Citadel Securities (Europe) Limited

Annual Report and Financial Statements for the year ended 31 December 2021

Registered Number: 5462867



Table of Contents

	Page
General Information	. iii
Strategic Report	iv
Directors' Report	. x
Independent Auditors' Report	. xiii
Statement of Financial Position	. 1
Statement of Comprehensive Income	. 2
Statement of Changes in Equity	. 3
Statement of Cash Flows	. 4
Notes to Financial Statements	
Note 1. Organisation	. 5
Note 2. Basis of Preparation	. 5
Note 3. Significant Accounting Policies	. 5
Note 4. Financial Instruments at Fair Value through Profit or Loss	. 10
Note 5. Collateralised Transactions	. 14
Note 6. Due from Brokers, Dealers, Clearing Organisation and Custodian	. 15
Note 7. Other Receivables and Prepayments	. 15
Note 8. Due to Brokers, Dealers and Custodian	. 15
Note 9. Accrued Expenses	. 15
Note 10. Share Capital	. 15
Note 11. Other Operating Expenses	. 15
Note 12. Staff Costs	. 16
Note 13. Directors' Remuneration	. 16
Note 14. Taxation	. 16
Note 15. Financial Risk Management	. 16
Note 16. Capital Management	. 21
Note 17. Transactions with Related Parties	. 22
Note 18. Subsequent Events	. 23
Note 19. Approval of Financial Statements	. 23
Appendices	
Independent Auditors' Report on Country-by-Country Reporting	. 24
Country-by-Country Reporting	. 27

General Information

Board of Directors at Date of Signing

Steven Atkinson Katrina Manson Richard Pike Deborah Anthony

Registered Office 120 London Wall London EC2Y 5ET England

Statutory Audit Firm

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

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

(Expressed in U.S. dollars in thousands)

The Directors present their Strategic Report for Citadel Securities (Europe) Limited ("CSEL" or the "Company") for the year ended 31 December 2021. All amounts presented are in USD in thousands unless otherwise stated. These financial statements were authorised for issue by the Board of Directors on 12 April 2022.

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 Citadel Securities Group ("CS Group") entities.

BUSINESS ENVIRONMENT AND COMPETITION

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

The financial markets in which the Company operates, and the activities of the Company are subject to frequent market, regulatory and legislative changes. The Company closely monitors all proposed changes and actively engages in the consultation processes to ensure the Company is well positioned to respond to these developments.

BUSINESS REVIEW

The profit for the year, as shown on the statement of comprehensive income on page 2, reflects the continued positive trading performance of the Company. During the year ended 31 December 2021, the Company earned total income of \$323,063 (2020: \$348,977) while total operating expenses amounted to \$258,327 (2020: \$240,403). Trading revenues decreased in line with lower trading volumes and volatility in the Company's key markets. The increase in operating expenses was in line with expectations and reflects the Company's focus on operational excellence by investing in technology, reducing operational risk, eliminating low-value activities and re-engineering outdated processes. During the year ended 31 December 2021, the Company made an operating profit of \$64,736 (2020: \$108,574).

The statement of financial position on page 1 shows a strong net asset and liquidity position, enabling the Company to take advantage of any opportunities identified in the market for further business growth.

The Company has continued to place the safety of its employees at the centre of its response to COVID-19 and enacted several new procedures to facilitate a safe return to the office. During the course of the year, the extent to which the Company's employees have worked from its offices increased from 2020 allowing the Company to continue to successfully service its clients throughout the year.

Russia's invasion of Ukraine and the wide range of sanctions imposed in response on Russia is having a significant impact on financial markets. The Company does not have any material direct exposure to Ukraine or Russia and the impact of the sanctions on its business activity is limited.

PRINCIPAL RISKS, FINANCIAL RISKS AND UNCERTAINTIES

The Company has exposure to the following principal risks from its use of financial instruments and activities: market risk, credit risk, liquidity risk, operational risk, business risk and compliance, legal and regulatory 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.

(Expressed in U.S. dollars in thousands)

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 and liquidity risk are monitored on a daily basis against limits set by the Board of Directors in the risk appetite statement.

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).

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 manages 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.

Please refer to Note 15 accompanying the financial statements for further information.

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 is exposed to credit risk in its role as a trading counterparty to clients. The Company's credit exposure to clients is partially mitigated by the use of delivery versus payment contractual settlement. The Company is also exposed to credit risk with financial institutions that clear its securities transactions. The Company's credit exposure to financial institutions is partially mitigated by the obligation of these financial institutions to maintain minimum capital requirements and to segregate customers' funds and financial instruments from the financial institution's own holdings. In addition, the Company actively reviews and manages its exposures to various clients and financial institutions to manage these residual risks.

Please refer to Note 15 accompanying the financial statements for further information.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its obligations as they fall due. The firm manages liquidity in line with the liquidity risk management framework documented in its Individual Liquidity Adequacy Assessment ("ILAA").

Please refer to Note 15 accompanying the financial statements for further information.

Operational Risk

The Company defines operational risk as the risk of financial losses or reputational damage caused by inadequate or failed internal processes, people and technology (including outsourcing) 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.

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 regularly assessed, monitored and managed. On a monthly basis the status of important risks is formally reported via key risk indicators to ensure they are within agreed risk tolerances. Breaches are escalated to local management and ultimately 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.

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 suite of automated pre and post trade controls across the Company's trading systems, monitored by experienced financial professionals. These controls are supplemented by policies, procedures, and risk assessments as well as a robust incident management and response process with appropriate escalation.

A dedicated operational risk team monitors and checks the business' risk management practices, advising on developing frameworks, processes, and controls to manage and mitigate risks, while independently reviewing and escalating risk and control issues to senior management.

The Company continues to invest in developing and implementing enhanced methodologies to identify, measure, monitor and manage material inherent operational risks in its key activities.

(Expressed in U.S. dollars in thousands)

Business Risk

Business risk means any risk to the Company arising from changes in its business, including: the risk to earnings posed by falling or volatile income; availability of adequate capital and the broader risk to the Company's business model or strategy proving inappropriate due to macro-economic, geopolitical, environmental, market, tax, regulatory or other factors affecting its operating environment; and the risk that the Company may not be able to carry out its business plan and desired strategy due to poor management and planning.

Compliance, Legal, and Regulatory Risk

Compliance, legal and regulatory risk is defined as the risk of impairment to the Company's business model, reputation and financial condition from failure to comply with laws and regulations, internal standards and policies and expectations of key stakeholders such as regulators, customers, employees and society as a whole. Legal risk is the risk of financial or reputational loss resulting from any type of legal issue. Compliance risk relates to the potential of the business violating law or regulation. Regulatory risk is the effect of a change in laws and regulations that could potentially cause losses to the business, sector, or market. Financial crime risk is not only confined to monetary loss and regulatory fine but also loss of reputation.

Conduct risk is a sub-type of compliance, legal and regulatory risk and is broadly defined as any action of a financial institution or individual that leads to customer detriment or has an adverse effect on market stability or effective competition. As part of its oversight of conduct risk, senior management also monitors key conduct risk metrics relating to employee conduct.

Other Risks

The Company is subject to risks associated with unforeseen or catastrophic events, including, but not limited to, geopolitical events, 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.

Please refer to Note 15 accompanying the financial statements for further disclosure on financial risk management.

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.

	2021	2020
Total comprehensive income	\$ 48,676 \$	81,483
Liquidity ratio	34.05%	35.13%
Return on equity	 17.29%	32.50%

The Company's profit for 2021 amounted to \$48,676 (2020: \$81,483) which represents a decrease of 40.26% compared to 2020. Despite a decrease in operating profit, the Company recorded a return on equity of 17.29% in 2021. The liquidity ratio remained strong and is broadly consistent with 2020. The Company held core liquid assets amounting to \$102,610 at 31 December 2021 (2020: \$91,981) and has no long-term debt.

(Expressed in U.S. dollars in thousands)

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 into 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 took effect on 1 January 2022. The new regulations aim to be more commensurate to the business models and risks associated with investment firms, rather than banks. The Company has successfully completed its preparations to transition to the new framework and has onboarded new third party software to further streamline the regulatory reporting requirements.

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 of Directors is required to have regard to, amongst other matters: 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 of Directors has responsibility for decision-making with respect to matters deemed to be of significance or strategic importance for CSEL.

As at 31 December 2021, the Board of Directors comprised two independent non-executive Directors who provide oversight and constructive challenge to management and two executivo Directors. The Board, in discharging its duties, dolegates 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. The Board receives regular updates from management on the Company's financial performance, risk limits, and compliance with law rule and regulation, which all are considered as part of the Board of Directors' ongoing oversight to ensure the Company is managed in a manner that promotes its long term success. Management also presents proposals on significant matters to the Board of Directors for review, challenge and approval, including but not limited to changes to the Company's risk appetite and tolerances. In considering these and other matters, the Board of Directors consistently considers whether the proposal would promote the long-term success of the Company.

(Expressed in U.S. dollars in thousands)

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 Board of 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 of Directors seeks to consider the interests and priorities of each stakeholder group. However, the Board of Directors acknowledges that in balancing different perspectives it is not always possible to deliver the desired outcome for all stakeholders.

Shareholder

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 of Directors.

<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 significant functions represented on the EOC or other management level 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.

Employee health and wellbeing has been a primary focus for the Company throughout the COVID-19 pandemic. The Company is committed to ensuring it provides a COVID-19 secure workplace and ensuring that staff are supported and have the resources to carry out their roles effectively whilst working remotely. 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 5% since 2020. As part of its oversight responsibilities, the Board of Directors requested and received regular updates on measures to ensure the wellbeing of employees during 2021 to ensure employee safety and compliance with government guidelines.

The Board of Directors also receives regular updates on conduct risk metrics, which provides it with relevant data and information on employee conduct, culture, and emerging issues.

Regulators and Trading Venues

The Board of Directors recognises the importance of an ongoing constructive dialogue with regulators and policymakers to share the Company's experience as a market stakeholder and recommendations on best practices across financial market legislative and regulatory developments. The CS Group is committed to the integrity, transparency, efficiency, competitiveness, and stability of financial markets. CSEL has consistently engaged with policymakers and regulators to ensure the successful implementation of key financial services regulations including the Markets in Financial Instruments Regulation and Directive ("MiFIR" and "MiFID II"), European Market Infrastructure Regulation, Short Selling Regulation, and the more recent Prudential Framework for Investment Firms. The Board of Directors has requested and received regular updates on regulatory matters of relevance for the Company and on the status of the CS Group's regulatory engagement and dialogue.

(Expressed in U.S. dollars in thousands)

In the context of the UK's departure from the European Union ("EU") and subsequent regulatory and market developments, the CS Group has remained an advocate for pragmatic solutions to financial services issues as they relate to the future EU-UK relationship, an approach the Company has also shared in the remit of the HM Treasury's Wholesale Financial Markets Review. The CS Group is also fully devoted to initiatives to deliver the Capital Markets Union ("CMU") in the EU, including through the ongoing MiFIR review. The CS Group also remains a firm proponent of the G-20 reforms to the over-the-counter derivatives markets – including promoting central clearing, enhancing transparency, transitioning to more competitive trading, and instilling more disciplined 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 2021, the CS Group has responded to several public consultations by the European Securities & Markets Authority, the European Commission, the UK Department for Business, Innovation & Skills, and HM Treasury, either independently and/or through various trade association partners.

Following periods of elevated market volatility, the Company remained watchful and in close contact with exchanges and regulators. The market infrastructure as well as the Company's operational risk management systems allowed the Company to continue to provide liquidity and trade without disruption, contributing to the orderly functioning of financial markets. The Board of Directors 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

12 April 2022

Directors' Report

(Expressed in U.S. dollars in thousands)

The Directors present their report and audited financial statements for the Company for the year ended 31 December 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
- Katrina Manson
- · Richard Pike (independent)
- Deborah Anthony (independent), appointed 19 April 2021

The following Directors resigned from the Board of Directors between 1 January 2021 and the date of signing the financial statements:

Anthony Walker (independent), resigned 26 April 2021

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

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 UK-adopted international accounting standards. Under company law, 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 applicable UK-adopted international accounting standards 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 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 also 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.

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.

DIVIDENDS

During the year ended 31 December 2021, the Company paid \$9,192 in dividends (2020: \$59,171). The Directors recommend the payment of a final ordinary dividend of \$70,000 in respect of the year ended 31 December 2021 in April 2022.

Directors' Report

(Expressed in U.S. dollars in thousands)

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 2021.

Energy Data and Greenhouse Gas ("GHG") Emissions

	For the year ended 31 December				
	2021	2020			
Energy consumption to calculate emissions (kilowatt hours - kWh)					
Total energy consumption	1,104,323	1,124,320			
Emissions (tonnes of Carbon Dioxide equivalent - tCO ₂ e)	"* Spiller - " Test to filling	马斯林斯 计连续处理 计电路			
Total scope 1	67	49_			
Total scope 2 (location based)	157	200			
Intensity ratio	<u>。神襲の近、 塩盐が物 ・ ・・ 174</u>				
tCO2e per full time equivalent	1.58	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.

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 floor in use for full year throughout 2021.

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 matching the operation of the heating, ventilation and air conditioning system to demand and turning off at times of low demand such as weekends.

RESEARCH AND DEVELOPMENT

A number of the Company's employees are engaged in research and development activity. The Company provides trading algorithm and other software development services to an affiliated CS Group company.

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 12 April 2022.

Directors' Report

(Expressed in U.S. dollars in thousands)

STAKEHOLDER ENGAGEMENT

Please refer to the Strategic Report.

SUBSEQUENT EVENTS

Please refer to Note 18 accompanying the financial statements.

FUTURE DEVELOPMENTS

Please refer to the Strategic Report.

FINANCIAL RISK MANAGEMENT

Please refer to Note 15 accompanying the financial statements.

On behalf of the Board

Steven Atkinson, Director

12 April 2022



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 2021 and of its profit and cash flows for the year then ended;
- · have been properly prepared in accordance with UK-adopted international accounting standards; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report and Financial Statements (the "Annual Report"), which comprise: Statement of Financial Position as at 31 December 2021; Statement of Comprehensive Income, Statement of Changes in Equity, Statement of Cash Flows, for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Basis for opinion

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

Independence

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

Conclusions relating to going concern

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.



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 2021 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.



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 by the engagement team 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.



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.

Mike Wallace (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP

Chartered Accountants and Statutory Auditors

London

12 April 2022

Statement of Financial Position

(Expressed in U.S. dollars in thousands)

ASSETS

		At 31 De	ber		
	Note		2021		2020_
Assets:	91 ·				
Cash and cash equivalents		\$	52,610	\$	27,973
Financial assets at fair value through profit or loss	4		1,764,851		860,237
Securities purchased under agreements to resell	5		458,058		215,533
Due from affiliates	17		138,164		42,988
Due from brokers, dealers, clearing organisation and					
custodian	6		100,757		170,126
Other receivables and prepayments	7		8,915		12,943
Total assets		\$	2,523,355	\$	1,329,800

LIABILITIES AND EQUITY

Liabilities:	A MARKET REPORT	 a this is a second	
Financial liabilities at fair value through profit or loss	4	\$ 1,327,116	\$ 888,242
Due to brokers, dealers and custodian	8	816,577	92,376
Accrued expenses	9	75,293	69,763
Due to affiliates	17	3,019	17,553
Total liabilities		2,222,005	 1,067,934
Equity		301,350	261,866
Total liabilities and equity		\$ 2,523,355	\$ 1,329,800

The financial statements on pages 1 to 23 were approved by the Board of Directors on 12 April 2022 and were signed on its behalf by:

Steven Atkinson, Director

12 April 2022

Statement of Comprehensive Income

(Expressed in U.S. dollars in thousands)

			For the year ended 31 D	ecember
	Note		2021	2020
Income:	Lange (Fill)			
Net gain in fair value on financial assets and financial liabilities at				
fair value through profit or loss		\$	119,920 \$	165,869
Service fees from related parties	17		179,877	156,103
Dividend income			10,940	8,228
Interest income on financial assets at fair value through profit or				
loss			8,555	16,928
Other interest income			3,733	1,992
Other income			1,109	806
Net foreign currency loss			(1,071)	(949)
Total income			323,063	348,977
Operating expenses:	J 80 1	14. v.		
Brokerage commissions and fees, net			33,892	33,697
Dividend expense			12,748	8,805
Performance fees			12,437	24,232
Interest expense on financial liabilities at fair value through profit				
or loss			10,187	11,887
Other interest expense			5,580	12,467
Other operating expenses	11		183,483	149,315
Operating expenses			258,327	240,403
Operating profit			64,736	108,574
Taxation:		tin j	i graffigurungunging generalis	TO WALL MEET
Withholding tax on dividend income			1,041	721
Income tax expense	14		15,019	26,370
Total comprehensive income		\$	48,676 \$	81,483

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.

Statement of Changes in Equity

(Expressed in U.S. dollars in thousands)

For the year ended	31 December 2020
--------------------	------------------

	Note	Call	ed Up Share Capital	ned Earnings (* * Tot	al 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

For the	year ended 31	December 2021
		The rest of the second second

	Note:	Call	ed Up Share i Capital	Ret	ained Earnings : "To	tal Equity
Balance at 1 January 2021		\$	193,000	\$	68,866 \$	261,866
Total comprehensive income			<u> </u>		48,676	48,676
Dividends					(9,192)	(9,192)
Balance at 31 December 2021	10	\$	193,000	\$.	108,350 \$	301,350

Statement of Cash Flows

(Expressed in U.S. dollars in thousands)			
	 For the year ende	d 31 De	ecember 2020
Cash flows from operating activities:		<i>a</i> , •	2020
Total comprehensive income	\$ 48,676	\$	81,483
Adjustments to reconcile total comprehensive income to net cash			
provided by operating activities:			
Interest income	(12,288)		(18,920)
Interest expense	15,767		24,354
Dividend income	 (10,940)		(8,228)
Dividend expense	12,748		8,805
Withholding tax on dividend income	1,041		721
Income tax expense	15,019		26,370
Interest received	 13,795		19,602
Interest paid	 (16,613)		(26,653)
Dividends received	11,105		8,575
Dividends paid	(12,847)		(9,118)
Withholding taxes paid on dividend income	 (652)		(668)
Income taxes paid	 (8,132)	-	(36,298)
	56,679		70,025
Changes in operating assets and liabilities:			,
Financial assets at fair value through profit or loss	(904,614)		(6,521)
Financial liabilities at fair value through profit or loss	438,874		(16,881)
Due from brokers, dealers, clearing organisation and custodian	 69,369		348,455
Securities purchased under agreements to resell	(242,536)		(112,019)
Due from affiliates	 (6,335)		(7,149)
Other receivables and prepayments	(1,030)		100
Due to brokers, dealers and custodian	 724,201		(280,960)
Accrued expenses	 2,723		30,225
Due to affiliates	(14,544)		11,007
Net cash provided by operating activities	 122,787		36,282
Cash flows from investing activities:	 n promitor a j		00,202
Disbursement of loan to affiliate	 (88,958)		(7,625)
Net cash used in investing activities	(88,958)		(7,625)
Cash flows from financing activities:	 (00,000)		(1,020)
Dividends paid	 (9,192)		(59,171)
Net cash used in financing activities	(9,192)		(59,171)
	•		(33,171)
Net increase (decrease) in cash and cash equivalents for the year	24,637		(30,514)
Cash and cash equivalents at the beginning of the year	27,973		58,487
Cash and cash equivalents at the end of the year	\$ 52,610	\$	27,973
Analysis of balances of cash and cash equivalents at the end of the year:			
Operating cash	\$ 51,610	\$	26,973
Restricted cash	1,000		1,000

(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. The branch employs 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 ("CSHP") 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.

<u>Affiliations</u>

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

<u>Administrator</u>

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 31 May 2023.

NOTE 2

Basis of Preparation

Statement of Compliance

The accompanying financial statements of the Company have been prepared in accordance with UK-adopted International Accounting Standards ("IFRS") in conformity with the requirements of the Companies Act 2006.

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 Company 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 primarily represents the functional currency of the Company's operations.

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 accounting 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 management's 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, judgements 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 accounting policies have been consistently applied by the Company to all periods presented. Reclassifications and restatements have been made to previously reported amounts to conform to the current presentation.

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 2021, \$1,000 (2020: \$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.

(Expressed in U.S. dollars in thousands)

The portfolio of equity securities, debt securities, derivative financial instruments and securities purchased under agreements to resell ("reverse repurchase agreements") is managed and performance is measured 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 and reverse repurchase agreements are solely principal and interest, however, these financial instruments are neither held for the purpose of collecting contractual cash flows nor held both for 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. These assets are therefore classified as fair value through profit or loss.

Derivative liabilities and short debt and equity securities are held for trading and measured at fair value through profit or loss. Securities sold under agreements to repurchase ("repurchase agreements") are designated as measured at fair value through profit or loss as they are managed and their performance evaluated on a fair value basis.

Financial assets and liabilities subsequently measured at amortised cost represent amounts due from brokers, dealers, clearing organisation and custodian; amounts due from affiliates; other receivables and prepayments; amounts due to brokers, dealers and custodian; accrued expenses and amounts 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 of 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.

MEASUREMENT

Financial instruments classified as at fair value through profit or loss, are initially measured at fair value, with transaction costs for such instruments being recognised directly on 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.

Financial instruments classified as amortised cost 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 (2020: same) as both the historical analysis and forward-looking information indicate that the expected credit losses arising from the Company's receivables are not expected to be material.

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 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 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.

Fair value is generally based on or derived from (i) closing prices of an exchange market, (ii) prices or inputs disseminated by third parties, including membership organisations, or market participants (e.g., mean of the bid and offer price) or (iii) valuation models using such prices or inputs (e.g., for certain derivative financial instruments). In the absence of market prices or inputs that are observable, 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). 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.

Management manages portfolios which 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.

Related unrealised gains or losses on financial instruments measured at fair value are generally recognised in net gain in fair value on financial assets and financial liabilities at fair value through profit or loss on the statement of comprehensive income.

(Expressed in U.S. dollars in thousands)

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 judgement 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 activ	ve market	s that are
	accessible a	at the	measurement	date for	identical,
	unrestricted	assets of	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 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 2 of the fair value hierarchy.

U.S. government securities

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

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 include forward and swap contracts related to equities, interest rates, and foreign currencies. 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 forwards and swaps, model inputs can generally be verified and model selection does not involve significant management judgement. Similar models are generally used to value similar instruments and require a variety of inputs.

OTC derivative financial instruments are generally 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.

Reverse Repurchase Agreements and Repurchase Agreements

Reverse repurchase agreements and repurchase agreements are valued by discounting the expected future cash flows using inputs including interest rates and funding spreads, which are determined based on the specific characteristics of the agreements. Reverse repurchase agreements and repurchase agreements are classified within Level 2 of the fair value hierarchy.

DERIVATIVE CONTRACTS

The fair value of a derivative financial instrument is recorded on the statement of financial position as a financial asset at fair value through profit or loss or financial liability at fair value through profit or loss, respectively, prior to the exchange of related cash flows at contractually specified intervals. Derivative financial instruments may require cash and cash collateral transferred to or from such counterparties, which is included in due from (to) brokers and dealers on the statement of financial position. Net realised and net change in unrealised gains (losses) on derivative financial instruments are included in negain/(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. Reverse repurchase agreements and repurchase agreements are treated as collateralised financings (see Note 5).

Interest income or expense on reverse repurchase agreements and repurchase agreements is recognised over the term of the relevant agreement and included in interest income on financial assets at fair value or interest expense on financial liabilities at fair value on the statement of comprehensive income.

(Expressed in U.S. dollars in thousands)

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

Amounts due from and due to brokers, dealers, clearing organisation and custodian may include 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 at 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 2021 was \$250,028 (2020: \$268,507).

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 2021, the Company received a research and development tax credit for qualifying expenditure incurred in 2020, included within other income (2020: same). Research and development expenses are charged to the statement of comprehensive income as incurred.

Staff Costs

Compensation and benefits comprise 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 is 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 recognises a provision for annual leave accrued by employees as a result of services rendered in the current period, and which employees are entitled to carry forward and use within the next 12 months. The provision is measured at the salary cost payable for the period of absence, including social security costs.

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 possible to be estimated.

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.

(Expressed in U.S. dollars in thousands)

The Company makes payments into a group personal pension plan, operating as a defined contribution pension scheme. The amount charged to the statement of comprehensive income in respect of pension costs and other post-retirement benefits is the contributions payable in the year. Differences between contributions payable in the year and contributions actually paid are shown as either accruals or propayments in trade and other payables or trade and other roccivables, respectively, on the statement of financial position. 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.

Taxation

The Company is subject to UK corporation tax directly. For the year ended 31 December 2021, any associated taxes have been included 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 pocition, 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 2021, based on such review, management have determined that the Company was not required to establish a liability for uncertain tax positions (2020: 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 negain 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.

<u>New and Revised Accounting Standards and Interpretations</u>
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

Interest Rate Benchmark Reform — Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16) came into effect on 1 January 2021 and has been adopted in the financial statements of the Company. There are no other standards, interpretations or amendments to existing standards or interpretations that are effective for annual periods beginning on 1 January 2021 that have a material effect on the financial statements of the Company.

NEW STANDARDS, AMENDMENTS AND INTERPRETATIONS EFFECTIVE AFTER 1 JANUARY 2022 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 2022 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.

(Expressed in U.S. dollars in thousands)

NOTE 4

Financial Instruments at Fair Value through Profit or Loss

The following fair value hierarchy tables present information about the Company's financial instruments measured at fair value on a recurring basis based on the lowest level of significant input to the valuations. The exposure by region for the related levels is also included in the tables below:

ASSETS AT FAIR VALUE AT 31 DECEMBER 2021

		Level 1	Level 2		Total
Government debt securities:	im. o			1 12 2th	Ta ea andotonional
U.S. government securities	. \$	1,405,213	\$	_ :	\$ 1,405,213
Equity securities:			د د پور ۱۸		1 11 11 - 1
Financial		88,110		42	88,152
Industrial and materials		61,588		35	61,623
Consumer		50,352		596	50,948
Energy and utilities		23,513		3	23,516
Healthcare		17,502		27	17,529
Technology		13,143		79	13,222
Other		20,437		47	20,484
Total securities owned		1,679,858		829	1,680,687
Derivative assets	is a subsequence of	நுள்ளுள்ள முன			The second second
Equity contracts:					
Options		42,889			42,889
Total return swaps ("TRS") on common stock		_	1,	517	1,517
Futures		435			435
Warrants		2			2
Foreign exchange contracts:					
Forwards			32,	006	32,006
Interest rate contracts:					
<u>Futures</u>		227			227
Swaps		_	461,	128	461,128
Commodity contracts:					
Futures		383,719			383,719
Derivative assets before offsetting		427,272	494,	<u>351</u>	921,923
Amounts offset		(382,586)	(455,	173)	(837,759)
Total derivative assets		44,686	39,	478	84,164
Total financial assets at fair value through profit or loss		1,724,544	40,	307	1,764,851
Securities purchased under agreements to resell	\$		\$ 458,	058 \$	458,058
Exposure by region			•		
Government debt securities:	·	2.5. 19	ு்€். அளவர்கள்	anonna a	* * · · /
North America		100.0%		_	100.0%
Equity securities and an analysis of the securities and the securities are also as a securities and the securities are a securities are a securities and the securities are a securities are a securities and the securities are a securities and the securities are a securities are a securities are a securities and the securities are a securities and the securities are a securities are			والمؤافرة مستهم فأنها	ton englad	lmililiiiiកក្កកក្កា
Europe		66.3%		0.3%	66.6%
South America		28.1		_	28.1
Asia		2.9		_	2.9
North America		2.3	· · · · · · · · · · · · · · · · · · ·		2.3
Africa		0.1	• •		0.1
Total		99.7%		0.3%	100.0%
Derivative assets	·		rive and adding the	antipolimis.	and the same
Europe		82.7%	ALIPZASONIU V. T	0.4%	83.1%
South America		8.9			8.9
Asia South America		- 0.9		7.0	7.0
Africa				<u>/.u</u>	1.0
North America		_ _		1.0	1.0
		01.69/	-	8.4%	
Total		91.6%		0.4%	100.0%

(Expressed in U.S. dollars in thousands)

LIABILITIES AT FAIR VALUE AT 31 DECEMBER 2021

LIABILITIES AT FAIR VALUE AT 31 DECEMBER 2021		Laval 4	Lovel 2		Total
Government debt securities		Level 1	Level 2	·	Total
U.S. government securities	\$	1,153,975	\$ -	\$	1,153,975
Equity securities:		1,133,973			1,100,970
Industrial and materials	·	32,005	11	·	32.016
Consumer		30,691	<u>'</u>		30,691
Financial		29,933	31		29,964
Energy and utilities		13,135			13,135
Technology		12,855	6		12,861
Healthcare		11,965	4		11,969
Other		3,530	_		3,530
Total securities sold, not yet purchased		1,288,089			1,288,141
Derivative liabilities		· · · · · · · · · · · · · · · · · · ·	*;		
Equity contracts:			,		
Options		20,938	_		20,938
TRS on common stock			1,909		1,909
Futures		1,688	_		1,688
Warrants			22		22
Foreign exchange contracts:					
Forwards		_	13,798		13,798
Futures		458			458
Interest rate contracts:			<u> </u>		
Futures		151			151
Swaps			455,173		455,173
Commodity contracts:					
Futures		382,597	_		382,597
Derivative liabilities before offsetting		405,832	470,902		876,734
Amounts offset		(382,586)	(455,173)		(837,759)
Total derivative liabilities		23,246	15,729		38,975
Total financial liabilities at fair value through profit or loss	\$	1,311,335	\$ 15,781	\$	1,327,116
Exposure by region					
Government debt securities:					
North America		100.0%			100.0%
Equity securities			Talling J. T.		
Europe		77.2%			77.2%
South America		15.6			15.6
Asia		5.1	_		5.1
North America		2.0			2.0
Africa		0.1			0.1
Total		100%			100%
Derivative liabilities					
Europe		91.2%	0.2%		91.4%
South America		4.8			4.8
				-	
Asia		0.3	3.5		3.8

As at 31 December 2021, the Company did not have any assets or liabilities at fair value classified as Level 3. Securities purchased under agreements to resell and securities sold under agreements to repurchase which include financing interest receivables and payables, include the effect of netting and agree to the statement of financial position.

(Expressed in U.S. dollars in thousands)

ASSETS AT FAIR VALUE AT 31 DECEMBER 2020

	Level 1	Level 2	Total
Government debt securities:		mmanajairust 🗈 🗀	<u> </u>
U.S. government securities	\$\$390,259	<u> </u>	\$ 390,259
Equity securities:			
Consumer	119,709		120,568
Financial	102,615		102,619
Industrial and materials	71,059		71,123
Energy and utilities	33,646		33,655
Technology	29,765		29,842
Healthcare	34,435		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	<u> </u>	335,472
Equity contracts:			
TRS on common stock		- 1,605	1,605
<u>Options</u>	61,281		61,281
Futures	228		228
Warrants	1		24
Derivative assets before offsetting	397,609		1,704,234
Amounts offset	(334,090		(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			
Government debt securities:			
North America	100.0		100.0%
Equity socurities are not a superior and a superior	-apananampa	http://www.common.com	agrammages were to the first the
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	is contributions of		nethological
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.

(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:				erandent-ranner men (t. 11) a. junio
U.S. government securities	\$ 553,179		<u> </u>	\$ 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			1	3 17 1
Interest rate contracts:				
Futures	455			455
Swaps		1,293,111		1,293,111
Commodity contracts:				***
Futures	334,094			334,094
Equity contracts:		4 440		4 440
TRS on common stock		1,419		1,419
Options	58,219			58,219
Futures	1,083 106			1,083
Warrants Foreign exchange contracts:	100	_ _	-	106
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	Ψ 000,222	Ψ 1,+00	Ψ 000	Ψ 000,242
	a photographic states	all reconstitutions		* .
North America	100.0%	· —	_	100.0%
Equity securities		100	as a toma	a ding a summing a sum
Europe	84.1%		<u> </u>	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%	_	0.29	
Derivative liabilities				
Europe	19.9%	64.1%		84.0%
North America		12.6		12.6
	3.3			3.3
South America	٠٠.٠١			
South America Asia			_	0.1

As at 31 December 2020, the Company classified delisted equity securities as Level 3. The Level 3 positions were valued by discounting the last observed exchange price.

Carrying amount of financial assets and liabilities that are not measured at fair value at 31 December 2021 and 2020 as determined by the accounting policies in Note 3 are considered a reasonable approximation of their fair value. These include cash and cash equivalents, amounts due from brokers, dealers and custodian, amounts due from affiliates, other receivables and prepayments, accrued expenses, amounts due to affiliates and due to brokers, dealers and custodian. As these assets and liabilities are not measured at fair value, they are not included in the fair value hierarchy tables above. Had these assets and liabilities been included in the fair value hierarchy, all would have been classified within Level 2 except for cash and cash equivalents which would have been classified within Level 1.

(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, and/or entering into transactions that are cleared through central clearinghouses.

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.

The following table presents information about reverse repurchase agreements and repurchase agreements.

	At 31 December			
		2021		2020
Fair value of securities collateral received for reverse repurchase agreements	\$	503.836	\$	576.881
Fair value of securities collateral pledged for repurchase agreements		45,971		362,218
Net cash collateral received		758		1,144

In the table above, the fair value of securities collateral received and pledged includes accrued coupon interest.

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				
	2021	2020			
Included in the statement of financial position					
Gross amounts	\$ 503,935	\$ 576,828			
Amounts offset	(45,877	(361,295)			
Net amounts	\$ 458,058	\$ 215,533			
Amounts not offset	÷∴∵suetiefe	1			
Counterparty netting	\$ —	- \$ —			
Financial instruments, at fair value	(458,058	(215,533)			
Total	\$ _	- \$			

SECURITIES SOLD UNDER AGREEMENTS TO REPURCHASE

		At 31 December			
•	_	2021	20	20	
Included in the statement of financial position	on 🖖 💮				
Gross amounts	\$	45,877	\$ 36	1,295	
Amounts offset		(45,877)	(36	1,295)	
Net amounts	\$		\$		
Amounts not offset		17 14 74	C ELTS		
Counterparty netting	\$	_	\$	_	
Financial instruments, at fair value		_			
Total	\$	_	\$	_	

In the tables above:

- Gross 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 legally enforceable master netting agreements or similar arrangements.
- 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 overcollateralisation 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.

<u>Repurchase Agreements – Maturities and Collateral Pledged</u>
The following table presents the gross carrying value of repurchase agreements by remaining contractual maturity and class of collateral pledged:

	At 31 December					
U.S. government securities		2021	2020			
Overnight	\$	45,877	\$ 361,294			
Financing interest payable		_	1			
Gross amounts	\$	45,877	\$ 361,295			

(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			
	2021 20			2020
Securities failed to deliver	_ \$	39,413	\$	35,270
Receivables from clearing organisation		37,552		35,409
Receivables from brokers and dealers		23,792		87,720
Receivables from custodian for unsettled				
trades		_		11,727
	\$	100,757	\$	170,126

None of the securities failed to deliver were receivable from an affiliate (2020: \$20,306).

NOTE 7

Other Receivables and Prepayments

	At 31 December				
	2021			2020	
Prepayments and accrued income	\$	4,698	\$	3,982	
Tax receivable		3,376		6,622	
Interest receivable	•	311		1,690	
Dividend receivable		530		649	
	\$	8,915	\$	12,943	

All receivables are due within one year, with the exception of a tax credit receivable of \$420 (2020: \$83), which is due after one year.

NOTE 8

Due to Brokers, Dealers and Custodian

Amounts payable to brokers, dealers and custodian consists of the following:

	At 31 December			
	2021		2020	
Payables to custodian for unsettled trades	\$ 658,665	\$		
Payables to brokers and dealers	118,510		57,126	
Securities failed to receive	39,402		35,250	
	\$ 816,577	\$	92,376	

Of the securities failed to receive, \$32,835 (2020: \$14,944) represents securities failed to receive from an affiliate.

NOTE 9

Accrued Expenses

	At 31 December			
		2021		2020
Compensation payable	\$	63,463	\$	60,305
Accruals		6,507		6,781
Corporation tax payable		3,601		
Interest payable		1,372		2,228
Dividend payable		350		449
	\$	75,293	\$	69,763

Compensation payable includes \$6,099 (2020: \$6,719) of accrued social security costs.

<u>NOTE 10</u>

Share Capital

At 31 December 2021, 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 (2020: 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 \$9,192 (\$0.05 per share) out of retained earnings during the year ended 31 December 2021 (2020: dividend of \$59,171, \$0.31 per share). Dividend per share is not expressed in thousands.

There were no share issuances or redemptions for the year ended 31 December 2021 (2020: none).

NOTE 11

Other Operating Expenses

	For the year ended 31 December		
	2021	2020	
Staff costs	\$ 108,046	\$ 103,769	
Service fees to related parties	47,070	17,501	
Communications and data processing	10,160	10,542	
Other expenses	9,349	8,915	
Professional fees	8,363	8,168	
Auditors' remuneration:			
Audit services pursuant to legislation	392	374	
Audit-related services	21	39	
Other non-audit services	82	7	
	\$ 183,483	\$ 149,315	

Further information in relation to service fees to related parties is set out in Note 17 to the financial statements.

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.

(Expressed in U.S. dollars in thousands)

NOTE 12

Staff Costs

	For the year ended 31 December			
	2021 2020			2020
Wages, salaries and bonus payments	\$	88,979	\$	86,844
Social security costs		11,664		10,908
Other staff costs		4,359		3,276
Pension costs		3,044		2,741
	\$	108,046	\$	103,769

The average monthly number of employees during the year including directors and seconded employees was 143 (2020: 136), analysed as follows:

	Average for the year ended 31 December		
	2021	2020	
Front office	60	59	
Technology and administrative support	81	75	
Independent directors	2	2	
	143	136	

NOTE 13

Directors' Remuneration

	F	For the year ended 31 December		
	_	2021		2020
Emoluments	\$	1,127	\$	1,101
Pension benefits		17		17
	\$	1,144	\$	1,118

Remuneration in respect of the highest paid Director, which is included in staff costs (Note 12):

	ŧ	or the ye	
		2021	2020
Emoluments	\$	962	\$ 877
Pension benefits		14	12
	\$	976	\$ 889

NOTE 14

Taxation

For the year ended 31 December 2021, the standard rate of corporation tax in the UK was 19% (2020: 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 2021, the Irish tax charge was assessed to be nil (2020: nil).

Factors Affecting Tax Charge for the Year

Corporation 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		
		2021	2020
Profit on ordinary activities before tax	\$	63,695 \$	107,853
Profit before taxation multiplied by the			
rate of corporation tax in the UK		12,102	20,492
Bank corporation tax surcharge		2,346	6,113
Timing and other differences		184	228
Foreign exchange differences		186	(168)
Adjustments in respect of prior years		419	(182)
Non-taxable income		(170)	(113)
Gain on disposal		(48)	_
Income tax expense	\$	15,019 \$	26,370

The tax assessed for the year is higher than (2020: higher than) the rate of corporation tax in the UK. The differences are explained below:

	For the year ended 31 December			
		2021		2020
Current tax		ile (eller er i	1.	
UK corporation tax on profit for the				
financial year	\$	14,600	\$	26,552
Adjustments in respect of prior years		419		(182)
Total current tax	\$	15,019	\$	26,370

NOTE 15

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 do so and will not, in general, attempt to hedge all market or other risks in the portfolio, and it will hedge certain risks only partially, if at all

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.

(Expressed in U.S. dollars in thousands)

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.

PRICE RISK

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

	At 31 December		
	2021 2020		
Equity securities owned	\$ 275,474 \$ 392,945		
Equity securities sold, not yet purchased	(134,166) (273,486)		
Derivatives assets	45,976 64,520		
Derivative liabilities	(24,568) (60,831)		
Total	\$ 162,716 \$ 123,148		

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

	At 31 December		
	2021	2020	
Net equity securities	\$ 141,308	\$ 119,459	
Net notional exposure from commodity			
contracts	753	(1,382)	
Net notional exposure from equity contracts	(106,039)	(431,881)	

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			
	2021	2020		
Equity securities:				
Market price +5%	\$ 178 \$	(1,254)		
Market price -5%	(941)	302		
Equity derivatives:	 			
Implied volatilities +25%	(69)	(1,904)		
Implied volatilities -25%	46	1,622		

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 daily, adjusting financial instruments as deemed necessary. Additionally, 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.

At 31 December 2021, the Company has no net exposure in a currency other than the U.S. dollar exceeding five percent of net assets (2020: same).

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.

(Expressed in U.S. dollars in thousands)

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 2021		
	+5%		-5%
EUR	\$	(725) \$	725
BRL		683	(683)
GBP		(439)	439
Other currencies		45	(45)

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

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			
	2021		2020	
Interest rates +100bps	\$ 1,754	\$	4,004	
Interest rates -100bps	1,455		(4,316)	

For the year ended 31 December 2021, the Company earned interest income of \$8,449 (2020: \$16,928) on its debt security holdings and incurred interest expense of \$8,593 (2020: \$11,887) 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.

IBOR transition

IBOR transition risk is the risk of loss related to the discontinuation of LIBOR and other interbank-offered based reference rates. The Company's exposure to instruments tied to these rates is limited to interest rate swaps referencing USD 3-month LIBOR, which will not cease until June 2023. The risk of any pricing adjustments in connection with the transition is largely mitigated by the fact that all of the Company's interest rate swap positions are cleared with LCH and will therefore have the same LIBOR cessation fallback arrangements.

The fair value of exposures which had not transitioned to an alternative benchmark interest rate as at 31 December 2021 were as follows:

	Assets	Liabilities		Net exposure
Interest rate contracts \$	111,928	\$ (100,542)) \$	11,386

The Company actively sought to provide liquidity in interest rate swaps referencing alternative reference rates and migrated its funding and cash management arrangements to non-LIBOR benchmarks during the year in advance of the cessation date.

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 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 to demand collateral based on the Company's mark-to-market exposure to the counterparty, as well as the right, in the event of counterparty default, 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.

(Expressed in U.S. dollars in thousands)

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

DERIVATIVE ASSETS SUBJECT TO MASTER NETTING AGREEMENTS

	At 31 December		
	2021	2020	
Included in the statement of financial pos	ition		
Gross amounts			
Interest rate contracts	\$ 461,355	\$ 1,305,62 <u>4</u>	
Commodity contracts	383,719	335,472	
Equity contracts	5,643	17,473	
Foreign exchange contracts	32,006		
Total	882,723	1,658,569	
Amounts offset			
Interest rate contracts	(455,173)	(1,293,111)	
Commodity contracts	(382,586)	(334,090)	
Equity contracts	_		
Foreign exchange contracts	_		
Total	(837,759)	(1,627,201)	
Net amounts		•	
Interest rate contracts	6,182	12,513	
Commodity contracts	1,133	1,382	
Equity contracts	5,643	17,473	
Foreign exchange contracts	32,006		
Total	44,964	31,368	
Amounts not offset in the statement of fin	ancial positi	on	
Financial Instruments			
Interest rate contracts	(76)	(156)	
Commodity contracts		(2)	
Equity contracts	(4,854)	(17,209)	
Foreign exchange contracts	(13,798)		
Total	(18,728)	(17,367)	
Net exposure			
Interest rate contracts	6,106	12,357	
Commodity contracts	1,133	1,380	
Equity contracts	789	264	
Foreign exchange contracts	18,208		
Total	\$ 26,236	14,001	

DERIVATIVE LIABILITIES SUBJECT TO MASTER NETTING AGREEMENTS

AGREEMENTS				
	_	At 31 De		
		2021	2020	
Included in the statement of fin	ancial _l	osition <u>+</u>		
Gross amounts				
Interest rate contracts	\$	455,324	\$ 1,293,5	66
Commodity contracts		382,597	334,0	
Equity contracts		6,564	24,7	56
Foreign exchange contracts		14,256	2	291
Total		858,741	1,652,7	′07
Amounts offset				
Interest rate contracts		(455,173)	(1,293,1	11)
Commodity contracts		(382,586)	(334,0	90)
Equity contracts				_
Foreign exchange contracts		•		_
Total		(837,759)	(1,627,2	(101
Net amounts				
Interest rate contracts		151	4	55
Commodity contracts		11		4
Equity contracts		6,564	24,7	56
Foreign exchange contracts		14,256	2	91
Total		20,982	25,5	06
Amounts not offset in the state	ment of	financial po	sition	ı, ik
Financial Instruments		**		
Interest rate contracts		(76)	(1	56)
Commodity contracts		_		(2)
Equity contracts		(4,854)	(17,2	
Foreign exchange contracts		(13,798)		_
Total		(18,728)	(17,3	67)
Net exposure				
Interest rate contracts		75	2	99
Commodity contracts		11		2
Equity contracts		1,710	7,5	47
Foreign exchange contracts		458		91
Total	\$	2,254	\$ 8,1	

In the tables above, gross amounts include all derivative financial instruments that are subject to master netting agreements. Amounts offset, counterparty netting, and financial instruments, at fair value, relate to legally enforceable master netting agreements or similar arrangements.

At 31 December 2021 the Company had posted cash collateral of \$40,374 (2020: \$55,763) and received cash collateral of \$43,518 (2020: \$11,974) with respect to the counterparties of its derivative financial instruments that are subject to master netting agreements.

(Expressed in U.S. dollars in thousands)

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

	At 31 December			
		2021		2020
Derivative assets not subject to master netting agreements	\$	39,200	\$	45,665
Net exposure to derivative instrument counterparties under master netting				
agreements		26,236		14,001
Total	\$	65,436	\$	59,666

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 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. Where possible, management attempt to mitigate the credit risk that exists with these account balances by, among other things, 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 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 2021	% Net Assets
The Bank of New York Mellon	17.1%
11.00	
LCH Clearnet Limited	14.4
ABN AMRO Clearing Bank N.V.	10.7
Merrill Lynch International	10.3
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

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 \$48,500 (2020: \$62,000) as part of its liquid resources. The policy for managing liquidity tärgets maintaining a pool of excess liquidity at the Company for various planned and contingent needs including, among others, mark-to-market losses on financial instruments, 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 34.05% at 31 December 2021 (2020: 35.13%), 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 significantly magnify both gains and losses, increasing the possibility of the Company incurring a substantial loss. 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 a variety of 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 portfolio that can be easily liquidated within one trading day, with liquidity monitored on a daily basis. As at 31 December 2021, all equity securities held by the Company have expected liquidity within one day (2020: same).

The tables below analyse the Company's due to brokers, dealers and custodian, 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 2021	Less than 3 months	More than 3 months		
Due to brokers, dealers and custodian	\$(816,577) \$			
Due to affiliates	(3,019)	_		
Accrued expenses	(73,754)	(1,539)		
Contractual cash outflows	\$(893,350) \$	(1,539)		

(Expressed in U.S. dollars in thousands)

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

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 2021 TRS on common	Less than 7 days	7 days to 1 month	1 to 12 months	More than 12 months
stock	<u>\$</u> — \$	\$	(802) \$	(1,107)
Options		(10,924)	(8,882)	(1,132)
Forwards	(13,754)	_	(44)	
Warrants		_	(1)	(21)
Futures	(42,822)	(130,809)	(211,164)	(99)
Swaps		(628)	(8,227)	(446,318)

At 31 December 2020 TRS on common	Less than 7 days	7 days to 1 month	1 to 12 months	More than 12 months
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)

Commitments

The Company enters into forward starting reverse repurchase and repurchase agreements that settle at a future date. At 31 December 2021, the Company had commitments relating to its unsettled forward starting reverse repurchase agreements and repurchase agreements of \$419,074 and \$83,693, respectively (2020: \$555,368 and \$394,748). As of 31 December 2021, these forward starting reverse repurchase and repurchase agreements each had a settlement date of 3 January 2022.

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 Company is subject to risks associated with unforeseen or catastrophic events, including, but not limited to, geopolitical events, 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 seeks to manage this risk through continuity and resiliency planning.

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.

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 believe resolution of any such matters would not have a material adverse effect on the financial condition of the Company,

NOTE 16

Capital Management

In 2021, the Company was subject to the EU's Capital Requirements Regulation ("CRR"). 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

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 Citadel Securities website.

(Expressed in U.S. dollars in thousands)

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 2021, the Company had CET1 capital of \$276,908 (2020: \$251,116) and Pillar 1 capital requirement of \$96,924 (2020: \$98,356). The Company's surplus capital over Pillar 1 requirement was \$179,984 (2020: \$152,760).

On 1 January 2022, the Investment Firm Prudential Regime ("IFPR") was implemented in the UK, which the Company will be subject to going forwards.

NOTE 17

Transactions with Related Parties

Expenses

Pursuant to an administrative services agreement, the Company reimburses CEAMER, CSAMER and their affiliates for direct and reimbursable administrative, general and operating expenses, including staff costs, paid by these entities, on behalf of the Company. For the year ended 31 December 2021, the reimbursable expenses were \$27,739 (2020: \$13,560) 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 2021, the Company had a combined payable to CEAMER, CSAMER and their affiliates of \$392 (2020: \$14,302), which is included in due to \$2,806 (2020: nil), which is included in due from 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 2021, these fees totaled \$12,437 (2020: \$24,232) and are reflected as performance fees on the statement of comprehensive income. Included in due to affiliates on the statement of financial position is \$1,880 (2020: \$2,435) 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 2021, algorithm development service fees of \$113,200 (2020: \$85,602) 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 2021, trade agency service fees from affiliates of \$58,800 (2020: \$61,876) 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 2021, these fees totaled \$4,846 (2020: \$3,674) 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 2021, these fees totaled \$2,428 (2020: \$3,666) and are reflected in service fees from related parties on the statement of comprehensive income.

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 2021, these trading fees totaled \$603 (2020: \$1,285) 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 and support and relationship management services of \$19,331 (2020: \$3,941), included within other operating expenses on the statement of comprehensive income.

Amounts outstanding as at 31 December 2021 in relation to the aforementioned services are \$10,775 (2020: \$7,145) included in due from affiliates on the statement of financial position and \$737 (2020: \$817) 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 2021, the Company recorded no revenue from performance obligations satisfied or partially satisfied in previous periods as these obligations are generally short term in nature (2020: 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. At 31 December 2021, the total commitment was \$130,000 (2020: \$90,000). 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 2021, the carrying value of the loan advanced is \$124,583 (2020: \$35,625), which is included in due from affiliates on the statement of financial position. There was no interest receivable as of 31 December 2021 (2020: \$117 included in due from affiliates on the statement of financial position). Interest income of \$1,464 is recognised during the year ended 31 December 2021 and is included in other interest income on the statement of comprehensive income (2020: \$1,912). Effective 1 January 2022, the interest rate has been updated to SOFR plus 1.25%.

Guarantees

The Company has provided a guarantee in respect of the lease of an affiliate's office premises. As at 31 December 2021, the affiliate had minimum future lease commitments of \$2,707 (2020: \$4,467).

(Expressed in U.S. dollars in thousands)

Miscellaneous Related Party Transactions

During 2021, the Company transferred equity securities to Citadel Securities Financial Trading (Ireland) Designated Activity Company ("CSFT"), an affiliate, for a net cash receipt of \$5,944. As a result of these transfers, the Company realised a net gain, which is included in net gain in fair value on financial assets and financial liabilities at fair value through profit or loss on the statement of comprehensive income. The transfer of positions was based on the fair values of these positions at the transfer date.

NOTE 18

Subsequent Events

The Company has performed an evaluation of subsequent events through 12 April 2022, which is the date the financial statements were available to be issued.

Effective 1 January 2022, and Citadel Enterprise Americas Services LLC ("CEASC") Citadel Securities Americas Services LLC ("CSASC") and Citadel Enterprise Europe Services Limited ("CEES"), all affiliates, have begun to provide administrative services to the Company. CEAMER and CSAMER continue to provide administrative services to the Company. The Company reimburses CEAMER, CSAMER, CEASC, CSASC, CEES and their affiliates for reimbursable and direct expenses incurred by these entities on behalf of the Company.

On 12 April 2022, the Directors approved and authorised a dividend of \$70,000 to CSEH.

NOTE 19

Approval of Financial Statements

The financial statements were approved and authorised for issue by the Board of Directors on 12 April 2022.



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 2021 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 2021 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.



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 the 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.

Procentelanterpe LP

PricewaterhouseCoopers LLP Chartered Accountants and Statutory Auditors London 12 April 2022

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 United Kingdom ("UK") adopted international accounting standards ("IFRS").

The Company has operations in the 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:

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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 2021

000111111 01 0001	TITLE CITIES OF		, DECEMBER EVE		
Jurisdiction Av	erage number of	Γurnover (" □ Pr	ofit before	unting tax	oration tax
	erage number of 🔄 🕍		taxation 🔠 👚 (char	ge)/credit	paid -
UK	139 \$	244,095 \$	65,062 \$	(15,024)\$	(8,132)
Ireland	4	5,933	715	5	_
Total	143 \$	250,028 \$	65,777 \$	(15,019)\$	(8,132)