

Citadel Securities GCS (Ireland) Limited

Pillar 3 Disclosures

31 December 2019

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1. Introduction

Company overview

Citadel Securities GCS (Ireland) Limited ('CSGI' or the 'firm') is a full scope MiFID investment firm regulated by the Central Bank of Ireland ('CBI'). The principal activity of the firm is technology-enabled liquidity provision in equities and financial derivatives across various European exchanges. The firm trades on a proprietary basis for its own account.

CSGI is a wholly-owned subsidiary of CSHC Ireland Ltd, a Cayman Islands company. The firm is part of Citadel Securities, an award-winning global market maker that provides liquidity across a broad array of fixed income and equity products. Citadel Securities was launched in 2002 and has over 900 dedicated employees across offices in Chicago, New York, Austin, Toronto, London, Dublin, Zurich, Hong Kong, Shanghai and Sydney.

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 as a percentage of its risk-weighted assets;
- 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; 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.

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 CSGI regulatory position as at 31 December 2019 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 2019.

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

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



Scope of application (Art. 436)

As required under Article 436 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 (Art. 435)

Risk management framework

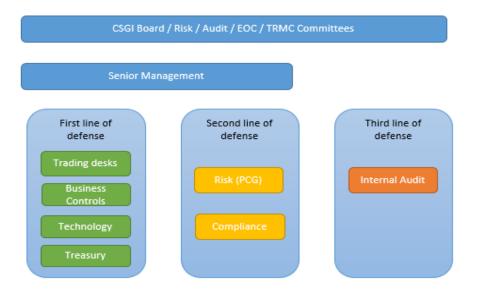
Risk management is an integral part of the business and is a focus for risk managers as well as the trading desks and support functions. At the highest level, the Board of Directors has overall responsibility for the establishment and oversight of the firm's risk management framework. The framework includes:

- identifying the principal risks faced by the firm in achieving its strategic objectives;
- establishing appropriate tolerances, limits and controls to manage those 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.

Monitoring of risks against the set appetite is via the Key Risk Indicators ('KRIs') that are presented monthly to the Firm's Executive and Operating Committee ('EOC') where any risk that breaches the amber threshold is discussed together with any required remedial action. Level 1 KRIs are monitored at each risk committee and lower level KRIs that breach the red threshold may be escalated for discussion at the Risk Committee meeting as appropriate. The risk appetite and policies 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 2019:



First line of defence

Responsibility for the identification of inherent risks and the development of first line controls, which monitor, manage and mitigate those risks lies firstly with CSGI's front office. Each businesses area is responsible for managing the firm's risk, in real time and in accordance with the firm's overall risk appetite. This requires them to meet capital, liquidity and risk exposure guidelines as set out in CSGI's Risk Appetite Statement ("RAS") and risk policy.

Second line of defence

CSGI has independent Risk and Compliance functions, each of whom have direct reporting lines to the Firm's Risk Committee and Board of Directors. The risk and compliance functions are responsible for independently assessing the robustness of the first line's risk identification and mitigation processes, including in respect of Conduct Risk.

Reporting will include monitoring of performance against the RAS; to set, monitor and report on risk policy and methodology and to challenge the risk management approach undertaken by the first line of defence.

Third line of defence

The third line of defence is the firm's internal audit function (outsourced to Grant Thornton UK LLP), which provides an independent review of the organisation and reports to the Board of Directors and 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 programme of work is established which provides appropriate coverage of the key risks and processes. The Audit Committee approves the Annual Audit Plan and receives regular reports on the results of audit work.

The scope of work of the Internal Audit function is to determine whether CSGI's risk management, control and governance processes, as designed, represented and operated by management, are adequate and functioning in a manner so as to provide reasonable assurance that:

- risks are appropriately identified and managed;
- governance mechanisms operate effectively;
- significant financial, managerial, and operating information is accurate, reliable, and timely;
- employee's actions are in compliance with policies, standards, procedures, and applicable laws and regulations;
- resources are acquired economically, used efficiently, and adequately protected;
- programmes, plans and strategic objectives are achieved;
- quality and continuous improvement are fostered in the organisation's control process;
- significant legislative or regulatory issues impacting the organisation are recognised and addressed properly; and
- assets are safeguarded.



3. Governance arrangements

Directors of CSGI are selected, and the appointments to management committees for CSGI 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 CSGI as of 31 December 2019:

- S. Atkinson
- A. Bothwell
- V. Parry
- R. Pike

Board Declaration - Adequacy of Risk Management Arrangements

The Board of CSGI is satisfied that 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. All individuals are considered for employment and advancement opportunities without regard to race, nationality, colour, religion or belief, gender, sexual orientation, family status, civil status, ethnic or national origin, age, disability or membership of the traveller community.

4. Risk exposure overview

CSGI conducts a comprehensive risk identification exercise by risk category across the business to ensure that all significant risks have been identified, assessed and are effectively managed. 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. These risks are then monitored real-time, daily or monthly as appropriate via KRIs. Any breaches against agreed risk tolerances are escalated through the governance process.

A high level risk assessment for CSGI is provided below.

Market risk

Market risk is the risk of loss in the value of financial instruments 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, options risk, interest rate risk and foreign exchange 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. Risk tolerances are set for both intraday and end of day positions and are monitored by the independent risk control function. Foreign exchange risk is the risk of loss due to the fluctuation of exchange rates. The valuation of the portfolio is subject to foreign exchange risk arising from non-US dollar positions. This risk is managed by the Treasury team through monitoring and hedging foreign exchange exposures on a daily basis.

Interest rate risk is the risk of loss due to changes in the level, slope and curvature of yield curves. The firm does not carry any material interest rate risk in its non-trading book.

Credit risk

Credit risk is the risk of financial loss arising from a counterparty failing to meet its obligations as they fall due. CSGI adopts the standardised approach to measure credit risk and further information is presented in section 6 of this report. The Finance team monitors the credit risk exposure by counterparty on a daily basis.

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. The credit quality of counterparties with whom CSGI transacts is monitored by the Treasury function.

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 counterparts.

Liquidity risk

The nature of the business means that CSGI runs a dynamic intra-day position in cash equities and cleared derivatives that requires liquidity in two forms: Firstly, liquidity to manage risk positions in all market conditions; and secondly, funding to continue to clear and settle trades intraday and to finance overnight positions.



The firm manages liquidity risk in line with its liquidity policy and documents its approach in the Internal Capital Adequacy Assessment Process ('ICAAP'). The ICAAP 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 firm monitors its liquidity position in real time and produces a daily summary report which is reviewed by senior management. KRIs associated with liquidity risk are reported on a monthly basis. Cash positions are monitored and reconciled daily by the global cash management function.

Intraday projections of cash balances are monitored on a gross basis to ensure the firm is accurately forecasting any timing mismatches between paying and receiving funds. Both initial and variation margin levels are forecasted and verified against margin calls the firm receives.

Liquidity risk on derivatives positions are not managed on the basis of contractual maturity as they are typically frequently settled on demand at fair value.

Operational risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. It also includes legal, reputational and outsourcing risks. The firm manages operational risks via its operational risk framework. The Board agreed a key quantitative metric for operational risk is resulting monetary losses for automated trading and another level for other operational losses as a result of significant operational failures. KRIs associated with operational risk are tracked and presented to the monthly EOC where breaches of amber threshold are discussed together with any required remedial action. Any breaches of red thresholds are escalated for discussion at the Board meeting.

The Board considers market conduct risk within operational risk. Conduct risk is highlighted in the Risk Control Framework and the Risk Appetite Statement. In terms of culture, Citadel Securities fosters an open and transparent environment and this is evidenced in collaboration across the group to continuously improve processes and enhance control. Integrity is one of Citadel Securities' six core values and there is zero tolerance for inappropriate conduct.

5. Capital resources

CSGI 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. CSGI 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 2019:

	31 December 2019 EUR 000s
Share capital	26,705
Capital contributions	186,933
Retained profits	23,665
Prudent valuation adjustment	(2,273)
Tier 1 capital	235,029
Total Capital Resources	235,029
Tier 1 capital	235,029
Prudent valuation adjustment	2,273
Unaudited earnings	8,887
Total financial statements shareholder's equity	246,189

6. Capital requirements (Art 438)

Credit Risk ('CR')

Credit risk arises from on and off balance sheet exposures held in the non-trading book. For CSGI this primarily consist 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. CSGI uses the mark to market method to calculate the potential future credit exposure on derivative transactions.

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

CSGI applies the calculation per article 308 of CRR to calculate its credit risk exposure arising from its trade exposures to a qualifying central counterparty.

The following table shows the exposure classes and amounts associated with the credit quality steps and the relevant risk weightings at 31 December 2019:

	Credit Quality Step	Risk Weight ('RW')	CR Exposure EUR 000s	CCR Exposure EUR 000s	RW Exposure EUR 000s
Exposure class					
Institutions	2, 3	20%	92,913	87,116	36,006
Institutions	4	50%	-	4,734	2,367
Total claims on institutions			92,913	91,850	38,373
QCCP	Unrated	4%	-	836,445	33,458
Corporates	4	100%	53,409	-	53,409
Total			146,332	928,295	125,240
CR and CCR Component					85,969

Operational risk capital requirement

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, systems or controls. CSGI measures Pillar 1 operational risk using the basic indicator approach. CSGI 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. For CSGI, we have

used a mix of actual and forecasted trading P&L given its first full year of operation was 2019. As at 31 December 2019, the firm's operational risk capital requirement was EUR 23,123,529.

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 CSGI's market risk include equity position risk and foreign exchange risk.

	31 December 2019 EUR 000s
Capital resources requirements	· · · · · · · · · · · · · · · · · · ·
Equity position risk	41,685
Foreign exchange position risk	1,570
Interest rate position risk	24,245
Total market risk capital requirement	67,500

Countercyclical capital buffer

The firm is required to calculate a Countercyclical Capital Buffer (CCyB) in line with the CRR. CSGI 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 2019 was EUR 5,011,342.

7. Leverage ratio

The leverage ratio is calculated as a percentage of CSGI'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 2019 EUR 000s
Tier 1 Capital	235,029
Leverage ratio exposure	2,309,572
Leverage ratio	10.18%

8. 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. Firms identify risks which are inadequately covered under Pillar 1 and set aside additional Pillar 2 capital against these risks. The Capital Planning Buffer ('CPB'), 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'), CSGI 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.

CSGI 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). CSGI has KRIs or other monitoring measures in place for all material operational risks that have risk severity rating 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 by determining an appropriate level of CPB.

9. Remuneration

All staff are employed either directly by CSGI or by a related entity, Citadel Securities Services (Ireland) Limited, and an appropriate proportion of employment costs are allocated to CSGI.

The Board of CSGI 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 Irish law¹ 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 Irish law.² This section provides an overview of the Firm's remuneration practices in accordance with the Policy.

The 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
 CSGI;
- The Policy reflects the business strategy, objectives, values and long-term interests of CSGI;
- The total variable remuneration of CSGI 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 CSGI 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, CSGI 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

CSGI has established an independent compensation oversight body (the "Compensation Oversight Body" ³) tasked with overseeing; (i) the implementation of the Policy; and (ii) the remuneration of Identified Staff under CRD IV 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.

³ As CSGI is not a Significant Institution for the purposes of CRD IV the Firm is not required to have a Remuneration Committee that satisfies the conditions set out in CRD IV. The Compensation Oversight Body has been established by CSGI for the purposes of overseeing the Firm's Remuneration Policy.



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

CSGI's compensation plan is composed of base salary and, where applicable, role based pay (fixed remuneration), Incentive Awards which determine the amount of their 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.

Relying upon the principal of proportionality provided for in the CRD and reflected in the EBA Guidelines, CSGI has dis-applied the 1:1 leverage ratio in CRD IV. The Compensation Oversight Body has set a maximum leverage ratio for CSGI of 2:1.

Similarly, CSGI has elected to apply the deferral and form of delivery requirements in a proportionate way by adjusting the specific numerical criteria of those requirements. Consequently, certain aspects of the Economic Model are linked to the employee Incentive Program, which provides that a certain percentage of compensation (determined in accordance with a pre-agreed sliding scale set by reference to percentage of total compensation) is required to be deferred (invested on an after-tax basis in Citadel funds).

Deferred amounts are invested in multiple Citadel funds (employees are not allowed to elect which funds or weightings) for 3.5 years thus aligning individual compensation with returns of overall Citadel funds over a multi-year period. Deferred amounts are automatically cancelled in the event of violation or breach of non-compete, non-solicitation and non-disclosure obligations of the relevant employees. Equally, deferred amounts will be automatically forfeited in the event of termination for Cause.

Performance Appraisal

The group 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. CSGI recognises good performance and provide 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 will be overseen by the Compensation Oversight Body.

Quantitative Disclosures

	C4aff whas	
Senior Management	actions have a material impact on the risk profile of the institution	All Other Staff
EUR 000s	EUR 000s	EUR 000s
603	852	84
560	1,176	98
5	6	1
560	771	98
0	0	0
0	406	0
0	0	0
0	406	0
0	406	0
0	0	0
0	0	0
210	0	0
2	0	0
165	0	0
1	0	0
165	0	0
0	1	0
	Management EUR 000s 603 560 5 560 0 0 0 0 0 210 2 165 1 165	Senior Management material impact on the risk profile of the institution EUR 000s EUR 000s 603 852 560 1,176 5 6 560 771 0 0 0 406 0 406 0 0 210 0 22 0 165 0 165 0