

Equity No Band					
	Equities: Shares and Depositary Receipts -				
Class of Instrument	Tick size liquidity band not available				
Client Type	Professional				
Notification if $< 1$ average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
CLSA (213800VZMAGVIU2IJA72)	31.3%	12.7%	na	na	0%
Banco Santander (5493006QMFDDMYWIAM13)	12.2%	15.0%	na	na	0%
Sanford C Bernstein Ltd (54930049G8WQ5OOUSD19)	8.4%	22.4%	na	na	0%
Royal Bank of Canada (TXDSU46SXBWIGJ8G8E98)	7.5%	1.5%	na	na	0%
Liquidnet (213800ZIRB79BE5XQM68)	6.4%	1.5%	na	na	0%
	Equities: Shares and Depositary Receipts -				
Class of Instrument	Tick size liquidity band not available				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class.	passive orders	aggressive orders	directed orders
CLSA (213800VZMAGVIU2IJA72)	39.5%	35.6%	na	na	0%
Banco Santander (5493006QMFDDMYWIAM13)	28.1%	40.5%	na	na	0%
Sanford C Bernstein Ltd (54930049G8WQ5OOUSD19)	11.5%	10.8%	na	na	0%
Royal Bank of Canada (TXDSU46SXBWIGJ8G8E98)	9.0%	3.2%	na	na	0%
Liquidnet (213800ZIRB79BE5XQM68)	5.4%	3.7%	na	na	0%



Equities: Shares and Depositary Receipts -				
Tick size liquidity bands 1 and 2				
Professional				
No				
Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
10.3%	14.9%	na	na	0%
9.0%	10.3%	na	na	0%
8.3%	7.4%	na	na	0%
7.8%	7.6%	na	na	0%
7.5%	7.5%	na	na	0%
Equities: Shares and Depositary Receipts -				
Tick size liquidity bands 1 and 2				
Retail				
No				
Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
22.5%	25.5%	na	na	0%
18.6%	16.8%	na	na	0%
7.3%	10.1%	na	na	0%
6.8%	7.3%	na	na	0%
	Tick size liquidity bands 1 and 2 Professional No Proportion of volume executed as a percentage of total in that class 10.3% 9.0% 8.3% 7.8% 7.5%  Equities: Shares and Depositary Receipts - Tick size liquidity bands 1 and 2 Retail No Proportion of volume executed as a percentage of total in that class 22.5% 18.6% 7.3%	Tick size liquidity bands 1 and 2 Professional No Proportion of volume executed as a percentage of total in that class  10.3% 14.9% 9.0% 9.0% 10.3% 7.4% 7.8% 7.5%  Equities: Shares and Depositary Receipts - Tick size liquidity bands 1 and 2 Retail No Proportion of volume executed as a percentage of total in that class  22.5% 18.6% 7.3% Proportion of orders executed as percentage of total in that class 10.3% 14.9% Proportion of orders executed as a percentage of total in that class 10.3% 10.1%	Tick size liquidity bands 1 and 2 Professional No Proportion of volume executed as a percentage of total in that class 10.3% 14.9% 10.3% 14.9% 10.3% 1	Professional No Proportion of volume executed as a percentage of total in that class 10.3% 14.9% 10.3%



Equity Band 3 and 4					
	Equities: Shares and Depositary Receipts -				
Class of Instrument	Tick size liquidity bands 3 and 4				
Client Type	Professional				
Notification if $< 1$ average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Sanford C Bernstein Ltd (54930049G8WQ5OOUSD19)	13.9%	14.1%	na	na	0%
Redburn Partners LLP (213800PKEJQZQXQCOJ04)	10.5%	1.6%	na	na	0%
Liquidnet (213800ZIRB79BE5XQM68)	9.4%	11.8%	na	na	0%
Citigroup (XKZZ2JZF41MRHTR1V493)	6.4%	2.4%	na	na	0%
Kempen & Co (2O302V7616D3HTVSXO60)	6.1%	9.9%	na	na	0%
	Equities: Shares and Depositary Receipts -				
Class of Instrument	Tick size liquidity bands 3 and 4				
Client Type	Retail				
Notification if $< 1$ average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Sanford C Bernstein Ltd (54930049G8WQ5OOUSD19)	30.7%	34.0%	na	na	0%
Redburn Partners LLP (213800PKEJQZQXQCOJ04)	12.0%	15.6%	na	na	0%
Liquidnet (213800ZIRB79BE5XQM68)	8.9%	10.8%	na	na	0%
Citigroup (XKZZ2JZF41MRHTR1V493)	7.1%	1.5%	na	na	0%
Kempen & Co (2O302V7616D3HTVSXO60)	7.0%	4.9%	na	na	0%



Equity Band 5 and 6					
	Equities: Shares and Depositary Receipts -				
Class of Instrument	Tick size liquidity bands 5 and 6				
Client Type	Professional				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Liquidnet (213800ZIRB79BE5XQM68)	32.7%	33.0%	na	na	0%
Sanford C Bernstein Ltd (54930049G8WQ5OOUSD19)	9.9%	11.6%	na	na	0%
UBS (REYPIEJN7XZHSUI0N355)	9.1%	6.4%	na	na	0%
Goldman Sachs (W22LROWP2IHZNBB6K528)	8.1%	7.5%	na	na	0%
JP Morgan (K6Q0W1PS1L1O4IQL9C32)	6.8%	6.1%	na	na	0%
	Equities: Shares and Depositary Receipts -				
Class of Instrument	Tick size liquidity bands 5 and 6				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Liquidnet (213800ZIRB79BE5XQM68)	30.9%	30.9%	na	na	0%
Sanford C Bernstein Ltd (54930049G8WQ5OOUSD19)	21.6%	23.7%	na	na	0%
UBS (REYPIEJN7XZHSUI0N355)	8.5%	5.6%	na	na	0%
Goldman Sachs (W22LROWP2IHZNBB6K528)	8.4%	7.5%	na	na	0%
JP Morgan (K6Q0W1PS1L1O4IQL9C32)	6.5%	6.6%	na	na	0%



Bonds					
Class of Instrument	Debt Instruments: Bonds				
Client Type	Professional				
Notification if $< 1$ average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Morgan Stanley (4PQUHN3JPFGFNF3BB653)	13.2%	11.4%	na	na	0%
HSBC (MP6I5ZYZBEU3UXPYFY54)	11.5%	8.9%	na	na	0%
JP Morgan (K6Q0W1PS1L1O4IQL9C32)	9.8%	11.3%	na	na	0%
Nomura (DGQCSV2PHVF7I2743539)	9.7%	6.1%	na	na	0%
Merrill Lynch International (B4TYDEB6GKMZO031MB27)	8.0%	12.5%	na	na	0%
Class of Instrument	Debt Instruments: Bonds				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Morgan Stanley (4PQUHN3JPFGFNF3BB653)	15.9%	12.7%	na	na	0%
HSBC (MP6I5ZYZBEU3UXPYFY54)	13.2%	13.5%	na	na	0%
JP Morgan (K6Q0W1PS1L1O4IQL9C32)	10.4%	11.7%	na	na	0%
Nomura (DGQCSV2PHVF7I2743539)	8.6%	6.6%	na	na	0%
Merrill Lynch International (B4TYDEB6GKMZO031MB27)	8.1%	7.6%	na	na	0%



Money markets					
Class of Instrument	Debt Instruments: Money Markets				
Client Type	Professional				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
HSBC (MP6I5ZYZBEU3UXPYFY54)	90.2%	80.0%	na	na	0%
TD Securities (PT3QB789TSUIDF371261)	4.4%	5.9%	na	na	0%
Barclays Capital (G5GSEF7VJP5I7OUK5573)	3.0%	6.4%	na	na	0%
Jefferies & Co (S5THZMDUJCTQZBTRVI98)	2.2%	7.1%	na	na	0%
Royal Bank Of Canada (ES7IP3U3RHIGC71XBU11)	0.2%	0.6%	na	na	0%
Class of Instrument	Debt Instruments: Money Markets				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
HSBC (MP6I5ZYZBEU3UXPYFY54)	88.7%	74.7%	na	na	0%
TD Securities (PT3QB789TSUIDF371261)	4.7%	6.3%	na	na	0%
Barclays Capital (G5GSEF7VJP5I7OUK5573)	3.6%	10.9%	na	na	0%
Jefferies & Co (S5THZMDUJCTQZBTRVI98)	2.2%	7.1%	na	na	0%
Royal Bank Of Canada (ES7IP3U3RHIGC71XBU11)	0.7%	0.8%	na	na	0%



Interest rate derivatives					
	Interest rates derivatives: Swaps, forwards,				
Class of Instrument	and other interest rates derivatives				
Client Type	Professional				
Notification if < 1 average trade per business day in the previous year	No				
Top 5 Venues ranked in terms of volume (descending order)	Proportion of volume executed as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Barclays Capital (G5GSEF7VJP5I7OUK5573)	38.3%	35.6%	na	na	0%
Morgan Stanley (4PQUHN3JPFGFNF3BB653)	17.9%	19.8%	na	na	0%
Nomura (DGQCSV2PHVF7I2743539)	13.1%	12.0%	na	na	0%
Goldman Sachs (W22LROWP2IHZNBB6K528)	13.0%	9.0%	na	na	0%
UBS (BFM8T61CT2L1QCEMIK50)	10.2%	15.7%	na	na	0%
	Interest rates derivatives: Swaps, forwards,				
Class of Instrument	and other interest rates derivatives				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No Trades				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders



Currency derivatives					
	Currency Derivatives: Swaps, forwards, and				
Class of Instrument	other currency derivatives				
Client Type	Professional				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Bank of New York Mellon (HPFHU0OQ28E4N0NFVK49)	70.8%	75.7%	na	na	0%
Pictet (549300GSSPQ1QSKI1376)	13.5%	2.2%	na	na	0%
Northern Trust (6PTKHDJ8HDUF78PFWH30)	6.8%	12.3%	na	na	0%
JP Morgan (K6Q0W1PS1L1O4IQL9C32)	4.2%	3.9%	na	na	0%
State Street (571474TGEMMWANRLN572)	2.6%	3.4%	na	na	0%
	Currency Derivatives: Swaps, forwards, and				
Class of Instrument	other currency derivatives				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Bank of New York Mellon (HPFHU0OQ28E4N0NFVK49)	98.2%	99.9%	na	na	0%
Edmond de Rothschild (5493009T9IBHZZKFR082)	1.4%	0.1%	na	na	0%
Northern Trust (6PTKHDJ8HDUF78PFWH30)	0.5%	0.1%	na	na	0%



Equity derivative TOTV					
Class of Instrument	Equity Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Client Type	Professional				
Notification if < 1 average trade per business day in the previous year	No				
Top 5 Venues ranked in terms of volume (descending order)	Proportion of volume executed as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Barclays Capital (G5GSEF7VJP5I7OUK5573)	25.8%	19.4%	na	na	0%
JP Morgan (K6Q0W1PS1L1O4IQL9C32)	18.8%	19.3%	na	na	0%
Morgan Stanley (4PQUHN3JPFGFNF3BB653)	14.4%	15.3%	na	na	0%
Credit Suisse (E58DKGMJYYYJLN8C3868)	14.0%	12.0%	na	na	0%
Deutsche Bank (7LTWFZYICNSX8D621K86)	12.0%	18.0%	na	na	0%
Class of Instrument	Equity Derivatives: Futures and Options Admitted to Trading on a Trading Venue				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No Trades				
Top 5 Venues ranked in terms of volume (descending order)	Proportion of volume executed as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders



Equity derivative other					
	Equity Derivatives: Swaps and other equity				
Class of Instrument	derivatives				
Client Type	Professional				
Notification if < 1 average trade per business day in the previous year	Yes				
Top 5 Venues ranked in terms of volume (descending order)	Proportion of volume executed as a percentage of total in that class	Proportion of orders executed as percentage of total in that class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
UBS (BFM8T61CT2L1QCEMIK50)	35.6%	23.1%	na	na	0%
Goldman Sachs (W22LROWP2IHZNBB6K528)	26.8%	23.1%	na	na	0%
Barclays Capital (G5GSEF7VJP5I7OUK5573)	22.0%	30.8%	na	na	0%
JP Morgan (K6Q0W1PS1L1O4IQL9C32)	15.0%	15.4%	na	na	0%
Morgan Stanley (4PQUHN3JPFGFNF3BB653)	0.6%	7.7%	na	na	0%
	Equity Derivatives: Swaps and other equity				
Class of Instrument	derivatives				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No Trades				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders



Securitized derivatives warrant					
Second 200 Mariant	Securitized Derivatives: Warrants and				
Class of Instrument	Certificate Derivatives				
Client Type	Professional				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Barclays Capital (G5GSEF7VJP5I7OUK5573)	34.0%	41.7%	na	na	0%
Morgan Stanley (4PQUHN3JPFGFNF3BB653)	31.6%	18.6%	na	na	0%
JP Morgan (K6Q0W1PS1L1O4IQL9C32)	26.0%	28.3%	na	na	0%
Barclays Capital (AC28XWWI3WIBK2824319)	4.1%	4.6%	na	na	0%
UBS (BFM8T61CT2L1QCEMIK50)	4.1%	4.5%	na	na	0%
Class of Instrument	Securitized Derivatives: Warrants and				
Class of Instrument	Certificate Derivatives				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Barclays Capital (G5GSEF7VJP5I7OUK5573)	97.1%	81.6%	na	na	0%
Morgan Stanley (4PQUHN3JPFGFNF3BB653)	1.1%	2.0%	na	na	0%
JP Morgan (K6Q0W1PS1L1O4IQL9C32)	0.8%	2.0%	na	na	0%
Barclays Capital (AC28XWWI3WIBK2824319)	0.7%	2.0%	na	na	0%
UBS (BFM8T61CT2L1QCEMIK50)	0.1%	4.1%	na	na	0%



Securitized derivatives other					
	Securitized Derivatives: Other Securitized				
Class of Instrument	Derivatives				
Client Type	Professional				
Notification if < 1 average trade per business day in the previous year	Yes				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Skandinaviska Enskilda Banken Lndn (F3JS33DEI6XQ4ZBPTN86)	97.7%	50.0%	na	na	0%
BAML (GGDZP1UYGU9STUHRDP48)	2.3%	50.0%	na	na	0%
	Securitized Derivatives: Other Securitized				
Class of Instrument	Derivatives				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	Yes				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
Skandinaviska Enskilda Banken Lndn (F3JS33DEI6XQ4ZBPTN86)	69.3%	25.0%	na	na	0%
BAML (GGDZP1UYGU9STUHRDP48)	30.7%	75.0%	na	na	0%



Exchange traded products					
	Exchange Traded Products (Exchange				
	Traded Funds, Exchange Traded Notes and				
Class of Instrument	Exchange Traded Commodities)				
Client Type	Professional				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
HSBC (MP6I5ZYZBEU3UXPYFY54)	55.3%	70.9%	na	na	0%
Sanford C Bernstein Ltd (54930049G8WQ5OOUSD19)	43.8%	25.6%	na	na	0%
UBS (REYPIEJN7XZHSUI0N355)	0.8%	2.3%	na	na	0%
	Exchange Traded Products (Exchange				
	Traded Funds, Exchange Traded Notes and				
Class of Instrument	Exchange Traded Commodities)				
Client Type	Retail				
Notification if < 1 average trade per business day in the previous year	No				
	Proportion of volume executed as a	Proportion of orders executed as	Percentage of	Percentage of	Percentage of
Top 5 Venues ranked in terms of volume (descending order)	percentage of total in that class	percentage of total in that class	passive orders	aggressive orders	directed orders
HSBC (MP6I5ZYZBEU3UXPYFY54)	80.2%	69.2%	na	na	0%
Sanford C Bernstein Ltd (54930049G8WQ5OOUSD19)	17.2%	29.0%	na	na	0%
UBS (REYPIEJN7XZHSUI0N355)	2.0%	0.1%	na	na	0%