$	1,329,800	$	1,574,055	$	2,670,240

The financial statements on pages 1 to 29 were approved by the Board of Directors on 13 April 2021 and were signed on its behalf by:

Steven Atkinson, Director
13 April 2021

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

Statement of Comprehensive Income

(Expressed in U.S. dollars in thousands)

	Note	For the year ended 31 December 2020	2019
Income:			
Net gain in fair value on financial assets and financial liabilities at fair value through profit or loss		$ 165,869	$ 148,737
Service fees from related parties	11	156,103	79,055
Interest income on financial assets at fair value through profit or loss		16,928	24,572
Dividend income		8,228	15,294
Other interest income		1,992	36,268
Other income		806	2,027
Net foreign currency loss		(949)	(3,142)
Total income		348,977	302,811
Operating expenses:			
Brokerage commissions and fees, net		33,697	38,994
Performance fees		24,232	16,286
Other interest expense		12,467	50,514
Interest expense on financial liabilities at fair value through profit or loss		11,887	26,555
Dividend expense		8,805	13,534
Other operating expenses	12	149,315	130,300
Operating expenses		240,403	276,183
Operating profit		108,574	26,628
Taxation:			
Withholding tax on dividend income		721	1,607
Income tax expense	15	26,370	9,388
Total comprehensive income		$ 81,483	$ 15,633

Gains and losses arise solely from continuing operations. There were no gains or losses other than those dealt with in the Statement of Comprehensive Income.

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

Statement of Changes in Equity

(Expressed in U.S. dollars in thousands)

	Note	For the year ended 31 December 2019		
		Called Up Share Capital	Retained Earnings	Total Equity
Balance at 1 January 2019		$ 193,000	$ 140,921	$ 333,921
Total comprehensive income		—	15,633	15,633
Dividends		—	(110,000)	(110,000)
Balance at 31 December 2019	10	$ 193,000	$ 46,554	$ 239,554

	Note	For the year ended 31 December 2020		
		Called Up Share Capital	Retained Earnings	Total Equity
Balance at 1 January 2020		$ 193,000	$ 46,554	$ 239,554
Total comprehensive income		—	81,483	81,483
Dividends		—	(59,171)	(59,171)
Balance at 31 December 2020	10	$ 193,000	$ 68,866	$ 261,866

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

Statement of Cash Flows

(Expressed in U.S. dollars in thousands)

	For the year ended 31 December 2020	2019
Cash flows from operating activities:		
Total comprehensive income	$ 81,483	$ 15,633
Adjustments to reconcile total comprehensive income to net cash provided by operating activities:		
Interest income	(18,920)	(60,840)
Interest expense	24,354	77,069
Dividend income	(8,228)	(15,294)
Dividend expense	8,805	13,534
Withholding tax on dividend income	721	1,608
Income tax expense	26,370	9,388
Interest received	19,602	63,347
Interest paid	(26,653)	(79,716)
Dividends received	8,575	15,062
Dividends paid	(9,118)	(12,873)
Withholding taxes paid on dividend income	(668)	(1,548)
Income taxes paid	(36,298)	(6,847)
	70,025	18,523
Changes in cash flows from operating activities:		
Net (increase) decrease in financial assets at fair value through profit or loss	(6,521)	1,332,930
Net decrease in financial liabilities at fair value through profit or loss	(16,881)	(1,343,054)
Due from brokers, dealers, clearing organisation and custodian	348,455	(321,382)
Securities purchased under agreements to resell	(112,019)	53,696
Due from affiliates	(7,149)	380
Other receivables and prepayments	100	(2,628)
Due to brokers and dealers	(280,960)	367,893
Accrued expenses	30,225	(20,967)
Due to affiliates	11,007	(6,247)
Net cash provided by operating activities	36,282	79,144
Cash flows from investing activities:		
(Disbursement of) proceeds from paydown of loan to affiliate	(7,625)	52,000
Net cash (used in) provided by investing activities	(7,625)	52,000
Cash flows from financing activities:		
Dividends paid	(59,171)	(110,000)
Net cash used in financing activities	(59,171)	(110,000)
Net (decrease) increase in cash and cash equivalents for the year	(30,514)	21,144
Cash and cash equivalents at the beginning of the year	58,487	37,343
Cash and cash equivalents at the end of the year	$ 27,973	$ 58,487
Analysis of balances of cash and cash equivalents at the end of the year:		
Operating cash	$ 26,973	$ 36,343
Restricted cash	1,000	1,000

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

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 1

Organisation

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 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 trade agency services and support, trade execution, portfolio management, trading algorithm and software 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. The Company has established a branch in Ireland; the address of its branch office is One Grand Canal Square, Dublin 2, Ireland. In 2019, regulated trading activity in the Irish branch was discontinued. The branch continues to employ staff providing technology support services to affiliated CS Group entities.

Ownership

The Company is owned by CSHC Europe LLC ("CSEH"), a Delaware limited company and the sole shareholder of the Company. Citadel Securities Holdings LP is the parent undertaking of the largest group of undertakings to consolidate these financial statements. The registered address of CSHP is: c/o The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware, 19801 USA. The ultimate controlling party is Kenneth Griffin.

Affiliations

Citadel Enterprise Americas LLC ("CEAMER"), Citadel Securities Americas LLC ("CSAMER"), Citadel Enterprise Europe Limited and Citadel Securities Ireland Services Limited, all affiliates, provide administrative and investment-related services to the Company.

Administrator

Northern Trust Hedge Fund Services LLC ("NTHFS") is responsible for providing certain middle and back office administrative and operational services to the Company. The services contract between the Company and NTHFS is currently effective through 30 June 2021.

NOTE 2

Basis of Preparation

Statement of Compliance

The accompanying financial statements of the Company have been prepared in accordance with international accounting standards ("IFRS") in conformity with the requirements of the Companies Act 2006.

For all periods up to and including the year ended 31 December 2019, the Company prepared its financial statements in accordance 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"). These financial statements for the year ended 31 December 2020 are the first the Company has prepared in accordance with IFRS.

First-time Adoption of IFRS

The Company has prepared financial statements that comply with IFRS applicable at 31 December 2020, together with the comparative period data for the year ended 31 December 2019. In preparing the financial statements, the Company's opening statement of financial position was prepared as at 1 January 2019, the Company's date of transition to IFRS. Note 19 explains the principal adjustments made by the Company in restating its FRS 102 financial statements, including the statement of financial position as at 1 January 2019 and the financial statements as at and for the year ended 31 December 2019.

Basis of Measurement

The financial statements have been prepared on a going concern basis and under the historical cost basis as modified by the revaluation of financial assets/liabilities at fair value through profit or loss. The Directors have a reasonable expectation that the Company has adequate resources to continue in operational existence for the foreseeable future.

Functional and Presentational Currency

These financial statements are presented in U.S. Dollar ("USD"), which is the Company's functional currency. Functional currency is the currency of the primary economic environment in which the entity operates. The issued share capital of the Company is denominated in USD and the performance of the Company is measured and reported to the shareholder in USD. The Directors of the Company believe that USD most faithfully represents the economic effects of the underlying transactions, events and conditions.

Use of Estimates and Judgements

The preparation of financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of policies and the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of income and expenses during the reporting period. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ significantly from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods. There are no estimates or assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next year.

The estimates as at 1 January 2019 and 31 December 2019 are consistent with those made for the same dates in accordance with FRS 102 (after adjustments to reflect any differences in accounting policies).

The accounting policies have been consistently applied by the Company throughout the year.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 3

Significant Accounting Policies

Cash and Cash Equivalents

The Company defines cash and cash equivalents on the statements of financial position and cash flows as cash and funds held in liquid investments with original maturities of 90 days or less. Cash and cash equivalents are held at various global financial institutions.

As at 31 December 2020, $1,000 (2019: $1,000, 1 January 2019: $1,000) is segregated at The Bank of New York Mellon to facilitate the transfer of funds with LCH Clearnet Limited ("LCH") on its direct debit system.

Financial Instruments

CLASSIFICATION

The Company classifies its financial instruments as subsequently measured at amortised cost or fair value through profit or loss based on both the Company's business model for managing those financial assets or liabilities and the contractual cash flow characteristics of the financial assets or liabilities.

The portfolio of equity securities, debt securities and derivative financial instruments is managed and performance is evaluated on a fair value basis. The Company is primarily focused on fair value information and uses that information to assess the financial instruments' performance and to make decisions. The Company has not taken the option to irrevocably designate any equity securities as measured at fair value through other comprehensive income. The contractual cash flows of the Company's debt securities are solely principal and interest, however, these securities are neither held for the purpose of collecting contractual cash flows nor held both for collecting contractual cash flows and for sale. The collection of contractual cash flows is only incidental to achieving the Company's business model's objective.

Financial assets and liabilities subsequently measured at amortised cost include cash and cash equivalents; due from brokers, dealers, clearing organisation and custodian; securities purchased under agreements to resell; due from affiliates; other receivables and prepayments; due to brokers and dealers; accrued expenses and due to affiliates.

RECOGNITION

The Company recognises all financial assets and financial liabilities on the trade date at which the Company becomes a party to the contractual provisions of the instrument.

DE-RECOGNITION

The Company de-recognises a financial asset when the contractual rights to the cash flows from the financial asset expire or it 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. Any interest in a transferred financial asset that is created or retained by the Company is recognised as a separate asset or liability.

The Company de-recognises a financial liability when its contractual obligations are discharged or cancelled or have expired.

Realised gains and losses on disposals are included in net gain/(loss) in fair value on financial assets and financial liabilities at fair value through profit or loss on the statement of comprehensive income.

MEASUREMENT

Financial asset and liabilities classified as at fair value through profit or loss, are initially measured at fair value, with transaction costs for such instruments being recognised directly in the statement of comprehensive income. Subsequent to initial recognition, all instruments classified as at fair value through profit or loss, are measured at fair value with changes in their fair value recognised in profit or loss.

Reverse repurchase and repurchase agreements are recorded at the amounts of cash paid or received, plus accrued interest, on the statement of financial position.

Due from brokers, dealers, clearing organisation and custodian, due from affiliates, and other receivables and prepayments are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

The Company assesses on a forward-looking basis, by considering both historical and forward looking information, the expected credit losses associated with its receivables carried at amortised cost. The impairment applied depends on whether there has been a significant increase in credit risk. No assets are credit impaired as at the reporting date and no amounts have been written off during the year (2019: same) as both the historical analysis and forward-looking information indicate that the expected credit losses arising from the Company's receivables are minimal.

Due to brokers and dealers, accrued expenses and due to affiliates are recognised initially at fair value and subsequently at amortised cost using the effective interest method.

FAIR VALUE MEASUREMENT PRINCIPLES

The Company measures and reports equity securities, debt securities and derivative financial instruments at fair value. Related unrealised gains or losses are generally recognised in net gain (loss) in fair value on financial assets and financial liabilities at fair value through profit or loss on the statement of comprehensive income.

The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value is determined by management based on the valuation principles set forth in the Company's governing documents and represents management's best estimate of fair value. In all instances, any financial instrument may either be valued by management or management may determine (but is under no obligation to do so) to engage a third party it believes to be qualified to value any financial instrument.

Where available, fair value is generally based on closing prices disseminated by the relevant exchange market, prices or inputs disseminated by third parties or market participants (e.g., mean of the bid and offer from a broker), or derived from such prices or inputs (e.g., inputs to valuation models for derivative financial instruments). In the absence of market prices or inputs that are observable, other valuation techniques are applied. Financial instruments are generally valued as of the market close (as determined by management). Management may determine to use a different value than would be assigned pursuant to the foregoing if management determines that doing so would better reflect fair value (e.g., management may determine that market quotations do not represent fair value if trading is halted before market close or a significant event occurs subsequent to market close).

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

These valuation techniques involve some level of estimation and judgement by management, the degree of which is dependent on, among other factors, the price observability and complexity of the financial instrument, and the liquidity of the market. The fair value determined may not necessarily reflect the amount which might ultimately be realised in an arm's length sale or liquidation of financial instruments and such differences may be material.

The accounting guidance for fair value measurements and disclosures establishes a fair value hierarchy that prioritises the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). A financial instrument's level within the fair value hierarchy is based on the lowest level of any input, individually or in the aggregate, that is significant to the fair value measurement. Management's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the financial instrument. The three levels of the fair value hierarchy are described below:

Basis of Fair Value Measurement

Level 1	Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;
Level 2	Quoted prices in markets that are not considered to be active or financial instruments for which all significant inputs are observable, either directly or indirectly; and
Level 3	Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

The following describes the valuation techniques applied to the Company's financial instruments to measure fair value, including an indication of the level within the fair value hierarchy in which each financial instrument is generally classified. Where appropriate, the description includes details of the valuation models and the significant inputs to those models.

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

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 and are generally classified within Level 1 or Level 2 of the fair value hierarchy.

The fair value of private equity securities is determined using a variety of methods including marking to broker quotes, analysis of cash flows, benchmarking to comparable companies, recent transactions or engaging a third party to value the securities. Private equity securities are categorised within Level 3 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.

Exchange-traded derivative financial instruments
Exchange-traded derivative financial instruments include options, warrants and futures contracts. These derivative financial instruments are valued using prices disseminated by the relevant exchange market, such as the closing price, settlement price, last available sales price, or the mean of the bid and offer price (a mid-market price). Exchange-traded derivative financial instruments are generally classified within Level 1 of the fair value hierarchy.

OTC derivative financial instruments
OTC derivative financial instruments represent swap contracts related to interest rates and equities. OTC derivative financial instruments are valued using prices or inputs disseminated by third parties or market participants (e.g., mean of the bid and offer from a broker), or derived from such prices or inputs (e.g., inputs to valuation models). Depending on the terms of the OTC derivative financial instrument, the fair value can be either observed directly or modeled.

For OTC derivative financial instruments that trade in liquid markets, such as generic swaps, model inputs can generally be verified and model selection does not involve significant management judgment. Similar models are generally used to value similar instruments and require a variety of inputs.

OTC derivative financial instruments are classified within Level 2 of the fair value hierarchy as all of the significant observable inputs can generally be corroborated to market evidence.

Management considers counterparty credit risk and non-performance risk in its valuation of derivative financial instruments entered into as bilateral contracts between two counterparties ("Bilateral OTC"). Factored into this consideration is the ability of the Company to settle, on a net basis, its derivative financial instruments pursuant to master netting agreements with each respective counterparty, as well as requirements to post and receive collateral pursuant to its credit support agreements with each respective counterparty.

DERIVATIVE CONTRACTS
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.

Derivative financial instruments may require cash and cash collateral transferred to or from such counterparties, and such cash and cash collateral amounts may exceed the amount of net derivative exposure with the respective counterparties. Such cash collateral is included in due from (to) brokers. Net realised and net change in unrealised gains (losses) on derivative financial instruments are included in net gain/(loss) in fair value on financial assets and financial liabilities at fair value through profit or loss on the statement of comprehensive income.

COLLATERALISED FINANCING
For transfers of financial assets that are not accounted for as sales, in which the transferor retains the risks and rewards associated with the financial assets, the financial assets remain on the statement of financial position and the transfer is accounted for as a collateralised financing. Securities purchased under agreements to resell ("reverse repurchase agreements") and securities sold under agreements to repurchase ("repurchase agreements") are treated as collateralised financings (see Note 5).

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

Interest income or expense on reverse repurchase agreements and repurchase agreements is recognised over the term of the relevant agreement and included in other interest income or other interest expense on the statement of comprehensive income.

DUE FROM AND DUE TO BROKERS, DEALERS, CLEARING ORGANISATION AND CUSTODIAN

Amounts due from and due to brokers, dealers, clearing organisation and custodian represent receivables for securities sold and payables for securities purchased that have been contracted for but not yet settled or delivered, securities failed to deliver or receive on the statement of financial position date and cash balances posted as margin with the clearing brokers. Substantially all of the Company's securities owned are pledged as part of financing arrangements where contract terms permit the applicable counterparty to sell or repledge the securities to others, subject to certain limitations.

OFFSETTING FINANCIAL ASSETS AND LIABILITIES

Financial assets and liabilities are offset by counterparty when there exists a legally enforceable right to offset the recognised amounts and when there is an intention to do so.

Share Capital

The Company is wholly-owned by CSEH through a capital balance. The capital balance is retained by the Company and is used for financing or investing activities.

Turnover

Per Companies Act 2006, the Company defines turnover as net trading income, being trading income less trading expenses. Trading income includes net gain in fair value on financial assets and financial liabilities at fair value through profit or loss, service fees from related parties, interest income on financial assets and fair value through profit or loss and dividend income. Trading expenses include brokerage commissions and fees (net), performance fees, interest expense on financial liabilities at fair value through profit or loss and dividend expense. Net trading income for the year ended 31 December 2020 was $268,507 (2019: $172,289).

Interest Income and Expense on Financial Assets and Financial Liabilities at Fair Value through Profit or Loss

Interest income (expense) on financial instruments is recognised using the effective interest method. Premiums (discounts) on debt obligations are generally amortised (accreted) over the life of the instrument using the effective yield method and are included in interest expense (income) on financial liabilities (assets) at fair value through profit or loss on the statement of comprehensive income, as applicable. Premiums on purchased callable debt obligations are amortised to the earliest call date and are included in interest expense (income) on financial liabilities (assets) at fair value through profit or loss on the statement of comprehensive income, as applicable.

Other Interest Income and Expense

Other interest income (expense) is recognised using the effective interest method.

Dividend Income and Expense

Dividend income (expense) on securities is recorded on the ex-dividend date gross of withholding taxes.

Transaction Costs

Transaction costs are costs incurred to acquire financial assets or liabilities at fair value through profit or loss. They include fees and commissions paid to agents, advisers, brokers and dealers. Transaction costs, when incurred, are immediately recognised in profit or loss as an expense.

Service Fees from Related Parties

Service fee income represents the fair value of the consideration received or receivable for the provision of services in the ordinary course of the Company's activities.

Service fees are attributed to the provision of algorithm development services, trade agency and support services, portfolio management services, relationship management and marketing services and trade execution services. All service fees are recognised over time in the period when the service is provided apart from trade execution fees, which are recognised on a trade date basis as transactions occur.

Research and Development Tax Credits

The Company is entitled to research and development tax credits for qualifying expenditures. Research and development tax credits are recognised when there is reasonable assurance that the credits will be received. In 2020, the Company received a research and development tax credit for qualifying expenditure incurred in 2019, included within other income. Research and development expenses are charged to the statement of comprehensive income as incurred.

Staff Costs

Compensation and benefits comprises salaries, benefits, payroll taxes, incentive compensation, and other bonus expenses granted to employees.

Short term employee benefits are expensed as the related service is provided. The expected cost of bonus payments are recognised as a liability when the Company has a present legal or constructive obligation as a result of services rendered by employees and a reliable estimate of the obligation can be made. Liabilities for bonus plans are measured at the amounts expected to be paid when they are settled.

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 those employees deferred bonus awards; the post-tax value of the deferred awards is contributed to employee investment funds, which in turn invest in affiliate managed funds. Incentive compensation is recorded as staff costs over the relevant service period when it is both probable and reasonably estimable.

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 other receivables and prepayments on 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.

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 companies, which allocate an appropriate share of pension costs to the Company (see Note 13).

All staff costs are included in other operating expenses on the statement of comprehensive income.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

Taxation

The Company is subject to UK corporate income tax directly. Corporation tax expense for the period comprises current tax, recognised in income tax expense on the statement of comprehensive income. Current tax is the expected tax payable on taxable profits for the period, using tax rates enacted or substantively enacted at the date of the statement of financial position, and any adjustment to tax payable in respect of previous periods.

In accordance with IFRS, management has reviewed the Company's tax positions for all open tax years. For the year ended 31 December 2020, based on such review, management have determined that the Company was not required to establish a liability for uncertain tax positions (2019: same). If the Company were to have an uncertain tax position, it would record interest and penalties, as applicable, in income tax expense on the statement of comprehensive income.

Foreign Currency Translation

The Company may hold assets and liabilities denominated in foreign currencies. The fair value of assets and liabilities is translated into USD using spot currency rates on the date of valuation. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are recognised in net gain in fair value on financial assets and financial liabilities at fair value through profit or loss (for gains/losses on financial instruments held at fair value) or net foreign currency loss (for all other gains/losses) on the statement of comprehensive income.

New and Revised Accounting Standards and Interpretations

In preparing the financial statements, the Company has adopted all applicable standards, amendments and interpretations.

STANDARDS AND AMENDMENTS TO EXISTING STANDARDS EFFECTIVE FROM THE BEGINNING OF THE FINANCIAL YEAR

There are no standards, interpretations or amendments to existing standards or interpretations that are effective for annual periods beginning on 1 January 2020 that have a material effect on the financial statements of the Company.

NEW STANDARDS, AMENDMENTS AND INTERPRETATIONS EFFECTIVE AFTER 1 JANUARY 2021 AND HAVE NOT BEEN EARLY ADOPTED

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning after 1 January 2021, and have not been early adopted in preparing these financial statements. None of these are expected to have a material effect on the financial statements of the Company.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 4

Financial Instruments at Fair Value through Profit or Loss

At the reporting date, the carrying amounts of securities owned, securities sold, not yet purchased and derivative financial instruments held by the Company for which fair values were determined directly, in full or in part, by reference to published price quotations (including broker net asset value ("NAV") quotes) and determined using valuation techniques (if NAV not actively traded) are as follows. The exposure by region for the related levels is also included in the tables below:

ASSETS AT FAIR VALUE AT 31 DECEMBER 2020

	Level 1	Level 2	Total
Government debt securities:			
U.S. government securities	$ 390,259	$ —	$ 390,259
Equity securities:			
Consumer	119,709	859	120,568
Financial	102,615	4	102,619
Industrial and materials	71,059	64	71,123
Energy and utilities	33,646	9	33,655
Technology	29,765	77	29,842
Healthcare	34,435	32	34,467
Other	671	—	671
Total securities owned	782,159	1,045	783,204
Derivative assets			
Interest rate contracts:			
Futures	627	—	627
Swaps	—	1,304,997	1,304,997
Commodity contracts:			
Futures	335,472	—	335,472
Equity contracts:			
Total return swaps ("TRS") on common stock	—	1,605	1,605
Options	61,281	—	61,281
Futures	228	—	228
Warrants	1	23	24
Derivative assets before offsetting	397,609	1,306,625	1,704,234
Amounts offset	(334,090)	(1,293,111)	(1,627,201)
Total derivative assets	63,519	13,514	77,033
Total financial assets at fair value through profit or loss	$ 845,678	$ 14,559	$ 860,237
Exposure by region			
Equity securities			
Europe	64.4%	0.3%	64.7%
South America	26.1	—	26.1
North America	7.2	—	7.2
Asia	2.0	—	2.0
Total	99.7	0.3	100.0
Derivative assets			
Europe	20.0	63.6	83.6
North America	0.1	13.0	13.1
South America	3.3	—	3.3
Total	23.4%	76.6%	100.0%

As at 31 December 2020, the Company did not have any assets at fair value classified as Level 3.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

LIABILITIES AT FAIR VALUE AT 31 DECEMBER 2020

	Level 1	Level 2	Level 3	Total
Government debt securities:				
U.S. government securities	$ 553,179	$ —	$ —	$ 553,179
Equity securities:				
Consumer	81,126	—	—	81,126
Financial	70,207	4	—	70,211
Industrial and materials	57,710	6	—	57,716
Energy and utilities	16,889	—	—	16,889
Technology	19,550	31	—	19,581
Healthcare	27,291	—	535	27,826
Other	112	25	—	137
Total securities sold, not yet purchased	826,064	66	535	826,665
Derivative liabilities				
Interest rate contracts:				
Futures	455	—	—	455
Swaps	—	1,293,111	—	1,293,111
Commodity contracts:				
Futures	334,094	—	—	334,094
Equity contracts:				
TRS on common stock	—	1,419	—	1,419
Options	58,219	—	—	58,219
Futures	1,083	—	—	1,083
Warrants	106	—	—	106
Foreign exchange contracts:				
Futures	291	—	—	291
Derivative liabilities before offsetting	394,248	1,294,530	—	1,688,778
Amounts offset	(334,090)	(1,293,111)	—	(1,627,201)
Total derivative liabilities	60,158	1,419	—	61,577
Total financial liabilities at fair value through profit or loss	$ 886,222	$ 1,485	$ 535	$ 888,242
Exposure by region				
Equity securities				
Europe	84.1%	—	—	84.1%
South America	10.2	—	—	10.2
Asia	3.2	—	0.2	3.4
North America	2.1	—	—	2.1
Africa	0.2	—	—	0.2
Total	99.8	—	0.2	100.0
Derivative liabilities				
Europe	19.9	64.1	—	84.0
North America	—	12.6	—	12.6
South America	3.3	—	—	3.3
Asia	0.1	—	—	0.1
Total	23.3%	76.7%	—	100.0%

As at 31 December 2020, the Company classified delisted equity securities as Level 3. Both observable and unobservable inputs may be used to determine the fair value of positions that the Company has classified within the Level 3 category. The table below provides information on the valuation technique and significant unobservable inputs for the equity securities measured at fair value on a recurring basis with Level 3 balances as at 31 December 2020.

Equity securities:	
Industry	Healthcare
Fair value of liabilities	$ 535
Valuation technique	Discounting of last observed exchange closing price
Significant unobservable inputs	Last observed exchange closing price of GBP 9.38; discounting rate of 50%

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

ASSETS AT FAIR VALUE AT 31 DECEMBER 2019

	Level 1	Level 2	Total
Government debt securities:			
U.S. government securities	$ 395,261	$ —	$ 395,261
Equity securities:			
Consumer	139,289	841	140,130
Financial	96,204	12	96,216
Industrial and materials	66,184	320	66,504
Energy and utilities	41,914	9	41,923
Technology	36,752	71	36,823
Healthcare	19,018	29	19,047
Other	216	—	216
Total securities owned	794,838	1,282	796,120
Derivative assets			
Interest rate contracts:			
Swaps	—	831,851	831,851
Futures	2,518	—	2,518
Commodity contracts:			
Futures	162,198	—	162,198
Equity contracts:			
Options	25,799	—	25,799
TRS on common stock	—	1,561	1,561
Futures	90	—	90
Warrants	2	—	2
Foreign exchange contracts:			
Futures	—	49	49
Forwards	20	—	20
Derivative assets before offsetting	190,627	833,461	1,024,088
Amounts offset	(161,351)	(805,141)	(966,492)
Total derivative assets	29,276	28,320	57,596
Total financial assets at fair value through profit or loss	$ 824,114	$ 29,602	$ 853,716
Exposure by region			
Equity securities			
Europe	88.7%	0.3%	89.0%
South America	7.3	—	7.3
North America	1.7	—	1.7
Asia	1.8	—	1.8
Africa	0.2	—	0.2
Total	99.7	0.3	100.0
Derivative assets			
Europe	17.5	69.0	86.5
North America	—	12.4	12.4
South America	1.1	—	1.1
Total	18.6%	81.4%	100.0%

As at 31 December 2019, the Company did not have any assets at fair value classified as Level 3.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

LIABILITIES AT FAIR VALUE AT 31 DECEMBER 2019

	Level 1	Level 2	Total
Government debt securities:			
U.S. government securities	$ 468,916	$ —	$ 468,916
Equity securities:			
Consumer	148,051	27	148,078
Financial	92,216	20	92,236
Industrial and materials	70,826	16	70,842
Energy and utilities	44,427	80	44,507
Technology	28,566	—	28,566
Healthcare	22,430	—	22,430
Total securities sold, not yet purchased	875,432	143	875,575
Derivative liabilities			
Interest rate contracts:			
Swaps	—	805,141	805,141
Futures	1,314	—	1,314
Commodity contracts:			
Futures	161,360	—	161,360
Equity contracts:			
Options	20,425	—	20,425
TRS on common stock	—	1,924	1,924
Futures	99	—	99
Warrants	13	—	13
Foreign exchange contracts:			
Forwards	—	5,764	5,764
Derivative liabilities before offsetting	183,211	812,829	996,040
Amounts offset	(161,351)	(805,141)	(966,492)
Total derivative liabilities	21,860	7,688	29,548
Total financial liabilities at fair value through profit or loss	$ 897,292	$ 7,831	$ 905,123
Exposure by region			
Equity securities			
Europe	90.7%	—	90.7%
South America	5.6	—	5.6
North America	1.7	—	1.7
Asia	2.0	—	2.0
Total	100.0	—	100.0
Derivative liabilities			
Europe	17.8	71.0	88.8
North America	—	10.6	10.6
South America	0.6	—	0.6
Total	18.4%	81.6%	100%

As at 31 December 2019, the Company did not have any liabilities at fair value classified as Level 3.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

ASSETS AT FAIR VALUE AT 1 JANUARY 2019

	Level 1	Level 2	Total
Government debt securities:			
U.S. government securities	$ 729,125	$ —	$ 729,125
Equity securities:			
Consumer	212,246	806	213,052
Financial	210,403	27	210,430
Industrial and materials	128,750	1,074	129,824
Energy and utilities	115,647	—	115,647
Technology	65,653	25	65,678
Healthcare	80,797	27	80,824
Other	77,939	26	77,965
Total securities owned	1,620,560	1,985	1,622,545
Derivative assets			
Interest rate contracts:			
Swaps	—	535,075	535,075
Futures	8,335	—	8,335
Commodity contracts:			
Futures	250,886	—	250,886
Equity contracts:			
Options	537,543	4,516	542,059
Futures	6,511	—	6,511
TRS on common stock	—	5,539	5,539
Warrants	21	—	21
Foreign exchange contracts:			
Futures	—	372	372
Derivative assets before offsetting	803,296	545,502	1,348,798
Amounts offset	(249,787)	(534,910)	(784,697)
Total derivative assets	553,509	10,592	564,101
Total financial assets at fair value through profit or loss	$ 2,174,069	$ 12,577	$ 2,186,646
Exposure by region			
Equity securities			
Europe	97.7%	0.2%	97.9%
North America	0.9	—	0.9
Asia	1.2	—	1.2
Total	99.8	0.2	100.0
Derivative assets			
Europe	59.1	22.5	81.6
North America	0.5	17.9	18.4
Total	59.6%	40.4%	100.0%

As at 1 January 2019, the Company did not have any assets at fair value classified as Level 3.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

LIABILITIES AT FAIR VALUE AT 1 JANUARY 2019

	Level 1	Level 2	Total
Government debt securities:			
U.S. government securities	$ 854,141	$ —	$ 854,141
Equity securities:			
Consumer	226,373	—	226,373
Financial	154,238	71	154,309
Industrial and materials	114,377	—	114,377
Energy and utilities	54,745	14	54,759
Technology	74,229	—	74,229
Healthcare	163,163	—	163,163
Other	56,524	6	56,530
Total securities sold, not yet purchased	1,697,790	91	1,697,881
Derivative liabilities			
Interest rate contracts:			
Swaps	—	549,563	549,563
Futures	5,290	—	5,290
Commodity contracts:			
Futures	249,787	—	249,787
Equity contracts:			
Options	515,169	3,222	518,391
Futures	6,725	—	6,725
TRS on common stock	—	3,483	3,483
Warrants	1	7	8
Foreign exchange contracts:			
Forwards	—	1,746	1,746
Derivative liabilities before offsetting	776,972	558,021	1,334,993
Amounts offset	(249,787)	(534,910)	(784,697)
Total derivative liabilities	527,185	23,111	550,296
Total financial liabilities at fair value through profit or loss	$ 2,224,975	$ 23,202	$ 2,248,177
Exposure by region			
Equity securities			
Europe	98.4%	—	98.4%
North America	0.1	—	0.1
Asia	0.6	—	0.6
Total	100.0	—	100.0
Derivative assets			
Europe	57.9	22.2	80.1
North America	0.3	19.6	19.9
Total	58.2%	41.8%	100.0%

As at 1 January 2019, the Company did not have any liabilities at fair value classified as Level 3.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 5

Collateralised Transactions

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 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 and as necessary, transfers or requests additional collateral as provided under the applicable agreement to ensure transactions are adequately collateralised.

As of 31 December 2020, as a result of entering into reverse repurchase agreements, the Company obtained collateral with a fair value of $576,881 (2019: $290,387, 1 January 2019: $936,740). Also, as of 31 December 2020, the Company had repurchase agreements with collateral posted having a fair value of $362,218 (2019: $186,565, 1 January 2019: $778,667). The fair value of the collateral obtained and posted includes accrued coupon interest. The Company received net cash collateral of $1,144 (2019: nil, 1 January 2019: $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.

Offsetting of Certain Collateralised Transactions

The following table presents information about the offsetting of these instruments:

SECURITIES PURCHASED UNDER AGREEMENTS TO RESELL

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Included in the statement of financial position			
Gross amounts	$ 576,828	$ 290,536	$ 933,534
Amounts offset	(361,295)	(186,810)	(776,094)
Net amounts	$ 215,533	$ 103,726	$ 157,440
Amounts not offset			
Counterparty netting	$ —	$ —	$ —
Financial instruments, at fair value	(215,533)	(103,663)	(156,910)
Total	$ —	$ 63	$ 530

SECURITIES SOLD UNDER AGREEMENTS TO REPURCHASE

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Included in the statement of financial position			
Gross amounts	$ 361,295	$ 186,810	$ 776,094
Amounts offset	(361,295)	(186,810)	(776,094)
Net amounts	$ —	$ —	$ —
Amounts not offset			
Counterparty netting	$ —	$ —	$ —
Financial instruments, at fair value	—	—	—
Total	$ —	$ —	$ —

In the tables above:

- Gross amounts and net amounts include all instruments, irrespective of whether there is a legally enforceable master netting agreement or similar arrangement in place. The gross and net amounts in this table include financing interest receivables and payables related to these transactions.
- Amounts offset, counterparty netting and financial instruments, at fair value, relate to master netting agreements or similar arrangements which have been determined by the Company to be legally enforceable in the event of default.
- Amounts are reported on a net basis in the statement of financial position when subject to a legally enforceable master netting agreement or similar arrangement and when certain other criteria are met in accordance with applicable accounting guidance on offsetting.
- Financial instruments not offset in the statement of financial position include the fair value of securities purchased or sold under the agreements to resell or repurchase, respectively, accrued coupon interest and cash collateral, where applicable. These amounts are limited to the net amount by counterparty reported on the statement of financial position and therefore any over-collateralisation of these positions is not included.
- Financial instruments representing securities sold or otherwise pledged as collateral for repurchase agreements include securities owned, at fair value, recorded on the statement of financial position as financial assets at fair value through profit or loss.

Repurchase Agreements – Maturities and Collateral Pledged

The following table presents gross obligations for repurchase agreements by remaining contractual maturity and class of collateral pledged:

U.S. government securities	At 31 December 2020	At 31 December 2019	At 1 January 2019
Overnight and open	$ 361,294	$ 186,800	$ 776,027
Financing interest payable	1	10	67
Gross amount presented in the offsetting table above	$ 361,295	$ 186,810	$776,094

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 6

Due from Brokers, Dealers, Clearing Organisation and Custodian

Amounts receivable from brokers, dealers, clearing organisation and custodian consists of the following:

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Receivables from brokers and dealers	$ 87,720	$ 435,834	$ 89,703
Receivables from clearing organisation	35,409	16,309	54,626
Securities failed to deliver	35,270	35,796	311
Receivables from custodian for unsettled trades	11,727	30,642	52,559
	$ 170,126	$ 518,581	$ 197,199

Of the securities failed to deliver, $20,306 (2019: $29,920, 1 January 2019: nil) represents securities failed to deliver to an affiliate.

NOTE 7

Other Receivables and Prepayments

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Prepayments and accrued income	$ 3,982	$ 4,615	$ 3,251
Tax receivable	6,622	3,497	2,307
Interest receivable	1,690	2,015	4,312
Dividend receivable	649	1,059	810
	$ 12,943	$ 11,186	$ 10,680

All receivables are due within one year, with the exception of a tax credit receivable of $83 (2019: $839, 1 January 2019: nil), which is due after one year.

NOTE 8

Due to Brokers and Dealers

Amounts payable to brokers and dealers consists of the following:

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Payables to brokers and dealers	$ 57,126	$ 337,935	$ 5,236
Securities failed to receive	35,250	35,401	207
	$ 92,376	$ 373,336	$ 5,443

Of the securities failed to receive, $14,944 (2019: $10,482, 1 January 2019: nil) represents securities failed to receive from an affiliate.

NOTE 9

Accrued Expenses

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Compensation payable	$ 60,305	$ 31,941	$ 47,242
Accruals	6,781	4,920	9,923
Interest payable	2,228	4,527	7,173
Dividend payable	449	773	111
Corporation tax payable	—	7,335	5,457
	$ 69,763	$ 49,496	$ 69,906

Compensation payable includes $6,719 (2019: $4,060, 1 January 2019: $4,823) of accrued social security costs.

NOTE 10

Share Capital

At 31 December 2020, the Company had 193,000,000 issued and outstanding ordinary 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 (2019: same). Par value is not expressed in thousands. There is a single class of ordinary shares. There are no restrictions on the distribution of dividends and the repayment of capital.

CSEH was distributed dividends of $59,171 ($0.31 per share) out of retained earnings during the year ended 31 December 2020 (2019: dividend of $110,000, $0.57 per share). Dividend per share is not expressed in thousands.

There were no share issuances or redemptions during the year ended 31 December 2020 (2019: none).

NOTE 11

Service Fees from Related Parties

	For the year ended 31 December 2020	For the year ended 31 December 2019
Algorithm development service fees	$ 85,602	$ 37,467
Trade agency and support service fees	61,876	35,008
Portfolio management service fees	3,674	2,756
Relationship management and marketing service fees	3,666	2,204
Trade execution service fees	1,285	1,620
	$ 156,103	$ 79,055

Details of the revenue during the year and receivables from related parties as at 31 December 2020 in relation to such services are set out in Note 18 to the financial statements. All related parties are within the CS Group.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 12

Other Operating Expenses

	For the year ended 31 December 2020	2019
Staff costs	$ 103,769	$ 89,111
Professional fees	10,979	7,952
Communications and data processing	8,285	6,891
Market data	2,661	3,605
Occupancy	2,889	3,463
Equipment	4,550	2,564
Auditors' remuneration:		
Audit services pursuant to legislation	374	322
Audit-related services	39	—
Taxation advisory services	—	47
Other non-audit services	7	22
Other expenses	15,762	16,323
	$ 149,315	$ 130,300

Auditors' remuneration is paid/payable to PricewaterhouseCoopers LLP for the statutory audit as well as for other services. Amounts are exclusive of value added tax.

NOTE 13

Staff Costs

	For the year ended 31 December 2020	2019
Wages, salaries and bonus payments	$ 86,844	$ 73,988
Social security costs	10,908	10,009
Other staff costs	3,276	3,164
Pension costs	2,741	1,950
	$ 103,769	$ 89,111

The monthly average number of employees during the year including Directors was 136 (2019: 120).

NOTE 14

Directors' Remuneration

	For the year ended 31 December 2020	2019
Emoluments	$ 1,101	$ 1,098
Pension benefits	17	17
	$ 1,118	$ 1,115

Remuneration in respect of the highest paid Director, which is included in staff costs (Note 13):

	For the year ended 31 December 2020	2019
Emoluments	$ 877	$ 923
Pension benefits	12	13
	$ 889	$ 936

NOTE 15

Taxation

For the year ended 31 December 2020, the standard rate of corporation tax in the UK was 19% (2019: 19%). The Company is subject to a Bank Corporation Tax surcharge of 8% on profits in excess of £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 2020, the Irish tax charge was assessed to be nil (2019: $14).

Factors Affecting Tax Charge for the Year

Corporate income tax has been calculated based on the results for the year and the resulting taxation charge is as follows:

	For the year ended 31 December 2020	2019
Profit on ordinary activities before tax	$ 107,853	$ 25,021
Profit before taxation multiplied by the rate of corporation tax in the UK	20,492	4,754
Bank corporation tax surcharge	6,113	594
Timing and other differences	228	417
Foreign exchange differences	(168)	847
Adjustments in respect of prior years	(182)	434
Non-taxable income	(113)	(128)
Gain on disposal	—	2,470
Income tax expense	$ 26,370	$ 9,388

The tax assessed for the year is lower than (2019: higher than) the rate of corporation tax in the UK. The differences are explained below:

	For the year ended 31 December 2020	2019
Current tax		
UK corporation tax on profit for the financial year	$ 26,552	$ 8,954
Adjustments in respect of prior years	(182)	434
Total current tax	$ 26,370	$ 9,388

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

NOTE 16

Financial Risk Management

The Company's activities expose it to a variety of financial risks: market risk (including price risk, currency risk, interest rate risk and off-balance sheet risk), credit risk and liquidity and leverage risk. Management attempts to monitor and manage these risks on an ongoing basis. While management often hedge certain portfolio risks, management is not required to and will not, in general, attempt to hedge all market or other risks in the portfolio, and it will hedge certain risks, if at all, only partially.

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

The organisational structure is designed to oversee risk management through three lines of defence. Risk is monitored first by the trading desk; each business 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, the global independent risk control function for the CS Group, and Compliance. The risk and compliance functions are responsible for independently assessing the robustness of the first line's risk identification and mitigation processes. The organisation framework for risk management is designed to facilitate reporting and escalation of risks to management and the Board of Directors depending on their severity.

The third line of defence is the internal audit function which provides independent risk assurance of the adequacy and effectiveness of the risk management and internal controls across the business and reports to the Company's Board of Directors and Audit Committee.

Market Risk

Market risk is the potential for changes in the value of financial instruments. Categories of market risk include, but are not limited to, exposures to equity prices, interest rates, commodity prices and currency prices.

Market risk is directly impacted by the volatility and liquidity of the markets in which the underlying financial instruments are traded. Management attempts to manage market risk in various ways, including through diversifying exposures and placing guidelines on position sizes. The ability to manage market risk may be constrained by changes in liquidity conditions and fast changes in the relative prices, volatilities and correlations between financial instruments and their corresponding hedges.

The Company may have positions in financial instruments that trade in different markets with different closing times. Any discrepancy in value resulting from asynchronous closing times may result in the recognition of a gain or loss in one period which may be offset by a corresponding loss or gain, in whole or in part, in the subsequent period.

PRICE RISK

The fair value of securities and related derivatives exposed to price risk was as follows:

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Equity securities owned	$ 392,945	$ 400,859	$ 893,420
Equity securities sold, not yet purchased	(273,486)	(406,659)	(843,740)
Derivatives assets	64,520	28,299	555,229
Derivative liabilities	(60,831)	(22,470)	(528,607)
Total	$ 123,148	$ 29	$ 76,302

The Company's exposure to price risk including the notional exposure on derivative contracts was as follows:

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Net equity securities	$ 119,459	$ (5,800)	$ 49,680
Net notional exposure from equity contracts	(431,881)	106,156	574,910
Net notional exposure from commodity contracts	(1,382)	(326)	(1,099)

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

The table below summarises the Company's sensitivity of equity securities and equity derivatives to changes in market prices of securities and implied volatilities for equity derivatives as at year-end. The analysis is based on the assumption that prices and volatilities are increased/decreased by the percentages disclosed in the table below with all other variables held constant and shows the change in profit attributable to the change in market levels:

	At 31 December	
	2020	2019
Equity prices:		
Market price +5%	$ (1,254)	$ (218)
Market price -5%	302	381
Equity derivatives:		
Implied volatilities +25%	(1,904)	998
Implied volatilities -25%	1,622	(932)

The Company sells various financial instruments which it does not yet own or which are consummated by the delivery of borrowed financial instruments ("short sales"). The Company is exposed to market risk for short sales. A short sale involves the risk of an unlimited increase in the market price of the particular investment sold short, which could result in an inability to cover the short position and unlimited loss. There can be no assurance that securities necessary to cover a short position will be available for purchase. To attempt to manage this market risk, the Company may hold financial instruments which can be used to hedge or settle these obligations and monitors its market exposure in real time, adjusting financial instruments as deemed necessary. Also, the Company's ability to conduct short sales on certain specified securities could be restricted due to regulatory and legislative rules, thus resulting in a reduced inventory of securities available for borrowing and increased transaction costs relating to short selling.

CURRENCY RISK

The Company may have exposure to non-U.S. currencies, directly or indirectly through its financial instruments, 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.

The tables below summarise the Company's assets and liabilities denominated in a currency other than the U.S. dollar with net exposure exceeding five percent of net assets:

	Balance at 31 December 2020 (in USD)
Currency	Net exposure
TRY	$ 32,520

	Balance at 31 December 2019 (in USD)
Currency	Net exposure
EUR	$ 260,727
CHF	165,187
GBP	91,973
SEK	20,568

	Balance at 1 January 2019 (in USD)
Currency	Net exposure
EUR	$ 230,452
GBP	120,224
CHF	34,670

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.

The table below summarises the sensitivity of the Company's trading portfolio to changes in foreign exchange movements. The analysis is based on the assumptions that foreign exchange rates increased/decreased by the percentage disclosed in the table below, with all other variables held constant.

	At 31 December 2020	
	+5%	-5%
EUR	$ (631)	$ 631
BRL	289	(289)
GBP	176	(176)
Other currencies	(2)	2

	At 31 December 2019	
	+5%	-5%
CHF	$ 321	$ (321)
GBP	317	(317)
SEK	174	(174)
EUR	(162)	162
Other currencies	85	(85)

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.

The table below summarises the Company's sensitivity to changes in interest rate risk as at year-end. The analysis is based on the assumption that interest rates are increased/decreased by the basis points disclosed in the table below with all other variables held constant and shows the change in profit attributable to the change in rates:

	At 31 December	
	2020	2019
Interest rates +100bps	$ 4,004	$ 3,998
Interest rates -100bps	(4,316)	(4,856)

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

For the year ended 31 December 2020, the Company earned interest income of $16,928 (2019: $24,572) on its debt security holdings and incurred interest expense of $11,887 (2019: $26,555) on its debt securities sold, not yet purchased, which are presented as interest income on financial assets at fair value through profit or loss and interest expense on financial liabilities at fair value through profit or loss, respectively, on the statement of comprehensive income.

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.

Credit Risk

Credit risk is the risk of losses due to the failure of a counterparty to perform according to the terms of a contract. The Company has established accounts with other financial institutions to clear its securities transactions. This can, and often does, result in a concentration of credit risk with one or more of these institutions. Such risk, however, is partially mitigated by the obligation of certain of these financial institutions to maintain minimum net capital and to segregate customers' funds and financial instruments from the financial institution's own holdings. The Company actively reviews and attempts to manage exposures to various financial institutions in an attempt to mitigate these risks. The Company also attempts to minimise this credit risk by carrying minimal excess collateral above any specific collateral requirement determined in accordance with the contractual terms between the Company and the relevant financial institution.

The Company is exposed to credit risk in its role as a trading counterparty to dealers and broker and dealer clients. The Company's credit exposure to broker and dealer clients is mitigated by the use of an industry-standard delivery versus payment through depositories and clearing banks.

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

The Company seeks to reduce its exposure to credit risk associated with counterparty non-performance under Bilateral OTC transactions by entering into master netting agreements and collateral arrangements with counterparties. These master netting 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.

At any point in time, subject to applicable bankruptcy or similar laws affecting creditors' rights, generally the Company's credit exposure to a derivative financial instrument counterparty under a master netting agreement is limited to any net unrealised gain of the Company on derivative financial instruments plus any collateral transferred to such counterparty by the Company pursuant to related credit support agreements, less any net unrealised loss of the Company on derivative financial instruments plus any collateral transferred to the Company by such counterparty pursuant to related credit support agreements. When the Company has executed master netting agreements permitting the legal right of offset of such exposures between the Company and such counterparty, these amounts are shown in the table below. Typically, the Company and the counterparty have rights of rehypothecation with respect to collateral received under such derivative master netting agreements. Initial margin pledged by or to the Company under derivative master netting agreements, but held at a third-party custodian, is not subject to rehypothecation by the counterparty or the Company.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

The tables below list the total amounts subject to master netting agreements:

DERIVATIVE ASSETS

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Included in the statement of financial position			
Gross amounts			
Interest rate contracts	$ 1,305,624	$ 834,369	$ 543,410
Commodity contracts	335,472	162,198	250,886
Equity contracts	17,473	1,650	194,097
Foreign exchange contracts	—	69	372
Total	1,658,569	998,286	988,765
Amounts offset			
Interest rate contracts	(1,293,111)	(805,141)	(534,910)
Commodity contracts	(334,090)	(161,351)	(249,787)
Equity contracts	—	—	—
Foreign exchange contracts	—	—	—
Total	(1,627,201)	(966,492)	(784,697)
Net amounts			
Interest rate contracts	12,513	29,228	8,500
Commodity contracts	1,382	847	1,099
Equity contracts	17,473	1,650	194,097
Foreign exchange contracts	—	69	372
Total	31,368	31,794	204,068
Amounts not offset in the statement of financial position			
Financial instruments			
Interest rate contracts	(156)	(1,314)	(4,503)
Commodity contracts	(2)	—	—
Equity contracts	(17,209)	(1,507)	(191,887)
Foreign exchange contracts	—	(49)	(369)
Total	(17,367)	(2,870)	(196,759)
Net exposure			
Interest rate contracts	12,357	27,914	3,997
Commodity contracts	1,380	847	1,099
Equity contracts	264	143	2,210
Foreign exchange contracts	—	20	3
Total	$ 14,001	$ 28,924	$ 7,309

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

DERIVATIVE LIABILITIES

	At 31 December 2020	At 31 December 2019	At 1 January 2019
Included in the statement of financial position			
Gross amounts			
Interest rate contracts	$ 1,293,566	$ 806,455	$ 554,853
Commodity contracts	334,094	161,360	249,787
Equity contracts	24,756	2,023	226,072
Foreign exchange contracts	291	5,764	1,746
Total	1,652,707	975,602	1,032,458
Amounts offset			
Interest rate contracts	(1,293,111)	(805,141)	(534,910)
Commodity contracts	(334,090)	(161,351)	(249,787)
Equity contracts	—	—	—
Foreign exchange contracts	—	—	—
Total	(1,627,201)	(966,492)	(784,697)
Net amounts			
Interest rate contracts	455	1,314	19,943
Commodity contracts	4	9	—
Equity contracts	24,756	2,023	226,072
Foreign exchange contracts	291	5,764	1,746
Total	25,506	9,110	247,761
Amounts not offset in the statement of financial position			
Financial instruments			
Interest rate contracts	(156)	(1,314)	(4,503)
Commodity contracts	(2)	—	—
Equity contracts	(17,209)	(1,507)	(191,887)
Foreign exchange contracts	—	(49)	(369)
Total	(17,367)	(2,870)	(196,759)
Net exposure			
Interest rate contracts	299	—	15,440
Commodity contracts	2	9	—
Equity contracts	7,547	516	34,185
Foreign exchange contracts	291	5,715	1,377
Total	$ 8,139	$ 6,240	$ 51,002

In the tables above:

- Gross amounts include all derivative financial instruments that are subject to master netting agreements.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

At 31 December 2020, the Company had posted cash collateral of $55,763 (2019: $26,688, 1 January 2019: $95,587) and received cash collateral of $11,974 (2019: $340,163, 1 January 2019: $171,638) with respect to the counterparties of its derivative financial instruments that are subject to master netting agreements.

The maximum exposure to credit risk is the net carrying amount of the derivative financial instruments outlined in the table below:

	At 31 December		At 1 January
	2020	**2019**	**2019**
Derivative assets not subject to master netting agreements	$ 45,665	$25,802	$360,033
Net exposure to derivative instrument counterparties under master netting agreements	14,001	28,924	7,309
Total	$ 59,666	$54,726	$367,342

The cash and security account balances held at various major financial institutions, which typically exceed government sponsored insurance coverages, subject the Company to a concentration of credit risk. Management attempts, where possible, to mitigate the credit risk that exists with these account balances by, among other factors, maintaining these account balances pursuant to segregated custodial arrangements, or by managing the amount of cash the Company has on deposit with banks and other globally recognised 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 financing sources as deemed appropriate. In an effort to limit credit risk, the Company generally enters into financial instrument transactions only with major financial institutions.

With respect to cash and cash equivalents, net derivative exposure, net equity securities and due to/from brokers, dealers, clearing organisation and custodian, the Company had concentration exceeding five percent of net assets with the counterparties outlined in the tables below:

At 31 December 2020	**% Net Assets**
ABN AMRO Clearing Bank N.V.	24.1%
Merrill Lynch International	22.0
LCH Clearnet Limited	18.1
The Bank of New York Mellon	14.9
Morgan Stanley & Co International plc	8.7

At 31 December 2019	**% Net Assets**
The Bank of New York Mellon	36.7%
Merrill Lynch International	23.1
LCH Clearnet Limited	18.0
ABN AMRO Clearing Bank N.V.	5.5

At 1 January 2019	**% Net Assets**
Merrill Lynch International	27.2%
The Bank of New York Mellon	26.8
LCH Clearnet Limited	12.6
Deutsche Bank AG	10.0
Morgan Stanley & Co. International plc	5.6

Liquidity and Leverage 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 has established processes to manage liquidity risk on the basis of expected cash flows and 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 $62,000 (2019: $58,000) as part of its liquid resources. The policy for managing liquidity targets maintaining a pool of excess liquidity at the Company for various planned and contingent needs including, among others, mark-to-market losses on investments, changes in margin requirements as term financing facilities mature, increases in initial margin requirements by clearinghouses, and shareholder's capital activity.

The Company maintains a liquid statement of financial position with a liquidity ratio of 35.13% at 31 December 2020 (2019: 49.62%, 1 January 2019: 35.96%), representing liquid assets as a percentage of net asset value. Liquid assets include cash and cash equivalents and the liquid asset buffer.

The Company generally invests on a leveraged basis, both through its financing arrangements, including repurchase agreements, and through the degree of leverage typically embedded in the derivative financial instruments in which it invests. The use of leverage can dramatically magnify both gains and losses, increasing the possibility of the shareholder's total loss of its investment in the Company. Leverage through margin borrowings generally requires collateral to be posted with prime brokers, custodians and counterparties. Market value movements could result in a prime broker or counterparty, under their respective agreements with the Company, having the right to reduce the value of such collateral or to require the posting of additional collateral, potentially resulting in the issuance of a margin call. This could also result in the Company having to sell assets at a time when the Company would not otherwise choose to do so. The Company seeks to mitigate this risk by utilising a diversified group of leverage providers and term financing arrangements as well as negotiating trading and financing agreements that include objective valuation methodologies and dispute rights for valuation differences between the Company and its prime brokers, custodians and counterparties.

The Company primarily invests in instruments that can be easily liquidated. To ensure liquidity, the Company maintains an equities and U.S. government securities portfolio that can be fully liquidated within 8 trading days, with liquidity monitored on a daily basis. The following table represents the expected liquidity of the equity securities and U.S. government securities held by the Company:

	At 31 December	
	2020	**2019**
1 day	100%	90%
1 day to 5 days	—	9%
5 days to 8 days	—	1%
Total	100%	100%

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

The tables below analyse the Company's due to brokers and dealers, due to affiliates and accrued expenses maturity groupings based on the remaining period at the statement of financial position date to the contractual maturity date. The amounts are the contractual undiscounted cash flows, which approximate fair value.

At 31 December 2020	Less than 3 months	More than 3 months
Due to brokers and dealers	$ (92,376)	$ —
Due to affiliates	(17,553)	—
Accrued expenses	(67,237)	(2,526)
Contractual cash outflows	**$(177,166)**	**$ (2,526)**

At 31 December 2019	Less than 3 months	More than 3 months
Due to brokers and dealers	$(373,336)	$ —
Due to affiliates	(6,546)	—
Accrued expenses	(47,524)	(1,972)
Contractual cash outflows	**$(427,406)**	**$ (1,972)**

At 1 January 2019	Less than 3 months	More than 3 months
Due to brokers and dealers	$ (5,443)	$ —
Due to affiliates	(12,793)	—
Accrued expenses	(62,223)	(7,683)
Contractual cash outflows	**$ (80,459)**	**$ (7,683)**

The tables below analyse the Company's derivative financial instruments in a loss position for which the contractual maturities are considered to be essential to the understanding of the timing of cash flows:

At 31 December 2020	Less than 7 days	7 days to 1 month	1 to 12 months	More than 12 months
TRS on common stock	$ —	$ —	$ (1,231)	$ (188)
Options	—	(32,494)	(24,369)	(1,356)
Forwards	—	—	—	—
Warrants	(83)	(11)	—	(12)
Futures	(25,796)	(136,181)	(173,639)	(307)
Swaps	(24)	(1,185)	(31,263)	(1,260,639)

At 31 December 2019	Less than 7 days	7 days to 1 month	1 to 12 months	More than 12 months
TRS on common stock	$ —	$ —	$ —	$ (1,924)
Options	—	(7,099)	(13,323)	(3)
Forwards	(1,979)	(3,774)	(11)	—
Warrants	(13)	—	—	—
Futures	(11,646)	(76,023)	(75,104)	—
Swaps	(59)	(1,740)	(16,624)	(786,718)

1 January 2019	Less than 7 days	7 days to 1 month	1 to 12 months	More than 12 months
TRS on common stock	$ (79)	$ (279)	$ (3,125)	$ —
Options	(69)	(53,829)	(457,710)	(6,783)
Forwards	(1,689)	(57)	—	—
Warrants	(1)	—	(7)	—
Futures	(33,886)	(124,595)	(101,253)	(2,068)
Swaps	(11)	(567)	(19,253)	(529,732)

Commitments

The Company enters into forward starting reverse repurchase and repurchase agreements that settle at a future date. At 31 December 2020, the Company had commitments relating to its unsettled forward starting reverse repurchase agreements and repurchase agreements of $555,368 and $394,748 million, respectively (2019: nil). As of 31 December 2020, these forward starting reverse repurchase and repurchase agreements each had a settlement date of 4 January 2021.

Other Risks

Due to its financial instruments, the Company may be subject to additional risks resulting from future political or economic conditions in the country or region of the investment and the possible imposition of adverse governmental laws or currency exchange restrictions affecting such country or region which could cause the securities and their markets to be less liquid and prices more volatile.

The risk that the transition from LIBOR and other interbank-offered based reference rates may lead to increased volatility and illiquidity in markets or investments that are tied to these rates which could adversely affect the Company's performance. The risk of any pricing adjustments required in connection with the transition is largely mitigated by the fact that all of its interest rate swap positions are cleared with LCH and will therefore have the same LIBOR cessation fallback arrangements. The Company actively manages its interest rate exposure and seeks to maintain a delta neutral portfolio.

The Company is subject to risks associated with unforeseen or catastrophic events, including terrorist attacks, natural disasters, and the emergence of a pandemic, which could create economic, financial, and business disruptions. These events could lead to operational difficulties that could impair management's ability to manage the Company's activities. Management manages this risk through continuity and resiliency planning. As an example, during 2020, COVID-19 developed rapidly. Management managed the Company's activities and economic impacts through 31 December 2020. Given the uncertainty of COVID-19 outcomes, the future impacts are currently not quantifiable and could materially adversely affect the Company and its activities.

Contingencies

In the normal course of business, the Company enters into contracts that contain provisions related to general indemnifications. The Company's maximum exposure under these arrangements is unknown, as any such exposure involves possible future claims that may be, but have not yet been, made against the Company, based on events which have not yet occurred. However, based on experience, management believes the risk of material loss from these arrangements to be remote.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

The majority of the Company's interest rate swaps are self-cleared through the Company's SwapClear membership at LCH. 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. 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 clearing house, 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 may be involved, in the normal course of business, in legal, regulatory and arbitration proceedings and/or inquiries concerning matters arising in connection with the conduct of its operations. The Company believes resolution of any such matters would not have a material adverse effect on the financial condition of the Company, although the resolution could be material to the Company's operating results for a particular period or periods. Given the inherent difficulty of predicting the outcome of the Company's litigation and regulatory matters, particularly in cases or proceedings in which substantial or indeterminate damages or fines are sought, the Company cannot estimate losses or ranges of losses for cases or proceedings where there is only a reasonable possibility that a loss may be incurred.

NOTE 17

Capital Management

In 2020, the Company was subject to the EU's Capital Requirements Regulation ("CRR"), supplemented by the FCA IFPRU. From 1 January 2021, the provisions of CRR were on shored in the UK by the Capital Requirements (Amendment) (EU Exit) Regulations. 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.

The Company manages its capital adequacy to ensure compliance with regulatory requirements and ensure sufficient capital surplus is maintained at all times in line with the risk appetite approved by the Board.

The objective of the Company's capital management approach is to maintain a strong capital base to support the business, including new initiatives, and provide returns for shareholders. Dividends are only made if the Company retains adequate capital and liquidity after payment of the dividend to support its planned business. The Company performs capital projections and stress testing at least annually as part of the Internal Capital Adequacy Assessment Process and its Pillar 3 Disclosure is published annually on the Company's website.

The Company's capital resources comprise share capital and other equity reserves attributable to its shareholders, which are all Common Equity Tier 1 permanent capital ("CET1") under CRR. The Company 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 2020, the Company had CET1 capital of $251,116 (2019: $221,442) and Pillar 1 capital requirement of $98,356 (2019: $87,295). The Company's surplus capital over Pillar 1 requirement was $152,760 (2019: $134,147).

NOTE 18

Transactions with Related Parties

Expenses

Pursuant to an administrative services agreement, the Company reimburses CEAMER, CSAMER and their affiliates for direct and allocable administrative, general and operating expenses, including staff costs, paid by these entities, on behalf of the Company. For the year ended 31 December 2020, the allocable expenses were $13,620 (2019: $12,648) and are included in other operating expenses on the statement of comprehensive income. Direct expenses where CEAMER, CSAMER and their affiliates act as paying agent represent all other non-trade related operating expenses. As of 31 December 2020, the Company had a combined payable to CEAMER, CSAMER and their affiliates of $14,302 (2019: $5,617), which is included in due to affiliates on the statement of financial position.

Pursuant to a Market Intermediation Agreement ("MIA"), an affiliate in the CS Group provides trade facilitation and research services to the Company. As consideration for the market intermediation services, the affiliate is paid an agreed proportion of the Company's profits from trading activities entered into pursuant to the MIA. During the year ended 31 December 2020, these fees totaled $24,232 (2019: $16,286) and are reflected as performance fees on the statement of comprehensive income. Included in due to affiliates on the statement of financial position is $2,435 (2019: $581) of these performance fees payable.

Service Fees

Pursuant to a services agreement, the Company provides algorithm development services to a CS Group affiliate. As consideration for the algorithm development services, the Company earns a fee which is calculated on a cost plus contribution basis. During the year ended 31 December 2020, algorithm development service fees of $85,602 (2019: $37,467) are reflected in service fees from related parties on the statement of comprehensive income.

Pursuant to a trade agency services agreement between the Company and various CS Group affiliates, the Company provides trade agency services to these entities. As consideration for the trade agency services, the Company earns a fee which is calculated on a cost plus mark-up basis. During the year ended 31 December 2020, trade agency service fees from affiliates of $61,876 (2019: $35,008) are reflected in the statement of comprehensive income.

The Company also serves as a portfolio manager of a CS Group affiliate whereby the Company earns fees pursuant to a portfolio management agreement. The fees were calculated on a cost plus mark-up basis. During the year ended 31 December 2020, these fees totaled $3,674 (2019: $2,756) and are reflected in service fees from related parties on the statement of comprehensive income.

The Company has also entered into service agreements where the Company provides CS Group affiliates with certain relationship management, marketing or risk monitoring services. The Company earns fees from such affiliates which were calculated on a cost plus mark-up basis. During the year ended 31 December 2020, these fees totaled $3,666 (2019: $2,204) and are reflected in service fees from related parties on the statement of comprehensive income.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

Pursuant to other service agreements entered into by the Company, the Company earned trading fees in exchange for providing electronic trade execution services to these CS Group affiliates. The trading fees were calculated on a fee per trade basis. During the year ended 31 December 2020, these trading fees totaled $1,285 (2019: $1,620) and are reflected in service fees from related parties on the statement of comprehensive income.

The Company also paid service fees to various CS Group affiliates for trade agency services of $3,941 (2019: $436), included within other operating expenses on the statement of comprehensive income.

Amounts outstanding as at 31 December 2020 in relation to the aforementioned services are $7,145 (2019: $80) included in due from affiliates on the statement of financial position and $817 (2019: $191) included in due to affiliates on the statement of financial position.

The Company did not have any transaction price allocated to unsatisfied or partially satisfied performance obligations. For the year ended 31 December 2020, the Company recorded no revenue from performance obligations satisfied or partially satisfied in previous periods as these obligations are generally short term in nature (2019: same).

Loans

The Company has entered into a loan agreement ("Loan Agreement") with a CS Group affiliate, in which the Company is the lender and the affiliate is the borrower.

Subject to the terms of the Loan Agreement, the Company would make available to the borrower an unsecured revolving credit facility in an amount not exceeding the lender's commitment. Throughout 2019 and until 1 July 2020, interest accrued at LIBOR plus 5%. Since 1 July 2020, interest accrues at LIBOR plus 2.85% per annum, payable monthly. As of 31 December 2020, the carrying value of the loan advanced is $35,625 (2019: $28,000), which is included in due from affiliates on the statement of financial position. The interest receivable of $117 as of 31 December 2020 is also included in due from affiliates on the statement of financial position (2019: $262). Interest income of $1,912 is recognised during the year ended 31 December 2020 and is included in other interest income on the statement of comprehensive income (2019: $3,212).

During 2020, the Loan Agreement was amended to incorporate fallback language for LIBOR cessation and to extend the maturity date to 31 December 2021.

Guarantees

The Company has provided a guarantee in respect of the lease of an affiliate's office premises. As at 31 December 2020, the affiliate had minimum future lease commitments of $4,467 (2019: $5,418).

NOTE 19

Transition to IFRS

Reconciliation of equity as at 1 January 2019 (date of transition to IFRS):

	FRS 102	Reclassification and Remeasurements	IFRS as at 1 January 2019
ASSETS			
Assets:			
Cash and cash equivalents	$ 37,343	$ —	$ 37,343
Financial assets at fair value through profit or loss	2,186,646	—	2,186,646
Due from brokers, dealers, clearing organisation and custodian	197,199	—	197,199
Securities purchased under agreements to resell	157,440	—	157,440
Due from affiliates	80,932	—	80,932
Other receivables and prepayments	10,680	—	10,680
Total assets	$ 2,670,240	$ —	$ 2,670,240
LIABILITIES AND EQUITY			
Liabilities:			
Financial liabilities at fair value through profit or loss	$ 2,248,177	$ —	$ 2,248,177
Due to brokers and dealers	5,443	—	5,443
Accrued expenses	69,906	—	69,906
Due to affiliates	12,793	—	12,793
Total liabilities	2,336,319	—	2,336,319
Equity	333,921	—	333,921
Total liabilities and equity	$ 2,670,240	$ —	$ 2,670,240

There has been no reclassification or remeasurement of assets or liabilities as a result of transitioning to IFRS.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

Reconciliation of equity as at 31 December 2019:

	FRS 102	Reclassification and Remeasurements	IFRS as at 31 December 2019
ASSETS			
Assets:			
Cash and cash equivalents	$ 58,487	$ —	$ 58,487
Financial assets at fair value through profit or loss	853,716	—	853,716
Due from brokers, dealers, clearing organisation and custodian	518,581	—	518,581
Securities purchased under agreements to resell	103,726	—	103,726
Due from affiliates	28,359	—	28,359
Other receivables and prepayments	11,186	—	11,186
Total assets	$ 1,574,055	$ —	$ 1,574,055
LIABILITIES AND EQUITY			
Liabilities:			
Financial liabilities at fair value through profit or loss	$ 905,123	$ —	$ 905,123
Due to brokers and dealers	373,336	—	373,336
Accrued expenses	49,496	—	49,496
Due to affiliates	6,546	—	6,546
Total liabilities	1,334,501	—	1,334,501
Equity	239,554	—	239,554
Total liabilities and equity	$ 1,574,055	$ —	$ 1,574,055

There has been no reclassification or remeasurement of assets or liabilities as a result of transitioning to IFRS.

Notes to Financial Statements

(Expressed in U.S. dollars in thousands)

Reconciliation of total comprehensive income for the year ended 31 December 2019:

		FRS 102		Remeasurements		IFRS for the year ended 31 December 2019
Income:						
Net gain in fair value on financial assets and financial liabilities at fair value through profit or loss	$	148,737	$	—	$	148,737
Interest income on financial assets at fair value through profit or loss		24,572		—		24,572
Other interest income		36,268		—		36,268
Dividend income		15,294		—		15,294
Service fees from related parties		79,055		—		79,055
Other income		2,027		—		2,027
Net foreign currency loss		(3,142)		—		(3,142)
Total income		302,811		—		302,811
Operating expenses:						
Brokerage commissions and fees, net		38,994		—		38,994
Performance fees		16,286		—		16,286
Interest expense on financial liabilities at fair value through profit or loss		26,555		—		26,555
Other interest expense		50,514		—		50,514
Dividend expense		13,534		—		13,534
Other operating expenses		130,300		—		130,300
Operating expenses		276,183		—		276,183
Operating profit		26,628		—		26,628
Taxation:						
Withholding tax on dividend income		1,607		—		1,607
Income tax expense		9,388		—		9,388
Total comprehensive income	$	15,633	$	—	$	15,633

There has been no remeasurement of total comprehensive income as a result of transitioning to IFRS.

NOTE 20

Subsequent Events

The Company has performed an evaluation of subsequent events through 13 April 2021, which is the date the financial statements were available to be issued. The Company is not aware of any subsequent events that require disclosure in the financial statements.

NOTE 21

Approval of Financial Statements

The financial statements were approved and authorised for issue by the Board of Directors on 13 April 2021.

pwc

Appendix: 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 2020 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 2020 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

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Company's ability to continue as a going concern for a period of at least twelve months from the date on which the Country-by-Country information is authorised for issue.

In auditing the Country-by-Country information, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the Country-by-Country information is appropriate.

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

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

Reporting on other information

The other information comprises all of the information in the Annual Report 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.

pwc

Appendix: Independent Auditors' Report to the Directors of Citadel Securities (Europe) Limited

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

As explained more fully in the Statement of Directors' responsibilities in respect of the financial statements set out on page iii, 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 note 2 and accounting policies in note 3 to the Country-by-Country information, 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.

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

Based on our understanding of the Company/industry, we identified that the principal risks of non-compliance with laws and regulations related to the Financial Conduct Authority's regulations and UK tax legislation, and we considered the extent to which non-compliance might have a material effect on the Country-by-Country information. We also considered those laws and regulations that have a direct impact on the Country-by-Country information such as applicable tax legislation and the Capital Requirements (Country-by-Country Reporting) Regulations 2013. We evaluated management's incentives and opportunities for fraudulent manipulation of the Country-by-Country information (including the risk of override of controls), and determined that the principal risks were related to posting inappropriate journal entries and management bias in accounting estimates. Audit procedures performed included:

- Enquiries of management, internal audit and those charged with governance;
- Review of internal audit reports and minutes of meetings of those charged with governance;
  Review of correspondence with, and reports to regulators;
- Identifying and testing journal entries, including those posted on unusual dates, containing unusual words, posted to unusual accounts, backdated journals and those posted by unexpected users; and

Appendix: Independent Auditors' Report to the Directors of Citadel Securities (Europe) Limited

- Challenging assumptions and judgements made by management in their accounting estimates, in particular in relation to the valuation of financial instruments.

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

A further description of our responsibilities for the audit of the 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
15 April 2021

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 IV ("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 international accounting standards ("IFRS").

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

In the disclosures that follow:

Turnover
The Company defines turnover as net trading income, being trading income less trading expenses. Trading income includes net gain in fair value on financial assets and financial liabilities at fair value through profit or loss, service fees from related parties, interest income on financial assets and fair value through profit or loss and dividend income. Trading expenses include brokerage commissions and fees (net), performance fees, interest expense on financial liabilities at fair value through profit or loss and dividend expense. 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 Taxation
Profit or loss is reported on a consolidated basis for each country.

Accounting Tax Charge
Accounting tax charge, for the purposes of country-by-country reporting, is interpreted as the corporation tax expense 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 2020

Jurisdiction	Average number of employees	Turnover	Profit/(loss) before taxation	Accounting tax charge	Corporation tax paid
UK	132	$ 265,595	$ 83,455	$ (26,370)	$ (36,298)
Ireland	4	2,912	(1,972)	—	—
Total	136	$ 268,507	$ 81,483	$ (26,370)	$ (36,298)