

## Analysis of Quantitative Trading Metrics Collected Under the Volcker Rule

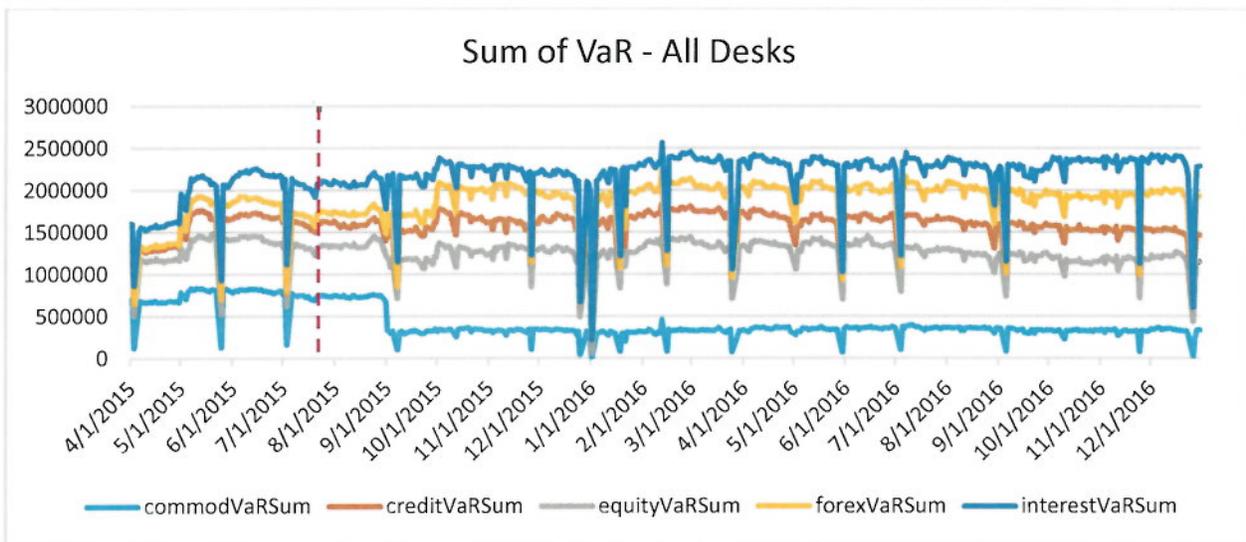
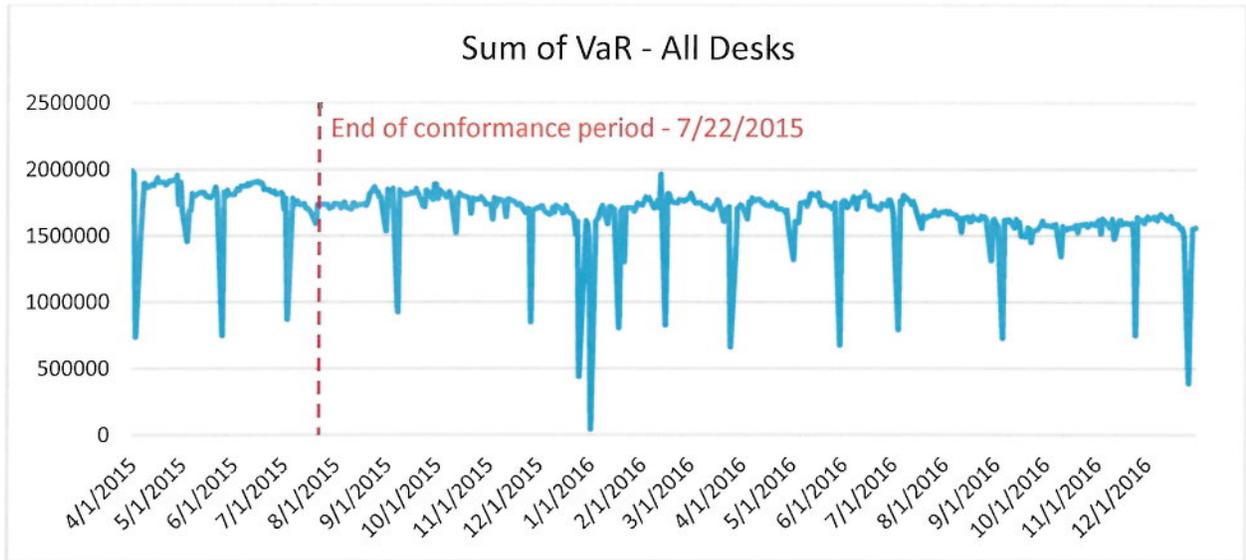
Changes in trading activity around the conformance period (charts on page 2)

- The sum of Value at Risk across all desks is steady to declining for those desks that exist across all months since April 2015. There are no particular trends within firm (not shown) or asset class (shown). Furthermore there is no noticeable difference in risktaking before and after the end of the conformance period shown with a vertical line. A similar pattern holds for stress VaR and securities inventory. (The periodic drops in VaR are due to holidays where VaR is not reported for some desks).

Changes in risk taking by asset class (table on Page 3)

- Sharpe ratios are a way of standardizing desks' profit and loss based on the risk taken by the desk. Sharpe ratios on profit and loss due to existing positions and due to changes in risk factors have averages very close to 0. This result is in line with our expectations for firms that do not proprietary trade, they should make profits from new positions rather than changes in value of existing positions. Firms still have positive Sharpe ratios calculated using comprehensive P&L, this is expected as firms earn a spread or charge a fee for their market making activity. When breaking down Sharpe ratios by asset class, it appears that some types of assets have higher risk-adjusted P&L than others, due largely to the differences in how market making in different asset classes is conducted. Averages for existing position P&L within each category are still near-zero. P&L due to change in risk factors is negative for most asset classes.

### Aggregation of VAR across Firms



# Sharpe Ratio Tables Volcker Metrics Group

February 6, 2017

Table 1: Sharpe Ratios (by P and L Type) from 201507 to 201612<sup>1</sup>

Descriptive Statistics		All Obs.	FX or Currency	Equity Risk	Interest Rate Risk	Inflation Risk	Credit Risk	Commodity Risk
Comprehensive	Mean	0.446	0.502	0.507	0.348	0.252	0.446	0.320
	Median	0.342	0.300	0.390	0.315	0.200	0.345	0.308
	N	5464	906	488	451	41	521	140
Existing Positions	Mean	0.070	0.103	0.090	0.033	-0.150	0.029	0.138
	Median	0.044	0.048	0.037	0.006	-0.166	0.006	0.141
	N	5327	909	462	446	41	520	140
New Positions	Mean	0.587	0.544	0.647	0.519	0.493	0.741	0.409
	Median	0.437	0.350	0.489	0.361	0.387	0.602	0.414
	N	5162	855	465	434	35	496	137
Due to Changes in Risk Factors	Mean	-0.025	-0.014	0.040	-0.046	-0.104	-0.086	0.111
	Median	-0.010	-0.009	0.035	-0.023	-0.027	-0.060	0.116
	N	5170	904	455	441	41	491	140

<sup>1</sup>These tables represent the long-run distributions of Sharpe Ratios for all data collected by the Volcker Metrics group. The Sharpe Ratios are calculated using reported daily profit and loss data from each trading desk. The daily observations are aggregated to monthly observations and the Sharpe Ratio is defined as  $\bar{X}/\sigma_m$ . Given the diversity and different functions each trading desk performs, it is not possible to determine a 'risk-free' rate of return and we therefore do not include one in our calculations.