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FINAL

Asset Services Sigma- Agent Performance Report

April 2019 Data

Executive Summary

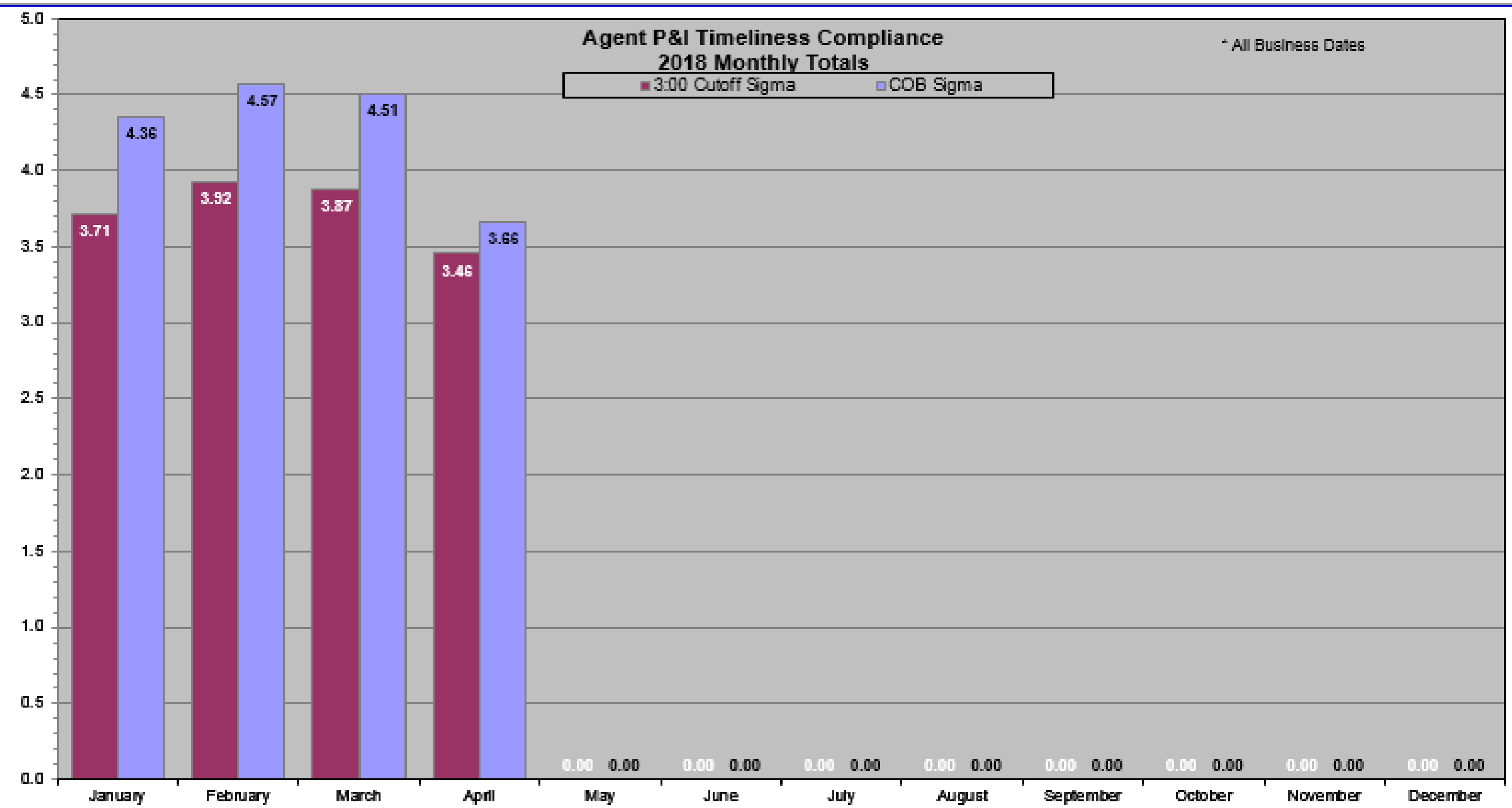
This report highlights the April 2019 performance of the top agents vs. industry targets. This report focuses on the following metrics:

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 2019 3.46σ 97.48%%. 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 2019 was 4.07σ 99.49%. This month's performance is above the target of 3.83σ (99.00%).

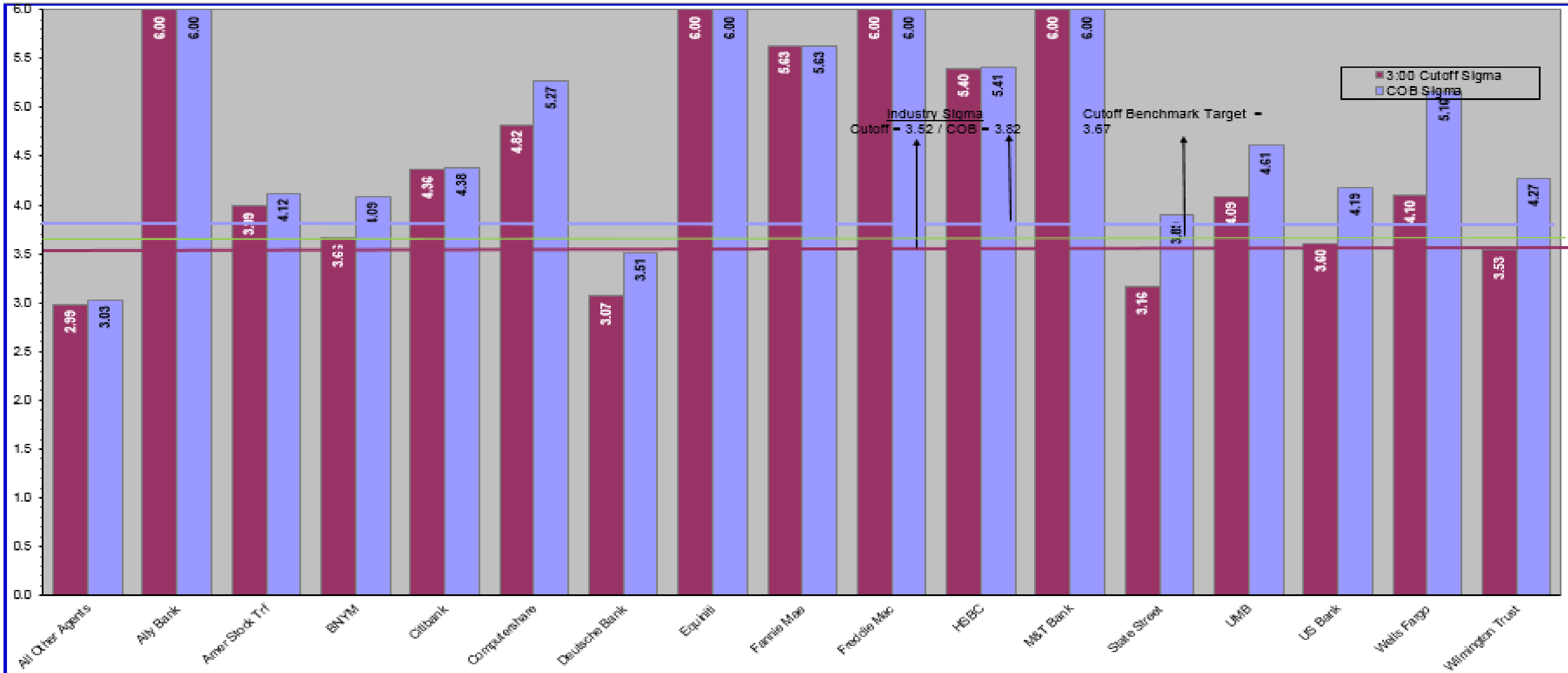
Please visit DTCC's web-site http://dtcc.com/asset-services/asset-services-performance-metrics.aspx for more detailed metric definitions and agent trend charts.

P&I Allocations Monthly Trend



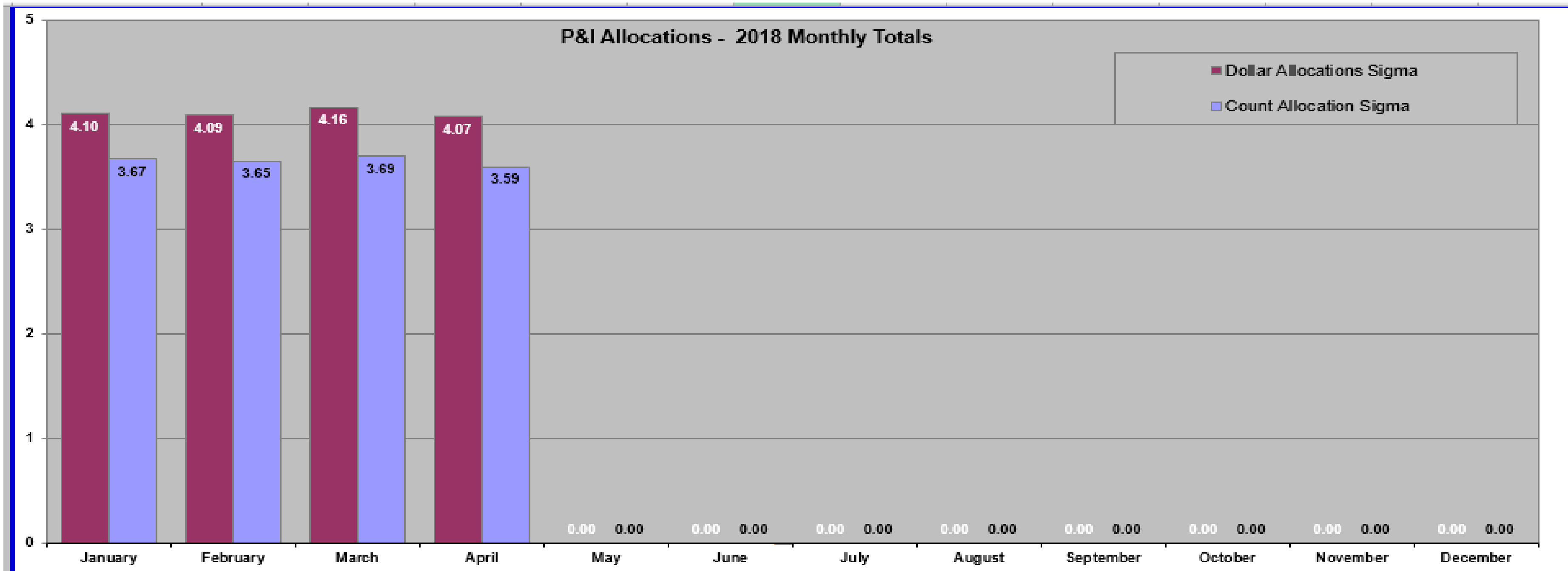
	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Percent by 3:00 Cut-off	98.65%	99.23%	99.12%	97.48%									98.63%
Cutoff Sigma	3.71	3.92	3.87	3.46									3.70
Percent by COB	99.79%	99.89%	99.87%	98.46%									99.51%
COB Sigma	4.36	4.57	4.51	3.66									4.08

P&I Timeliness Compliance – Agent Performance



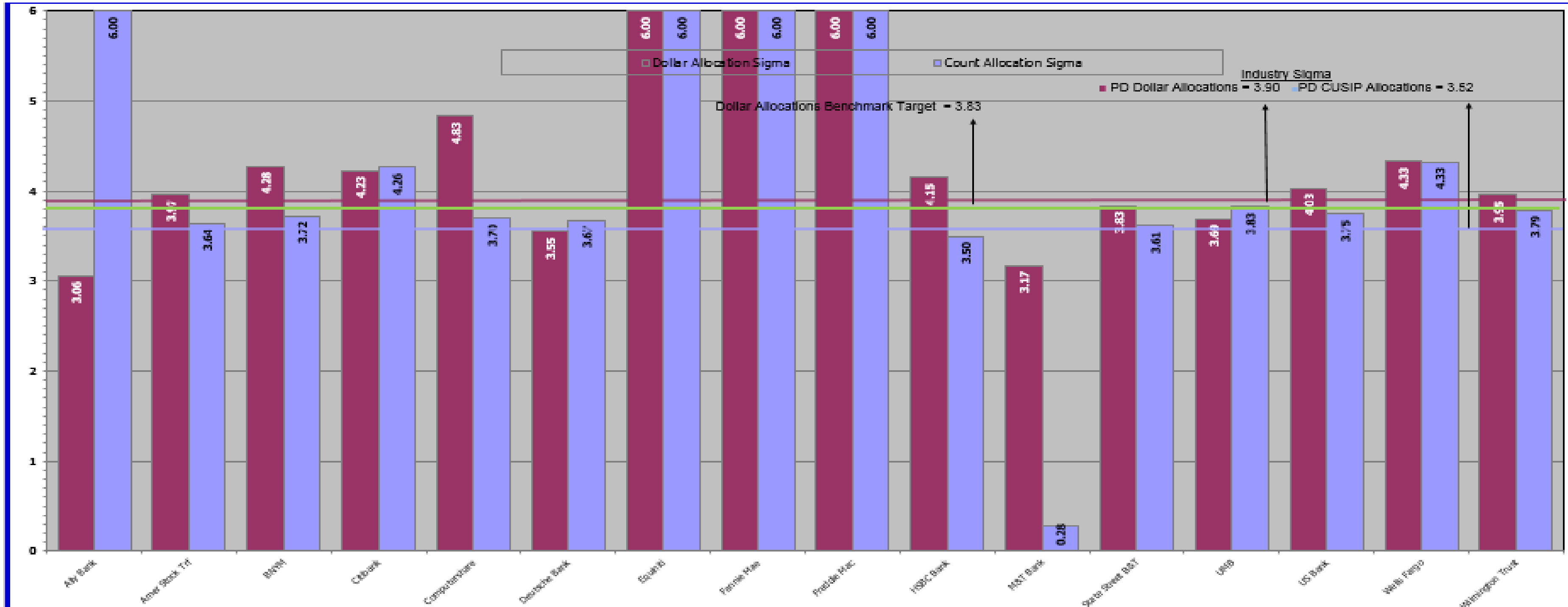
	All Other Agents	Ally Bank	Amer Stock Trf	BNYM	Citibank	Computer share	Deutsche Bank	Equiniti	Fannie Mae	Freddie Mac	HSBC	M&T Bank	State Street	US Bank	Wells Fargo	Wilmingt on Trust
% of Total Allocations	18.09%	0.37%	1.95%	27.48%	5.29%	8.05%	7.64%	3.29%	0.15%	1.15%	0.52%	0.00%	1.34%	12.99%	8.90%	2.39%
Percent by 3:00 Cut-off	93.13%	100.00%	99.35%	98.47%	99.79%	99.95%	94.18%	100.00%	100.00%	100.00%	100.00%	100.00%	95.20%	98.23%	99.54%	97.91%
Cutoff Sigma	2.99	6.00	3.99	3.66	4.36	4.82	3.07	6.00	5.63	6.00	5.40	6.00	3.16	3.60	4.10	3.53
Variance from Industry Cutoff Sigma	-0.47	2.54	0.53	0.21	0.91	1.36	-0.39	2.54	2.17	2.54	1.95	2.54	-0.29	0.15	0.65	0.08
Percent by COB	93.64%	100.00%	99.56%	99.53%	99.80%	99.99%	97.77%	100.00%	100.00%	100.00%	100.00%	100.00%	99.17%	99.64%	99.99%	99.72%
COB Sigma	3.03	6.00	4.12	4.09	4.38	5.27	3.51	6.00	5.63	6.00	5.41	6.00	3.89	4.19	5.16	4.27

P&I Allocations Monthly Trend



	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Total Expected Allocations (Billions)	$273.662	$258.606	$333.572	$281.044									$1146.885
Allocation $ Percent	99.54%	99.52%	99.61%	99.49%									99.54%
Allocation $ Sigma	4.10	4.09	4.16	4.07									4.11
Unallocated Impact (Billions $)	$1.272	$1.253	$1.296	$1.423									$5.244
Total CUSIP Expected	273,962	367,084	300,356	268,925									1,210,327
CUSIP Allocations %	98.49%	98.41%	98.58%	98.18%									98.42%
CUSIP Allocations Sigma	3.67	3.65	3.69	3.59									3.65
Unallocated Impact (Count)	4,131	5,853	4,255	4,885									19,124

P&I Allocations – Agent Performance



AGENT	All Other Agents	Ally Bank	Amer Stock Trf	BNYM	Citibank	Computer share	Deutsche Bank	Equiniti	Fannie Mae	Freddie Mac	HSBC Bank	M&T Bank	State Street B&T	US Bank	Wells Fargo	Wilmington Trust
Total Expected / % of Industry	$51.393	$1.150	$5.632	$78.664	$14.397	$23.224	$21.227	$9.504	$0.445	$3.311	$0.585	$0.002	$3.605	$35.355	$25.476	$6.710
	18.28%	0.41%	2.00%	27.98%	5.12%	8.26%	7.55%	3.38%	0.16%	1.18%	0.21%	0.00%	1.28%	12.58%	9.06%	2.39%
Allocation $ Percent	99.35%	94.06%	99.32%	99.73%	99.68%	99.96%	98.00%	100.00%	100.00%	100.00%	99.60%	95.30%	99.02%	99.43%	99.77%	99.30%
Allocation $ Sigma	3.98	3.06	3.97	4.28	4.23	4.83	3.55	6.00	6.00	6.00	4.15	3.17	3.83	4.03	4.33	3.95
Variance from Industry $ Sigma	-0.07	-1.00	-0.09	0.22	0.17	0.78	-0.50	1.94	1.94	1.94	0.10	-0.88	-0.22	-0.02	0.27	-0.10
CUSIP Allocations %	96.08%	100.00%	98.38%	98.67%	99.71%	98.59%	98.51%	100.00%	100.00%	100.00%	97.71%	11.11%	98.28%	98.77%	99.76%	98.89%
CUSIP Allocations Sigma	3.26	6.00	3.64	3.72	4.26	3.70	3.67	6.00	6.00	6.00	3.50	0.28	3.61	3.75	4.33	3.79
Variance from Industry CUSIP Sigma	-0.33	2.41	0.05	0.12	0.67	0.10	0.08	2.41	2.41	2.41	-0.10	-3.31	0.02	0.15	0.73	0.19