

Asset Services Sigma- Agent Performance Report

April 2018 Data



Executive Summary

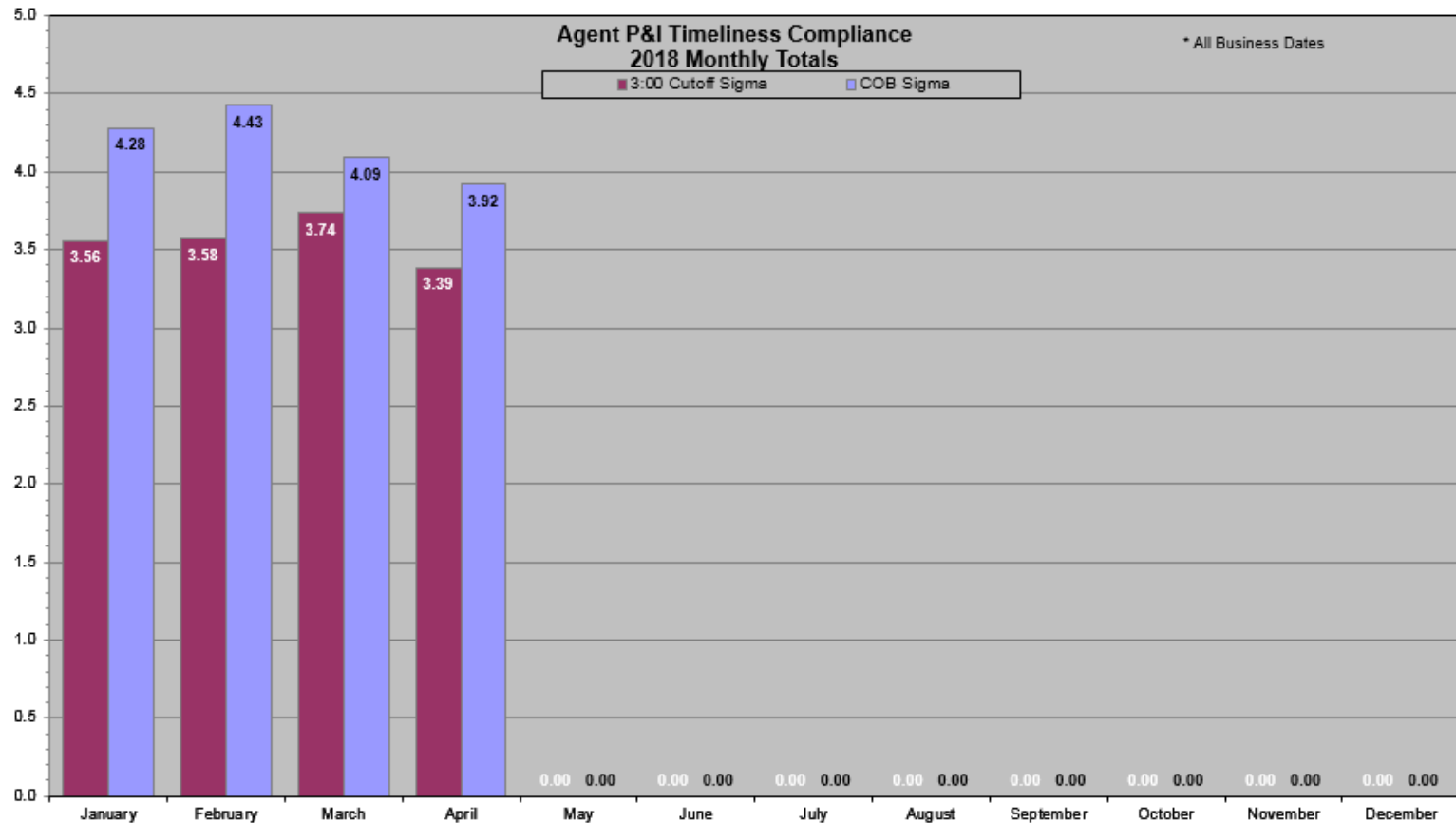
This report highlights the April 2018 performance of the top agents vs. industry targets. This report focuses on the following metrics:

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 April 2018 was 3.39σ (97.05%). This month's performance is below 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 April 2018 was 3.92σ (99.23%). This month's performance is above the target of 3.83σ (99.00%).

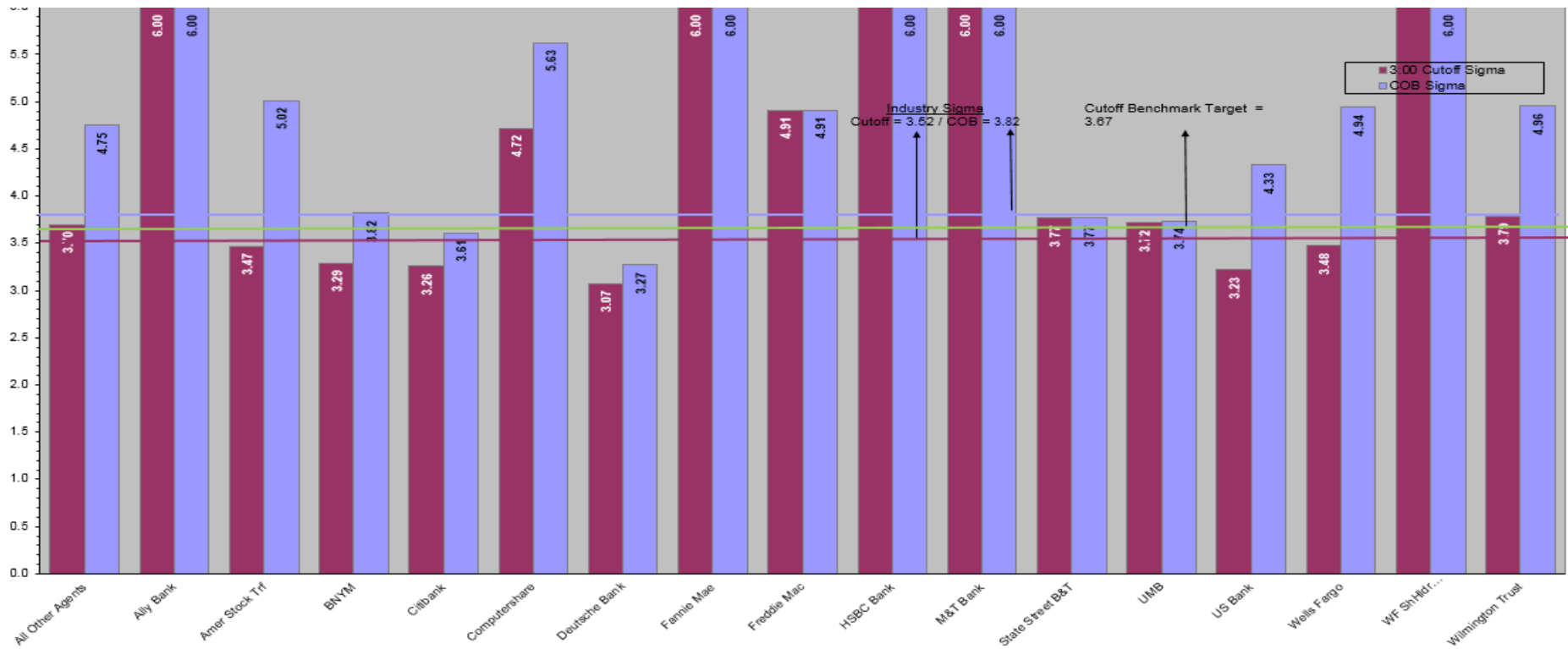
Please visit DTCC's web-site <http://dtcc.com/asset-services/asset-services-performance-metrics.aspx> for more detailed metric definitions and agent trend charts.

P&I Allocations Monthly Trend



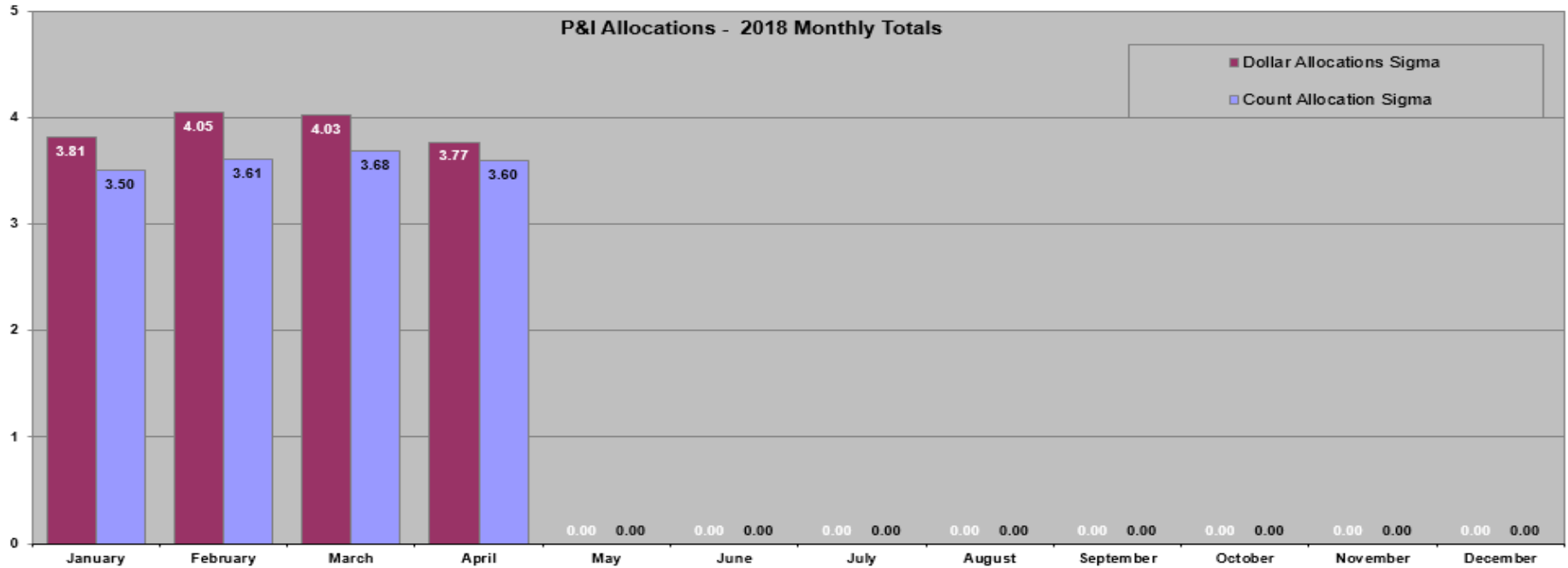
	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Percent by 3:00 Cut-off	98.03%	98.12%	98.73%	97.05%									97.97%
Cutoff Sigma	3.56	3.58	3.74	3.39									3.55
Percent by COB	99.73%	99.83%	99.52%	99.23%									99.56%
COB Sigma	4.28	4.43	4.09	3.92									4.12

P&I Timeliness Compliance – Agent Performance



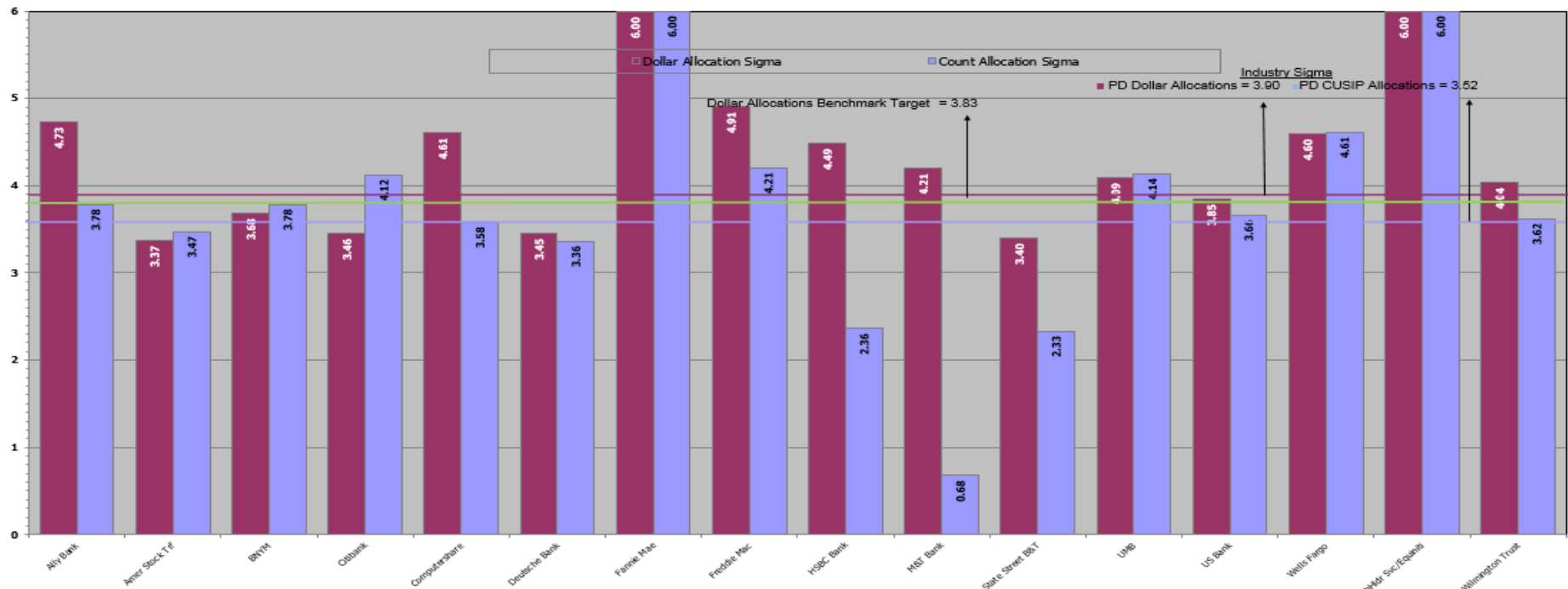
	All Other Agents	Ally Bank	Amer Stock Trf	BNYM	Citibank	Computershare	Deutsche Bank	Fannie Mae	Freddie Mac	HSBC Bank	M&T Bank	State Street B&T	US Bank	Wells Fargo	WF ShHldr Svc/Equiniti	Wilmington Trust
% of Total Allocations	10.91%	0.12%	1.49%	33.70%	5.60%	8.19%	7.15%	0.10%	0.80%	0.92%	0.01%	0.95%	14.17%	10.49%	2.99%	2.28%
Percent by 3:00 Cutoff	98.61%	100.00%	97.56%	96.34%	96.05%	99.94%	94.22%	100.00%	99.97%	100.00%	100.00%	98.84%	95.78%	97.59%	100.00%	98.90%
Cutoff Sigma	3.70	6.00	3.47	3.29	3.26	4.72	3.07	6.00	4.91	6.79	6.00	3.77	3.23	3.48	7.41	3.79
Variance from Industry Cutoff	0.31	2.61	0.08	-0.10	-0.13	1.33	-0.32	2.61	1.52	3.40	2.61	0.38	-0.16	0.09	4.02	0.40
Percent by COB	99.94%	100.00%	99.98%	98.99%	98.26%	100.00%	96.20%	100.00%	99.97%	100.00%	100.00%	98.84%	99.77%	99.97%	100.00%	99.97%
COB Sigma	4.75	6.00	5.02	3.82	3.61	5.63	3.27	6.00	4.91	6.00	6.00	3.77	4.33	4.94	6.00	4.96

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									\$1187.547
Allocation % Percent	98.96%	99.47%	99.42%	98.84%									99.16%
Allocation \$ Sigma	3.81	4.05	4.03	3.77									3.89
Unallocated Impact (Billions \$)	\$3.109	\$1.344	\$1.926	\$3.701									\$9.979
Total CUSIP Expected	282,008	370,197	305,287	267,999									1,225,491
CUSIP Allocations %	97.75%	98.27%	98.55%	98.22%									98.21%
CUSIP Allocations Sigma	3.50	3.61	3.68	3.60									3.60
Unallocated Impact (Count)	6,344	6,422	4,416	4,781									21,963

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	\$37.089 11.62%	\$0.399 0.13%	\$4.934 1.55%	\$105.967 33.19%	\$17.840 5.59%	\$27.105 8.49%	\$22.994 7.20%	\$0.339 0.11%	\$2.637 0.83%	\$2.529 0.79%	\$0.024 0.01%	\$2.851 0.89%	\$43.105 13.50%	\$33.958 10.64%	\$9.912 3.10%	\$7.371 2.31%
Allocation \$ Percent	99.01%	99.94%	96.95%	98.54%	97.48%	99.90%	97.45%	100.00%	99.97%	99.86%	99.66%	97.14%	99.05%	99.90%	100.00%	99.45%
Allocation \$ Sigma	3.83	4.73	3.37	3.68	3.46	4.61	3.45	6.00	4.91	4.49	4.21	3.40	3.85	4.60	6.00	4.04
Variance from Industry \$ Sigma	-0.67	0.96	-0.40	-0.09	-0.31	0.83	-0.32	2.23	1.14	0.72	0.43	-0.37	0.08	0.83	2.23	0.27
CUSIP Allocations %	96.80%	98.88%	97.58%	98.86%	99.56%	98.14%	96.85%	100.00%	99.66%	80.57%	20.59%	79.77%	98.45%	99.91%	100.00%	98.29%
CUSIP Allocations Sigma	3.35	3.78	3.47	3.78	4.12	3.58	3.36	6.00	4.21	2.36	0.68	2.33	3.66	4.61	6.00	3.62
Variance from Industry CUSIP Sigma	-0.14	0.18	-0.13	0.18	0.52	-0.02	-0.24	2.40	0.61	-1.24	-2.92	-1.27	0.06	1.01	2.40	0.02

*Please note WF ShHldr Svc is now Equiniti