



ASSET SERVICES SIGMA- AGENT PERFORMANCE REPORT

July 2022

Executive Summary

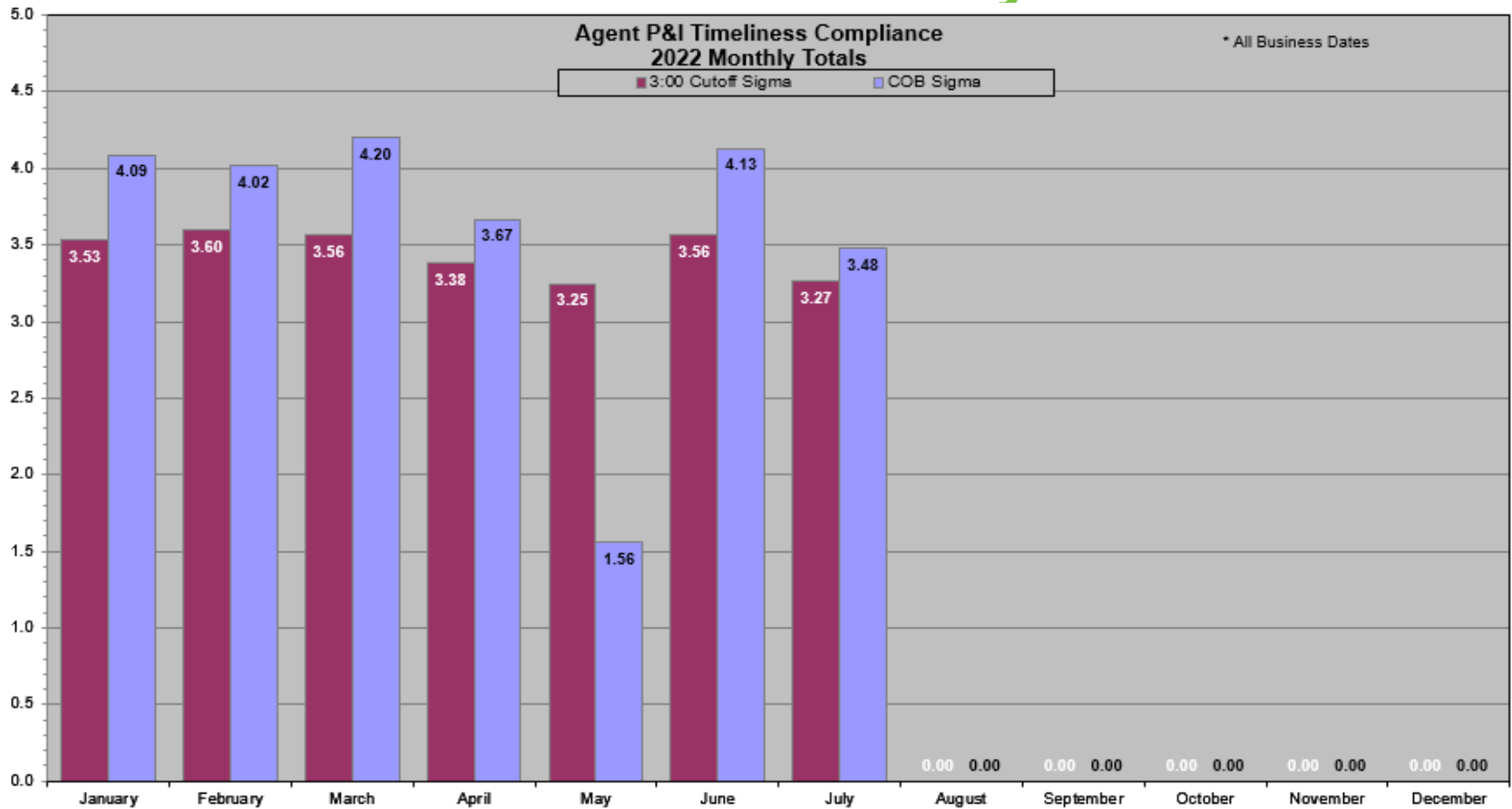
This report highlights the July 2022 performance of the top agents vs. industry targets. This report focuses on the following metrics:

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 July 2022 was 3.27σ (96.14%). 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 July 2022 was 3.50σ (97.70)%. This month's performance is below the target of 3.83σ (99.00)%.

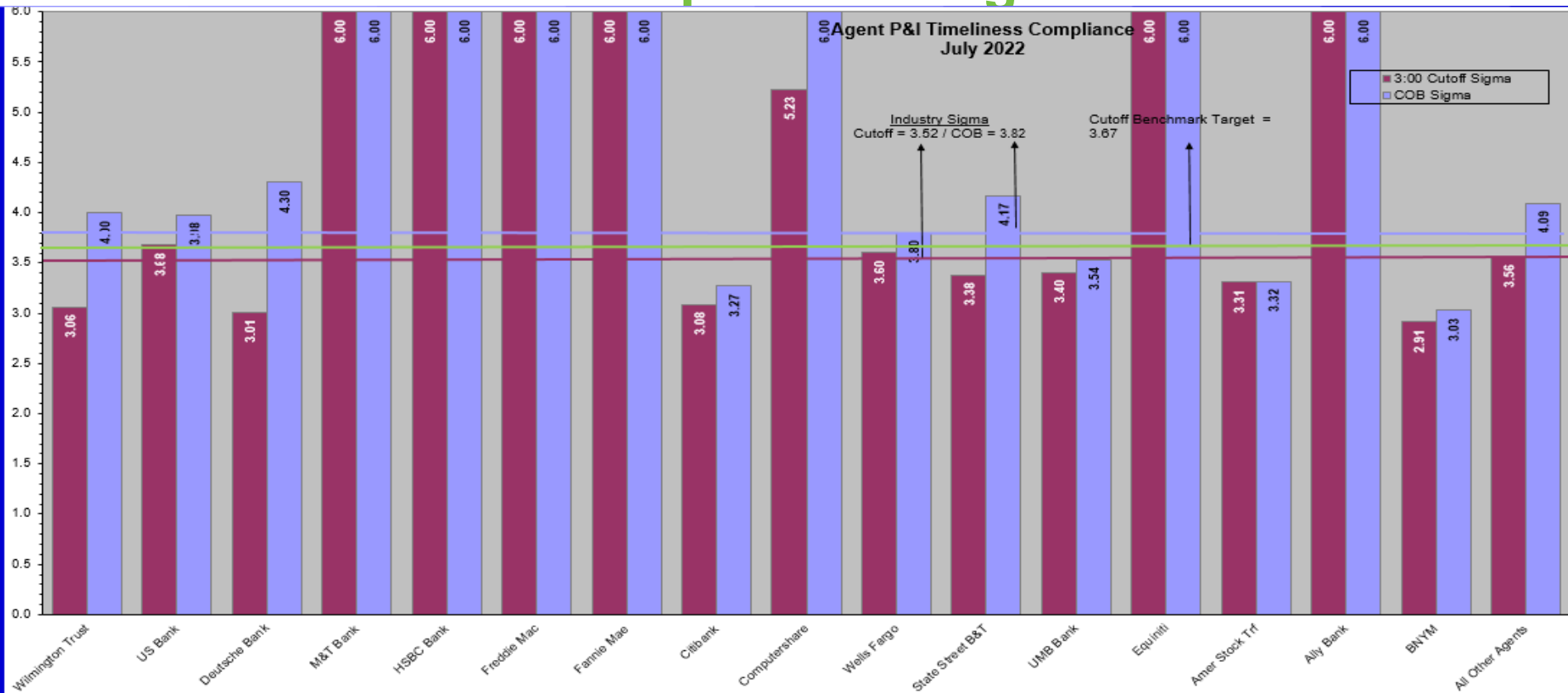
Please visit DTCC's web-site <http://dtcc.com/asset-services/asset-services-performance-metrics.aspx> for more detailed metric definitions and agent trend charts.

P&I Allocations Monthly Trend



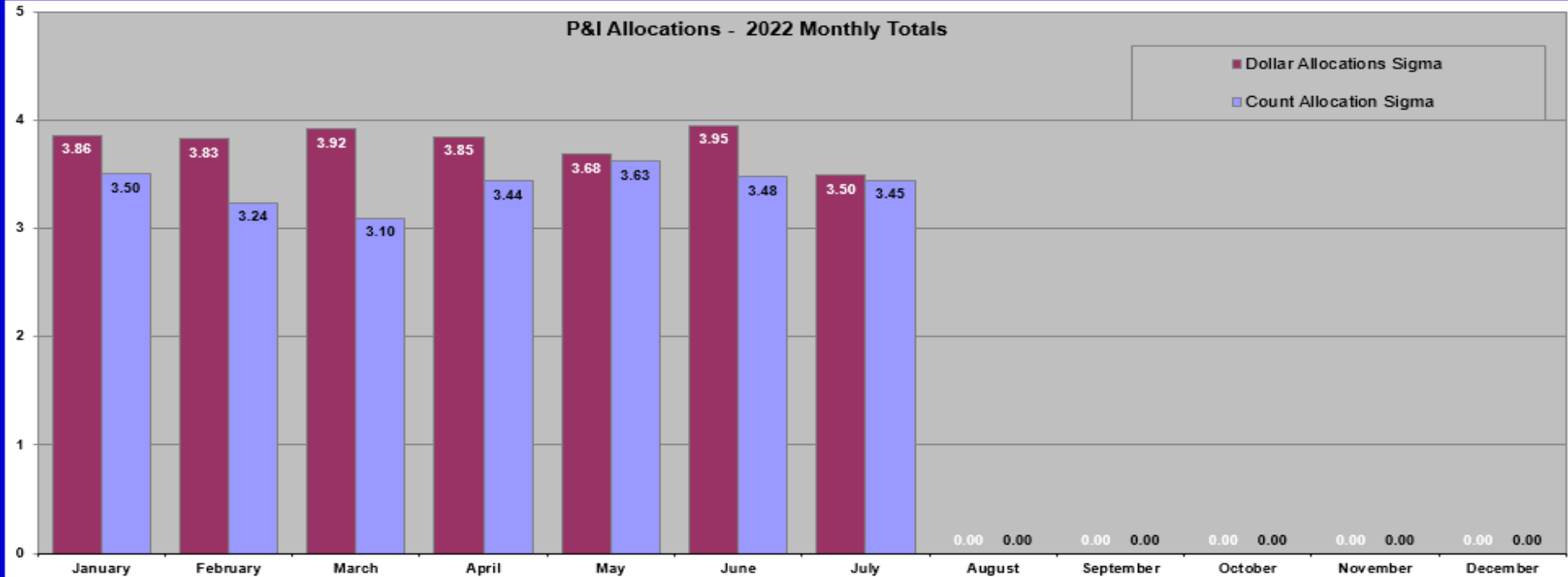
	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Percent by 3:00 Cut-off	97.89%	98.19%	98.04%	97.02%	95.98%	98.04%	96.14%						97.37%
Cutoff Sigma	3.53	3.60	3.56	3.38	3.25	3.56	3.27						3.44
Percent by COB	99.52%	99.42%	99.65%	98.49%	52.29%	99.57%	97.61%						92.41%
COB Sigma	4.09	4.02	4.20	3.67	1.56	4.13	3.48						2.93

P&I Timeliness Compliance – Agent Performance



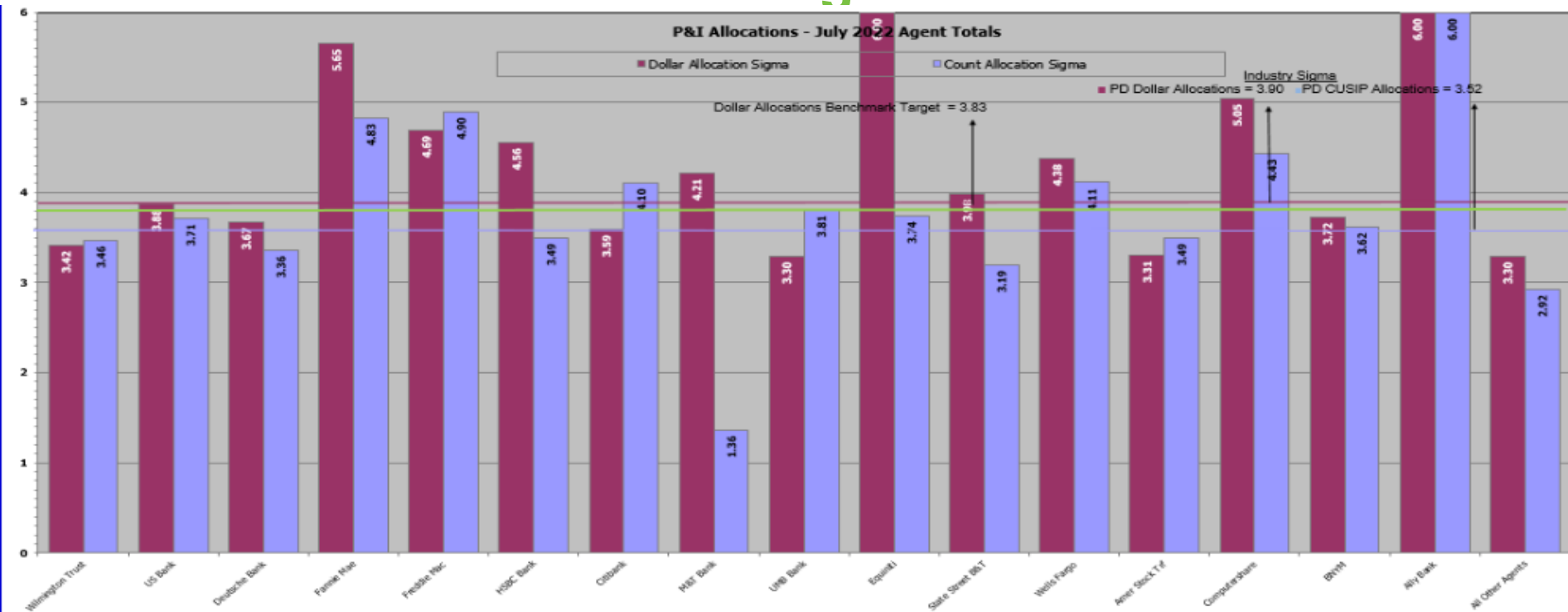
	Wilmington Trust	US Bank	Deutsche Bank	M&T Bank	HSBC Bank	Freddie Mac	Fannie Mae	Citibank	Computershare	Wells Fargo	State Street B&T	Equiniti	Amer Stock Trf	Ally Bank	BNYM	All Other Agents
% of Total Allocations	4.24%	20.29%	4.69%	0.00%	0.69%	1.44%	0.08%	7.36%	8.07%	9.60%	1.69%	3.47%	1.99%	0.08%	26.80%	8.87%
Percent by 3:00 Cutoff	94.10%	98.53%	93.49%	100.00%	100.00%	100.00%	100.00%	94.33%	99.99%	98.22%	96.97%	100.00%	96.49%	100.00%	92.14%	98.03%
Cutoff Sigma	3.06	3.68	3.01	6.00	6.00	6.00	6.00	3.08	5.23	3.60	3.38	6.00	3.31	6.00	2.91	3.56
Variance from Industry Cutoff	-0.20	0.41	-0.25	2.73	2.73	2.73	2.73	-0.18	1.96	0.34	0.11	2.73	0.04	2.73	-0.35	0.29
Percent by COB	99.37%	99.34%	99.75%	100.00%	100.00%	100.00%	100.00%	96.17%	100.00%	98.93%	99.62%	100.00%	96.54%	100.00%	93.66%	99.52%
COB Sigma	4.00	3.98	4.30	6.00	6.00	6.00	6.00	3.27	6.00	3.80	4.17	6.00	3.32	6.00	3.03	4.09

P&I Allocations Monthly Trend



	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Total Expected Allocations (Billions)	\$323.177	\$297.874	\$355.959	\$280.752	\$320.382	\$371.917	\$165.222						\$2115.282
Allocation % Percent	99.09%	99.00%	99.22%	99.06%	98.55%	99.29%	97.70%						98.94%
Allocation \$ Sigma	3.86	3.83	3.92	3.85	3.68	3.95	3.50						3.80
Unallocated Impact (Billions \$)	\$2.929	\$2.982	\$2.764	\$2.648	\$4.659	\$2.647	\$3.795						\$22.424
Total CUSIP Expected	278,521	378,196	314,798	268,591	270,832	357,034	281,107						2,149,079
CUSIP Allocations %	97.73%	95.90%	94.50%	97.39%	98.32%	97.61%	97.42%						96.91%
CUSIP Allocations Sigma	3.50	3.24	3.10	3.44	3.63	3.48	3.45						3.37
Unallocated Impact (Count)	6,315	15,514	17,313	6,999	4,539	8,548	7,252						66,480

P&I Allocations – Agent Performance



AGENT	Wilmington Trust	US Bank	Deutsche Bank	Fannie Mae	Freddie Mac	HSBC Bank	Citibank	M&T Bank	Equiniti	State Street B&T	Wells Fargo	Amer Stock Trf	Computer share	BNYM	Allly Bank	All Other Agents
Total Expected \$ of Industry	\$12.052	\$59.063	\$13.691	\$0.243	\$4.020	\$0.166	\$19.999	\$0.014	\$10.405	\$4.975	\$27.459	\$5.943	\$24.071	\$73.298	\$0.251	\$29.145
% of Industry	4.21%	20.64%	4.78%	0.08%	1.40%	0.06%	6.99%	0.01%	3.64%	1.74%	9.59%	2.08%	8.41%	25.61%	0.09%	10.18%
Allocation %	97.24%	99.13%	98.49%	100.00%	99.93%	99.89%	98.15%	99.67%	100.00%	99.35%	99.80%	96.46%	99.98%	98.69%	100.00%	96.39%
Allocation \$ Sigma	3.42	3.88	3.67	5.65	4.69	4.56	3.59	4.21	6.00	3.98	4.38	3.31	5.05	3.72	6.00	3.30
Variance from Industry \$ Sigma	-0.30	0.16	-0.05	1.93	0.97	0.84	-0.13	0.50	2.28	0.26	0.66	-0.41	1.33	0.00	2.28	-0.42
CUSIP Allocations %	97.53%	98.65%	96.84%	99.96%	99.97%	97.67%	99.54%	44.44%	98.74%	95.46%	99.55%	97.69%	99.83%	98.31%	100.00%	92.21%
Allocations \$ Sigma	3.46	3.71	3.36	4.83	4.90	3.49	4.10	1.36	3.74	3.19	4.11	3.49	4.43	3.62	6.00	2.92
Variance from Industry CUSIP Sigma	0.02	0.26	-0.09	1.38	1.45	0.04	0.65	-2.09	0.29	-0.26	0.67	0.05	0.98	0.18	2.55	-0.53