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REPORT PAPER

2017 RTS 28 Best Execution Report

For today's investor



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Qualitative Summary Of Our Monitoring Of Execution Quality In 2017

Aviva Investors conducts daily best execution monitoring and monthly transaction cost analysis to review execution performance and to ensure that the execution venues and counterparties selected for different instrument types continue to consistently provide the best possible result for clients. Transaction cost analysis (TCA) is used as a pre and post trade monitoring tool. Aviva Investors utilises independent providers, particular to each asset class, to measure both the market impact and opportunity costs of equity, fixed income and foreign exchange trades and trading strategies.

The Aviva Investors Trader Oversight Group (TOG) meets each month to review and challenge the performance of our trading teams and to assess our ongoing compliance with Aviva Investors' Global Order Execution Policy and best execution obligations. The TOG utilises TCA summary reports, 1st and 2nd line best execution monitoring, volume and venue trend analysis across all asset classes and instruments, post-trade operational reporting, as well as input from our legal team on the progress of on boarding new venues or counterparties.

Overview:	
Have there been any close links, conflicts of interests, and common ownerships with respect to any execution venues used to execute orders?	There have been no close links, conflicts of interests nor common ownerships with any execution venues or counterparties used by the firm. Aviva Investors has robust policies and procedures in place in order to ensure that arrangements with counterparties are in the best interest of clients. Some counterparties may offer Aviva Investors minor non-monetary benefits permissible under the Markets In Financial Instruments Directive 2014/65/EU (MiFID II) and our internal policies. A copy of our conflicts of interest policy is available upon request.
Are there any specific arrangements in place with any execution venues regarding payments made or received, discounts, rebates or non-monetary benefits received?	There are no specific arrangements concerning payments made or received discounts, rebates or non-monetary benefits with any current execution venues.
Has the list of execution venues listed in the firm's execution policy changed in the period? If so, what factors that led to the change?	FX – there were no material changes in 2017 Equities – there were no material changes in 2017 Fixed Income – there were no material changes in 2017 Money Markets – there were no material changes in 2017
Explain how order execution differs according to client categorisation, where the firm treats categories of clients differently and where it may affect the order execution arrangements.	Not applicable as the firm's clients are all categorised as professional.
How has the firm used any data or tools relating to the quality of execution, including any data published under RTS 27?	In addition to our 1st and 2nd line monitoring of execution performance we utilise independent TCA, where we feel data quality is sufficient to generate worthwhile analysis. The output of this analysis is in line with our in-house monitoring and has not therefore affected our choice of venues in 2017. The first reports published under RTS 27 will cover a reporting period that is representative of the first quarter of 2018 and will be published by 30 June 2018. We plan to use this data, once it becomes available.
How has the firm used the output of a consolidated tape provider established under Article 65 of Directive 2014/65/EU.	Not applicable. Data was not available for the period ending 31 December 2017.

Aviva Investors takes into account various execution factors to determine the manner in which orders are executed, including but not limited to:

- Price
- Cost
- Size of the order
- Speed
- Likelihood of execution & settlement
- Nature of the Order
- Other considerations – e.g. investment objectives of the Portfolio Manager

The relative importance of these factors differs according to the instrument being traded and the particular trading strategy being deployed by the trader at that time.

Aviva Investors maintains a comprehensive list of approved brokers and venues for the provision of execution services, which is available to clients on request. A list of execution venues and broker entities with which Aviva Investors places or transmits orders for execution may change, as market structures evolve, and will be subject to ongoing monitoring and analysis for the quality of execution.

The key factors considered in selecting venues and brokers will be:

- Market coverage: consideration of the coverage of global markets or specialist coverage by region.
- Instrument coverage: consideration of the expertise of the broker/venue across non-complex products and/or more diverse or complex products such as derivatives.
- Trading protocols: consideration of whether the counterparty offers RFQ (Request for quotation), list functionality, open trading, ALL to ALL, dark pool, crossing and other protocols.
- Cost to transact: consideration of whether the costs to transact with the counterparty are transparent and fair to all participants.
- Efficiency: Aviva Investors will also give due consideration to whether the venue can reduce operational risk by providing straight through processing directly from Aviva Investor's order management system through to settlement especially on more complex instruments such as derivatives.

Reliability: Aviva Investors will assess whether the quality of the service provided by the broker or venue is of high standard, focussing on, inter alia, the availability of prices quoted and the robustness of those firms' IT infrastructure.

For your consideration:

Aviva Investors has chosen to aggregate its reporting under RTS 28 and Article 65(6) of the MiFID II Delegated Regulation into a single disclosure (Top 5 Counterparty Report). For each class of financial instrument Aviva Investors will only either place or execute client orders.

Any RTS 28 financial instrument not listed in this disclosure is not placed or executed by Aviva Investors. This document should be read in conjunction with the Aviva Investors Global Order Execution Policy.

The percentage of passive and aggressive orders for each Top 5 Counterparty Report have not been included as Aviva Investors does not execute equity or equity-like instruments directly in the market and does not operate an order book for non-equity instruments.

The percentage of directed orders has also not been included as Aviva Investors has full discretion on where client orders are placed or executed.

All equity trades in scope for this report have been reported under a single asset class: “a) Equities - Shares & Depositary Receipts”, as the tick size liquidity bands were not available for 2017 data.

Aviva Investors monitors quality of execution via its first and second line monitoring framework and independent TCA. Where Aviva Investors feels data is sufficient to generate worthwhile analysis, data from key trading venues and internal records is utilised. The outcomes of these monitoring activities are reviewed at our Trader Oversight Group and used to review and challenge our internal model and counterparties performance.

Explanation of Terms for quantitative tables

- Top 5 Execution Venues ranked in terms of trading volumes in descending order
- Volume Traded (%) - Proportion of Volume Traded as a Percentage of total in the instrument class for the calendar year
- Orders Executed (%) - Proportion of Orders Executed as a Percentage of total in the instrument class for the calendar year
- Class of Instrument - ESMA defined Class of Instrument Group
- <1 Average trade per business day - Flag to note if the Instrument Class traded fewer than one order per business day on average per calendar year. Takes values Y or N.



Equities

Class of Instrument		Equities	
Notification if <1 average trade per business day in the previous year		N	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class	
Goldman Sachs International - W22LROWP2IHZNBB6K528	15.14%	17.10%	
Citigroup Global Markets Limited - XKZZ2JZF41MRHTR1V493	13.36%	16.32%	
UBS AG BFM8T61CT2L1QCEMIK50	10.10%	15.50%	
Credit Suisse Securities (Europe) Limited - DL6FFRRLF74S01HE2M14	9.14%	7.71%	
HSBC Bank Plc- MP6I5YZBEU3UXPYFY54	8.47%	12.76%	

Class of Instrument		Exchanged Traded products - Exchange Traded Funds	
Notification if <1 average trade per business day in the previous year		Y	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class	
Investment Technology Group Limited 213800EEC95PRUCEUP63	37.58%	14.74%	
Barclays Capital Securities Limited K9WDOH4D2PYBSLSOB484	26.22%	1.28%	
HSBC Bank PLC MP6I5YZBEU3UXPYFY54	12.97%	8.33%	
JP Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	12.43%	0.64%	
UBS AG BFM8T61CT2L1QCEMIK50	3.16%	35.90%	

Class of Instrument		Securitized Derivatives - Warrants and Certificate Derivatives	
Notification if <1 average trade per business day in the previous year		Y	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class	
Credit Suisse Securities (Europe) Limited - DL6FFRRLF74S01HE2M14	53.57%	20.00%	
Winterflood Securities Limited 8BRUP6V1DX3PIG2R0745	24.71%	20.00%	
Citigroup Global Markets Limited XKZZ2JZF41MRHTR1V493	21.48%	50.00%	
Liberum Capital Limited 213800U6KUF87S1KCC03	0.24%	10.00%	

Due to the liquid nature of the majority of equity trades, for orders of a normal market size, Aviva Investors places the highest importance on price, followed by likelihood of execution. For large size program trades or illiquid securities one broker may be selected based on previous experience in handling orders in that region or security. The top five brokers have a broad trading coverage of cash equity and program trading globally.



Fixed Income

Rates and Credit

In regard to the percentage of trades that we placed on an MTF (Multi-lateral trading facility) as opposed to voice please see the below:

Venue	Percentage of business in terms of notional volume (%)	Venue	Percentage of business in terms of number of trades (%)
Bloomberg	4.40	Bloomberg	8.24
Market Axess	0.68	Market Axess	2.01
Tradeweb	26.51	Tradeweb	42.28
Liquidnet	0.15	Liquidnet	0.35

Class of Instrument	Debt Instruments - Bonds	
Notification if <1 average trade per business day in the previous year	N	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class
Deutsche Bank Aktiengesellschaft 7LTFWZYICNSX8D621K86	9.50%	8.59%
Morgan Stanley & Co International PLC 4PQUHN3JPFQFNF3BB653	9.31%	5.62%
HSBC Bank PLC MP6I5ZYBUEU3UXPYFY54	7.25%	7.11%
Lloyds Bank PLC H7FNTJ4851HG0EXQ1Z70	6.82%	4.54%
Natwest Corporate Investments 213800ZHJFDZ2SQ1N51	6.76%	6.01%

Due to the liquid nature of the markets Aviva Investors transacts in, for orders in normal market size the greatest emphasis is placed on price, followed by likelihood of execution/ settlement and speed. Normal market-sized trades are executed on electronic trading venues whenever possible.

For large-sized orders, or orders in a less-liquid currency, a single bank maybe selected to price or work all or part of the order. This counterparty would be selected on previous experience in handling such orders, and any axes they may have. In this case price is still the main consideration, but the size of the order able to be traded and likelihood of execution and settlement also become very important factors.

The top five venues for Fixed Income Rates reflect the performance of these counterparties across the range of currencies and order sizes traded. In particular these venues reflect strength in GBP markets, which make up a significant proportion of the overall trading volumes.

Fixed Income credit can sometimes be a very illiquid market. Therefore, the likelihood of execution is placed alongside price as the key execution factors.

The top five venues for Fixed Income Credit during 2017 have provided trading coverage across the wide range of credit sectors that Aviva Investors trade. These venues provide consistent pricing in all market conditions and have the ability to utilise their balance sheet to facilitate trading. Also, the ability to leverage a variety of distribution channels to provide better execution coverage and high hit ratios on MTF trading venues for RFQ enquiry are also considered.



Exchange Traded (ETD) & OTC Derivatives

Class of Instrument		Equity Derivatives - Options and Futures (Futures & Listed/OTC Options)	
Notification if <1 average trade per business day in the previous year		N	
Counterparty RTS 28	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class	
Credit Suisse Securities (Europe) Limited - DL6FFRRL74S01HE2M14	27.79%	15.60%	
UBS AG BFM8T61CT2L1QCEMIK50	10.62%	15.03%	
Goldman Sachs International W22LROWP2IHZNBB6K528	9.06%	3.49%	
JP Morgan Securities Limited K6Q0W1PS1L1O4IQL9C32	8.50%	12.66%	
Barclays Capital Securities Limited K9WDOH4D2PYBSLSOB484	8.00%	6.82%	

Class of Instrument		Equity Derivatives - Swaps and other Equity Derivatives (TRS & Variance Swaps)	
Notification if <1 average trade per business day in the previous year		Y	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class	
BNP Paribas R0MUWSFPU8MPRO8K5P83	67.84%	20.74%	
Societe Generale SA O2RNE8IBXP4R0TD8PU41	15.82%	36.22%	
JP Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	14.14%	33.75%	
Citibank, National Association E57ODZWZ7FF32TWEFA76	0.95%	0.77%	
Goldman Sachs International W22LROWP2IHZNBB6K528	0.75%	4.95%	

Class of Instrument		Interest Rate Derivatives - Swaps, forwards and other interest rates derivatives	
Notification if <1 average trade per business day in the previous year		N	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class	
Morgan Stanley & Co International PLC 4PQUHN3JPF6FNF3BB653	14.52%	12.93%	
Citigroup Global Markets Limited XKZZ2JZF41MRHTR1V493	13.84%	9.85%	
JP Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	13.48%	17.40%	
Deutsche Bank Aktiengesellschaft 7LTFWZYICNSX8D621K86	9.27%	5.61%	
HSBC Bank PLC MP6I5ZYZBEU3UXPYFY54	7.39%	8.16%	

Class of Instrument		Interest Rate Derivatives - Futures and Options (ETD & Swaptions)	
Notification if <1 average trade per business day in the previous year		N	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class	
JP Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	16.67%	25.46%	
HSBC Bank PLC MP6I5ZYZBEU3UXPYFY54	14.98%	11.94%	
Bank of America Merrill Lynch International Limited EYKN6V0ZCB8VD9IULB80	14.05%	15.10%	
Deutsche Bank Aktiengesellschaft 7LTFWZYICNSX8D621K86	13.09%	7.31%	
Nomura International PLC DGQCSV2PHVF7I2743539	9.87%	13.13%	

Exchange Traded (ETD) & OTC Derivatives continued

Class of Instrument	Credit Derivatives - Other Credit Derivatives (Index/ Single name & tranche CDS)	
Notification if <1 average trade per business day in the previous year	N	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class
Merrill Lynch International GGDZP1UYGU9STUHRDP48	32.67%	8.79%
JP Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	24.63%	19.56%
Goldman Sachs International W22LROWP2IHZNBB6K528	14.25%	22.42%
Citigroup Global Markets Limited XKZZ2JZF41MRHTR1V493	12.98%	23.51%
Citibank, National Association E57ODZWZ7FF32TWEFA76	5.50%	1.88%

Class of Instrument	Credit Derivatives - Other Credit Derivatives (CDS Options)	
Notification if <1 average trade per business day in the previous year	Y	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class
Barclays Capital Securities Limited K9WDOH4D2PYBSLSOB484	37.77%	42.25%
JP Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	33.89%	15.49%
Citigroup Global Markets Limited XKZZ2JZF41MRHTR1V493	22.34%	25.35%
Goldman Sachs International W22LROWP2IHZNBB6K528	6.01%	16.90%

Class of Instrument		Currency Derivatives - Futures and options admitted to trading on a trading venue	
Notification if <1 average trade per business day in the previous year		Y	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class	
BNP Paribas ROMUWSFPU8MPRO8K5P83	57.03%	51.19%	
JP Morgan Securities PLC K6Q0W1PS1L1O4IQL9C32	16.53%	8.70%	
Societe Generale SA O2RNE8IBXP4R0TD8PU41	10.75%	12.46%	
Standard Chartered Bank RILFO74KP1CM8P6PCT96	7.31%	4.44%	
Citigroup Global Markets Limited XKZZ2JZF41MRHTR1V493	2.73%	4.44%	

The relative importance of the execution factors for OTC derivatives and exchange traded derivatives is for the most part governed by the complexity of both the financial instrument and the asset class. However, as a default, price and likelihood of execution rank above other factors.

Regardless of asset class, where OTC derivatives are not traded on a trading venue, the fairness of the price proposed by the eligible counterparty or counterparties is checked using independent reference data. A fair market valuation is based on an assessment of this data and current liquidity conditions prior to execution. The ability to execute larger orders, may take preference if it is deemed to minimise any potential adverse market impact on the final execution.

This independent price data is reviewed by the 1st line control process on a post-trade basis. Client eligibility (in terms of ISDA/CDEA documentation) is a factor in the counterparty selection process.

With regard to ETDs, normal market-sized orders are executed by the counterparty in the form of a Care Order. The greatest emphasis is on price and the speed of execution. For larger-sized orders, Block size or over, Care Order may be used or a counterparty may be asked for a risk price to trade the whole order depending on market liquidity at the time. This counterparty would be selected on previous experience in handling such orders, and any axes they may have.

In this case price is still the main consideration, but the size of the order able to be traded and likelihood of execution and settlement are also important factors.

The top five venues for ETDs reflect the performance of these counterparties in providing competitive pricing of risk across the range of currencies and order sizes traded.



Foreign exchange

Class of Instrument	Currency Derivatives - Swaps, forwards and other currency derivatives	
Notification if <1 average trade per business day in the previous year	N	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class
Goldman Sachs International W22LROWP2IHZNBB6K528	17.55%	19.28%
Citigroup Global Markets Limited XKZZ2JZF41MRHTR1V493	13.04%	9.21%
HSBC Bank PLC MP6I5ZYBUEU3UXPYFY54	9.19%	8.94%
Societe Generale SA O2RNE8IBXP4R0TD8PU41	7.88%	6.75%
Barclays Capital Securities Limited K9WDOH4D2PYBSLSOB484	7.14%	3.80%

Due to the highly liquid nature of the foreign exchange market, for orders of a normal market size, Aviva Investors places the highest importance on price, followed by likelihood of execution. The majority of orders are executed electronically via a multibank streaming price platform.

For larger orders or those in an illiquid currency pair, the size of the order may make electronic execution impractical. In these cases a smaller number of counterparties may be chosen to price in competition, or if the order is significantly sized a single bank may be chosen to work all or part of the order. Client eligibility is a factor in our counterparty selection process.

The top five venues for FX are reflective of the relative outperformance of these counterparties across both methods of execution and are in line with our in-house monitoring.



Money Market Instruments

Class of Instrument		Money Market	
Notification if <1 average trade per business day in the previous year		N	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class	
Tullett Prebon (Securities) Limited 549300BMVW85YF9FGN67	28.42%	22.19%	
BGC Brokers L.P ZWNFQ48RUL8VJZ2AIC12	20.41%	21.35%	
Tradition London Clearing Limited 549300035Z3DHK2T4A54	10.45%	9.76%	
InterCapital Limited 213800CPHUNULVIEMB24	8.36%	6.66%	
Bank of America Merrill Lynch International Limited EYKN6V0ZCB8VD9IULB80	5.39%	7.19%	

Whilst price is an important factor in the execution of Money Market instruments, the nature of the order (credit quality of issue for example) and the likelihood of execution are equally as relevant. For any tradable money market instrument a competing price may be sought, however due to their nature, Aviva Investors may only be able to source from one party. As a consequence money market trades are executed in close collaboration with the instructing portfolio manager to ensure our execution strategy aligns with their investment objective.

The top five venues for Money Market instruments are reflective of the relative outperformance of these counterparties based on the trading strategies we deploy.



Securities Financing Transactions

Class of Instrument	Securities Financing Transactions	
Notification if <1 average trade per business day in the previous year	N	
Top five execution venues ranked in terms of trading volumes (descending order)	Proportion of volume traded as a percentage of total in that class	Proportion of orders executed as percentage of total in that asset class
Abbey National Treasury Services PLC R83QYRLEMH4ZSHI0L097	30.82%	9.06%
HSBC Bank PLC MP6I5ZYBUEU3UXPYFY54	19.18%	7.16%
BNP Paribas Securities Services SA 549300WCGB70D06XZS54	12.57%	10.71%
Societe Generale SA O2RNE8IBXP4R0TD8PU41	7.40%	6.99%
National Australia Bank Limited F8SB4JFBSYQFRQEH3Z21	6.38%	2.20%

The most important execution factor is price. Additional factors would be speed of execution/confirmation and timely/efficient settlement. Another factor taken in to account is the available counterparty credit limit, which can often have an impact on the selection of the counterparty.

The top five counterparties for Securities Financing Transactions detailed in the quantitative report are reflective of the relative outperformance of these counterparties based on the trading strategies we deploy.

Important Information

Except where stated as otherwise, the source of all information is Aviva Investors Global Services Limited (AIGSL). As at 2nd January 2019. Unless stated otherwise any views and opinions are those of Aviva Investors. They should not be viewed as indicating any guarantee of return from an investment managed by Aviva Investors nor as advice of any nature. Information contained herein has been obtained from sources believed to be reliable, but has not been independently verified by Aviva Investors and is not guaranteed to be accurate. Past performance is not a guide to the future. The value of an investment and any income from it may go down as well as up and the investor may not get back the original amount invested. Nothing in this material, including any references to specific securities, assets classes and financial markets is intended to or should be construed as advice or recommendations of any nature. This material is not a recommendation to sell or purchase any investment.

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