CITADEL | Securities

Citadel Securities (Europe) Limited

Pillar 3 Disclosures

31 December 2021

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1. Introduction

Company overview

Citadel Securities (Europe) Limited ('CSEL' or the 'firm') is a full scope IFPRU investment firm regulated by the Financial Conduct Authority ('FCA'). The principal activity of the firm is technology-enabled liquidity provision and market making in equities, futures, options, interest rate swaps and government securities. The firm trades on a proprietary basis for its own account. Additionally, the firm provides agency execution, portfolio management, trading algorithm development and other support services to affiliated Citadel Securities Group entities.

CSEL is a wholly owned subsidiary of CSHC Europe LLC, a Delaware limited liability company. The firm is part of Citadel Securities, a global market maker that provides liquidity across a broad array of fixed income and equity products.

Disclosure overview

The firm is required under the EU Capital Requirement Regulation ('CRR') to maintain adequate financial resources to ensure there is no significant risk that liabilities cannot be met as they fall due. The CRR is based on the Basel Accord framework, which consists of three 'pillars' of prudential supervision:

- Pillar 1 sets out the minimum capital requirements firms are required to maintain;
- Pillar 2 deals with the Internal Capital Adequacy Assessment Process ('ICAAP') and the Supervisory Review and Evaluation Process through which the firm and the regulator satisfy themselves regarding the adequacy of capital relative to the risks the firm faces and controls it has in place; and
- Pillar 3 aims to encourage market discipline by developing a set of disclosure requirements which will allow market participants to assess key pieces of information on a firm's capital resources, risk exposures and risk assessment process.

Information in this report is prepared in accordance with the Pillar 3 disclosure rules as required by the CRR, and supplemented by the Financial Conduct Authority ('FCA') Prudential sourcebook for Investment Firms ('IFPRU'). From 1st January 2022, CSEL falls under the scope of the Investment Firm Prudential Regime ('IFPR'). However per MIFIDPRU TP 12, disclosures should still be made in accordance with CRR rules for reference dates before 30 December 2022.

The Pillar 3 disclosures have been prepared solely to comply with regulatory requirements to provide public information on: the firm risk management objectives and policies; its capital position; its capital resources requirements under Pillar 1; and its approach to assessing the adequacy of capital. The data presented in this report refers to the CSEL regulatory position as at 31 December 2021 and should be read in conjunction with the firm's annual report and financial statements. This report is based on the operating and governance structures in place at 31 December 2021.

Frequency and means of disclosure (Art. 433 and 434)

In accordance with Articles 433 and 434 of the CRR, the disclosures are issued at a minimum on an annual basis and published on the Citadel Group website www.citadelsecurities.com. The disclosures are reviewed and approved by the firm's senior management and Board of Directors. CSEL is not part of a Group for the purposes of CRR disclosure requirements and is regulated by the FCA on a 'solo' basis.

Scope of application (Art. 436)

As required under Article 436 of the CRR, it is confirmed that outside of regulatory requirements to hold capital, there are no current or foreseen material practical or legal impediments to the prompt transfer of funds or repayment of liabilities among the parent undertakings.

2. Risk management objectives and policies

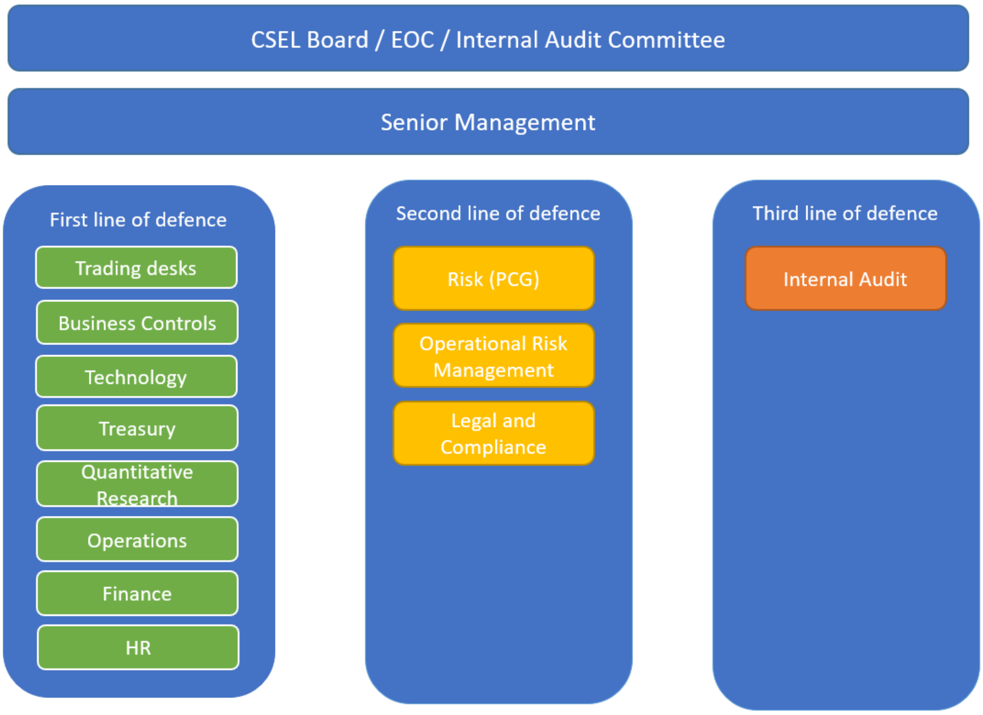
Risk management is an integral part of the business and is a focus for risk managers as well as the trading desks and support functions. At the highest level, the Board of Directors has overall responsibility for the establishment and oversight of the firm's risk management framework. The framework includes:

- identifying the Principal risks faced by the firm in achieving its strategic objectives;
- establishing appropriate risk appetites and tolerances, along with limits and controls to manage the risks; and
- ensuring that appropriate monitoring and reporting systems are in place such that controls remain robust and evolve with the changing risk profile of the firm.
- providing clear accountability for risk management

The Board has developed the firm's Risk Appetite Statement ("RAS"), which sets out the amount and type of risk that CSEL is willing to take to meet its strategic objectives. Monitoring of risks against the RAS is via the Level 1 Key Risk Indicators ('KRIs') that are presented monthly to the firm's Executive and Operating Committee ('EOC'), where any risk that breaches its amber threshold is discussed together with any required remedial action. Any Level 1 KRIs, along with lower level KRIs, are also monitored and any breach of the red thresholds may be escalated for discussion to the Board of Directors as appropriate. The risk appetite and risk guidelines are reviewed regularly to reflect changes in market conditions and the firm's activities.

Three lines of defence:

Risk management is set within the firm's overall risk framework, which is based upon a three-lines-of-defence model. Roles and responsibilities within the firm for the management of risk operate within this framework. The organisational structure is designed to facilitate risk management through three lines of defence as illustrated below as at 31 December 2021:



First line of defence

Responsibility for the identification of inherent risks and the development of first line controls, which manage and mitigate those risks. Each risk owner is responsible for owning and managing the risks and controls applicable to their areas to comply with the firm's risk appetite and policies. Within CSEL this refers to the Trading desks, Business Controls Technology, Treasury, Quantitative Research (QR), Operations, Finance and all other Enterprise functions.

Second line of defence

The second line provides independent oversight and is responsible for establishing risk management standards and providing independent challenge of activities and controls. Portfolio Construction and Risk Group ("PCG"), Operational Risk Management and Legal and Compliance are the second line of defence for CSEL.

As part of conduct risk monitoring, a monthly dashboard is compiled that highlights various early warning indicators that could flag potential future conduct issues as well as potential conduct risk issues. This monthly dashboard is shared with the Senior Managers of CSEL who meet monthly to review the dashboards and discuss any concerns with respect to conduct risk.

Reporting from the second line risk functions to the EOC and Board of Directors includes monitoring of performance against the RAS and a report on risk taking and tolerances across the entity.

Third line of defence

The third line of defence is the firm's internal audit function, which provides an independent assurance of the organisation and reports to the UK Internal Audit Committee. The Internal Audit function provides an objective, independent assessment of the adequacy and effectiveness of internal controls across the business. A risk-based audit plan is established annually to agree which areas of the business will be reviewed in detail. The UK Internal Audit Committee approves the internal audit function's annual audit plan and receives regular reports on the results of audit work.

3. Governance arrangements

Directors of CSEL are selected, and the appointments to management committees for CSEL are made, on the basis of merit, experience and, where applicable, actual responsibilities within the firm, taking into account judgement, character, expertise, skills and knowledge useful to the oversight of the firms' businesses.

The firm will also take into consideration the balance and interplay of knowledge, skills, diversity of viewpoints and experience of the board of directors and management committees as a whole when looking to make appointments to build effective, collegial and functioning governance arrangements which can be responsive to the needs of the firm.

We have set out below the members of the board of directors of CSEL as of 31 December 2021:

- D. Anthony (independent)
- S. Atkinson
- K. Manson
- R. Pike (independent)

Board Declaration – Adequacy of Risk Management Arrangements

The Board of CSEL is satisfied that CSEL management has taken reasonable care to establish and maintain risk systems and controls as appropriate to the business.

Diversity and Inclusion

Citadel is an equal opportunity employer. The firm aims to have a diverse workforce and for it to be representative of the make-up of society and Citadel's clients. All individuals are considered for employment and advancement opportunities without regard to race, creed, nationality, colour, religion or belief, political opinion, gender, sex, sexual orientation, gender re-assignment, pregnancy or maternity, marital status, civil partnership, ethnic or national origin, age or disability.

4. Risk exposure overview

The firm has built out a Risk Register to identify and assess the material risks to which the firm is exposed. This register is a list of key risks across all Principal risk categories. On an annual basis, business managers and support managers conduct a comprehensive risk identification exercise, where all identified risks in the Risk Registers are reviewed, updated or added to, as required, by an appropriate owner. Each item is assessed for its level of inherent risk, the effectiveness of the controls that are mapped to the risk, and the level of residual risk after control effectiveness is considered. If the residual risk is greater than a set threshold on the firm's Risk Severity Matrix, a KRI is required to ensure the appropriate level of monitoring of the risk. Any breaches against agreed risk tolerances are escalated through the governance process.

The register is updated to consider new risks that CSEL may be exposed to and should be evaluated for completeness when there is a change to the Firm's activities through the Material Business Change ("the MBC") process.

A high level summary of CSEL's Risk taxonomy is provided below.

Market risk

Market risk is the potential for changes in the value of investment positions due to changes in market prices. Market risk is directly impacted by the volatility and liquidity in the markets in which the related underlying financial instruments are traded. Categories of market risk include equity position risk, commodity position risk, foreign exchange risk, interest rate risk and volatility risk.

- Equity position risk is the risk of loss due to changes in prices and implied volatilities of individual equities, baskets of equities and equity indices.
- Interest rate risk is the risk of loss due to changes in the level, slope and curvature of yield curves.
- Foreign exchange risk is the risk of loss due to the fluctuation of exchange rates
- Commodity position risk is the risk of loss due to changes in prices of commodities.
- Volatility risk is the risk of loss due to a change in the implied volatility of an option.
- Model risk is the risk that occurs when a financial model is used to measure quantitative information, such as a firm's Market risks or value transactions, and the model fails or performs inadequately and leads to adverse outcomes for the firm.

Risk tolerances are set for both intra-day and end of day positions and are monitored by the independent risk control function.

Credit risk

Credit risk is the risk of financial loss due to the failure of a counterparty to meet its obligations as they fall due. CSEL adopts the standardised approach to measure credit risk. The Treasury function within Citadel Group monitors the amount of business across all trading relationships on a global basis across the entire group. Citadel endeavours to maintain a good balance of business across a range of prime brokers and bank counterparties. Finance provides daily reporting on the credit risk exposure by counterparty and internal rating.

Counterparty credit risk is the risk of loss as a result of a party to a transaction defaulting before the final settlement of the transaction's cash flows. A dedicated Credit Counterparty Team within Treasury is responsible for rating and setting counterparty limits for each counterparty that the entity trades within on a DVP basis. The Credit Counterparty Team also reports daily on exposure utilization and any exceedances of these Credit Guidelines.

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'). The ILAA is reviewed by senior management and approved by the Board of Directors. The firm aims to ensure, as far as possible, that it has sufficient liquidity to meet its liabilities when due without incurring unacceptable losses or risking damage to the firm's or the Group's reputation.

The Treasury function, in coordination with Operations, manages CSEL day-to-day liquidity, provides a diversified range of funding sources and secures favorable terms with its counterparties. Treasury is structured as an independent function to avoid any conflict of interest (for example, by removing any profit incentive to fund long-term assets with short-term liabilities). A fundamental aim is to achieve lockup provisions on margin terms to allow for certainty of cash flows over a given period of time.

Treasury is responsible for measuring, monitoring and managing the liquidity position of the firm and reporting to the EOC and Board. It is also responsible for identifying when the firm's liquidity framework is no longer appropriate due to changes in funding conditions or the asset/liability mix within the entity.

Cash Management is responsible for managing all payments within the firm. This function sits within Operations and works closely with Treasury. Intraday liquidity and the firm's Liquid Asset Buffer ("LAB") are monitored on a real time basis to ensure there is sufficient cash or cash equivalent assets to meet ongoing and stressed liquidity demands of the firm. Any concerns or material change in funding conditions are immediately communicated to the European Treasurer, the Global Treasurer or the CSEL CEO as appropriate. The Board of Directors has defined a minimum level of liquid assets to be set aside as a LAB such that the entity has sufficient funds available on an ongoing basis to be able to meet all of its payments in a stress event.

Operational risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and technology 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 host of automated pre and post trade controls across the Company's trading systems, monitored by experienced finance 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. As part of its oversight of operational risk, senior management also monitors key conduct risk metrics relating to employee conduct.

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 meet 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 a 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.

Business Risk

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

5. Capital resources

CSEL maintains a capital base that is appropriate to support the development of the business and ensures regulatory capital requirements are met at all times.

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

The table below summarises the amount and type of capital resources and provides a reconciliation to the balance sheet shareholder's equity as at 31 December 2021:

	31 December 2021 USD 000
Share capital	193,000
Retained profits	87,000
Prudent valuation adjustment	(3,092)
Tier 1 capital	276,908
Total Capital Resources	**276,908**
Tier 1 capital	276,908
Prudent valuation adjustment	3,092
Unaudited earnings	21,350
Total financial statements shareholder's equity	**301,350**

6. Capital resources requirements

Credit Risk ('CR')

Credit risk arises from on and off-balance sheet exposures held in the non-trading book. For CSEL this primarily consists of cash balances. The firm adopts the standardised approach to calculate credit risk. External credit assessments provided by Moody's and S&P are used to assign a credit quality step to the firm's exposures in various institutions. Risk weight is then applied to calculate the risk weighted exposure.

Claims on institutions have a residual maturity of less than 90 days with no material amounts falling due after 90 days. The firm has no financial assets which are past due or impaired.

Counterparty Credit Risk ('CCR')

Counterparty credit risk is the risk that a counterparty to a transaction could default before the final settlement of the transaction's cash flows. CSEL uses the mark to market method to calculate the potential future credit exposure on derivative transactions.

Credit Risk to a qualifying central counterparty ('QCCP')

CSEL applies the calculation per article 308 of CRR to calculate its credit risk exposure arising from its trade exposures and pre-funded contributions to the default fund of LCH, which is a qualifying central counterparty ('QCCP').

The following table shows the exposure classes and amounts associated with the credit quality steps and the relevant risk weightings at 31 December 2021:

	Credit Quality Step	Risk Weight ('RW')	CR Exposure $'000	CCR Exposure $'000	RW Exposure $'000
Exposure class					
Central Government	1	0%	581	-	-
Institutions	2, 3	20%	158,752	40,530	39,856
Total claims on institutions			**159,333**	**40,530**	**39,856**
QCCP (direct exposure)	unrated	2%	-	230,484	4,610
QCCP (via clearing member)	unrated	4%	-	3,206	128
QCCP (default fund)	unrated	-	-	-	41,528
Corporates	4	100%	144,826	-	144,826
Total			**304,159**	**274,220**	**230,948**
CR and CCR Capital Requirement		**8%**			**18,476**

Operational risk capital requirement

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, systems or controls. CSEL measures Pillar 1 operational risk using the basic indicator approach. The relevant indicator is the average of the firm's audited net income figures for the last 3 years, which is then multiplied by 15% to arrive at the operational risk capital requirement. As at 31 December 2021, the firm's operational risk capital requirement was USD 25,590,000.

Market risk capital requirement

Market risk is the risk of loss in the value of financial instruments due to changes in market conditions. Categories of CSEL's market risk include equity position risk, commodities position risk, foreign exchange risk and interest rate risk. The Pillar 1 charge for interest rate risk is calculated using the duration-based method, as detailed in Article 340 of the CRR. The firm has been granted permission to use a sensitivity model in the calculation of interest rate risk on derivative instruments in accordance with Article 331 of the CRR.

	31 December 2021 USD 000
Capital resources requirements	
Commodities position risk	281
Interest rate position risk	16,166
Equity position risk	32,765
Foreign exchange position risk	3,300
Total market risk capital requirement	**52,512**

Countercyclical capital buffer

The firm is required to calculate a Countercyclical Capital Buffer in line with the CRR. CSEL calculates countercyclical capital buffer equal to its total risk exposure amount multiplied by the weighted average of the countercyclical buffer rates that apply to exposures in the jurisdictions where the firm's relevant credit exposures are located. The institution specific Countercyclical Capital Buffer as at 31 December 2021 was USD 64,000.

7. Pillar 2

Under Pillar 2, firms are required to undertake a regular assessment of the amounts, types and distribution of capital that they consider adequate to cover the level and nature of risks to which they are, or might be, exposed. The Pillar 2 framework consists of two parts. Under Pillar 2A, firms identify risks which are inadequately covered under Pillar 1 and set aside additional Pillar 2 capital against these risks. Pillar 2B consists of the Capital Planning Buffer ('CPB'), which does not form part of the regulatory capital requirement. The CPB is available to absorb losses and/or to cover increasing capital requirements in adverse circumstances that are outside the firm's normal and direct control, so that the firm can meet the overall financial adequacy rules at all times.

As part of the Internal Capital Adequacy Assessment Process ('ICAAP'), CSEL identifies and assesses risks that are inadequately covered or not covered at all under Pillar 1. The ICAAP forms an integral part of the firm's risk management processes and capital management strategy. It is updated at least annually and is reviewed and approved by the Board of Directors.

CSEL has conducted a comprehensive risk identification exercise by risk category across the business to ensure that all significant risks have been identified and captured by the risk management framework. All significant risks are assessed and documented along with any risk mitigants and associated controls. The resulting risk exposure level is estimated using a matrix of parameters.

Each risk is assigned an owner who is responsible for assessing that risk with respect to risk score (High/Medium/Low) and risk mitigant strength (Vulnerable/Moderate/Strong) to determine the risk exposure level (Critical/Material/Moderate/Low). CSEL has KRIs or other monitoring measures in place for all material operational risks that have risk exposure at 4 (Medium) or above. Risk owners together with the Finance team assess each identified risk to determine if any additional Pillar 2 capital should be held. Where applicable, risk owners will make reference to internal and external loss data when assessing risks.

The firm's ICAAP includes stress testing to supplement its risk management framework and assess the capital adequacy of the business. These stress tests play an important role in providing a forward-looking assessment of risk and factoring this into capital and liquidity planning procedures.

8. Leverage ratio

The leverage ratio is calculated as a percentage of CSEL's Tier 1 capital over its total exposure measure. The total exposure measure is the sum of exposure value of all assets and off-balance sheet items. The leverage ratio of the firm is monitored on a daily basis by the Finance team.

	31 December 2021 USD 000
Tier 1 Capital	276,908
Leverage ratio exposure	2,803,888
Leverage ratio	**9.88%**

9. Remuneration

The Board of CSEL has adopted a Remuneration Policy, which has been developed in order to ensure the firm's adherence to the relevant requirements of the EU Capital Requirements Directive 2013/36/EU and the EU Capital Requirements Regulation 575/2013 as implemented into UK law[1] and the European Banking Authority Guidelines on remuneration, and the remuneration rules under the Markets in Financial Instruments Directive 2014/65 EU, and EU Delegated Regulation 2017/565 as implemented into UK law.[2] This section provides an overview of the Firm's remuneration practices in accordance with its remuneration policy.

The remuneration policy reflects the following principles:

- Remuneration practices should be consistent with and promote sound and effective risk management and not encourage risk-taking that exceeds the level of tolerated risk of CSEL;
- The remuneration policy reflects the business strategy, objectives, values and long-term interests of CSEL;
- The total variable remuneration of CSEL should not limit the group's ability to strengthen its capital base;
- The structure of an employee's remuneration should be consistent with and promote effective risk management and should encourage employees to operate with integrity and in the best interests of clients.
- Where the financial performance of CSEL is subdued or negative, total variable remuneration should generally be considerably contracted, taking into account both current remuneration and reductions in payouts of amounts previously earned.
- For the avoidance of doubt, CSEL does not pay remuneration through vehicles or instruments that are, or could be interpreted as, designed to avoid the remuneration rules under CRD IV, as supplemented by the EBA Guidelines.

Governance

CSEL has established a compensation oversight body (the "Compensation Oversight Body") tasked with overseeing; (i) the implementation of the remuneration policy; and (ii) the remuneration of Identified Staff under IFPRU and Relevant Persons for the purposes of the MiFID II remuneration rules in line with the principles set out above. In accordance with its Terms of Reference (which has been approved by the Board), the Compensation Oversight Body meets at least twice per year and reports to the Board.

[1] The European Communities (Capital Requirements) Regulations 2014 (S.I. 158/2014) and the European Communities (Capital Requirements) (No.2) Regulations 2014 (S.I. 159/2014) (together the "CRD IV Regulations").

[2] by the Markets in Financial Instruments Regulations 2017 (S.I. 375/2017) (the "MiFID Regulations"), (together "MiFID II").

Compensation Structure

CSEL's compensation plan is composed of base salary, Incentive Awards which determine the amount of discretionary bonus (variable remuneration) and benefits. Incentive Awards comprise in part a cash component and in part an unvested shares component, in the form of unvested shares in a company formed by the Citadel group for its employees that itself is invested in funds managed by the Citadel group.

Incentive Awards are awarded in respect of any calendar year during which employees are employed by the group on a discretionary basis based on (i) personal performance and demonstration of Citadel Values and the Citadel Leadership Model including complying with standards of good conduct and acting with integrity and in the best interests of clients; and/or (ii) firm-wide or team performance results.

Performance Appraisal

CSEL endeavours to conduct an annual written performance review of each employee's performance to ensure employees perform their jobs to the best of their abilities and in accordance with expectations. CSEL recognises good performance and provides appropriate suggestions for improvement when necessary.

It is the responsibility of the global compensation group to instruct managers and business heads to specifically consider each individual's performance, contributions and attainment of non-financial objectives and goals (measured using non-financial metrics, including adherence to effective risk management, compliance with the regulatory system and with relevant regulatory requirements and metrics relating to conduct) in advance of setting and finalising compensation for their employees specifically taking account of performance in a multi-year framework and any compliance or risk breaches. This process is overseen by the Compensation Oversight Body.

Total remuneration awarded to code staff by CSEL in 2021 amounted to USD 18,761,546.