



Northern Trust Global Investments Limited Order Execution Policy

Policy Summary

A. Authority

UK Financial Conduct Authority

B. Statement of Purpose

The policy sets out the key steps it deems sufficient to comply with the best execution requirements as set out in the conduct of business rules of the FCA and how these steps enable the best possible results for our clients consistently over time.

C. Scope and Applicability

The Order Execution Policy applies to Northern Trust Global Investments Limited (NTGIL). The term NTGIL shall mean and any other affiliated company performing a regulated activity on behalf of clients contracting with NTGIL, whether authorised by the Financial Conduct Authority (FCA) or any successor hereto or not.

D. Effective Date

December 2020



1. Introduction & Application

Introduction

- 1.1 The Order Execution Policy applies to:
1. Northern Trust Global Investments Limited;
 2. Any affiliated company performing portfolio management or execution of client orders on behalf of clients contracting with Northern Trust Global Investments Limited (NTGIL), whether authorised by the Financial Conduct Authority (FCA) or any successor hereto or not.
- 1.2 Throughout this document the term “client order” refers to a decision to deal or an order received from an affiliated entity of NTGIL.
- 1.3 This document sets out the strategy of NTGIL for obtaining the best possible result for the execution of its client orders. The policy sets out all steps deemed sufficient to comply with the best execution requirements as set out in the rules of the FCA and how these steps enable the best possible execution results on a consistent, on-going basis.
- 1.4 The NTGIL Order Execution Policy (“the Policy”) covers:
- how NTGIL manages the execution process;
 - how NTGIL handles client order execution from the point of order origination to the completion of the execution;
 - the execution venues that NTGIL has selected to achieve the best possible client order execution, and the selection process associated with such execution venues;
 - the critical factors affecting client order execution and the methods of such factor selection, and;
 - an explanation of why NTGIL believes that this order execution policy will deliver the best possible result for the execution of client orders.

The best execution rules

- 1.5 As an Investment firm authorised and subject to FCA rules, NTGIL must take all sufficient steps to obtain, when executing client orders, the best possible result for its clients taking into account the execution factors. These factors are listed in section 2.
- 1.6 The execution factors are the characteristics of the client, the characteristics of the client order, the characteristics of the financial instruments involved and the execution venues where the order could be placed.
- 1.7 The scope of FCA rules is limited to certain instrument types and dealing activities.
- 1.8 **Client instructions; impact on best execution**
- In cases where a client gives a specific instruction with respect to the conditions for executing an order, this policy will not be applied for those aspects of the execution



relating to the specific instructions of the client. For example a client may give an instruction to only execute transactions with a list of brokers they have provided, we would not in such an instance trade with a broker not on that list even if they offered a better price or execution quality.

- 1.9** The policies that are described in this Order Execution Policy document are applied through a series of procedures. These are maintained by business professionals within the relevant business area. These procedures are aligned with this execution policy and are monitored to ensure that this policy is implemented as specified in this document.

Relevant codes and policies

- 1.10** The Policy is aligned to and supported by the following codes and policies:
- (a) Northern Trust Asset Management's (NTAM) Code of Ethics; and
 - (b) NT EMEA Conflicts of Interest & Inducements Policy
 - (c) Such voluntary industry codes that NTGIL, either as a legal entity or as part of the NT Corporation, has adopted, including the UK Money Markets Code.

Responsibilities

- 1.11** Accountability for the implementation and communication of this policy lies with the NTGIL's Chief Operating Officer (COO). Responsibility for the maintenance of NTGIL Order Execution Policy lies with COO as chair of the NTAM International Commissions and Trading Committee
- 1.12** Accountability for monitoring and oversight of compliance with this policy lies with Head of Compliance for NTGIL. Any questions relating to how the NTGIL Order Execution Policy should be interpreted or applied should in the first instance be addressed to the Head of Compliance.
- 1.13** The NTGIL Order Execution Policy will be periodically reviewed (no less than annually) to reflect regulatory changes, material technology or changes in the processes for managing the way client orders are executed, in order to ensure its content continues to be appropriate to the firms' activities.
- 1.14** The senior management of NTGIL are responsible for maintaining a conflicts of interest policy and identifying, managing or preventing and disclosing any relevant conflicts related to client order handling, undertaking on-going reviews on the effectiveness and appropriateness of the policy, the areas of potential conflict within NTGIL and the procedure for management of conflicts that arise.
- 1.15** Regular reviews on execution performance are undertaken by NTAM's EMEA compliance team. This is covered in greater detail in section 7.

2. Execution factors

- 2.1** When executing client orders NTGIL will take account of a range of execution



factors. These factors are considered in the initial selection of execution venues and the ongoing review of performance of those execution venues. These factors and their relative importance will be determined using the experience of the investment professional within NTGIL, depending on the asset class being traded and the product the client order relates to. These factors include:

- price;
- costs;
- speed of execution;
- likelihood of execution;
- speed of settlement;
- likelihood of settlement;
- size of the order;
- nature of the order.

2.2 Ordinarily, price will merit a high relative importance in achieving the best possible result; however, there may be circumstances for certain clients, order types, execution strategies, financial instruments or markets when other factors are weighted with greater importance than price.

2.3 When determining the relative importance of each of the above execution factors the following will be taken into consideration:

- The client's characteristics, including its client classification;
- The characteristics and nature of the order placed on the client's behalf;
- The characteristics of the financial instruments; and
- The execution venues to which the order can be directed.

2.4 In order to achieve the best possible execution result we, or the counterparties to whom we hand the order, may adopt one or more trading methods or execution venues to satisfy the order. As a consequence, there may be occasions where client orders will be executed outside of a regulated market, Multilateral Trading Facility (MTF) or Organised Trading Facility (OTF). This includes submitting orders to a Systematic Internaliser (SI), to a non- EEA affiliate or to execute orders over the counter (OTC).

Single order trades

2.5 Single order trades are managed via the trading desk for equity, FX and derivative trading and by portfolio managers for fixed income trading. Where appropriate, orders may be transmitted to dealing desks of affiliated entities in Chicago and Hong Kong, to take advantage of local expertise and timing considerations.

2.6 The size and nature of a single order trade is often particularly important. For example, when executing orders for index tracking portfolios, NTGIL will usually adopt an execution benchmark based upon the end of day closing price. This approach to achieving the best possible result would differ from an execution for an active portfolio



manager or an order traded intraday.

Programme trades

- 2.7** Programme trades are an amalgamation of multiple orders for one client, or orders for multiple clients, to be transmitted to a broker for execution in a single block in order to mitigate execution costs on behalf of the client.
- 2.8** Price quotes from multiple brokers, and/or from multiple execution venues, are generally sought for programme trades where appropriate, particularly at index rebalance effective dates. Once the execution venue (or firm to which the order is transmitted to for execution) with the best overall terms has been selected, the programme trade is submitted for execution. The dealers monitor the performance of the execution until completion of the entire order (following the completion of the entire programme trade the portfolio managers may then conduct transaction cost analysis to assess the execution quality of the trades).
- 2.9** When necessary, the equity trading desk discloses a limited amount of high-level aggregate information in order to select suitable execution venues. This information would include certain aggregated statistics such as overall volume or number of orders.

Directed Cash Dealing

- 2.10** For the purpose of the creation or redemption of ETF shares, NTGIL may accept Directed Trades for an Authorised Participant (AP) to instruct for NTGIL to trade an order with a certain broker and specify a particular trading strategy. For these trades, the full costs of using a specific broker are passed back to the AP who has chosen the broker. NTGIL will consider best execution to have been achieved by acting in accordance with the instructions given by the AP.

Over the counter transactions

- 2.11** Financial instruments may in certain circumstances be bought or sold "over-the-counter", directly with the counterparty and not subject to the rules or clearing arrangements of an exchange or Trading Venue (which includes Regulated Markets ("RM"s", Multilateral Trading Facilities ("MTFs") and Organised Trading Facilities ("OTF"s). Such orders will only take place where we believe this will result in best execution being achieved and subject to regulatory requirements regarding trading on Trading Venues, unless the instruments being traded are not listed on a Trading Venue.
- 2.12** As the trade does not take place on a venue there is greater potential settlement risk in respect of these over-the-counter transactions as the transaction will not be covered by the settlement rules of the Trading Venue. Settlement risk is the risk that the counterparty to a transaction does not deliver the payment or security in accordance with the agreed



terms after the other counterparty has already fulfilled its part of the agreement. There also may be differing exposure to counterparty risk. In order to mitigate this risk NTGIL only enters into transactions with counterparties who have been approved through our credit risk approval process. See section 6 for further details.

- 2.13** In addition, in certain cases (primarily for some fixed interest securities such as commercial paper) financial instruments may not be listed, quoted or admitted to trading on any stock exchange or quotation system at the time of purchase or sale, as a result pricing information for Instruments may be more difficult to obtain and the liquidity of the Instruments may be adversely affected. In such instances liquidity is considered as the primary execution factor rather than price.
- 2.14** By consenting to this policy clients authorise us to be able to execute transactions on an MTF/OTF, and outside of an MTF/OTF or a Regulated Market, this includes submitting orders to a Systematic Internaliser (SI), to a non- EEA affiliate or executing orders over the counter (OTC).

3. Execution Arrangements: Asset Class Specific

- 3.1** NTGIL manages client assets across multiple asset classes, in both pooled investment vehicles and separately managed accounts (SMAs). Accordingly NTGIL manages its execution arrangements with due regard to the product categories and asset classes being dealt. The execution policy is therefore aligned with the requirements of the underlying mandates, and agreements.
- 3.2** NTGIL may execute client orders for the following classes of financial instruments:
- Shares, Exchange Traded Funds (ETFs) and depository receipts
 - Bonds & Securitised Assets; such as Asset Backed Securities (ABS) and Residential Mortgage Back Securities (RMBS)
 - Money Market Instruments
 - Interest rate futures and options (exchange traded)
 - Currency swaps, forwards and other currency derivatives
 - Equity futures (exchange traded)
 - Securitised derivatives – warrants and certificate derivatives
 - Units in collective investment schemes

Equities (Shares, ETFs and depository receipts)

- 3.3** Equity dealing is managed by a centralised dealing desk (“CDD”) made of NTGIL’s own trading desk (based in London), along with the trading desks of two affiliates- Northern Trust Inc. (based in Chicago) and The Northern Trust Company Hong Kong (based in



Hong Kong) (collectively referred to as the CDD). Orders are passed from the portfolio manager to the trading desk in their region via an order management system. The CDD have responsibility for managing the execution of the order and conduct them in accordance with this policy. Where appropriate NTGIL's trading desk may receive and transmit orders to affiliates for execution on behalf of the client. Orders for portfolios managed in other jurisdictions may, from time to time, be sent to NTGIL's trading desk through the CDD.

NTGIL (or our affiliated trading desks) transmit orders to external (non-affiliated) brokers for execution and do not execute orders directly on trading venues.

- 3.4** Passive management products, such as index portfolios, have very specific dealing benchmarks. Timeliness and likelihood of execution are generally the most important execution factors in so far as, generally, a successful outcome for an index fund is to achieve a specific market on close price to match the valuation of the security within the benchmark index, for any trade or set of trades. Trades are therefore submitted in a manner which will result in the greatest likelihood of achieving such a benchmark.

Generally, two execution strategies are available for execution of orders for passive portfolios:

1. The competing quotes/ request for quotes method;
2. Transmission of aggregated market on close orders to a single broker for execution at a specified time (generally the index closing time)

In deciding which strategy to follow, the dealing desk will consider the importance of certainty of execution at a price close to the benchmark index price, compared to the likely dispersion of executions away from the benchmark price given the size of the trade.

- 3.5** The order execution arrangements for passive portfolios seek to minimise market impact and maximise liquidity in the execution of client orders, seeking to minimize transaction costs whilst matching the index risk and return characteristics and minimising operational risk throughout the process. Where it is deemed appropriate to trade away from the index implementation point, portfolio managers are expected to use sound judgement and rationale, including consulting the dealing desk where appropriate, to devise appropriate trading strategies, to minimise risk and ensure that mandates are managed within client expectations and guidelines.

- 3.6** Other equity portfolios may have specific investment objectives, and the portfolios are managed with the aim of meeting these through the use of dealing models and approaches which are seeking to exploit particular market price conditions. Often a successful execution result for the equity portfolios is to prioritise speed and achieve a rapid execution. This is reflected in the fact that an implementation shortfall benchmark is frequently the correct transaction cost analysis benchmark for the equity portfolios.

- 3.7** An implementation shortfall calculation will consider the actual cost of a trade and compare it against the predicted cost of a trade using a transaction cost estimation model – which considers markets movement, cost of market impact and speed of execution.



Fixed Income

- 3.8 In recognition of the structure of fixed income markets, fixed income dealing is managed directly by the fixed income portfolio management teams as they are experts in dealing such instruments.

Fixed Income portfolio managers engage in trading a wide variety of instruments through two distinct strategies:

Active strategies encompass management of money market funds, ultra-short duration and high yield bond portfolios. In these strategies a mixture of bonds, asset backed securities and money market securities are acquired. We distinguish between those securities with unique identifiers known pre trade (typically bonds) and those that are newly issued on request for which an identifier may or may not be issued post trade (typically money market instruments; time deposits, asset backed commercial paper, certificates of deposit, commercial paper and reverse repurchase agreements)

Passive strategies are primarily concerned with securities that have a unique identifier (ISIN) known to portfolio managers pre-trade. Securities are selected (sampled) with the objective of matching the risk and return of a target benchmark. Typically benchmark indices contain securities with more than one year to maturity.

Both strategies seek to acquire instruments via primary and secondary markets. For both active and passive portfolios the portfolio manager will look to participate in purchases through primary issuance whenever possible (i.e. where the security fits within the accounts' guidelines, credit and duration profile).

Government and Corporate bonds and other Fixed Income securities

NTGIL use a combination of electronic dealing systems and a conventional voice contact with / telephone calls to brokers.

- 3.9 NTGIL use an aggregated electronic price service for the majority of its executions in fixed income instruments. This service enables NTGIL to achieve the best possible execution result, as multiple prices can be discovered at a single point in time. NTGIL then selects the best available price from those presented. This electronic price service provides a full audit trail for the execution process. For passive fixed income, trading may also be conducted via telephone and trade files. Executions are monitored against the relevant benchmark, and are also referenced against pre-trade dealer quotes.
- 3.10 The execution factors as set out in section 2 are taken into account when dealing government and corporate bonds. In the event the portfolio manager has identified a price target for a specified security, while placing more importance on the price sought than the speed in executing the order, it remains incumbent on the portfolio manager to obtain the best possible price available at the time of trade.
- 3.11 When trading certain instruments, particularly illiquid securities, or when dealing in a large volume, greater importance may be placed on sourcing liquidity and likelihood of execution, in which case the order may be executed as a limit trade placed with an individual broker at a specified price. NTGIL conducts post trade analysis to monitor the



results of such trading to confirm that best execution is achieved on a continuous basis.

- 3.12** Internal electronic accounting systems are used to ensure that client mandate limits are monitored and observed.

Money Market Instruments

- 3.13** Cash is invested into various short term fixed income instruments and money market securities. Money Market Funds are managed by fixed income portfolio managers who are experts in dealing in such instruments.

- 3.14** Money Market Instruments are primarily traded for cash funds and cash collateral reinvestment (securities lending), managed by NTGIL's Fixed Income portfolio managers. The instruments are typically bespoke and a large percentage of money market instruments are purchased through primary issuance, either directly from the issuer or through a broker.

- 3.15** Due to the nature of the over the counter (OTC) short duration fixed income markets, liquidity and price will ordinarily merit a high relative importance in achieving the best possible execution result.

- 3.16** Time deposits and reverse repurchase transactions are overnight in nature, heavily supply constrained (on both an absolute basis and as a result of the organisation's stated credit and CCAR preferences). As they are not MiFID instruments they are not subject to NTGIL's Order Execution Policy, but are subject to internal policies. Counterparties we enter into transactions with for such instruments must be approved under our credit risk assessment process.

Securities lending – Cash Collateral Reinvestment

- 3.17** When cash is provided as collateral, the majority of cash received as collateral is then invested into various short term fixed income instruments and money market funds. Cash received as collateral is managed by fixed income portfolio managers who are experts in dealing in such instruments. Due to the nature of the over the counter (OTC) short duration fixed income markets, liquidity and price will ordinarily merit a high relative importance in achieving the best possible execution result.

Foreign Exchange

- 3.18** Foreign exchange transactions are usually a consequence of other execution activity. If a trade is envisaged which is known to require conversion to a different currency, a foreign exchange transaction is created. The trading desks execute foreign exchange transactions via an independent electronic platform or directly with authorized foreign exchange counterparties.

- 3.19** The trading desk engage in spot FX trading, which is not covered under this policy as these are not financial instruments as defined under FCA/MiFID rules, however our counterparty approval processes are still applied.

Currency Forwards and Non-deliverable forwards (NDFs)



- 3.20** Forward currency contracts may be used to hedge against currency risk that has resulted from assets held by a portfolio that are not in the Base Currency. NTGIL, may, for example, trade forward currency contracts by selling forward a foreign currency against the Base Currency to protect the portfolio from foreign exchange rate risk that has risen from holding assets in that currency.
- 3.21** Transactions in currency derivatives may be executed through electronic communication networks, but executions occur bilaterally with banks acting as NTGIL's counterparties, either offering the best price achieved through requesting competing quotes or transmitted for execution at the relevant market's 4PM Fix rate.
- 3.22** Executed trades are recorded at the point of execution. Most trades will be executed at the target WM/Reuters 4pm closing rate. For these trades the business verifies that the actual 4pm rate is given by the counterparty with which we execute. In limited circumstances we will not actively seek rates from brokers, but will take the rates given by the client's custodian (which may be a Northern Trust affiliate). Circumstances which may give rise to such instances, include but are not limited to, where a transaction involves a restricted currency, or a trade is small in size that it would cost more to execute through a broker.
- 3.23** Transactions to trade at market price are mostly executed by NTGIL's trading desk, while transactions for the same instruments to be traded to obtain that day's relevant benchmark price are aggregated and transmitted between NTGIL and its affiliates, Northern Trust Investments Inc. (NTI) and The Northern Trust Company Hong Kong (TNTCHK) Limited, for a trader in one of the firms to manage executions with banks that act as counterparty.
- 3.24** NTGIL maintains a list of which banks are offering the most competitive terms and will look to arrange transactions for all accounts where clients permit the counterparty to be traded with. On a periodic basis this list will be updated if the terms offered by banks become more or less competitive for particular instruments.
- 3.25** Where a client restricts NTGIL from trading with certain counterparties, the trades will be arranged with the bank offering the most competitive terms with which NTGIL is permitted to enter into transactions, in accordance with the client's instructions. While clients may restrict NTGIL from using some banks, NTGIL retain discretion over which banks to enter into transactions with subject to these restrictions and such orders are not therefore considered client directed.

Equity Derivatives- Index Futures

- 3.26** Exchange traded index futures are used primarily for efficient portfolio management purposes, mainly to "equitise" cash contributions/redemptions into or out of a portfolio, hedge index exposure for limited periods when immediate purchase/sale of the underlying is not feasible or in the best interests of the client and gain short-term exposure to securities, where appropriate, to enhance value.
- 3.27** Exchange-traded index futures positions can also be unwound simultaneously with the purchase or sale of the underlying equity position. NTGIL policy on the execution of



derivatives trades is similar to that outlined above for single stock executions.

3.28 The objective when trading index futures is to achieve execution at the relevant exchange close, at a price as close as possible to the exchange close price minus a commission which is standard across banks.

3.29 The trading desk monitor executed trades to ensure close prices are achieved consistently and query any outliers/ issues with the relevant broker.

Collective investment schemes

3.30 For certain portfolios managed which are designed as 'Feeder Funds', which invest solely into the units a relevant UCITS fund, the portfolio managers will invest into units of the collective investment scheme in accordance with the Feeder Fund's investment objective and prospectus.

3.31 We generally conclude transactions in such funds with the fund provider at the official price since we do not consider that sufficient liquidity is available elsewhere to enable us to obtain the best possible result on a consistent basis.

IPOs, primary and secondary issues.

3.32 NTGIL manages primary issues such as IPO's and secondary offerings fairly between clients. These forms of execution differ from secondary markets dealing. Usually information around such dealing situations is known in advance. Information around this type of dealing is collected centrally and distributed to all interested parties. Where there is an expression of dealing interest this will be collected and aggregated. The client orders are submitted as a single instruction to the executing venue by client type.

Secondary Offerings

3.33 Occasionally NTGIL may participate in secondary offerings, client orders are aggregated and submitted in the manner as for initial offerings, the precise approach to trading will be determined by the traders, having regard to the nature and terms of the offer.

4 Execution management arrangements

4.1 NTGIL maintains an effective dealing structure and process appropriate to contributing



to competitive performance and achieving the best possible result for client executions on a consistent basis. The execution management process adopts a structured approach from decision to settlement, and clear information is captured at all stages of the execution process.

- 4.2 NTGIL maintains all necessary records and audit trails relating to the execution process.

NTGIL operational structure for execution management

- 4.3 Where NTGIL transmits client orders to its affiliates, procedures are in place to ensure that the execution of these orders is managed in accordance with this execution policy.

Client Order Handling and Aggregation

- 4.4 It is NTGIL policy to handle client orders promptly, fairly and in due turn. Prior to execution, where appropriate, client orders are aggregated together to achieve a better overall execution. Although NTGIL will not enter into aggregated orders that it believes will materially disadvantage a client, there is the possibility that the effect of aggregation may work to the disadvantage of a client order. Order aggregation does not occur when the execution objectives of the client orders are different.

- 4.5 Client orders are transmitted electronically, using facilities provided to us by third party, non-affiliated entities (i.e. Bloomberg, Tradeweb, Triton) or the brokers themselves, but these are merely conduits to the end counterparties. Orders may also be transmitted directly to a MTF or OTF.

- 4.6 The execution venues available will vary according to product and asset class. Particularly in equities where there are often numerous competing exchanges and venues, it should be noted that the brokers NTGIL instructs would not typically be directed to prefer one particular venue over another, but to adhere to their commitment to comply with best execution.

Client Order Allocation

- 4.7 NTGIL manages order allocations for client orders appropriately. Once executed, market executions are allocated to clients fairly and proportionately on a pro-rata basis. However, in situations where particular allocations for a single portfolio would result in the holding being too small to be tradeable would be regarded as uneconomic to the client; NTGIL will adopt an alternative allocation process.

- 4.8 The alternative process involves traders or portfolio managers (for Fixed Income instruments) having the discretion to assign a small allocation entirely to one of or a number of accounts, or to exclude one or more accounts from receiving the allocation. However every time this occurs, the Compliance team must be made aware so that they can monitor and provide independent oversight of fair allocation, conducting investigations and applying changes to processes where necessary.

Residual / uncompleted client orders

- 4.9 Residual client orders will be managed appropriately. Where a trade cannot be completed over a single dealing session, the residual order will be retained in the



form of an electronic record. This series of electronic records is maintained on the NTGIL order management systems and both the traders and portfolio managers will monitor such trades on an ongoing basis until completion, amendment or cancellation of the order.

Limit orders

- 4.10** Where NTGIL places an order for shares admitted to trading on a regulated market or traded on a regulated market, MTF or OTF may, the broker executing the order may be instructed that if the order is not immediately executed under prevailing market conditions, a limit order should be placed and the order may not be made immediately public so as to be accessible to other market participants.

Management of conflicts of interest

- 4.11** NTGIL has policies and controls in place to identify, prevent, manage and where necessary disclose conflicts of interest. Where a staff member identifies a possible conflict of interest in the course of order execution or handling, this will be managed in accordance with the Northern Trust EMEA Conflict of Interest and Inducements Policy.

Methods of Order management

- 4.12** NTGIL will use electronic systems that support and enhance the execution process. NTGIL uses electronic order management systems for the purposes of client order execution management.
- 4.13** All systems associated with the post-trade execution management process maintain appropriate record-keeping and fully auditable information flows.

Methods of order placement

- 4.14** When placing client orders, electronic communication mechanisms, such as FiX protocol links, and Bloomberg messaging are used wherever possible. When manual processes are necessary then the trader or portfolio manager is required to confirm the manual instruction with an electronic communication.
- 4.15** Verbal orders are confirmed in an electronic format. For example, in the case of money-market instruments an electronic messaging system is employed to confirm the order.

Use of electronic dealing or order management systems

- 4.16** For Fixed income and FX trading, NTGIL employs a range of electronic trading venues, such as Multi-Lateral Trading Facilities (“MTF”) or Organised Trading Facilities (“OTF”) to add value to the client order execution process. The use of the systems is determined on a case-by-case basis in terms of the ability to achieve the best overall result for the client order.
- 4.17** NTGIL has the ability to use electronic dealing tools provided by certain brokers and execution venues, accessing these through approved counterparties. This includes the ability to execute trades using algorithmic strategies as well as using direct market access technology. The use of these tools entirely depends upon whether they could



assist in achieving the best possible result for the client order.

Trade matching

- 4.18** In a limited number of circumstances, NTGIL may identify a security in which we are transacting a client order where we also are also handling a client order engaging in the opposite side of a transaction in the same security with the same trading characteristics. In such instances we will only seek to match a trade where both clients will benefit, from improved price/ lower market impact, lower commission or both. No internal crossing takes place; trades are always matched and executed through an external counterparty. This enables us to independently verify the market prices and furthermore allow for normal matching and settlement. For fixed income securities multiple quotes are received and the quote that is most competitive for each client is selected.

Best possible result monitoring

- 4.19** NTGIL monitors execution quality and the extent to which the best possible execution result for client orders has been achieved. NTGIL employs analytical techniques to contribute to monitoring execution results when executing transactions on behalf of the client. This includes technologies such as transaction cost analysis systems for equities, FX and fixed income.
- 4.20** These analytical tools are used at all stages of the execution process and give the ability to assess expected costs, analyse the cost of execution during the performance of a trade, and then to assess an execution after the event.

Record keeping

- 4.21** NTGIL maintains records of the execution management process in accordance with regulatory requirements. These include records of client orders and all aspects of execution of a client's order, including execution prices, times, original intentions and post-event allocations.
- 4.22** The records are maintained electronically. All systems are backed up and disaster recovery processes are in place.



5. Managing execution commission rates & Research

- 5.1 NTGIL dealers actively manage the payment and level of execution commission rates. This management is formally monitored on a quarterly basis by the NTAM International Commissions and Trading Committee (See section 7). The monitoring of execution commission rates is considered in relation to an execution venue's ability to deliver the best overall execution result for client orders.

Separation of commission payments – Commission Unbundling

- 5.2 The majority of execution commission is related to dealing equity instruments. Under FCA rules it is necessary to separate commission payments made for execution and other services received. This is referred to as commission unbundling.

The following paragraphs describe the policy for managing the purchase of research and services with client dealing commissions.

Purchase of research & soft commissions

- 5.3 Where NTGIL or any of its affiliates who execute orders on clients' behalf, clients will pay an execution-only rate and will not use dealing commissions to pay for research or other "softed" items. Where NTGIL values data or information, it will pay for this from its own resources.

Use of external research

- 5.4 Under FCA rules NTGIL will not accept unsolicited "free" third party research e.g. from brokers or specialist research firms. Where NTGIL values research or it is deemed necessary to use research in order to carry out its portfolio management activities, NTGIL will pay for research from its own resources. It is the policy of NTGIL to use external research that covers economic, sector and company specific issues. The use of research is purely to assist NTGIL investment teams with identifying investment opportunities.

- 5.5 The content of this research includes, but is not limited to, the analysis of economies, countries, industries and individual companies. It may also deal with specific issues of topical interest and / or portfolio construction issues such as benchmark or risk analysis.

Commission sharing agreements

- 5.6 NTGIL has no active commission sharing agreements as NTGIL does not use commissions to pay for research.

6. Selection of execution venues

6.1 In this document we use the generic term “execution venue” to describe execution counterparties, systems and marketplaces including:

- Executing brokers/ counterparties;
- Systematic internalisers (Principal traders and market makers);
- Multilateral Trading Facilities (MTFs), e.g. Tradeweb and ITG Posit
- Organised Trading Facilities (OTFs), e.g. TP Europe Ltd;
- Regulated Markets; Non-EEA entities performing a similar function to any of the above;
- Direct Market Access Systems (including use of trading algorithms);
- Electronic communication networks, e.g. FX All; and
- Crossing networks.

6.2 For each financial instrument in which NTGIL either decides to deal or executes orders on behalf of clients, execution venues have been selected in accordance with this policy and applicable underlying procedures.

6.3 In Appendix I we limit the use of ‘execution venue’ to counterparties to whom we transmit client orders (in respect of equities), as transactions are executed via these counterparties, directly or via their trading facilities. In other asset classes we have included MTFs and other types of execution venues which bring market participants together, as this is the route through which we execute transactions with respect to those asset classes for certain transactions.

6.4 NTGIL may select new execution venues (subject to broker approval processes) where it will serve in the best interest of clients.

6.5 All execution venues are subject to a review process prior to inclusion on the approved execution venue list. NTGIL maintains a list of execution venues, which dealers and portfolio managers may choose for each individual trade. A two stage process exists for oversight:

- The first is a review process to select brokers that have the financial and

operational capabilities to execute orders in accordance with this policy without incurring unacceptable counterparty risk on any particular transaction.

- The second is an ongoing monitoring of execution venues in terms of their overall execution performance and their ability to deliver best execution. This analysis is undertaken both via statistical measurement techniques, and subjective assessments based upon the knowledge and expertise of NTGIL dealers and/or portfolio managers. A review must be undertaken no less than annually.

6.6 **Fixed Income**

The appropriate trading venue will largely be a function of the venues which the portfolio manager believes display the better liquidity characteristics for the securities in question.

Broadly speaking transactions for fixed income instruments are executed through TradeWeb for government issued securities/rates markets, MarketAxess for corporate bonds/credit with Bloomberg as a back-up venue or to enable access to quotes from brokers who do not provide coverage through the other platforms.

Beyond the use of MTFs to route client orders, other execution venues may include direct 'Over-the-counter' bilateral negotiation, voice trading and transmission of orders to brokers to be executed off venue on market close.

6.7 **Currency Derivatives**

Electronic communication networks are generally used to route orders for execution with counterparties either for competitive quote transactions at the current market price, or with the objective of achieving a price as close as possible to the relevant benchmark price e.g. WM Company/ Reuters 4PM benchmark rates '4PM fix'². Due to purposes for which forwards are utilized and the passive management strategy of the majority of portfolios, significantly more volume is executed as aggregated trades using the latter method and benchmark.

These venues offer the ability to trade by both means, the factors for choosing a venue are based on the efficiency and ease of use for the different trading strategies, as well the availability of a competing quotes facility, which is utilized for at market price transactions- experience and analysis of executions does not demonstrate material differences in the competitiveness of execution terms such as price.

Ongoing controls and monitoring

6.8 In general, NTGIL will always endeavor to transact on delivery versus payment (d.v.p.) terms and on the very limited occasions this is not possible will not:

- deliver securities in a sale transaction until NTGIL has received payment for such securities, or;
- make payments for securities purchased until NTGIL has received such securities.

7. Supervision, monitoring and oversight

7.1 Supervision and monitoring occurs at multiple stages of the execution process. NTGIL's internal order management system facilitates numerous checks and reviews with the aim that all trades are valid and can be executed.

7.2 As trade executions are received back electronically, the internal order management system will validate such executions and highlight any discrepancies which might require investigation, for example large deviations in price that differ from the expected price.

7.3 Quarterly reviews are undertaken by Compliance to monitor execution performance.

NTAM's Compliance team conduct a quarterly review of foreign exchange counterparties performance for competitive trades. The review includes, but is not limited to key performance criteria like a counterparty's response rate to request-for-quotes, their propensity to win RFQs and provide competitive rates, and the number of quotes received for each trade. The NTGIL International Commissions and Trading

Committee may then decide on any number of actions considering Compliance recommendations, including putting a counterparty on watch, restricting or terminating order flow and removing or adding counterparties.

- 7.4 Periodically, NTGIL's Risk and Compliance team shall compare the approved broker list maintained by the NTGIL International Commissions and Trading Committee to the list of brokers set up in the various trading systems to determine that transactions can only be executed through approved brokers. Any exceptions on systems and or actual transactions are investigated.

8. Oversight and reporting

- 8.1 Oversight of trading to confirm client orders are being handled and executed in accordance with this policy is the responsibility of the NTGIL International Commissions and Trading Committee (NTGIL C&T), which meets on a quarterly basis.
- 8.2 NTGIL C&T membership includes the Heads of the trading desk, equity and fixed income portfolio management teams, representatives from the, Compliance, Front Office Support, Legal teams and NTGIL's Chief Executive Officer. (CEO) The committee is chaired by NTGIL's Chief Operating Officer (COO) .
- 8.3 The NTGIL C&T will undertake an assessment at least annually of this policy and NTGIL's execution arrangements to assess the quality of executions obtained and assess whether all sufficient steps have been taken to obtain the best possible result for execution of client orders, or to identify any improvements or changes required to arrangements. This may include, without limitation, requiring the addition or removal of a broker or execution venue to/from the approved counterparty list.
- 8.4 Additionally, the committee will undertake a review of NTGIL's order execution arrangements in the event of a material change occurring that may affect the firm's ability to continue to operate in accordance with the policy.
- 8.5 Reports shall be presented to each meeting of the NTGIL C&T summarising the results of monitoring of execution quality, with findings and if relevant any necessary recommendations.

9. Effectiveness of NTGIL Order Execution Policy



- 9.1** NTGIL believes that this execution policy consistently provides the best possible result for the execution of client orders.
- 9.2** The NTGIL Order Execution Policy is to clearly set out the execution approach to client orders, carry out client executions in accordance with the underlying client mandate and in line with this policy and then supervise and monitor performance in line with this policy.

APPENDIX 1

NTGIL Execution Venues

In this Appendix we limit the use of 'execution venue' to execution counterparties with whom we may deal orders with.

In respect of equities orders are transmitted to and executed via these counterparties, directly or via their trading facilities. In other asset classes we have included MTFs, OTFs and other types of execution venues which bring market participants together, as this is the route through which we execute transactions with respect to those asset classes for certain transactions.

When dealing client orders NTGIL will only use execution counterparties that form part of the "approved execution venue list" and where NTGIL believes they have the ability to deliver the best possible execution result. An up to date comprehensive list of approved entities is available to clients on request. Orders for NTGIL clients may be transmitted to affiliated entities Northern Trust Investments Inc. or the Northern Trust Company Hong Kong Limited, who also act as agent and adhere to the approved execution venue list.

The following section lists the approved execution venues where client orders will be executed. Please note that this list is subject to change.

For FX, in limited circumstance, e.g. restricted currencies where we are unable to obtain a price, or a trade is small in size and would cost more to execute via a broker; we will execute using a client's custodian.

Note also that access to certain regulated markets is achieved through Direct Electronic Access facilities provided by counterparties or via brokers/counterparties that determine whether or not a transaction is conducted under the rules of a regulated market.

Equities/Fixed Income (including cash collateral management)

280 SECURITIES LLC	ABBEY NATIONAL TREASURY SERVICES PLC	ACADEMY SECURITIES INC
ALLIANCEBERNSTEIN INVESTMENTS INC	AMERIPRISE FINANCIAL SERVICES INC	AMERITAS INVESTMENT CORP
AMHERST PIERPONT SECURITIES LLC	ANDES CAPITAL GROUP LLC	ANZ SECURITIES INC.
APEX CLEARING CORP	ARBOR RESEARCH & TRADING LLC	AUERBACH GRAYSON & COMPANY LLC
B C ZIEGLER AND CO	B RILEY SECURITIES INC	BANCO BILBAO VIZCAYA ARGENTARIA SA
BANCO SANTANDER SA	BANCO SANTANDER SA (NEW YORK BRANCH)	BANK OF AMERICA MERRILL LYNCH INTERNATIONAL DAC
BANK OF AMERICA NA	BANK OF MONTREAL	BANK OF NOVA SCOTIA
BANK OF NOVA SCOTIA (LONDON BRANCH)	BARCLAYS BANK PLC	BARCLAYS CAPITAL INC
BARCLAYS CAPITAL SECURITIES LTD	BARCLAYS SECURITIES JAPAN LTD	BB&T CAPITAL MARKETS INC
BBVA SECURITIES INC	BCP SECURITIES LLC	BCS PRIME BROKERAGE LTD
BGC BROKERS LP	BGC FINANCIAL LP	BLACKROCK INVESTMENTS LLC
BLAYLOCK VAN LLC	BLOOMBERG TRADEBOOK LLC	BMO CAPITAL MARKETS CORP
BNP PARIBAS (LONDON BRANCH)	BNP PARIBAS SA	BNP PARIBAS SA (PARIS BRANCH)
BNP PARIBAS SECURITIES (ASIA) LIMITED	BNP PARIBAS SECURITIES CORP	BNY MELLON CAPITAL MARKETS LLC
BOFA SECURITIES EUROPE SA	BOFA SECURITIES INC	BOK FINANCIAL SECURITIES INC
BREAN CAPITAL LLC	BRED BANQUE POPULAIRE	BROWNSTONE INVESTMENT GROUP LLC

BTIG LIMITED	CABRERA CAPITAL MARKETS LLC	CANACCORD GENUITY LLC
CANADIAN IMPERIAL BANK OF COMMERCE	CANADIAN IMPERIAL BANK OF COMMERCE (LONDON BRANCH)	CANTOR FITZGERALD & CO
CASTLEOAK SECURITIES LP	CF SECURED LLC	CHARLES SCHWAB & CO INC
CIBC WORLD MARKETS CORP.	CIBC WORLD MARKETS PLC	CITADEL SECURITIES LLC
CITIBANK INTERNATIONAL LTD	CITIBANK NA	CITIBANK NA (LONDON BRANCH)
CITIC SECURITIES CO LTD	CITIGROUP GLOBAL MARKETS INC	CITIGROUP GLOBAL MARKETS LIMITED
CITIZENS CAPITAL MARKETS INC	CL KING & ASSOCIATES INC	CLARKSONS PLATOU SECURITIES INC
CLSA (UK)	CLSA GLOBAL MARKETS PTE LTD	CLSA LTD
COLLIERS SECURITIES LLC	COMERICA SECURITIES INC	COMMERZBANK AG
COMMONWEALTH AUSTRALIA SECURITIES LLC	COMMONWEALTH BANK OF AUSTRALIA	COOPERATIEVE RABOBANK UA (LONDON BRANCH)
COWEN AND CO LLC	CREDIT AGRICOLE CIB (GRAND CAYMAN)	CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK (LONDON BRANCH)
CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK SA	CREDIT AGRICOLE INDOSUEZ CHEUVREUX NORDIC AB	CREDIT AGRICOLE SA (LONDON BRANCH)
CREDIT AGRICOLE SECURITIES (USA) INC	CREDIT SUISSE (HONG KONG) LTD	CREDIT SUISSE AG
CREDIT SUISSE AG (NEW YORK BRANCH)	CREDIT SUISSE SECURITIES (EUROPE) LTD	CREDIT SUISSE SECURITIES (USA) LLC
CREWS & ASSOCIATES INC	CROSS POINT CAPITAL LLC	DA DAVIDSON & CO

DAIWA CAPITAL MARKETS AMERICA INC	DAIWA CAPITAL MARKETS EUROPE LTD	DANSKE BANK A/S
DANSKE BANK A/S (LONDON BRANCH)	DAVENPORT & COMPANY LLC	DEUTSCHE BANK AG
DEUTSCHE BANK SECURITIES INC	DIRECT	DNB MARKETS
DREXEL HAMILTON LLC	DZ BANK AG DEUTSCHE ZENTRAL GENOSSENSCHAFTSBANK FRANKFURT AM MAIN	E TRADE SECURITIES LLC
EXANE BNP PARIBAS	FEDERAL FARM CREDIT BANKS FUNDING CORP	FEDERAL HOME LOAN MORTGAGE CORPORATION
FELTL & COMPANY	FHN FINANCIAL SECURITIES CORP	FIFTH THIRD SECURITIES INC
FIRST TRYON SECURITIES LLC	FIS BROKERAGE & SECURITIES SERVICES LLC	FLOW TRADERS U.S. INSTITUTIONAL TRADING LLC
FLOW TRADERS US LLC	FMSBONDS INC	FOR PROCREATE - DO NOT USE
GENESIS GLOBAL TRADING INC	GEORGE K BAUM & CO	GIFS CAPITAL COMPANY LLC
GOLDMAN SACHS & CO LLC	GOLDMAN SACHS INTERNATIONAL	GUGGENHEIM SECURITIES LLC
GUZMAN & COMPANY	HAITONG INTERNATIONAL (UK) LTD	HEADLANDS TECH GLOBAL MARKETS LLC
HERBERT J SIMS & CO INC	HILLTOP SECURITIES INC	HM TREASURY UK SOVEREIGN SUKUK PLC
HSBC BANK PLC	HSBC SECURITIES (USA) INC	HUNTINGTON NATIONAL BANK (THE)
HUTCHINSON SHOCKEY ERLEY & CO	ICAP CORPORATES LLC	ICAP SECURITIES LIMITED
IMPERIAL CAPITAL LLC	INCAPITAL LLC	INDUSTRIAL AND COMMERCIAL BANK OF CHINA LTD

ING BANK NV	ING BANK NV (AMSTERDAM BRANCH)	ING FINANCIAL MARKETS LLC
INSTINET EUROPE LIMITED	INSTINET LLC	INTERACTIVE BROKERS LLC
IPREO HOLDINGS LLC	ITAU CORPBANCA COLOMBIA SA	JANE STREET CAPITAL LLC
JANE STREET EXECUTION SERVICES LLC	JANNEY MONTGOMERY SCOTT LLC	JEFFERIES INTERNATIONAL LTD
JEFFERIES LLC	JP MORGAN CAZENOVE LIMITED	JP MORGAN SECURITIES LLC
JP MORGAN SECURITIES PLC	JPMORGAN CHASE BANK NA	JVB FINANCIAL GROUP LLC
KBC BANK (LONDON BRANCH)	KEEFE BRUYETTE & WOODS INC	KEYBANC CAPITAL MARKETS INC
LA BANQUE POSTALE	LA BANQUE POSTALE (PARIS BRANCH)	LIQUIDNET EUROPE LIMITED
LIQUIDNET INC	LLOYDS BANK PLC	LLOYDS SECURITIES INC
LOOP CAPITAL MARKETS LLC	LPL FINANCIAL LLC	M&T SECURITIES INC
MACQUARIE BANK LTD	MACQUARIE CAPITAL (EUROPE) LIMITED	MACQUARIE CAPITAL (USA) INC
MACQUARIE CAPITAL SECURITIES (SINGAPORE) PTE LTD	MACQUARIE CAPITAL SECURITIES LIMITED - HONG KONG	MARKETAXESS CAPITAL LTD
MARKETAXESS CORPORATION	MARKETAXESS EUROPE LTD	MAXIM GROUP LLC
MERRILL LYNCH INTERNATIONAL	MERRILL LYNCH PIERCE FENNER & SMITH INC	MESIROW FINANCIAL INC
MILLENNIUM ADVISORS LLC	MISCHLER FINANCIAL GROUP INC	MIZUHO BANK LTD
MIZUHO INTERNATIONAL PLC	MIZUHO SECURITIES USA LLC	MORGAN STANLEY & CO INTERNATIONAL PLC

MORGAN STANLEY & CO LLC	MORGAN STANLEY SECURITIES LTD	MUFG BANK LTD (LONDON BRANCH)
MUFG SECURITIES AMERICAS INC	MURIEL SIEBERT & CO INC	MUTUAL FUND TRADE
NATIONAL ALLIANCE SECURITIES CORPORATION	NATIONAL AUSTRALIA BANK LIMITED (SYDNEY BRANCH)	NATIONAL AUSTRALIA BANK LTD
NATIONAL AUSTRALIA BANK LTD (NEW YORK BRANCH)	NATIONAL BANK FINANCIAL INC (UK BRANCH)	NATIONAL BANK OF CANADA FINANCIAL INC
NATIONAL FINANCIAL SERVICES LLC	NATIXIS SECURITIES AMERICAS LLC	NATWEST MARKETS PLC
NATWEST MARKETS SECURITIES INC	NOMURA INTERNATIONAL PLC	NOMURA SECURITIES INTERNATIONAL INC
NORDEA BANK ABP	NORTH SOUTH CAPITAL LLC	NORTHERN TRUST SECURITIES INC
NUVEEN SECURITIES LLC	ODEON CAPITAL GROUP LLC	OPPENHEIMER & CO INC
OPS BROKER - TENDER AGENT	OREC SECURITIES LLC	PEEL HUNT LLP
PENSERRA SECURITIES LLC	PERFORMANCE TRUST CAPITAL PARTNERS LLC	PERSHING LLC
PIPER SANDLER & CO	PNC CAPITAL MARKETS LLC	PRUDENTIAL FUNDING LLC
RABO SECURITIES USA INC	RAYMOND JAMES & ASSOCIATES INC	RAYMOND JAMES FINANCIAL INC.
RBC CAPITAL MARKETS LLC	RBC DOMINION SECURITIES INC	RBC EUROPE LTD
ROBERT W BAIRD & CO INCORPORATED	ROOSEVELT & CROSS INCORPORATED	ROYAL BANK OF CANADA (NEW YORK BRANCH)
ROYAL BANK OF CANADA (TORONTO BRANCH)	RUSSELL IMPLEMENTATION SERVICES INC	RW PRESSPRICH & CO

SAMUEL A RAMIREZ & COMPANY INC	SANFORD C BERNSTEIN & CO LLC	SANTANDER INVESTMENT SECURITIES INC
SCOTIA CAPITAL USA INC	SEAPORT GLOBAL SECURITIES LLC	SG AMERICAS SECURITIES LLC
SG SECURITIES (HK) LIMITED	SIEBERT WILLIAMS SHANK & CO LLC	SKANDINAVISKA ENSKILDA BANKEN AB
SKANDINAVISKA ENSKILDA BANKEN AB (LONDON BRANCH)	SMBC NIKKO CAPITAL MARKETS LIMITED	SMBC NIKKO SECURITIES AMERICA INC
SOCIETE GENERALE (NEW YORK BRANCH)	SOCIETE GENERALE SA	SOCIETE GENERALE SA (LONDON)
STATE STREET GLOBAL MARKETS LLC	STEPHENS INC.	STERN BROTHERS & CO
STIFEL NICOLAUS & CO INC	STONEX FINANCIAL INC	SUMITOMO MITSUI BANKING CORPORATION
SUMRIDGE PARTNERS LLC	SUSQUEHANNA FINANCIAL GROUP LLLP	SUSQUEHANNA INTERNATIONAL SECURITIES LIMITED
SVB LEERINK LLC	SVENSKA HANDELSBANKEN AB	TD AMERITRADE INC
TD SECURITIES (USA) LLC	THORNTON FARISH INC	TOKYO TANSHI CO LTD
TORONTO-DOMINION BANK (LONDON BRANCH)	TOYOTA MOTOR CREDIT CORP	TRADEWEB DIRECT LLC
TRADITION LONDON CLEARING LIMITED	TRADITION SECURITIES AND DERIVATIVES INC	TRIBAL CAPITAL MARKETS LLC
TRUIST SECURITIES INC	TRUMID FINANCIAL LLC	TULLETT PREBON (SECURITIES) LIMITED
TULLETT PREBON EUROPE LTD	TULLETT PREBON FINANCIAL SERVICES LLC	UBS AG
UBS AG (LONDON BRANCH)	UBS EUROPE SE	UBS FINANCIAL SERVICES INC

UBS SECURITIES CO LTD	UBS SECURITIES LLC	UEDA YAGI TANSHI CO LTD
UNICREDIT BANK AG	UNITED OVERSEAS BANK LTD (LONDON BRANCH)	US BANCORP
US BANCORP INVESTMENTS INC	US BANK MUNICIPAL SECURITIES GROUP	VINING-SPARKS IBG LP
VIRTU AMERICAS LLC	VIRTU ITG EUROPE LIMITED	VIRTU ITG LLC
WALL STREET ACCESS LLC	WEDBUSH SECURITIES INC	WELLS FARGO CLEARING SERVICES LLC
WELLS FARGO SECURITIES INTERNATIONAL LTD	WELLS FARGO SECURITIES LLC	WESTPAC CAPITAL MARKETS LLC
WILLIAM BLAIR & COMPANY LLC	ZIONS BANCORPORATION NATIONAL ASSOCIATION	

Futures brokers

CITIGROUP GLOBAL MARKETS INC	GOLDMAN SACHS INTERNATIONAL	MERRILL LYNCH INTERNATIONAL
CITIGROUP GLOBAL MARKETS LIMITED	GOLDMAN SACHS JAPAN CO LTD	MERRILL LYNCH PIERCE FENNER & SMITH INC
CREDIT SUISSE SECURITIES (EUROPE) LTD	INVESTMENT TECHNOLOGY GROUP INC	NEWEDGE USA LLC
CREDIT SUISSE SECURITIES (USA) LLC	JP MORGAN SECURITIES LLC	UBS AG (LONDON BRANCH)
GOLDMAN SACHS & CO LLC	JP MORGAN SECURITIES PLC	UBS LTD
		UBS SECURITIES LLC

Foreign-exchange counterparties (including FX forwards)

BANK OF AMERICA NA	GOLDMAN SACHS BANK USA	STATE STREET BANK AND TRUST COMPANY
BANK OF MONTREAL	GOLDMAN SACHS INTERNATIONAL	THE TORONTO-DOMINION BANK (LONDON BRANCH)

BANK OF NEW YORK MELLON (LONDON BRANCH)	GOLDMAN SACHS JAPAN CO LTD	TORONTO-DOMINION BANK/THE
BANK OF NEW YORK MELLON CORP/THE	HONGKONG AND SHANGHAI BANKING CORPORATION LTD	UBS AG
BNP PARIBAS (LONDON BRANCH)	JP MORGAN CHASE BANK NA (LONDON BRANCH)	UBS AG (HONG KONG BRANCH)
BNP PARIBAS SA	JPMORGAN CHASE BANK NA	UBS AG (LONDON BRANCH)
CITIBANK JAPAN LTD	JPMORGAN CHASE BANK NA (LONDON BRANCH)	UBS AG (STAMFORD BRANCH)
CITIBANK NA	MERRILL LYNCH PIERCE FENNER & SMITH INC	UBS AG (TOKYO BRANCH)
CITIBANK NA (BANGKOK BRANCH)	MITSUBISHI UFJ TRUST AND BANKING CORPORATION	
CITIBANK NA (INDIA BRANCH)	MORGAN STANLEY & CO INTERNATIONAL PLC	
CITIBANK NA (LONDON BRANCH)	MORGAN STANLEY CAPITAL SERVICES LLC	
CREDIT SUISSE (HONG KONG) LTD	MORGAN STANLEY MUFG SECURITIES CO LTD	
CREDIT SUISSE AG	NORDEA BANK ABP	
CREDIT SUISSE AG (LONDON BRANCH)	NORDEA BANK DANMARK A/S	
CREDIT SUISSE INTERNATIONAL	NORTHERN TRUST COMPANY (THE)	
FIRST REPUBLIC BANK	SOCIETE GENERALE SA	
GOLDMAN SACHS & CO LLC	STANDARD CHARTERED BANK	

Multilateral Trading Facilities for Foreign-exchange (including FX forwards)

FX All
FX Connect

Multilateral Trading Facilities for Fixed Income

Tradeweb
MarketAxess
Bloomberg MTF