As at March 2022

Goldman Sachs International, Goldman Sachs Bank Europe SE and Goldman Sachs Paris Inc. et Cie

Clearing Member Cost Disclosure Statement

Direct Clearing

Introduction

Goldman Sachs International, Goldman Sachs Bank Europe SE and Goldman Sachs Paris Inc. et Cie are each a clearing member of various European Union (**EU**), and/or United Kingdom (**UK**) central counterparties (respectively, each a "**GS Clearing Member**" and each a "**CCP**")[1]. On that basis, each GS Clearing Member will be providing direct clearing services to its clients through certain CCPs in accordance with (1) EMIR[2] and RTS 6[3]; and/or, as applicable, as a consequence of the UK's exit from the EU, (2) the "retained EU law" version of EMIR and RTS 6 (as may be amended), as defined and as implemented into UK domestic law and regulation under the European Union (Withdrawal) Act 2018 (as may be amended) (the **EUWA**).

In connection with providing direct clearing services, EMIR and RTS 6 impose certain obligations on the GS Clearing Members, including a requirement to disclose the levels of protection and information on the costs associated with the omnibus client account and individual client account types that we offer. Further information on account types, the levels of protection offered and the legal implications of choosing one or other account type are set out in the Clearing Member Disclosure Document for each GS Clearing Member (the "**General Clearing Member Disclosure Document**"). This cost disclosure statement is intended to provide an introduction to more detailed, client specific, pricing discussions which will take place between you and your Goldman Sachs relationship contacts.

Throughout this document references to "we", "our" and "us" are references to the GS Clearing Member providing the direct clearing services. References to "you" and "your" are references to the client. In addition, and as applicable, as a consequence of the UK's exit from the EU, references to any provisions of EU law and regulation, shall be construed as references to those provisions as they form part of "retained EU law"; as defined and as implemented into UK domestic law and regulation under the EUWA.

Organisation of this disclosure statement

This disclosure statement is set out as follows:

- Part 1: General Information.
- Part 2: Overview Costs Information.
  - Part 2(a): Costs: Discounts and Rebates.
  - Part 2(b): Clearing House Fees and Charges.
- Part 3: Costs Information – Omnibus Client Account vs. Individual Client Account.
  - Part 3(a): Account Set Up and Maintenance Costs.

[1] A list of the CCPs at which a particular GS Clearing Member is or is expected to become a clearing member can be found in the relevant General Clearing Member Disclosure Document.

[2] Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories.

[3] Commission Delegated Regulation (EU) No 2017/589 supplementing Directive 2014/65/EU with regard to regulatory technical standards specifying the organisational requirements of investment firms engaged in algorithmic trading.

- Part 3(b): Meeting CCP Obligations.
- Part 3(c): Collateral Movements and Reconciliation.
- Part 3(d): Return on Initial Margin

- Part 4: Indicative Charges for Individual and Omnibus Client Accounts.

Part 1: General Information

This disclosure statement is intended to provide an introduction to more detailed, client specific, pricing discussions as to the costs involved in selecting either an omnibus client account or individual client account to assist you in making an informed choice as to which account type best suits your circumstances and requirements. This disclosure statement should be read in conjunction with the General Clearing Member Disclosure Document for the relevant GS Clearing Member providing you with direct clearing services, which provides further background on the account types, asset segregation models and the clearing process.

This disclosure statement is only intended to provide you with information and does not constitute legal or any other form of advice and must not be relied upon as such. Much of this information is generic and is subject to variation depending on a number of factors, including mutual operational requirements and the CCP(s) at which your account(s) will be maintained.

This disclosure statement does not provide all the information you may need in order to determine which account type is most suitable for you. It is your responsibility to review and conduct your own due diligence on the relevant rules, legal documentation and any other information provided to you by us or a third party. You may wish to appoint your own professional advisors to assist you with this.

We shall not in any circumstances be liable, whether in contract, tort, breach of statutory duty or otherwise for any losses or damages that may be suffered as a result of using this disclosure statement. Such losses or damages include (a) any loss of profit or revenue, damage to reputation or loss or any contract or other business opportunity or goodwill and (b) any indirect or consequential loss. This paragraph does not extend to an exclusion of liability for, or remedy in respect of, fraudulent misrepresentation.

Part 2: Overview Costs Information

The information provided in this Part 2 is designed to provide an overview of those general factors which are likely to have an impact upon the cost of setting up and operating an account at the CCP level. We anticipate that the relevant factors are likely to include:

- Your account type (i.e. the particular form of omnibus client account or individual client account offered by the relevant CCP).

- The CCP(s) where you require your client account(s) to be opened. This will be a factor to the extent that CCPs may charge differing costs or fees which we would generally seek to pass through to clients.

- The number of accounts you require and the number of currencies held per account. The number of accounts you hold at the CCP will likely dictate how much of our time and resources will be dedicated to managing these accounts, from initial set up to daily reconciliation and maintenance.

- The size of your initial margin from time to time, and transaction volume/turnover. This is a proxy for the level of activity and change in your initial margin requirement from day-to-day.

- How much excess pre-funding you hold per account with us and at the CCP level. In structures where it is not possible to hold excess balances, this drives the likely size of CCP margin calls (daily and intraday) which will require us to top up your account(s) from our own funds while waiting for you to provide collateral.

(a) Costs: Discounts and Rebates

You may receive certain discounts or rebates on certain of the standard costs listed in this document if any or a combination of the criteria and factors below apply. These factors are each considered separately by us and will be subject to your clearing structure and activity with us, as well as your commission structure:

- You have a high volume of transactions.
- Operationally, we're able to rely on standardised and automated processes (such as those related to collateral management, trade capture, reporting and reconciliation etc.).

We reserve the right to apply discounts and rebates to you based on our internal analysis and the relevance of the criteria above.

(b) CCP Fees and Charges

The GS Clearing Members are a clearing member at various CCPs in the EU and the UK and such CCPs will have various applicable fees and charges in connection with the provision of clearing services. Each GS Clearing Member will apply such CCP fees and charges to your account (as applicable), in addition to our own charges, and the application of the relevant CCP fees and charges will depend on your chosen client account and clearing activity, together with any other relevant factors.

For details of certain clearing house fees and charges, please visit the following CCP websites:

CCP	CCP list of fees and charges
ICE Clear Europe Limited	https://www.theice.com/publicdocs/ICE_Clear_Europe_CDS_Fees_Client.pdf
LCH Limited / LCH SA	https://www.lch.com/services/swapclear/fees
Eurex Clearing AG	https://www.eurexclearing.com/resource/blob/32638/2d0d2c31fcf4085bdd47e51e429c88ff/data/otc-interest-rate-derivatives-pricing-and-fees.pdf
Cassa di Compensazione e Garanzia S.p.A (Euronext Clear)	https://www.euronext.com/sites/default/files/2021-03/Fee%20schedule%20for%20CCP%20in%20force%20from%2014%20December%202020.pdf
BME Clearing, S.A.U.	https://www.bmeclearing.es/ing/Segments/Fees
European Commodity Clearing AG	https://www.ecc.de/en/about-ecc/rules/price-list
Nasdaq Clearing AB	https://www.nasdaq.com/docs/2022/03/02/220302_App_03_-_FIN_Fee_List.pdf
LME Clear	https://www.lme.com/en/trading/access-the-market/fees

Please note that these links have been provided for convenience only. In the event that any of them do not work, please contact the relevant CCP directly.

Part 3: Costs Information – Omnibus client account vs. Individual client account

This Part 3 sets out an introduction as to the type of costs that are likely to arise from setting up and operating an account at the CCP level and an indication of how these costs might differ depending on whether an omnibus client account or an individual client account is chosen.

(a) Account Set Up and Maintenance Costs

Account set up and maintenance costs are likely to differ depending on whether an omnibus client account or individual client account is chosen.

Omnibus Client Account

As explained in the General Clearing Member Disclosure Document, omnibus client accounts may be offered by CCPs on a gross or net basis and will be shared accounts used by you and one or more of our other clients. The omnibus client account is broadly similar to the account structures in place prior to the implementation of EMIR, therefore our account opening and ongoing maintenance charges do not differ significantly from levels which applied prior to that time. However, maintenance charges could apply for certain types of products and portfolio types. We would note that these charges are subject to periodic and ongoing change.

Individual Client Account

The cost of us opening and maintaining an individual account on your behalf is likely to be somewhat higher than if you opt to use an omnibus client account. This is largely due to the enhanced level of operational time and resources required in order for us to effectively operate and supervise an individual client account at each CCP. For example, each individual client account will require daily reconciliations. In addition, many CCPs have a fee in setting up these accounts due to the operational overhead on their side.

The additional complexity of the individual client account model will result in higher account maintenance costs than the omnibus client account model. For further details, see Part 4.

(b) Meeting CCP Obligations

We anticipate that a key driver of the costs per client account type will be the additional costs incurred by us in respect of meeting CCP obligations. For example, we will be required to incur costs in meeting CCP obligations whenever there is a client funding shortfall (i.e., where client funds are not available to meet the CCP's margin call), which could be caused by insufficient collateral, ineligible collateral or delays in meeting margin calls. The likelihood of such shortfalls can be driven by how promptly margin calls are met, the risk profile of your portfolio and whether you maintain an appropriate level of excess funding.

Should any shortfalls arise, we will meet these shortfalls on your behalf through our own funding at the CCP level in order to minimise any disruption to your day-to-day activities. We will charge you a fee for the associated costs of doing so, which we would expect to vary depending on a number of factors including the size of the shortfall and the length of the delay in meeting that shortfall.

Omnibus Client Account

Daily (initial margin) and intraday (variation margin) CCP collateral requirements arise in relation to both client account types. We anticipate that client funding shortfalls are less likely to occur in relation to omnibus client accounts, as the impact of any one client in an omnibus structure is lower. We anticipate that this will result in a more efficient (reduced) need for omnibus account holders to rely on us to meet funding shortfalls at the CCP level.

Individual Client Account

For clients who opt for individual client accounts we consider that there is an increased possibility of funding shortfalls occurring at the CCP level because your collateral will be segregated as a separate collateral pool and because we are unable retain client excess balances in such a structure. Any such charges would be applied in full on an individual basis, rather than being shared among clients on a pro rata basis. Accordingly, we would expect additional charges to be more frequently applied (and potentially to be greater) in the case of an individual client account rather than an omnibus client account.

As we need to prepare for CCP margin calls on each individual client account, a significant allocation of our own assets will need to be set aside to meet the possibility of such client accounts requiring a top up at the start of the day and/or on an intraday basis.

(c) Collateral Movements and Reconciliation

Whether you have an omnibus client account or individual client account, we will typically be responsible for moving your collateral (including any excess) to your account at the CCP level. Our onward posting of your collateral will increase the volume of transactions between us and the relevant CCP. In addition, we will be required to perform reconciliations to ensure the integrity of the balance on the accounts at the CCP level. An increased number of collateral movements will increase the cost of performing this reconciliation.

Utilising a different currency (for example, single currency margining) is also more complex in the individual client account model, typically requiring a significantly greater number of individual payments than when managed on a net omnibus basis.

Omnibus Client Account

Should you choose to make use of an omnibus client account, then we would normally reduce the total number of transactions to the CCP by aggregating your collateral with that of one or more of our other clients when making transfers to the omnibus account at the CCP level. This may enable us to spread the costs of each transaction across more than one client.

Individual Client Account

If you choose an individual client account, we will be required to onward post your margin (including excess) to the CCP. Accordingly, you will be required to bear the costs of any transaction that arises in connection with transferring your margin to the CCP.

In order to reduce these costs, you may choose to pre-fund your individual client account by maintaining excess collateral at the CCP and/or reducing the frequency with which you request substitution of collateral held in your account.

Additional individual client account maintenance fees would normally be charged to make up for the additional individual cash movement fees and operations-intensive processing for the above.

(d) Return on Initial Margin

How we treat your excess margin will differ depending on whether an omnibus client account or individual client account has been chosen. This could have an impact on the overall cost associated with your account.

Omnibus Client Account

If you opt for the omnibus client account, then we expect that the relevant CCP will margin all contracts in the same product group as a single portfolio. The result of this is that there is an increased likelihood of offsets from a risk perspective and the CCP may require collateral that is less than the collateral within the omnibus client account. Where agreed, we may hold any excess margin with one or more third-party banks. This excess margin held at a third-party bank may attract a different rate of return than that offered by a CCP.

Individual Client Account

Any excess will generally be held by the CCP in your individual client account, with any rate of return being determined by the CCP.

As an individual client account holder, the return on your balances held directly at the CCP level may not be as attractive as those managed under the omnibus client account model.

Part 4: Indicative charges for omnibus and individual client accounts

This Part 4 provides indicative information regarding our anticipated charging structure for omnibus and individual client accounts, which we expect will consist of the following general charging components:

a. A transaction fee ("**Transaction Commission**"), which is charged on a per million notional basis, a fixed fee per lot or a fixed fee per allocation and is applicable to both omnibus and individual client accounts.

b. An account maintenance fee ("**Maintenance Charge**"), which is accrued as a basis point charge on your initial margin balance and is applicable to both omnibus and individual client accounts.

c. A charge for funding client margin shortfalls ("**Funding Charge**"), which is accrued as a basis point charge on your margin deficit and is applicable to both omnibus and individual client accounts.

d. Additional charges incurred by us in connection with clearing your portfolio, including CCP clearing fees, maintenance fees, account segregation fees, as well as agent bank fees ("**Third Party Charges**"), applicable to both individual and omnibus client accounts.

e. An interest schedule, applicable to both omnibus and individual client accounts showing benchmark and spreads per currency plus any applicable cash management fee for clients posting in base currency. We will pass through the CCP interest schedule for any margin held in an ISA

Our current expectation is that the above fees represent a complete overview of our intended charging structure for a typical client specifically in relation to the choice between omnibus and individual client account types. This charging structure may be adapted in exceptional cases and is subject to change over time as the market develops.

Certain of these charges may apply periodically (for example, certain CCPs charge a monthly or annual facilitation fee per individual client account), while others may arise on a per-transaction basis. These charges are subject to change.

Details of third party charges will be included in the daily statement we will make available to you as your clearing broker. In addition, third party charging structures are generally publically available on the relevant third party website provided in Part 2.

Indicative Pricing Considerations

We apply certain specific charges for the provision of clearing services, as set-out in the table below. We note that the indicative pricing below provides a general guide only of the fees we charge our clients and do not represent the specific fees, charges and pricing for you or for each specific client-type. Instead the fees below are intended to help your pricing discussions:

Cost Item	Account Type	Omnibus Client Account / Individual Client Account
Trade Commission	Omnibus Client Account Individual Client Account	USD 750 per allocation USD 100 per million notional USD 8 per lot
Maintenance Commission	Omnibus Client Account Individual Client Account	100bps on the initial margin
Funding Fee	Omnibus Client Account Individual Client Account	Benchmark + 100bps on funding deficit
Credit Spread	Omnibus Client Account Individual Client Account	-250bps on credit balance
Debit Spread	Omnibus Client Account Individual Client Account	+250bps on debit balance

Please note that individual client accounts may incur the application of certain specific and higher costs and charges in comparison to omnibus client accounts. Such charges will depend on various factors such as (but not limited to) the number of individual client accounts opens, the type of margin posted, the collateral management process and the CCP, etc.

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The information set out herein is provided as an indication of possible costs associated with an average client specifically in relation to the choice between an omnibus and individual client account. The indicative charges referred to are of course subject to ongoing review and change by us and relevant third parties as the EMIR account models and CCP offerings develop. We would be happy to discuss what the precise costs are likely to be in respect of setting up and operating an account at the CCP level based on your individual circumstances and requirements. Your Goldman Sachs relationship contact will be in touch to arrange these discussions.