

**BROKER****2019****Top 5 Brokers - 2019**

<u>Position</u>	<u>Instrument Class</u>	<u>Broker</u>	<u>lei_mic</u>	<u>pct_usd_vol</u>	<u>pct_ord_vol</u>	<u>passive</u>	<u>aggressive</u>	<u>directed</u>
1	(b) Debt Instruments	Citigroup Global Markets Limited	XKZZZJZF41MRHTR1V493	14.235%	13.060%	N/A	N/A	N/A
2	(b) Debt Instruments	JPMorgan Chase Bank, National Association	7H6GLXDRUGQFU57RNE97	9.095%	8.240%	N/A	N/A	N/A
3	(b) Debt Instruments	Royal Bank of Canada	ES7IP3U3RHIGC71XBU11	8.832%	9.410%	N/A	N/A	N/A
4	(b) Debt Instruments	Barclays Bank plc	G5GSEF7VJP517OUK5573	7.281%	8.280%	N/A	N/A	N/A
5	(b) Debt Instruments	Deutsche Bank	9J6MBOOO7BECTDTUZW19	6.209%	6.372%	N/A	N/A	N/A
1	(d) Credit Deriv	CITIGROUP GLOBAL MARKETS	XKZZZJZF41MRHTR1V493	46.839%	31.746%	N/A	N/A	N/A
3	(d) Credit Deriv	Barclays Bank plc	G5GSEF7VJP517OUK5573	21.406%	19.841%	N/A	N/A	N/A
2	(d) Credit Deriv	JPMorgan Chase Bank, National Association	7H6GLXDRUGQFU57RNE97	17.598%	23.809%	N/A	N/A	N/A
5	(d) Credit Deriv	Credit Suisse Securities (USA) LLC	1V8Y6QCX6YMJ2OELI46	6.626%	8.730%	N/A	N/A	N/A
4	(d) Credit Deriv	Goldman Sachs	FOR8UP27PHTHYVLBNG30	4.546%	5.555%	N/A	N/A	N/A