Americas Cash Equities Disclosures

(Updated October 2023)

Effective: October 1, 2023 – Citigroup Inc. (“Citi”, “we” or the “Firm”) is a global financial services firm that offers banking and other financial services in jurisdictions around the globe. Citi operates as a broker, dealer and market maker in equities and options markets through its broker dealer and affiliates. Citi is dedicated to adhering to applicable laws and regulations in our dealings with our clients in those markets. This document is intended to clarify aspects of the trading relationship between the Citi broker dealers operating in the Americas and our clients (each, the “Client” or “you”) in equities markets.

Citi offers execution services in equities securities and other financial instruments directly through Citigroup Global Markets Inc. (CGMI) in the United States and through its affiliates located regionally in Latin America (LATAM), Asia-Pacific (APAC) and Europe, the Middle East and Africa (EMEA) (the “Services”). Please see our Americas Listed Equity Options Disclosures for important information related to Listed Options.

The information being described relates to the provision of the Services, is current as of the Effective date, and is subject to change without notice and prior to the circulation of any update. It is always recommended that you contact your Citi sales representative or eesales@cit.com for current or additional information.

The disclosures set forth in this document apply to the institutional equities business of Citi in the Americas and the Services provided to clients that fall within the regulatory definition of “Institution”; these disclosures may not be complete, and we recommend seeking clarifications you may require from your Citi representative. These disclosures are intended for institutional clients and are not intended for individuals or other retail investors. These disclosures are subject to (and, to the extent of any conflict, shall be governed by): (i) any written agreement with you; and (ii) any applicable law or regulation (including, but not limited to, any applicable requirements regarding best execution or conflicts of interest). Laws and regulations in various jurisdictions may provide rights or obligations other than those discussed in this document. To the extent of any conflict between these disclosures and any other disclosures (including published policies) we have previously provided to you, the terms of these disclosures shall govern.

You should review this document in connection with other applicable Citi agreements, terms of business and disclosures, including the “Disclosure to Citi Markets’ Institutional Equities Clients” available at the ICG Regulatory Disclosures website here https://www.citigroup.com/global/disclosures, in order to fully understand your relationship with us in the context of a particular transaction. The Firm may execute an order received from you as principal or agent (e.g., executed by Citi on an exchange or otherwise as agent for its Clients), or partly as principal and partly as agent. In the case of transactions executed on an agency basis, the Firm will be acting solely as agent for the purpose of execution and not otherwise as an agent, fiduciary, financial advisor or in any similar capacity on your behalf, and the disclosures set out in this document will also apply to the extent relevant, except for those set out in the section under the heading “Principal Trading”.

Any statements we make to a Client should not be construed as recommendations or advice or that Citi has acted as the Client’s advisor. In addition, when we transact with our Clients, we rely upon the apparent authority of the employees, representatives, advisers, and agents who communicate with us on their behalf, and we assume no obligation to independently verify that authority.

(1) Principal Trading

When we execute a client order as principal, we do so on an arm’s length basis, for our own account. In such capacity, Citi (including its sales and trading personnel) does not act as a broker, agent, fiduciary, advisor or in any similar capacity on behalf of its Client, and Citi does not undertake the duties that an entity acting in that capacity would ordinarily perform.
When we are acting in a principal trading capacity, we may look for market opportunities that both satisfy the terms of a Client’s order and may allow us to make an appropriate return on the transaction with the Client, including while executing other transactions to satisfy our own, competing trading interests and responding to competing orders from other Clients. As such, except to the extent that we have agreed to different terms of execution with a Client, we will exercise our reasonable discretion in entering into a transaction with a Client based upon its order, including with respect to fill quantity, execution time, prioritization and whether to hedge or enter into such transaction electronically, manually, on aggregated basis with other orders or using internal or external sources of liquidity.

We make markets in equity securities and related products. We also act as an Authorized Participant in the creation and redemption of exchange-traded products (ETPs). As a market maker and/or Authorized Participant, we may have a number of positions and execute against the competing orders of multiple Clients, as well as trading to satisfy our own interests. As a result, we may trade with others prior to or alongside hedging or executing a particular Client’s order.

Subject to and where allowed by applicable law, we may hedge any transaction. This activity may take into account both the information that you provide when asking us to quote for a transaction and any information held regarding your previous trading activity. Following the receipt of an order or an indication of interest likely to result in a Client transaction, we may, in our reasonable discretion, engage in hedging as we determine appropriate to manage risks that we assume in connection with such transaction or to inform the pricing of such transaction. We also exercise reasonable discretion in deciding how, when, and where to hedge, which may take into account both internal and external sources of liquidity. The risk may be hedged by the desk the order was routed to and/or other desks, and those desks will have visibility to client order information. Our hedging, and other market-making activities can affect: market levels; the prices we offer to a Client or at which execution occurs; the availability of liquidity at levels necessary to execute Client orders; the level at which a benchmark or reference market rate is set; and whether prices change in a manner that accelerates, triggers, or delays or prevents the triggering of, stop-loss orders, barriers, knock-outs, knock-ins or similar order conditions. While it is not intended that such hedging activity will cause any material detrimental effect to you, such activity may have an impact upon the prices you obtain when we trade with you or when you trade with other firms. This activity may be entered into at any time after you ask us to provide a quote for a transaction. In conducting our hedging, positioning, and other market-making activities, we endeavor to employ means reasonably designed to avoid undue market impact, and in all cases we endeavor to comply with applicable law.

In some cases, we do not disclose information regarding such activities to our Clients on an order- or transaction-specific basis, but we require our personnel to be truthful if they agree to provide such information. We also are under no obligation to pass on to a Client profits derived from those activities. Further, we generally do not disclose the amount of revenue we earn or expect to earn from a transaction or the components of our “all-in” price, but again, we require our personnel to be truthful if they agree to provide such information.

All quotes provided to a Client are indicative quotes (unless we indicate otherwise e.g., by providing a quote in response to a request for a firm quote, or by displaying quotes with a clear reference that such quote is actionable not indicative. We may quote a principal transaction as an all-in price or as a guaranteed price including the addition of a commission.

When determining prices at which we will trade as principal, we may take into account factors including, but not limited to: product type; the market in which the transaction would occur; the type of order; the size and direction of the transaction; other pricing information; and internal costs. We may also take into account Client-specific and transaction-specific factors including, but not limited to: the volume, types, size, frequency or speed of trading the Client executes with Citi and in the market; the potential market impact of the Client’s trading activity with Citi and in the market; the Client’s credit quality and Citi’s credit exposure to the Client; specific terms of the transaction or governing documentation; and the extent and nature of the Client’s business relationship(s) with Citi. Local legal or regulatory requirements may also be determinative. Some of these factors might operate to a Client’s
disadvantage and may delay or prevent the execution against the order or increase the slippage or difference between any specified price trigger for the order and the actual execution price.

The relevant impact of each individual factor on the price of a transaction will differ depending upon the specific circumstances of that transaction. As a result, we may quote different prices to different Clients or at different times for the same or substantially similar type of transaction.

Where we provide quotes when acting as principal, we may, subject to applicable law: decide the transaction size or sizes of such quotes; update or withdraw such quotes at any time; execute orders at a different price than set out in such quotes; execute orders at a better price than set out in such quotes in respect of transactions where execution in several securities is part of one transaction or in respect of orders that are subject to conditions other than market price. In addition, where we receive an order of a size bigger than our quotation size, we may decide to execute that part of the order which exceeds our quotation size at the quoted price, or at a different price; where we provide such quotes in different sizes and receive an order between those sizes, we may decide to execute the order at one of the quoted prices, or at a different price. Further, we may limit both the number of transactions that we undertake to enter into with a client pursuant to any quote and the total number of transactions that we undertake to enter into with different clients pursuant to any quote. Lastly, we may make any other modifications to our quotes as we determine in our sole discretion are necessary or desirable.

When you enter into Equities transactions with us, it will be on the basis that you have read and understood these terms of dealing. If you have questions after reading this document, please contact a senior Citi representative. This document is also available at https://www.citigroup.com/global/disclosures and may be updated from time to time.

When a counterparty submits a request to trade at a price electronically streamed by us or submits a request-for-quote to us electronically, this request may be subject to a series of pre-trade checks performed by our deal acceptance logic to determine whether or not we will accept the request.

- These pre-trade checks, which may delay acceptance or rejection of a request to trade, are referred to in this document as “last look” when they are applied to indicative quotes that have not yet expired. General considerations and characteristics of last look are described below. The specific parameters and application of last look differ across counterparties, transaction types and Platforms (collectively defined as Citi proprietary and third-party electronic securities trading platforms and direct application programming interfaces), and are subject to change at our discretion. Last look allows us to manage our execution risk without downgrading the quality of spreads and liquidity we indicate to our counterparties. In the absence of last look, we would potentially have to protect ourselves by providing less depth of liquidity and wider spreads to counterparties using Platforms.
- We employ last look for the following primary reasons:
  - We indicate prices to a broad counterparty base. Those indicative prices are based on, among other considerations, our inventory and risk profile. Last look is in place in order to ensure that we can manage our position and risk profile.
  - Communication latencies can cause requests to trade and indicative quotes to become stale. Additionally, some market data is not updated continuously in real time.
  - We check the credit status of our counterparties and our credit exposure to the counterparty, which may change in real time.
  - We undertake other counterparty-based checks, such as counterparty authorization to engage in a particular transaction, to fulfill our risk management objectives and regulatory obligations.
- Along with risk management, regulatory, and staleness checks, we perform a price check. If the market price for a transaction is at a level beyond a counterparty-specific threshold applied by our trade acceptance logic after receipt of a counterparty’s request to trade, we will reject the trade request. We apply this price check symmetrically, in which case we will reject or accept the trade regardless of whether the market price has moved against us or against the counterparty. The application of last look to trading on or pursuant to the rules of certain swap execution facilities may vary with respect to some
interest rate swap transactions. Further Citi has the discretion to respond to a quote via a Platform in a manual capacity. For quote responses provided in a manual capacity, we view this to be outside of the scope of the last look process. For example, a trader may manually respond to a request for quote through means of an electronic Platform; however, due to the manual nature of the traders actions, such activities would not be subject to the last look process describe herein.

- We apply last look immediately upon, and in some cases after a brief time delay following, receipt of a counterparty’s order, although the application of last look may vary across different Platforms. Connectivity to the third-party vendors may vary and we suggest speaking to the vendor(s) directly to provide further information on what information is visible on the respective Platform(s) regarding firm or indicative quotes.
- We may take into consideration a variety of factors in setting last look parameters, including: product type and Platform on which the transaction would occur; the counterparty’s historical trading characteristics and preferences; trade size and the extent and nature of a counterparty’s business relationship(s) with us.
- While a counterparty’s trade request is pending, subject to completion of last look, we do not engage in any trading activity (including pre-hedging or pre-positioning activity) on the basis of that specific trade request or utilize that information for the purposes of adjusting our pricing.

(2) IOIs

Communication with Clients about trading axes and client flow is a constant activity in which our Global Sales and Trading team engage. We communicate about such trading activity using a wide variety of media, including phone, Bloomberg (either via chat or the terminal), Symphony chat, e-mail and, at times, face-to-face. For the above communication methods (and any other non-FIX, non-systematized communication means), Citi, consistent with industry practice, does not use AFME qualifiers when communicating IOIs using these means. We do adhere to the AFME Framework and use AFME qualifiers as described below, for all system-generated and fix-communicated IOIs. IOIs that are not entered mechanically may not adhere to that framework and will be noted accordingly. That being said, all of our client communications concerning trading axes and client flows follow the common regulatory guidance that our communication is truthful, accurate and not misleading (FINRA 09-28).

Citi’s indications of interest (“IOIs”) may be communicated through Citi’s proprietary order management system or a third-party vendor system. These IOIs may be actionable or non-actionable (in whole or part). These IOIs may also be either “natural” or “non-natural,” and may either represent client or house/principal interest. IOIs may be targeted/customized to the recipient or disseminated publicly.

In designating IOIs as “natural” or “non-natural”, and “client” or “house”, Citi generally follows the AFME/IA Framework for Indications of Interest (https://www.afme.eu/globalassets/downloads/divisions/equities/afme-eqt-framework-for-indications-of-interest.pdf). This disclosure clarifies Citi’s use of those IOI designations where the Framework is ambiguous:

- Citi’s C:1 – Client Natural (Block) and C:2 – Client Natural (Working) IOIs are intended to reflect our existing orders. So long as the customer order has been received by Citi, Citi may use either a C:1 or C:2 IOI to represent both the customer order, and Citi’s cash hedge orders entered to offset the risk of a client-initiated swap*. In either case, the order may or may not be working in the market.
  * Swap hedging flow is Citi principal flow, executed and reported as such. However, for the purposes of additional transparency, these hedging transactions are advertised as a C:1 or C:2 IOI (as the liquidity sought is related to a client-initiated swap order).

- When Citi transmits an H:1 – House Position Unwind IOI, Citi does not intend to immediately replace that position. When Citi transmits an H:2 – House Position Wanted IOI, Citi is engaging in proactive hedging activity and does not intend to immediately unwind the resulting position. Citi may at any time and without prior notice to clients, under certain circumstances (e.g., changing market conditions or risk
appetite) decide not to fill published size or trade out of or replace traded positions acquired in response to these IOIs. Positions may include cash equities and/or derivatives.

- Citi may use the P:1 – Potential IOI when Citi has a reasonable expectation that it has a client interest. Please note that, consistent with the Framework, at the time of display, P:1 IOIs do not necessarily represent a customer order that Citi has received, and no assurance can be given that the potential interest will result in a trade until Citi has had a conversation with both the buyer and the seller.

A client tiering arrangement is used to facilitate dissemination of IOIs. Except for low touch orders, by default, all client orders are opted into IOIs. To opt-out, or if you have other questions regarding our IOI practices, please contact your Citi sales representative.

(3) **Citi-ONE ATS**

CGMI operates an alternative trading system known as Citi-ONE ATS (the “ATS”) – Market Participant ID (MPID) is ONEC and Market Identifier Code (MIC) code is ONEC.

The Citi-ONE ATS is hosted, operated, and supported by a third-party service provider, Operations and Compliance Network, LLC (“Ocean”), subject to the direction and oversight of CGMI as the broker dealer operator. Some important features of the Citi-ONE ATS include interactions between the ATS and CGMI’s algorithms and smart order router (the “SOR”), described further below. For more comprehensive information regarding the features and functionality of the Citi-ONE ATS, kindly review the Citi-ONE Form ATS-N (disclosure document) publicly available on the U.S. Securities Exchange Commission (SEC) Form ATS-N Filing and Information page here: [https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm](https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm).

Citi-ONE, through Ocean and another third-party market data service provider, provides three real-time, continuous data feeds to CGMI’s algorithms and SOR. There are confidentiality agreements in place with Ocean and the other third-party market data service provider that prohibit the use of such data by Ocean and the third-party market data service provider other than to carry out their obligations to CGMI. These data feeds contain aggregated and anonymized buy and sell information for resting orders (“Orders”) from all Participants in the ATS that are priced at or within the National Best Bid and Offer.

- Aggregated anonymized information about all resting Orders in the ATS is subject to these data feeds, whether such Orders were sent indirectly via CGMI’s algorithms or SOR or directly by a Participant, and regardless of whether a user is a Client, an Affiliate or Business Unit (trading as agency or principal) of CGMI. Conditional Orders and Market on Close orders are not included in the data feeds.
- These aggregated and anonymized ATS data feeds include symbol, side (buy or sell), quantity available at or within the NBBO across all Orders in the ATS and a timestamp of the snapshot included on the continuous data feeds from the ATS. The data feeds do not include the timestamp of any individual Order.
- The three data feeds include aggregate quantity represented at three price levels within the NBBO on each side: the bid (buy and sell Orders at the bid price), midpoint (buy and sell Orders at the midpoint price) and offer (sell and buy Orders at the offer price).
- In the event there is only one Order resting in the ATS within the NBBO on a given side of the market for a symbol, that Order will still be included in the relevant data feed. Although information cannot be aggregated in such instances, the data feeds will not reflect that the trading interest is comprised of a single Order, and the Order will be anonymized.
- The data feeds are provided to the CGMI algorithms and SOR by Ocean and another third-party service provider. The algorithms and SOR use the data in the feeds solely to make efficient real-time decisions regarding whether and when to route orders to Citi-ONE, and what price conditions and quantity to apply to those orders.
- CGMI may use the data feeds to preference the ATS over other potential routing destinations when CGMI has determined, in accordance with applicable internal procedures, that such routing and preferencing decisions are consistent with CGMI’s best execution obligation.
Users of CGMI’s equity algorithms and SOR may not opt out of having their Citi-ONE resting Orders included in the data feeds that are provided to CGMI’s algorithms and SOR. However, users of CGMI’s algorithms and SOR may request that their orders not be routed to the ATS by contacting their Equities client coverage person and receiving confirmation from CGMI that the request has been completed. Direct Subscribers can determine whether to send Orders to the ATS.

FINRA publishes alternative trading system (“ATS”) trade and volume information on its website, accessible via this link: https://otctransparency.finra.org/otctransparency/AtsIssueData

(4) Central Risk (CGMI)

CGMI’s Central Risk Desk (“Central Risk” or “CR”) is tasked with optimizing CGMI’s risk portfolio and may use a variety of hedging products, engage in securities trades with customers and the markets, and make two-sided institutional size markets via Indications of Interest (“IOIs”) in a range of NMS Securities.

Trades executed with CR are done on a principal basis with Citi. CR trades with clients on an immediate-or-cancel basis, based on contemporaneous market prices, and does not transact in the market in order to source liquidity for a particular transaction, unless required by law/regulation (e.g., Regulation NMS top-of-book sweeps). However, in its role managing the Firm’s risk, CR continuously evaluates its risk position in the context of the market and may transact in the market in a variety of products in response to changes in its evaluation of risk. If the contemporaneous market price used by CR to price transactions with clients differs from the price to CR in sourcing or liquidating risk, the resultant profit or loss accrues to Citi.

CR makes its non-displayed principal liquidity available via two distinct interactions called “Pillars”: Direct Client Access program (“DCA” or “Pillar 1”) and Liquidity Hub (“LH” or “Pillar 2”). The availability of other interactions or Pillars may vary based on region and market, so please contact your CGMI coverage for more detail.

Clients who interact with CGMI via Electronic Execution may request access to CR by contacting their Sales representative. Clients who interact with CGMI via Program Trading and/or High Touch will be enabled at Citi’s discretion based on factors including, but not limited to, overall client relationship and technology capabilities -- clients may request opt-out by contacting a Citi sales representative. For clients executing on swap, we may strike the original hedge for any swap by executing a principal transaction, such as against LH, rather than executing at a third-party market center, venue, or an exchange - clients that prefer we not do so may contact their Sales representative, though we retain the ultimate discretion. Orders filled by CR will be denoted as principal capacity executions on trade confirmations.

Pillar 1 - DCA

Clients can access DCA in a variety of ways including by sending a directed Immediate or Cancel (“IOC”) order to CR DCA, or by instructing CGMI Smart Order Router (“SOR”)/Algo to send orders to CR DCA in addition to other venues. Client identification and parent order information are passed to CR platform, along with execution details including quantity and price. This information is not passed to Liquidity Hub.

Pillar 2 – Liquidity Hub

LH is an internal source of CGMI principal liquidity for Electronic Execution (“EE”) orders, orders from Citi affiliate’s and high-touch orders submitted to EE by CGMI’s Equities Division trading personnel. Clients’ parent algo orders can interact with LH by sending an order to Electronic Execution directly, or via Program Trading and/or High Touch. If a client order is executed partially or fully in LH, CR trading personnel will, after such execution, become aware of the client’s identity and execution details. In the event of a partial fill, the unfilled quantity is not disclosed.
EE algorithms can interact with LH in the following two ways, both of which are commonly referred to by CGMI as “factor facilitation”:

 Sending an IOC order to LH – when an IOC child order is entered with LH, LH considers that order in isolation, i.e., without regard to the existence of any other order received by LH. After determining whether the client order is a match to CR’s appetite, LH will fill or cancel the child order.

 Resting a conditional order with LH – conditional orders from external clients, CGMI’s internal principal desks, and Citi’s affiliates will rest with LH, and may be analyzed in isolation or in a portfolio with other resting conditional orders. Where resting conditional orders match CR’s appetite, LH will request firm-ups for some or all of the resting conditional orders and will fill those firm-up orders that pass internal and regulatory control checks. If CR’s appetite in any particular security is less than the quantity available in all currently resting conditional orders, LH will assign liquidity based on a variety of factors including, but not limited to, origin (e.g., from a Citi trading desk, or a client relationship), parent order leaves quantity, and order arrival time.

 For both Pillars 1 and 2, CR trading personnel will not have knowledge of the unfilled quantity of a client’s orders.

 CR trading personnel will analyze the historical trades CR effects via DCA and LH. This information will be used to configure the CR system to make the trading experience more efficient. Aggregate client-level fill rates can be disclosed to the CR team on T+1 to help adjust the client experience.

 Markets Quantitative Analysis (“MQA”) analysts support the Citi Global Equities business in general and have access to principal and client orders and execution information across the Equities Division. In the context of the CR business, MQA analysts may be requested to analyze real-time or historical executed and unexecuted orders to further optimize the interactions.

 See “Principal Trading”, “Confidentiality / Privacy and Data Management”, “Conflicts of Interest” and “Quantitative Analysts” sections for additional information.

 (5) Citi External Liquidity

 This section of the disclosure applies to Citi’s electronic execution offering in the Americas, specifically in the U.S., Canada, Mexico, and Brazil. In the Americas, Citi has access to various exchanges, Alternative Trading Systems (“ATSs”)/Electronic Communications Networks (“ECNs”), Electronic Liquidity Providers (“ELPs”)/Single Dealer Platforms (“SDPs”), Floor Brokers, and Inter-Dealer Brokers. For orders sent to Citi’s cash equities High-Touch desks, we may access other liquidity sources such as other executing brokers.

 What are the external sources of liquidity you connect to?

 Citi seeks to optimize trade execution across exchanges, ATSSs, SDPs and other broker / dealers. Eligibility for venue interaction varies by country, trading desk, trader, client, and order parameters. Please contact your Citi representative for details as to your specific configuration and venue list.

 Can clients opt out of any external venues (incl. non-displayed liquidity sources)?

 Clients have the ability to customize their venue routing preferences to “opt out” and/or “opt in” from interacting with any external venue where not prohibited by law, rule or regulation (for example, under Rule 611 of Regulation NMS).

 Clients also have the ability to further customize their venue interaction preferences where supported on venue level. Such interactions may include the ability to leverage conditional orders, minimum execution quantity and select unique order types.
Citi may route to various SDPs and ATSs based on various factors described in the “Order Handling / Routing” section below. The SDPs/ATSs may in turn provide Citi with data and statistics describing their experience resulting from interacting with Citi. If upon reviewing their data in conjunction with Citi’s data, Citi finds that a specific client is responsible for continuously contributing to the negative experience of the SDPs/ATSs, Citi reserves the right to unilaterally disable access to the SDP/ATS for that particular client. In the event this were to occur, Citi would make a reasonable effort to notify the impacted client(s) in a timely manner and see if an alternate resolution is possible (e.g., disabling for certain types of flows/strategies/traders, or segmenting/isolating the flow via a separate session or fix tag on an opt-in basis where such a capability exists).

**Does Citi aggregate orders to fulfill minimum quantity?**

No, Citi does not aggregate separate client orders to fulfill minimum fill requirements. Citi may, however, access venues that aggregate orders to fulfill Minimum Execution Size. Clients can choose to opt-out from executing on those venues that aggregate orders.

**Does Citi have an ownership stake in any venues that it connects to?**

Citi has strategic ownership stakes in the following US-based execution venues: Miami International Holdings, Inc. (parent of MIAX PEARL Equities Exchange); the Members Exchange “MEMX” which is an SEC-registered securities exchange; Kezar Markets (formerly Titan Parent Company, LLC), for which Citi has a Board seat, and which is the holding company for Level ATS a US equity dark pool trading venue for the sell-side, and Luminex, a block trading venue built for the buy-side; and the Chicago Mercantile Exchange as part of its membership requirements.

Citi also has strategic ownership stakes in Latin America-based execution venues in Peru, Colombia, Dominican Republic, Guatemala, and Uruguay. Please contact your sales representative for more information.

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### (6) Order Handling / Routing

This section of the disclosure refers explicitly to Citi’s electronic execution offering in the Americas, specifically in the U.S., Canada, Mexico, and Brazil.

These disclosures aim to provide transparency and a general description to our clients regarding our order handling and routing practices, including the influence fees and rebates have on routing decisions. The general description may not be representative of how certain individual orders are handled.

**In what countries in the Americas does Citi offer electronic trading? Is any of it outsourced?**

Citi has an electronic trading offering in the U.S., Canada, Brazil, and Mexico.

For the US markets, Citi operates an in-house built proprietary algorithmic container and Smart Order Routers. Citi may also use the Bloomberg Broker Network, an order routing service, as a means to connect to some broker dealers in the US offering markets for listed and OTC securities. Citi also maintains connectivity to a third-party broker/dealer in the event of temporary market connectivity issues.

For Canadian equities (including inter-listed securities traded in Canada), Citi routes client orders to Virtu ITG Canada Corp. for execution in Canadian markets.

For the Brazil and Mexico markets, Citi operates an in-house built proprietary algorithmic container. For Mexico, orders via Citismart algorithms pass through Ullink’s smart order router solution.

**How is Citi charged for accessing market liquidity?**

For exchanges, rates are published and standard. For non-exchange liquidity providers (Alternative Trading Systems or “ATSs”, Electronic Communications Networks or “ECNs”, Single Dealer Platforms or “SDPs”, Electronic
Liquidity Providers or “ELPs”, and broker-dealers, Citi negotiates rates. Depending on the venue and Citi’s interaction with the venue, Citi may incur a cost, execute at no cost, or receive a rebate. A client’s fee arrangement with Citi will determine whether or not these economics are passed back to the client and/or influence the routing decisions.

How does Citi interact with liquidity?

Configurations in each of the following three scenarios may vary by trading desk, trader, country, client, and order parameters. Clients should contact their Citi representative for details as to their specific configuration.

1. Liquidity Taking:

CGMI’s algorithms and SORs capture a contemporaneous snapshot of quotes, Orders from the Citi-ONE ATS (as described in the “Citi-ONE ATS” section above) and various other sources, including some or all of the following may be applicable if available: exchanges, and external off-exchanges venues and broker dealers. For more detailed information on Citi-ONE, please see Part III, Item 15, Display, in the Form ATS-N filings accessible here: https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm.

If there is more aggregate liquidity available than is necessary to fill the order, the factors Citi uses when determining which venue(s) to select for marketable orders include, but may not be limited to, some or all of the following: fill rates & hit rates, average daily volume, venue fees, rebates and tiers, etc.

Certain configurations of Citi’s Smart Order Routers may rank fee, rebate, and tier factors differently. For example, some configurations will place a higher weight on fees, rebates, and tiers, and may prioritize inverted external displayed exchanges (which provide a rebate for taking liquidity) and broker / dealers (which may provide a superior cost alternative). Further, certain configurations may route orders to venues sequentially or in parallel, route orders seeking price improvement and hidden liquidity within the spread or utilize ISO (Intermarket Sweep Orders) order types in some or all of the orders sent to lit Reg NMS protected exchanges.

2. Displayed Liquidity on Exchanges:

When we go to an exchange, Citi’s Smart Order Routers may display all or a portion of the orders on exchanges. When a country has more than one exchange available to select from, the factors Citi’s Smart Order Routers use when determining which exchange(s) to select for non-marketable orders include, but may not be limited to, some or all of the following: venue fees, rebates and tiers, queue length on the exchange, trade frequency and volumes on the exchange, or venue historical market share in traded security.

Certain configurations of Citi’s Smart Order Routers may rank different factors differently. For example, some configurations will place a higher weight on fees, rebates, and tiers, and may prioritize posting on rebate paying venues.

3. Hidden Liquidity:

Citi may route hidden orders to exchange and off-exchange venues where available. Citi can utilize some or all of the following tactics in parallel or sequentially depending on the configuration: resting pegged orders, resting non-pegged orders, resting and responding to conditional orders, or utilizing IOC/FOK ping orders (sequentially or simultaneously)

When determining where to route, Citi’s routing logic will weigh some or all of the following factors including, but not limited to, urgency of the parent order, historical fill / hit rates and market share, venue fees, rebates and tiers, historical markouts, availability of quotes from available liquidity sources, etc.

What anti-gaming controls does Citi employ?
Citi employs a variety of anti-gaming tactics that are meant to protect the Client order from adverse price moves, information leakage and excessive market impact. The tactics vary by trading desk, country, client, and order parameters, and may include any of the following:

- Limiting prices of hidden orders and protecting those sent to ATSs and exchanges with a limit price threshold that tracks the price evolution of the volatility cone defined by the volatility of the security.
- Utilizing a minimum fill quantity to protect against pinging by small orders; minimum fill quantity may either have a static threshold and/or be adjusted dynamically intra-day.
- Adjusting the size and timing of orders such that it is randomized to minimize footprint detection.
- Limiting information leakage by not posting out loud for certain names and limiting the number of venues we have resting open orders at any given time.
- Suspending orders breaching beta adjusted and non-beta adjusted price move thresholds for manual intervention.
- Adjusting the size and timing of orders such that it is randomized to minimize footprint detection.
- Reducing exposure of child orders during events that result in higher than anticipated participation rates.
- Dynamically change trading speed based on real time price movements with random pauses.

Clients should contact their Citi representative for details as to their specific configuration.

**What venues are eligible and how do you select the list of venues an order will interact with?**

All orders are eligible for interaction with all venues Citi connects to, including Citi-ONE, by default, with the exception of CR via Pillar 1, or Pillar 2 (as described in the “Central Risk” section). At any time, Citi may choose to cease routing to certain destinations partially or entirely, as a result of Citi’s analysis of the executions on an ad hoc basis and/or received during our Best Execution Committee review (please see “Best Execution” section). The decision to cease routing or to incorporate a different order of routing priority is typically made due to poor quantitative performance metrics, technical issues, and/or based on regulatory actions or reputational concerns. Based on a variety of factors, including Citi’s discretion, interactions with such internal and external sources of liquidity may vary by trading desk, country, client, and order parameters.

Clients should contact their Citi representative for details as to their specific configuration.

**Does CGMI preference its own internal venues?**

Citi algorithms and SOR may preference our internal principal liquidity (CR via Pillar 1, or Pillar 2, as described in the “Central Risk” section above) if a client opts in for CR interaction and it is available ahead of any other venue, internal or external.

Citi owns and operates the Citi-ONE ATS for crossing orders in NMS Stocks and generally preferences Citi-ONE as a routing destination when consistent with the Firm’s best execution obligation. By default, all Citi client orders are opted in to interact with Citi-ONE.

**Can clients customize the venue preferences?**

Citi’s algorithmic and routing strategies are highly customizable. Clients have the ability to customize their venue routing preferences to “opt out” and/or “opt in” from interacting with any venue where there is no conflict in adhering to market regulatory obligations, such as Regulation NMS in the U.S.

Clients should contact their Citi representative for details as to their specific configuration.

**What market data does Citi use?**

In the U.S., CGMI uses a combination of direct (proprietary) and indirect (SIP) market data feeds for routing purposes. If there are any issues with one or more of the direct market data feeds, Citi reserves the right to fail over to the SIP feed without notifying customers in advance. CGMI does not receive market data directly from
Long Term Stock Exchange (LTSE), NYSE National, NYSE American, NYSE Chicago, and MIAX PEARL Equities Exchange.


In Brazil and Mexico, Citi captures market data from Refinitiv (now part of London Stock Exchange Group).

For Canadian equities (including inter-listed securities traded in Canada), Citi routes client orders to Virtu ITG Canada Corp. for execution in Canadian markets.

How are platform enhancements implemented?

At any time, Citi may implement enhancements to its Electronic Trading platform, which includes Citi’s algorithms, smart order routers and core infrastructure components, and we will endeavour to communicate material changes to you on a best-efforts basis. As part of the release of an enhancement(s), the roll-outs may be performed across the platform as a whole or in parts to all trading desks, traders and clients or a subset of trading desks, traders and clients. For some enhancements or venue access, a group made up of internal traders and in some circumstances clients who have specifically opted in, may be given access to the functionality or venues access that is not available to all clients described herein. Once the enhancements have been verified, Citi may make the enhancements available to all clients.

Citi’s Handling of Held/Not Held Orders

Orders transmitted to Citi may be handled on a “held” or “not held” basis. As a general matter, Citi handles orders from institutional clients on a “not held” basis unless the client order specifically indicates otherwise. With limited exception, Citi does not accept held orders, nor will Citi accept a modification of a not held order to a held order.

Contact your Citi representative to determine whether an exception might be available.

Does Citi accept GTD and GTC Orders?

Citi provides the following order handling procedure and protocols as it relates to the duration of cash equities orders in the Americas. In the interests of increasing transparency, the following disclosure is to inform CGMI clients and those clients of CGMI affiliates whose orders are entered with CGMI or Citi’s affiliates (collectively, “Citi Clients”) of Citi’s order handling procedures and protocols related to good-til-date (“GTD”) and good-til-cancelled (“GTC”) orders in cash equities products.

Duration of orders

Citi considers client orders to be Day Orders, unless otherwise specified. A Day Order is an order that is only valid on and for the day it is entered. Day Orders and unfilled portions of partially executed Day Orders will expire at the end of the regular trading day on the day that the order was received (generally 4:00 p.m. Eastern Time).

The Firm also accepts GTD and GTC orders. GTC/GTD orders are only eligible for execution during the regular market hours between 9:30 a.m. to 4 p.m. Eastern Time. A GTC/GTD order will remain open on the Firm’s books until executed, cancelled by the client that placed the order or cancelled by the Firm, or in case of GTD until the order expires at its designated time-in-force date but no later than one calendar year, whichever comes first.

Reserved rights as it relates to GTD/GTC orders

The Firm reserves the right, at its sole discretion but subject to applicable laws and rules, to modify, suspend, or cancel any of its order handling protocols as it relates to GTD/ GTC orders entered by Citi Clients. While the Firm makes reasonable efforts to ensure the GTD/ GTC offering operates as expected, there may be a risk associated with the system failure, interruption, or delay in messaging (i.e., cancelations) that could expose a client to
substantial damage, expense or loss. In the case of a system failure or other delay or outage, Citi will use commercially reasonable efforts to provide you with current information and communicate any order updates, modifications, cancellations, etc. in timely manner. Below is the list of the Firm’s expectations from its clients, when GTD/ GTC orders are entered by Citi Clients:

- Citi reserves the right to cancel GTC/GTD orders for any reason, including systems issues/unavailability, corporate actions on a best-efforts basis (dividends, splits, and symbol changes), security restrictions, and risk checks at any point in the lifetime of the GTC/GTD order.
- It is the responsibility of each Citi Client to check and monitor the status of their GTC/GTD orders whether these orders are live, cancelled or modified as intended, and have not been cancelled by Citi for any reason at all times, including during U.S. market hours.
- Each Citi Client must provide three electronic contact means (e.g., phone numbers, IMs, emails) that are actively monitored during applicable business hours between 7 am and 6 pm Eastern Time in the event orders require intervention/action/confirmation.

To the extent permitted by applicable law, the Firm reserves the right and will have no responsibility or liability for any potential damage, expense or loss incurred due to the failure to adhere to the above expectations.

(7) CGMI Best Execution

How does CGMI provide Best Execution?

In any transaction for or with a customer or a customer of another broker-dealer, CGMI uses reasonable diligence to ascertain the best market for the subject security and buy or sell in such market so that the resultant price to the customer is as favorable as possible under prevailing market conditions. Reasonable diligence may include, amongst other things, the character of the market for the security (e.g., price, volatility and relative liquidity, and pressure on available communications), the size and type of transaction, the number of markets checked, the accessibility of quotations, and the terms and conditions of the order.

CGMI also maintains a best execution governance framework designed to (i) consistently seek to deliver best execution and operate in the best interests of our clients; (ii) comply with all relevant regulatory requirements; and (iii) continuously look at ways to further improve our execution capabilities. This framework supports CGMI’s review of held and not held order handling practices for compliance with the principles of Best Execution, and any recommendations for policies, procedures, and order handling practices relating thereto to qualified principals of the Firm responsible for the pertinent business activities.

When making decisions regarding the handling and routing of customer orders, CGMI considers (among other things) the size and type of the order; the trading characteristics of the security involved (including liquidity); the availability of accurate information affecting choices as to the most favorable market center for execution and the availability of technological aids to process such information; and the cost and difficulty associated with achieving an execution in a particular market center.

CGMI can provide clients with Transaction Cost Analysis (TCA) reports and show a liquidity map for a client’s equities order flow that shows venues and the percentage of liquidity provided versus taken at each venue. In addition, upon request by a client, CGMI can provide such client with an SEC Rule 606 report that shows standardized disclosure of our institutional order handling and routing. For additional disclosures concerning order handling and routing, please see our SEC Rule 606 Disclosure here: https://www.citigroup.com/global/disclosures.
(8) Market Commentary

When we provide market commentary, we are not acting as your adviser and we do so with the expectation that you are a sophisticated investor capable of making your own investment decisions without reliance on suggestions or information we may provide.

(9) Trading Limits

To the extent we communicate or otherwise impose notional or share limits and/or any other limits or control settings, any such limits/controls are for the benefit of Citi and have the goal of fulfilling Citi’s obligations under the SEC’s Market Access Rule (15c3-5).

You may not rely on any such limits for your risk management purposes.

(10) Confidentiality / Privacy and Data Management

We are bound by contractual and regulatory obligations relating to confidential information and have adopted policies and procedures to assist us in meeting these obligations. Additionally, we follow a Global Markets and Securities Services Policy on Sharing Client or Citi Confidential Information, which sets out requirements that apply in connection with the sharing of Client and Citi Confidential Information. This policy provides that, with limited exception (including as described below), Confidential Information may not be shared externally and, within Citi, may be shared only on a “need to know” basis.

Also see Citi’s global Privacy Notice here: https://www.citigroup.com/global/privacy. For more information, please contact your CGMI representative.

What follows is a non-exhaustive discussion of how we may use and share certain order and execution data, including cancellations/modifications (together, “Trade Data”):

Citi may use Trade Data for bona-fide business purposes

These business purposes include, without limitation, performing venue and transaction cost analysis, evaluating order routing practices, advertising aggregated low-touch and high-touch trading volumes externally, improving trading decisions (e.g., by understanding market dynamics, to determine trading strategy, or evaluate capital commitment trades) and distributing IOIs. Additionally, we analyze information regarding executed and unexecuted transactions on an individual and aggregate basis for a variety of additional purposes, including credit and market risk management, sales coverage, client relationship management, and revenue tracking and management. In addition, Trade Data will also be analyzed internally by Citi personnel who support the execution channel (including, but not limited to, Operations, IT/application support team, Compliance, electronic execution analysts and quantitative analysts) in order to optimize the execution offering.

As part of our obligations as a regulated entity, we share Trade Data with our global regulators or the public as required, and may rely on vendors to comply with such obligations, e.g., preparing and displaying statistical reports required by SEC Rule 605 and 606. We may also disclose this information as requested or required by deposition, interrogatory, request for documents, subpoena, civil investigative demand or similar process.

Aggregated Anonymized Data

We analyze, comment on, and disclose the anonymized and aggregated Trade Data of all clients regarding executed and unexecuted transactions, together with other relevant market information, internally and to third parties, as market color.
We also use such anonymized and aggregated information in products, services or data that we offer as part of our business.

CGMI advertises client electronic trading executed volume on a delayed basis - clients may opt out by contacting their CGMI representative.

For Central Risk, we will run simulations and share aggregated and anonymized statistics such as, but not limited to potential profit and loss, crossing rates, cost savings, with our Central Risk teams (Central Risk, “CR”) to evaluate whether the CR offering should be made to a non-opted in client, to evaluate the impact of any adjustments/changes made or to be made to the Central Risk system with opted-in clients, and to gauge whether to provide an CR offering or make changes to the CR offering for a client. When doing so, in all cases, no individual orders or transaction information is shared. If a client has opted in to trading with Central Risk, then client name would be shared.

Opt out may be offered for a limited set of aggregated and anonymized data sets described herein; please contact your sales representative for details.

Client Coverage

Single Point of Contact – For certain North America Cash Equities clients, upon notice and consent, sales coverage will be streamlined by having a single point of contact (and assigned back-up coverage) for all of their High-Touch, Electronic Execution and Program Trading orders (“Cash Products”, which, for clarity, includes single stocks, ETPs and total return swaps on cash equities). The assigned coverage will have visibility into all of that client’s orders in those Cash Products. Clients who do not consent to this streamlined coverage model will follow the default coverage model described here.

High Touch – By default, high-touch orders remain visible to the desk(s) to which the orders are routed for execution. Additionally, if an order is sent to Citi’s Smart Order Router (SOR) by any desk for algo or DMA interaction, then the Electronic Execution (EE) desk and Execution Advisory Services (EAS) have visibility into your order for support with execution globally.

Electronic Execution (Low Touch or EE) – When orders are routed directly to the EE desk, other desks cannot see the security entered or traded, and therefore cannot see side, quantity, etc. The EE desk globally has its own entitlements which are designed to maintain the confidentiality of your order flow. This infrastructure is separate from that of the High-Touch Cash desk, Program Trading desk and Research Sales team. For some accounts, Cash Equities Low Touch coverage and Futures Low Touch coverage may cover an account in either asset class, sharing in the coverage responsibilities. Please contact your sales representative for information on how you may be covered.

The EE desk will receive automated alerts when there is a potential for the High-Touch Cash desk to find a contra for, or to principally facilitate, orders in specific stocks. No client-identifying information is ever communicated between the High-Touch and EE desks. The one-way information flow starts with the automated notification to the EE desk, which then gets relayed to the EE client who can decide to re-route their low-touch order(s) to the High-Touch desk or do nothing and leave the order(s) as-is. If you have questions, please contact your Sales representative for more information.

Citi-ONE ATS – The Citi algorithms and SOR may also interact with Citi-ONE and if an order match occurs, your order and execution will be visible to the Citi-ONE ATS desk. For more detailed information, please see Part II, Item 7: Protection of Confidential Trading Information, in the Form ATS-N filing accessible here: https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm.

FIX – With respect to FIX orders (sent either via high-touch or low-touch channels), CGMI’s Connectivity team can view all such orders.
(11) Conflicts of Interest

The fact that we act as a broker and a dealer in securities for multiple Clients with differing interests gives rise to inherent conflicts of interest between us and our Clients and among our Clients with respect to whether, when, to what extent and at what prices we execute transactions with our Clients.

In some Equities markets we may maintain inventory or pre-position in anticipation of a future Client’s order. We may derive additional benefits from that activity, including, among others, reduced transaction costs when we use internal liquidity and ownership or other economic interest (such as the right to receive payments or other fees or revenue sharing) in an external venue or platform where we trade to fill a Client’s order. This activity may present conflicts of interest, but it is our policy to conduct this activity in a manner designed to avoid disadvantaging our Clients. All compensation or other economic interests resulting from such arrangements will accrue to Citi’s account and not the Client’s account.

Reference price transactions are transactions agreed with reference to a future determined auction price, benchmark, or other reference price. A Client should be aware of the key mechanics of reference prices and that the use of reference prices creates inherent conflicts of interest between Citi and its Clients. Our hedging activity is only for risk mitigation purposes and never to influence or manipulate the reference price.

Any Citi entity may transact business with you or on your behalf or (where separately agreed in writing) provide advice to you, in circumstances where it has, directly or indirectly, a material interest or a relationship of any description with a third party which may involve a conflict of interest or potential conflict of interest with you. In this context, material interests or relationships may include, without limitation, Citi interests through market ownership and personnel interests through shareholdings or board memberships. Subject to applicable law, no such conflict of interest or potential conflict of interest shall prevent any Citi entity from carrying out any transaction and no Citi entity shall be liable to account to you for any benefit made or received by it in such circumstances.

We have policies and procedures to identify, consider and manage potential conflicts of interest and protect the integrity of our relationships with our clients. Citi Personnel are required to comply with such policies and procedures and may not do anything directly or indirectly that is prohibited thereunder. A summary description of our conflicts of interest policy is available to you on request.


Authorized Participant for Exchange-traded Products (ETPs):

During the normal course of business, Citi may (i) be appointed by an applicable fund management company (or such other third party acting for and on behalf of an ETF) to (a) serve as an authorized participant with the objective of subscribing directly for and redeeming shares with an ETF (on the primary market) on a cash or in-kind basis; and (b) enter into, promote, offer or sell the ETFs with clients (on the secondary market); and (ii) enter into, promote, offer or sell any underlying assets or contracts (whether or not structured), which may be linked either directly or indirectly to the ETF ("constituents"). Citi may at any time (1) have long or short principal positions or actively trade (whether or not through making markets to its clients) positions in or relating to the ETF or any constituent; (2) invest in or engage in transactions with or on behalf of other persons relating to the ETF and/or any constituent; (3) undertake hedging transactions (for the purposes of any constituent or contract) which may adversely affect the level, price or rate or other factor underlying the ETF and/or any constituent; (4) have an investment banking or commercial relationship with the ETF or any of its appointed agents, of any constituent and have access to information from ETF issuers or other issuers of securities or other constituents (or any of their appointed agents); or (5) publish research in respect of any ETF or constituent.
Such activity may or may not affect the performance of the ETF, but potential investors and counterparties should be aware that a conflict of interest may arise when a person acts in more than one capacity, and such conflict of interest may affect (whether in a positive manner or a negative manner) the performance of the ETF. Furthermore, Citi may receive remuneration from a fund management company (or such other third party acting for and on behalf of an ETF).

(12) **Quantitative Analysts**

CGMI maintains a record of all orders received (including orders received but not executed), and all orders executed, as required by regulation. These records are generally available to Technology, Compliance, and control function personnel in order to surveil trading and monitor operational status. Additionally, certain front-office personnel employ quantitative techniques to analyze these records for various business purposes (e.g., to manage credit and market risk, to enable client relationship management, to improve trading decisions, to improve both CR and EE offerings, to produce market commentary, to monitor trading, etc.). These personnel may be organized into teams that have reporting structures separate from the Equities Division (e.g., MQA) and whose supervision and compensation are directed independently from the Equities Division, or they may be embedded within a particular business within the Equities Division (e.g., Execution Advisory Services or “EAS” within the EE business) and have their supervision and compensation directed by the management of their particular business.

For information on Citi-ONE, please see Part II, Item 7: Protection of Confidential Trading Information, in the Form ATS-N filing accessible here: [https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm](https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm).

(13) **Payment for Order Flow**

Rule 607 of Regulation NMS requires broker-dealers to disclose, upon opening a new customer account and on an annual basis thereafter: (i) their policies regarding payment for order flow, including a statement as to whether any payment for order flow is received for routing customer orders and a detailed description of the nature of the compensation received; and (ii) their policies for determining, in the absence of specific customer instructions, where to route customer orders that are the subject of payment for order flow, including a description of the extent to which orders can be executed at prices superior to the National Best Bid / Offer (“NBBO”).

Certain venues offer cash credits or rebates for orders that provide liquidity to their books and charge explicit fees for orders that extract liquidity from their books. Other venues are inverted, meaning they offer those benefits for orders that remove liquidity from their books and charge fees for orders that provide liquidity to their books. CGMI routes orders to exchanges that provide these programs and may be eligible for these benefits under the relevant exchange rules. For any execution, customers of CGMI may request that CGMI identify the venue on which their transactions have been executed and advise whether CGMI netted a rebate from such venue during the relevant time period. The Firm provides its practices in accordance with SEC Rule 607 to its customers through the Firm’s website, which is available at [https://www.citigroup.com/global/disclosures](https://www.citigroup.com/global/disclosures). In addition, the Firm may send the Rule 607 disclosure to its customers in a yearly mailing and upon the opening of a new account.