5. Venue and Counterparty reporting

A.i. Debt instruments - Bonds

	Counter	party					
Class of Instrument	Debt instruments - bonds						
Notification if <1 average							
trade per business day in the			N				
previous year							
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of		
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders		
volumes (descending order)	of total in that class	percentage of total in					
		that class					
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	38.59%	26.92%	0.00%	100.00%	0.00%		
Goldman Sachs International - W22LROWP2IHZNBB6K528	15.13%	17.44%	0.00%	100.00%	0.00%		
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	12.76%	11.23%	0.00%	100.00%	0.00%		
Mirexa - 549300BMVW85YF9FGN67	9.96%	12.40%	0.00%	100.00%	0.00%		
HSBC Bank PLC - MP6I5ZYZBEU3UXPYFY54	7.34%	13.93%	0.00%	100.00%	0.00%		

Ordinarily price has been the most important execution factor. However, for some bonds, particularly emerging market bonds, sourcing adequate liquidity and minimising subsequent market impact is also a concern. As such, for highly liquid products the trading team will normally operate a Request For Quote ("RFQ") process using a sub-section from Fulcrum's panel of execution counterparties. For less liquid issues, sourcing begins with discussions around potential inventory held, followed by a RFQ process for a first tranche. In certain circumstances, the counterparty to the first tranche will then be tasked with working the balance of the order.

A.ii. Debt instruments - Money markets instruments

Counterparty							
Class of Instrument	Debt instruments - money market instruments						
Notification if <1 average							
trade per business day in the			N				
previous year							
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of		
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders		
volumes (descending order)	of total in that class	percentage of total in					
		that class					
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	37.35%	35.05%	0.00%	100.00%	0.00%		
Goldman Sachs International - W22LROWP2IHZNBB6K528	25.48%	28.59%	0.00%	100.00%	0.00%		
Nomura International Plc - DGQCSV2PHVF7I2743539	17.15%	11.94%	0.00%	100.00%	0.00%		
Barclays Bank PLC - G5GSEF7VJP5I7OUK5573	10.40%	14.35%	0.00%	100.00%	0.00%		
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	5.44%	5.48%	0.00%	100.00%	0.00%		

The money market instruments Fulcrum trades are highly liquid government issuances, price (yield) is the main determinant in execution, and trades are always executed at best price available from the panel of quoting counterparties. Orders are electronically routed to an aggregated RFQ platform for execution (TSOX in Bloomberg).

B.i. Interest rates derivatives- Futures and options admitted to trading on a trading venue

Counterparty							
Class of Instrument	Intere	Interest Rate Derivatives - Futures and options admitted to trading on a trading venue					
Notification if <1 average							
trade per business day in the			N				
previous year							
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of		
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders		
volumes (descending order)	of total in that class	percentage of total in					
		that class					
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	60.81%	60.73%	0.00%	100.00%	100.00%		
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	16.58%	9.88%	0.00%	100.00%	100.00%		
Barclays Bank PLC - G5GSEF7VJP5I7OUK5573	11.58%	9.44%	0.00%	100.00%	100.00%		
Goldman Sachs International - W22LROWP2IHZNBB6K528	6.49%	9.68%	0.00%	100.00%	100.00%		
Societe Generale International Limited - 0IKLU6X1B10WK7X42C15	2.57%	7.62%	0.00%	100.00%	100.00%		

Venue						
Class of Instrument	Interest Rate Derivatives - Futures and options admitted to trading on a trading venue					
Notification if <1 average						
trade per business day in the			N			
previous year						
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of	
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders	
volumes (descending order)	of total in that class	percentage of total in				
		that class				
Board of Trade of the City of Chicago, Inc 549300EX04Q2QBFQTQ27	48.91%	31.14%	0.00%	100.00%	100.00%	
EUREX Frankfurt Aktiengesellschaft - 529900UT4DG0LG5R9O07	35.77%	31.27%	0.00%	100.00%	100.00%	
The Montreal Exchange - 5493004XJK1P32XQLA57	4.52%	7.70%	0.00%	100.00%	100.00%	
ASX - 549300ZD7BBOVZFVHK49	3.92%	14.04%	0.00%	100.00%	100.00%	
ICE Futures Europe - 549300UF4R84F48NCH34	3.86%	6.31%	0.00%	100.00%	100.00%	

The current prices of listed futures and options are verifiable by reference to the public order book for the products in consideration. Most Fulcrum trades in these instruments are executed directly on these venues via provider algorithms which access these order books directly. For off-screen block trades and RFQ process is followed.

B.ii. Interest rates derivatives - Swaps, forwards, and other interest rate derivatives

Counterparty							
Class of Instrument	Interest Rate Derivatives - Swaps, forwards, and other interest rate derivatives						
Notification if <1 average							
trade per business day in the			N				
previous year							
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of		
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders		
volumes (descending order)	of total in that class	percentage of total in					
		that class					
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	29.66%	33.99%	0.00%	100.00%	0.00%		
Goldman Sachs International - W22LROWP2IHZNBB6K528	26.40%	29.26%	0.00%	100.00%	0.00%		
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	12.03%	10.94%	0.00%	100.00%	0.00%		
Barclays Bank PLC - G5GSEF7VJP5I7OUK5573	7.48%	2.37%	0.00%	100.00%	0.00%		
UBS - BFM8T61CT2L1QCEMIK50	6.57%	7.16%	0.00%	100.00%	0.00%		

Venue									
Class of Instrument	Inte	Interest Rate Derivatives - Swaps, forwards, and other interest rate derivatives							
Notification if <1 average									
trade per business day in the			N						
previous year									
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of				
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders				
volumes (descending order)	of total in that class	percentage of total in							
		that class							
TRADEWEB LLC - 5493009DYKOCXWBRC524	42.70%	58.86%	0.00%	100.00%	0.	.00%			

Interest rate swap trading has evolved rapidly post-financial crisis. The advent of OTC clearing brought greater price transparency to the market and widened the range of potential counterparties. Fulcrum's IRS executions are run via an RFQ process with a panel containing counterparties with a global reach.

C.i. Credit derivatives - Other credit derivatives

Counterparty					
Class of Instrument		Credit de	rivatives - Other credit d	lerivatives	
Notification if <1 average					
trade per business day in the			Υ		
previous year					
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)	of total in that class	percentage of total in			
		that class			
Goldman Sachs International - W22LROWP2IHZNBB6K528	33.01%	28.74%	0.00%	100.00%	0.0
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	30.38%	26.35%	0.00%	100.00%	0.0
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	27.32%	20.96%	0.00%	100.00%	0.0
Barclays Bank PLC - G5GSEF7VJP5I7OUK5573	7.64%	19.16%	0.00%	100.00%	0.0
Societe Generale International Limited - OIKLU6X1B10WK7X42C15	0.61%	0.60%	0.00%	100.00%	0.0

Venue								
Class of Instrument	Credit derivatives - Other credit derivatives							
Notification if <1 average								
trade per business day in the	Υ							
previous year								
Top five execution venues	Proportion of volume Proportion of orders Percentage of Percentage of Percentage of							
ranked in terms of trading	traded as a percentage executed as passive orders aggressive orders directed orders							
volumes (descending order)	of total in that class percentage of total in							
	that class							
TRADEWEB LLC - 5493009DYKOCXWBRC524	89.90% 85.25% 0.00% 100.00% 0.00							

Credit default swaps also evolved rapidly post-financial crisis. Similar to IRS, Fulcrum's CDS executions are run via an RFQ process with a panel containing counterparties with a global reach. For US entities when executing 'Made Available for Trading (MAT)' order, the Bloomberg SEF is accessed as the venue for execution.

D.i. Currency derivatives - Futures and options admitted to trading on a trading venue

Counterparty							
Class of Instrument	Curr	Currency derivatives - Futures and options admitted to trading on a trading venue					
Notification if <1 average							
trade per business day in the			N				
previous year							
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of		
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders		
volumes (descending order)	of total in that class	percentage of total in					
		that class					
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	31.41%	17.73%	0.00%	100.00%	100.00%		
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	29.06%	41.56%	0.00%	100.00%	100.00%		
Barclays Bank PLC - G5GSEF7VJP5I7OUK5573	20.04%	13.16%	0.00%	100.00%	100.00%		

Goldman Sachs International - W22LROWP2IHZNBB6K528	8.53%	11.43%	0.00%	100.00%	100.00%
Societe Generale International Limited - 0IKLU6X1B10WK7X42C15	7.06%	10.53%	0.00%	100.00%	100.00%

Venue						
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			N			
previous year						
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of	
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders	
volumes (descending order)	of total in that class	percentage of total in				
		that class				
Chicago Mercantile Exchange Inc SNZ2OJLFK8MNNCLQOF39	99.91%	99.80%	0.009	100.00%	100.00%	
ICE Futures US Currencies	0.03%	0.09%				
Singapore Exchange (SIMEX)	0.02%	0.04%	0.009	100.00%	100.00%	

The current prices of listed futures and options are verifiable by reference to the public order book for the products in consideration. Most Fulcrum trades in these instruments are executed directly on these venues via provider algorithms which access these order books directly. For off-screen block trades and RFQ process is followed.

D.ii. Currency derivatives - Swaps, forwards and other currency derivatives

Counterparty						
Class of Instrument	Currency derivatives - Swaps, forwards and other currency derivatives					
Notification if <1 average						
trade per business day in the			N			
previous year						
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of	
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders	
volumes (descending order)	of total in that class	percentage of total in				
		that class				
JPMorgan Chase Bank NA - 7H6GLXDRUGQFU57RNE97	22.84%	25.94%	0.00%	100.00%	0.00%	
UBS AG, Zurich - BFM8T61CT2L1QCEMIK50	12.36%	6.75%	0.00%	100.00%	0.00%	
Barclays Bank PLC - G5GSEF7VJP5I7OUK5573	10.62%	8.09%	0.00%	100.00%	0.00%	
HSBC Bank PLC - MP6I5ZYZBEU3UXPYFY54	10.07%	8.19%	0.00%	100.00%	0.00%	
Goldman Sachs International - W22LROWP2IHZNBB6K528	8.92%	17.79%	0.00%	100.00%	0.00%	

Venue						
Class of Instrument		Currency derivatives - S	Swaps, forwards and ot	her currency derivatives		
Notification if <1 average						
trade per business day in the			N			
previous year						
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of	
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders	
volumes (descending order)	of total in that class	percentage of total in				
		that class				
Thomson Reuters LLC - 549300WQWDPFSMQ8I087	87.26%	96.04%	0.00%	100.00%		0.00%

FX forward trades are primarily executed via an electronic aggregated RFS system, called FXall. Fulcrum selects up to five counterparties to provided streaming, executable prices for the requests raised. Credit risk is minimised as all trades are given up to the Firm's FX prime broker upon execution. For US entities a small portion of trades are executed on the Thomson Reuters swap execution facility (SEF).

E.i. Equity Derivatives - Options and Futures admitted to trading on a trading venue

Counterparty					
Class of Instrument	Equ	ity Derivatives - Options	and Futures admitted to	trading on a trading ve	nue
Notification if <1 average					
trade per business day in the			N		
previous year					
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)	of total in that class	percentage of total in			
		that class			
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	54.73%	44.36%	0.00%	100.00%	100.00%
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	23.36%	22.69%	0.00%	100.00%	100.00%
Barclays Bank PLC - G5GSEF7VJP5I7OUK5573	10.38%	15.28%	0.00%	100.00%	100.00%
Goldman Sachs International - W22LROWP2IHZNBB6K528	6.40%	8.14%	0.00%	100.00%	100.00%
Societe Generale International Limited - 0IKLU6X1B10WK7X42C15	2.37%	6.96%	0.00%	100.00%	100.00%

Venue							
Class of Instrument	Equity Derivatives - Options and Futures admitted to trading on a trading venue						
Notification if <1 average							
trade per business day in the	N						
previous year							
Top five execution venues	Proportion of volume Proportion of orders Percentage of Percentage of Percentage of						
ranked in terms of trading	traded as a percentage executed as passive orders aggressive orders directed orders						
volumes (descending order)	of total in that class percentage of total in						
	that class						
Chicago Mercantile Exchange Inc SNZ2OJLFK8MNNCLQOF39	39.97% 16.60% 0.00% 100.00% 1						

EUREX Frankfurt Aktiengesellschaft - 529900UT4DG0LG5R9O07	13.88%	28.93%	0.00%	100.00%	100.00%
Hong Kong Futures Exchange Limited	6.59%	9.86%	0.00%	100.00%	100.00%
Singapore Exchange Limited - 549300IQ650PPXM76X03	4.29%	13.11%	0.00%	100.00%	100.00%
ICE Futures Europe Financials	4.19%	7.02%	0.00%	100.00%	100.00%

The current prices of listed futures and options are verifiable by reference to the public order book for the products in consideration. Most Fulcrum trades in these instruments are executed directly on these venues via provider algorithms which access these order books directly. For off-screen block trades and RFQ process is followed. Where similar/mirrored contracts are available across different exchanges, comparisons are made as to the most efficient method for accessing the desired risk.

E.ii. Equity Derivatives - Swaps and other equity derivatives

Counterparty					
Class of Instrument		Equity Derivativ	es - Swaps and other ed	juity derivatives	
Notification if <1 average					
trade per business day in the			N		
previous year					
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)	of total in that class	percentage of total in			
		that class			
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	64.81%	16.71%	0.00%	100.00%	0.00%
Goldman Sachs International - W22LROWP2IHZNBB6K528	17.75%	3.92%	0.00%	100.00%	0.00%
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	17.16%	79.28%	0.00%	100.00%	0.00%
Barclays Bank PLC - G5GSEF7VJP5I7OUK5573	0.28%	0.10%	0.00%	100.00%	0.00%

Fulcrum trades some equity index/basket product through OTC swaps. These are executed with a counterparty under ISDA documentation, which needs to be in place for all funds/accounts trading the swap.

F.i. Securitized Derivatives - Warrants and Certificate Derivatives

Counterparty					
Class of Instrument		Securitized Derivat	tives - Warrants and Cer	tificate Derivatives	
Notification if <1 average					
trade per business day in the	Y				
previous year					
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)	of total in that class	percentage of total in			
		that class			
HSBC Bank PLC - MP6I5ZYZBEU3UXPYFY54	35.28%	40.00%	0.00%	100.00%	0.00%
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	30.99%	32.73%	0.00%	100.00%	0.00%
Goldman Sachs International - W22LROWP2IHZNBB6K528	9.43%	1.82%	0.00%	100.00%	0.00%
Societe Generale International Limited - 0IKLU6X1B10WK7X42C15	7.51%	1.82%	0.00%	100.00%	0.00%
UBS	6.66%	7.27%	0.00%	100.00%	0.00%

Across 2019 Fulcrum traded warrants with a selection of counterparties. For these products a competitive RFQ process is held for pricing the underlying risk and the winning counterparty then packages the risk into a warrant.

G.i. Commodities derivatives and emission allowances Derivatives - Options and Futures admitted to trading on a trading venue

Counterparty					
	Commodities derivativ	es and emission allowar	nces Derivatives - Option	ns and Futures admitted	to trading on a trading
Class of Instrument	venue				
Notification if <1 average					
trade per business day in the	N				
previous year					
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)	of total in that class	percentage of total in			
		that class			
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	47.01%	51.90%	0.00%	100.00%	100.00%
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	19.35%	12.29%	0.00%	100.00%	100.00%
Barclays Bank PLC - G5GSEF7VJP5I7OUK5573	12.89%	9.13%	0.00%	100.00%	100.00%
Goldman Sachs International - W22LROWP2IHZNBB6K528	6.75%	9.91%	0.00%	100.00%	100.00%
Societe Generale International Limited - OIKLU6X1B10WK7X42C15	4.78%	10.01%	0.00%	100.00%	100.00%

Venue					
	Commodities derivative	ves and emission allowa	nces Derivatives - Option	ns and Futures admitted	to trading on a trading
Class of Instrument			venue		
Notification if <1 average					
trade per business day in the			N		
previous year					
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)	of total in that class	percentage of total in			
		that class			
Board of Trade of the City of Chicago, Inc 549300EX04Q2QBFQTQ27	28.59%	24.83%	0.00%	100.00%	100.00%
New York Mercantile Exchange, Inc 5493008GFNDTXFPHWI47	25.17%	20.81%	0.00%	100.00%	100.00%

ICE Futures Europe - 549300UF4R84F48NCH34	18.23%	15.19%	0.00%	100.00%	100.00%
COMEX	13.40%	7.59%	0.00%	100.00%	100.00%
THE LONDON METAL EXCHANGE - 213800NB8G5VRT1DXC91	8.51%	10.59%	0.00%	100.00%	100.00%

The current prices of listed futures and options are verifiable by reference to the public order book for the products in consideration. Most Fulcrum trades in these instruments are executed directly on these venues via provider algorithms which access these order books directly. For off-screen block trades and RFQ process is followed. Where similar/mirrored contracts are available across different exchanges, comparisons are made as to the most efficient method for accessing the desired risk.

G.ii. Commodities derivatives and emission allowances Derivatives - Other commodities derivatives and emission allowances derivatives

Counterparty						
Class of Instrument	Commodities derivatives and emission allowances Derivatives - Other commodities derivatives and emission allowances derivatives					
Notification if <1 average						
trade per business day in the			N			
previous year						
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of	
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders	
volumes (descending order)	of total in that class	percentage of total in				
		that class				
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	49.62%	64.65%	0.00%	100.00%	0.00%	
Macquarie Bank Limited - 4ZHCHI4KYZG2WVRT8631	34.32%	30.17%	0.00%	100.00%	0.00%	
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	16.05%	5.18%	0.00%	100.00%	0.00%	

Fulcrum's implementation of commodity index swaps uses close prices as execution levels. The products are OTC in nature and trade under an ISDA.

H.i. Equity

Counterparty					
Class of Instrument			Equity		
Notification if <1 average					
trade per business day in the			Υ		
previous year					
Top five execution venues	Proportion of volume	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	traded as a percentage	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)	of total in that class	percentage of total in			
		that class			
J.P. Morgan Securities PLC - K6Q0W1PS1L1O4IQL9C32	55.78%	88.02%	0.00%	100.00%	0.00%
Morgan Stanley & Co. International PLC - 4PQUHN3JPFGFNF3BB653	34.77%	5.78%	0.00%	100.00%	0.00%
Goldman Sachs International - W22LROWP2IHZNBB6K528	9.46%	6.19%	0.00%	100.00%	0.00%

As equity products, the current public price of these assets is verifiable through public order books. Fulcrum accesses these products through execution counterparties, primarily on an agency execution basis.