Please note: MGIM trades on behalf of professional clients only

All instruments are traded via an FC FCA approved list of brokers and intermediaries Start Date: 31/12/2017

Date Range for report -

Class of Instrument Equities Notification if <1 average trade per business day in the previous N year Proportion of volume traded as a Top five execution venues Proportion of orders Percentage of Percentage of Percentage of ranked in terms of trading percentage of total in that class passive orders aggressive orders directed orders executed as percentage of total volumes (descending order) in that class Stifel Nicolaus Europe Limited 74.4% 47.6% n/a n/a n/a [213800BVEFNZ8UYPKL03] Canaccord Genuity 20.5% 33.3% n/a n/a n/a [ZBU7VFV5NIMN4ILRFC23] Hobart Capital 5.1% 19.0% n/a n/a n/a [21380004WPTMQ9RQXQ63]

End Date:

31/12/2018

Class of Instrument	Debt instruments - bonds				
Notification if <1 average trade					
per business day in the previous	Y				
year					
Top five execution venues	Proportion of volume traded as a	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	percentage of total in that class	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)		percentage of total			
		in that class			
BridPort	31.3%	22.0%	n/a	n/a	n/a
[2138001S6PWXXBKX9S40]	31.570	22.070	ny a	174	iiy a
TD Securities (Euroclear)	25.1%	31.2%	n/a	n/a	n/a
[PT3QB789TSUIDF371261]	23.170	51.270	iiy a	174	ny u
MTI SW (Euroclear)	16.1%	14.7%	n/a	n/a	n/a
[213800ZXJI3S6VKHTX31]	10.1/0	11.770	iiy a	174	ny u
RBC (Euroclear)	10.6%	7.3%	n/a	n/a	n/a
[TXDSU46SXBWIGJ8G8E98]	10.070	7.570	ii, u	/u	ii, a
Credit Suisse (Euroclear)	7.8%	10.1%	n/a	n/a	n/a
[DL6FFRRLF74S01HE2M14]	7.370	10.170	iiy a	ηa	ηa

Class of Instrument	Debt instruments - money markets				
Notification if <1 average trade					
per business day in the previous	Y				
year					
Top five execution venues	Proportion of volume traded as a	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	percentage of total in that class	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)		percentage of total			
		in that class			
Citibank (Fedwire)	39.2%	36.2%	n/a	n/a	n/a
[XKZZ2JZF41MRHTR1V493]	35.270	50.278	nya.	n/a	17.8
TD Securities (Fed Wire)	28.5%	21.4%	n/a	n/a	n/a
[PT3QB789TSUIDF371261]	201070	221170	, a	, a	
TD Securities (Fed Wire)	28.5%	21.4%	n/a	n/a	n/a
[PT3QB789TSUIDF371261]	20.570	21.170	ny a	174	174
Morgan Stanley (Fed wire)	2.0%	12.1%	n/a	n/a	n/a
[4PQUHN3JPFGFNF3BB653]	2.070	12.170	ny a	174	174
RBC (Crest)	0.6%	1.3%	n/a	n/a	n/a
[TXDSU46SXBWIGJ8G8E98]	0.070	1.570	ii, u	170	174

Class of Instrument	Interest rates derivatives				
Notification if <1 average trade					
per business day in the previous	Y				
year					
Top five execution venues	Proportion of volume traded as a	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	percentage of total in that class	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)		percentage of total			
		in that class			

JPM (Futures) [K6Q0W1PS1L1O4IQL9C32]	100.0%	100.0%	n/a	n/a	n/a

Class of Instrument	Currency derivatives				
Notification if <1 average trade					
per business day in the previous	N				
year					
Top five execution venues	Proportion of volume traded as a	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	percentage of total in that class	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)		percentage of total			
		in that class			
Citibank (FX)	35.5%	14.4%	n/a	n/a	n/a
[XKZZ2JZF41MRHTR1V493]	33.370	14.470	пуа	n/ a	ny a
BBH InfoFx	25.4%	23.2%	n/a	n/a	n/a
[5493006KMX1VFTPYPW14]	23.170	23.270	nya	174	
JPM (FX)	24.3%	27.5%	n/a	n/a	n/a
[K6Q0W1PS1L1O4IQL9C32]	2.0070	271070	, a	, a	, a
NT (FX)	14.8%	34.3%	n/a	n/a	n/a
[6PTKHDJ8HDUF78PFWH30]	14.070	54.570	nya	n/u	iiy a
Standard Bank SA (FX)	0.0%	0.6%	n/a	n/a	n/a
[QFC8ZCW3Q5PRXU1XTM60]	0.070	0.070	, u	, a	, u

Class of Instrument	Equity derivatives				
Notification if <1 average trade					
per business day in the previous	Y				
year					
Top five execution venues	Proportion of volume traded as a	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	percentage of total in that class	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)		percentage of total			
		in that class			
JPM (Futures)	71.2%	83.7%	n/a	n/a	n/a
[K6Q0W1PS1L1O4IQL9C32]	, 1.2,0	05.770	nya	174	ii/u
Deutsche Bank (Futures)	28.8%	16.3%	n/a	n/a	n/a
[7LTWFZYICNSX8D621K86]	20.070	10.570	iiy d	174	ny a

Class of Instrument	Exchange traded products				
Notification if <1 average trade					
per business day in the previous	N				
year					
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 class	Percentage of passive orders	Percentage of aggressive orders	Percentage of directed orders
Hobart Capital [213800O4WPTMQ9RQXQ63]	100.0%	100.0%	n/a	n/a	n/a

Class of Instrument	Other instruments				
Notification if <1 average trade					
per business day in the previous	Y				
year					
Top five execution venues	Proportion of volume traded as a	Proportion of orders	Percentage of	Percentage of	Percentage of
ranked in terms of trading	percentage of total in that class	executed as	passive orders	aggressive orders	directed orders
volumes (descending order)		percentage of total			
		in that class			