

Asset Services Sigma- Agent Performance Report

May 2018 Data



Executive Summary

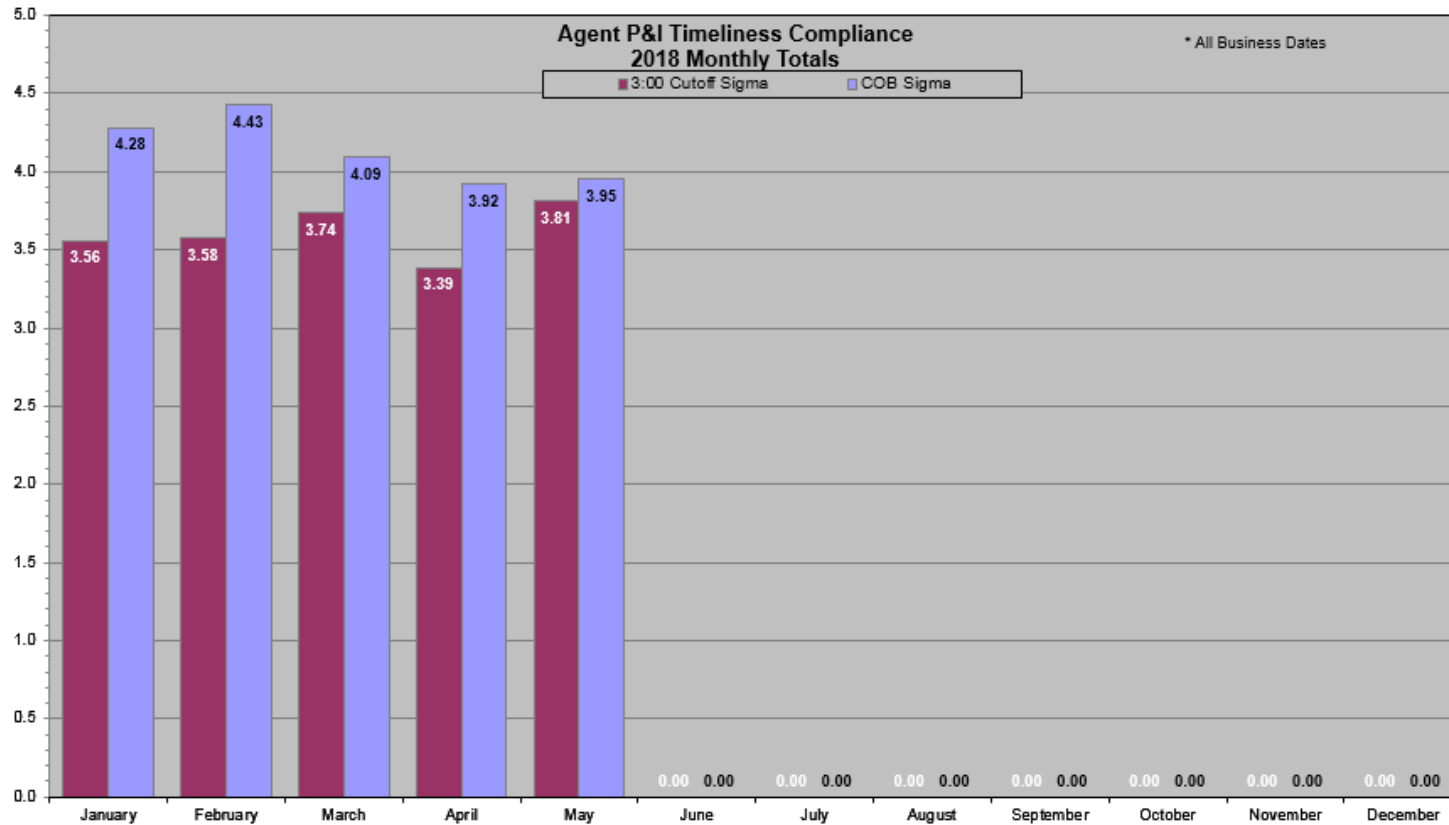
This report highlights the May 2018 performance of the top agents vs. industry targets. This report focuses on the following metrics:

Principal and Interest payment timeliness compliance - percentage of funds received from agents at cut-off (3:00pm ET) and at close of business (6:00pm ET), relative to the total dollars paid for the month. The Agent sigma performance for May 2018 was 3.81σ (98.96)%. This month's performance is above the target of 3.67σ (98.50%).

Principal and Interest allocations on payable date - percentage of allocated dollars and CUSIPS, relative to the total expected dollars and CUSIPs allocated. The Agent sigma performance for May 2018 was 3.95σ (99.29)%. This month's performance is above the target of 3.83σ (99.00%).

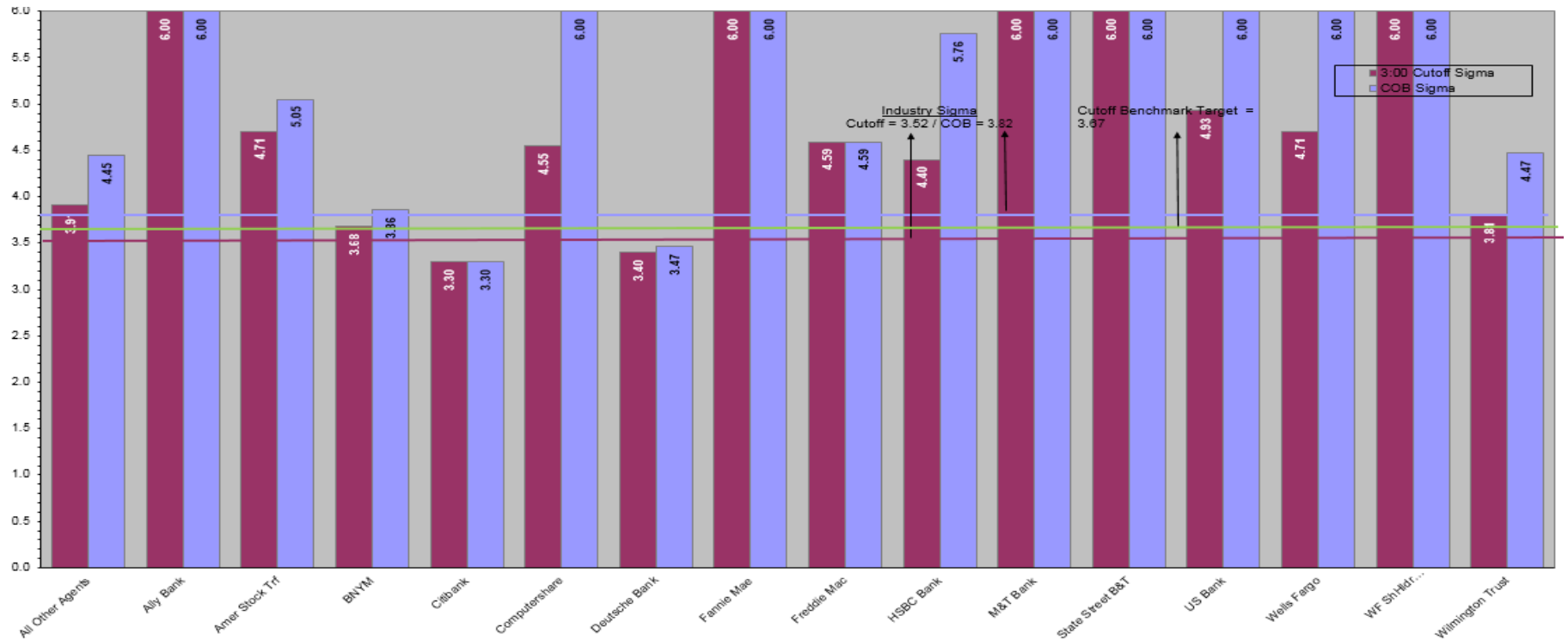
Please visit DTCC's web-site <http://dtcc.com/asset-services/asset-services-performance-metrics.aspx> for more detailed metric definitions and agent trend charts.

P&I Allocations Monthly Trend



	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Percent by 3:00 Cut-off	98.03%	98.12%	98.73%	97.05%	98.96%								98.18%
Cutoff Sigma	3.56	3.58	3.74	3.39	3.81								3.59
Percent by COB	99.73%	99.83%	99.52%	99.23%	99.29%								99.50%
COB Sigma	4.28	4.43	4.09	3.92	3.95								4.08

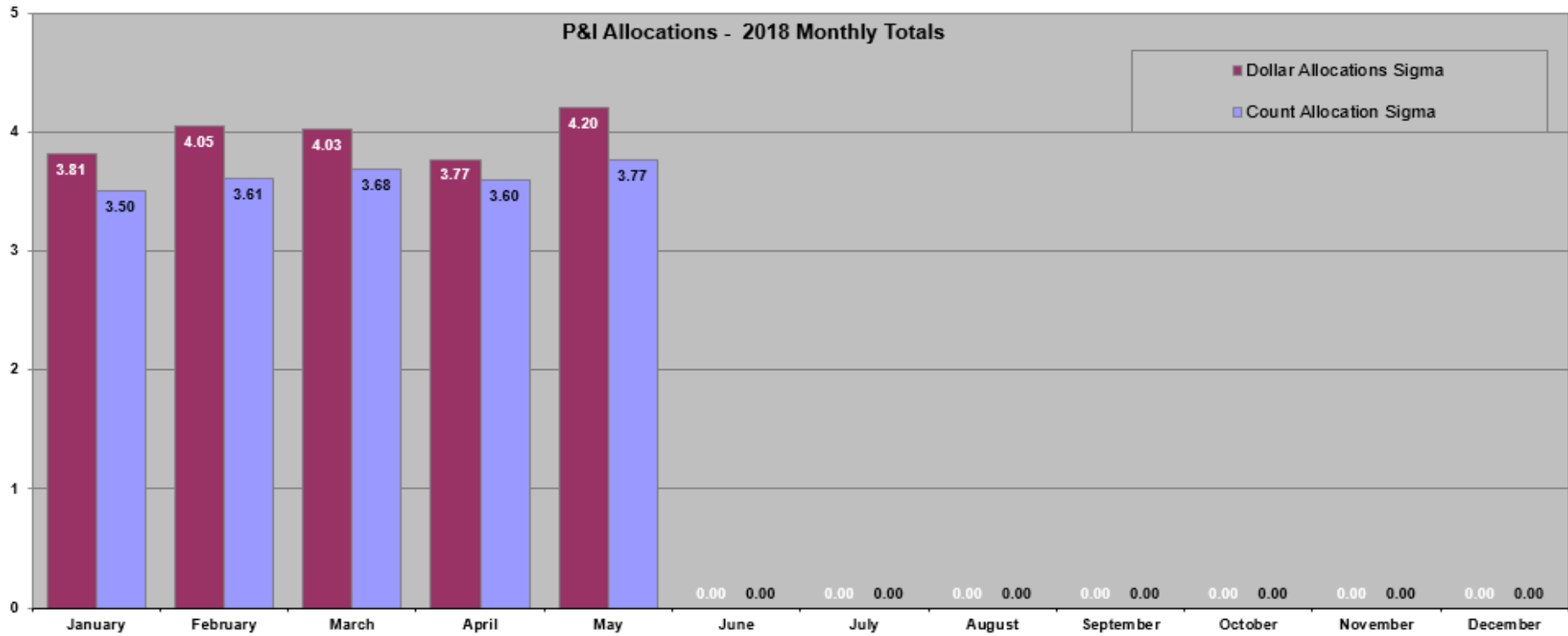
P&I Timeliness Compliance – Agent Performance



	All Other Agents	Ally Bank	Amer Stock Trf	BNYM	Citibank	Computershare	Deutsche Bank	Fannie Mae	Freddie Mac	HSBC Bank	M&T Bank	State Street B&T	US Bank	Wells Fargo	WF ShHldr Svc/Equiniti	Wilmington Trust
% of Total Allocations	12.79%	0.20%	1.82%	31.49%	6.55%	9.63%	6.65%	0.10%	0.63%	1.20%	0.00%	0.76%	15.44%	8.13%	2.06%	2.55%
Percent by 3:00 Cutoff	99.21%	100.00%	99.93%	98.53%	96.39%	99.89%	97.15%	100.00%	99.90%	99.81%	100.00%	100.00%	99.97%	99.93%	100.00%	98.95%
Cutoff Sigma	3.91	6.00	4.71	3.68	3.30	4.55	3.40	6.00	4.59	4.40	6.00	6.00	4.93	4.71	6.00	3.81
Variance from Industry Cutoff	0.10	2.19	0.90	-0.13	-0.51	0.74	-0.41	2.19	0.78	0.59	2.19	2.19	1.12	0.89	2.19	0.00
Percent by COB	99.84%	100.00%	99.98%	99.09%	96.39%	100.00%	97.53%	100.00%	99.90%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.85%
COB Sigma	4.45	6.00	5.05	3.86	3.30	6.00	3.47	6.00	4.59	5.76	6.00	6.00	6.00	6.00	6.00	4.47

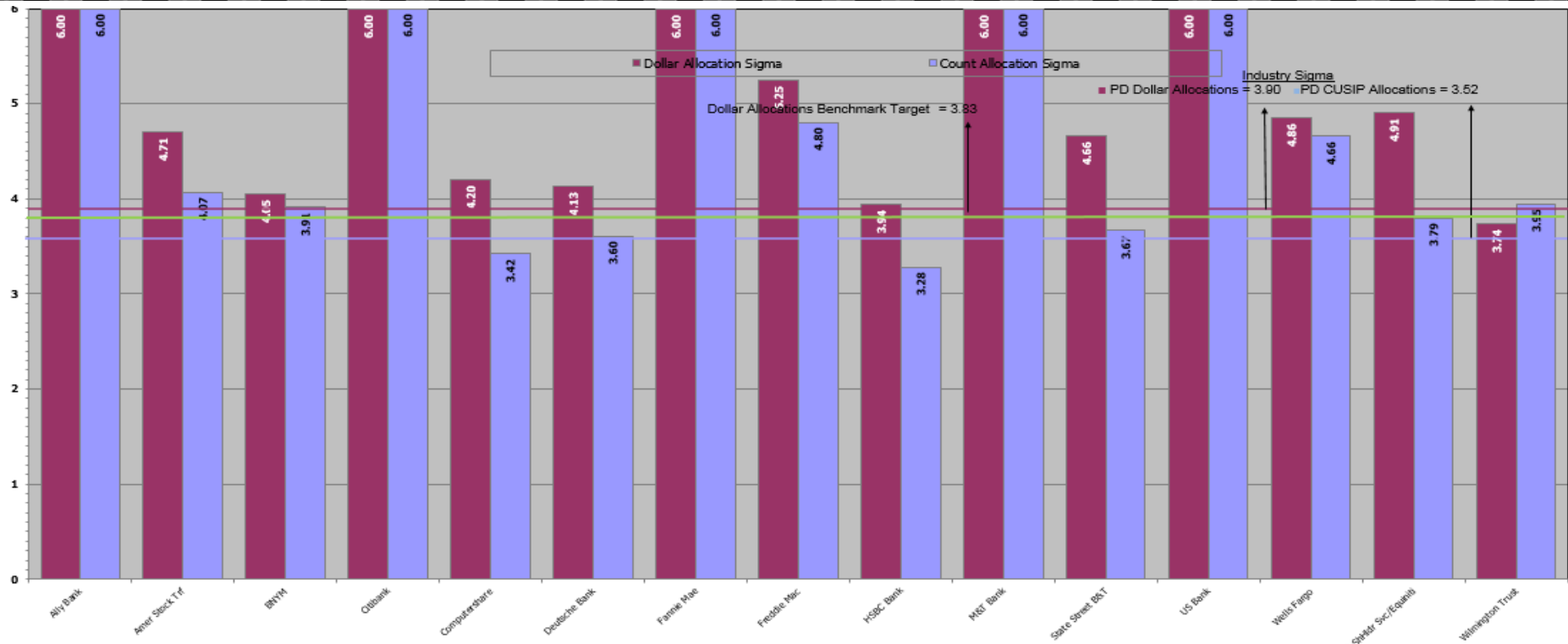
*Please note WF ShHldr Svc is now Equiniti

P&I Allocations Monthly Trend



	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Total Expected Allocations (Billions)	\$299.863	\$252.145	\$316.245	\$319.295	\$317.673								\$1505.220
Allocation \$ Percent	98.96%	99.47%	99.42%	98.84%	99.66%								99.26%
Allocation \$ Sigma	3.81	4.05	4.03	3.77	4.20								3.94
Unallocated Impact (Billions \$)	\$3.109	\$1.344	\$1.826	\$3.701	\$1.094								\$11.074
Total CUSIP Expected	282,008	370,197	305,287	267,999	270,969								1,496,460
CUSIP Allocations %	97.75%	98.27%	98.55%	98.22%	98.84%								98.32%
CUSIP Allocations Sigma	3.50	3.61	3.68	3.60	3.77								3.63
Unallocated Impact (Count)	6,344	6,422	4,416	4,781	3,156								25,119

P&I Allocations – Agent Performance



AGENT	All Other Agents	Ally Bank	Amer Stock Trf	BNYM	Citibank	Computer share	Deutsche Bank	Fannie Mae	Freddie Mac	HSBC Bank	M&T Bank	State Street B&T	US Bank	Wells Fargo	WF ShHldr Svc/Equiniti	Wilmington Trust
Total Expected / % of Industry	\$43.978 / 13.84%	\$0.642 / 0.20%	\$5.910 / 1.86%	\$99.020 / 31.17%	\$20.106 / 6.33%	\$31.131 / 9.80%	\$20.795 / 6.55%	\$0.315 / 0.10%	\$2.034 / 0.64%	\$1.117 / 0.35%	\$0.007 / 0.00%	\$2.398 / 0.75%	\$49.633 / 15.62%	\$25.859 / 8.14%	\$6.682 / 2.10%	\$8.046 / 2.53%
Allocation \$ Percent	99.44%	100.00%	99.93%	99.47%	100.00%	99.66%	99.58%	100.00%	99.99%	99.27%	100.00%	99.92%	100.00%	99.96%	99.97%	98.76%
Allocation \$ Sigma	4.04	6.00	4.71	4.05	6.00	4.20	4.13	6.00	5.25	3.94	6.00	4.66	6.00	4.86	4.91	3.74
Variance from Industry \$ Sigma	-0.16	1.80	0.50	-0.15	1.80	0.00	-0.07	1.80	1.04	-0.26	1.80	0.46	1.80	0.65	0.71	-0.46
CUSIP Allocations %	97.10%	100.00%	99.49%	99.20%	100.00%	97.26%	98.23%	100.00%	99.95%	96.25%	100.00%	98.49%	100.00%	99.92%	98.91%	99.28%
CUSIP Allocations Sigma	3.40	6.00	4.07	3.91	6.00	3.42	3.60	6.00	4.80	3.28	6.00	3.67	6.00	4.66	3.79	3.95
Variance from Industry CUSIP Sigma	-0.37	2.23	0.30	0.14	2.23	-0.35	-0.17	2.23	1.03	-0.49	2.23	-0.10	2.23	0.89	0.03	0.18

*Please note WF ShHldr Svc is now Equiniti