ASSET SERVICES SIGMA- AGENT PERFORMANCE REPORT

December 2023

Executive Summary

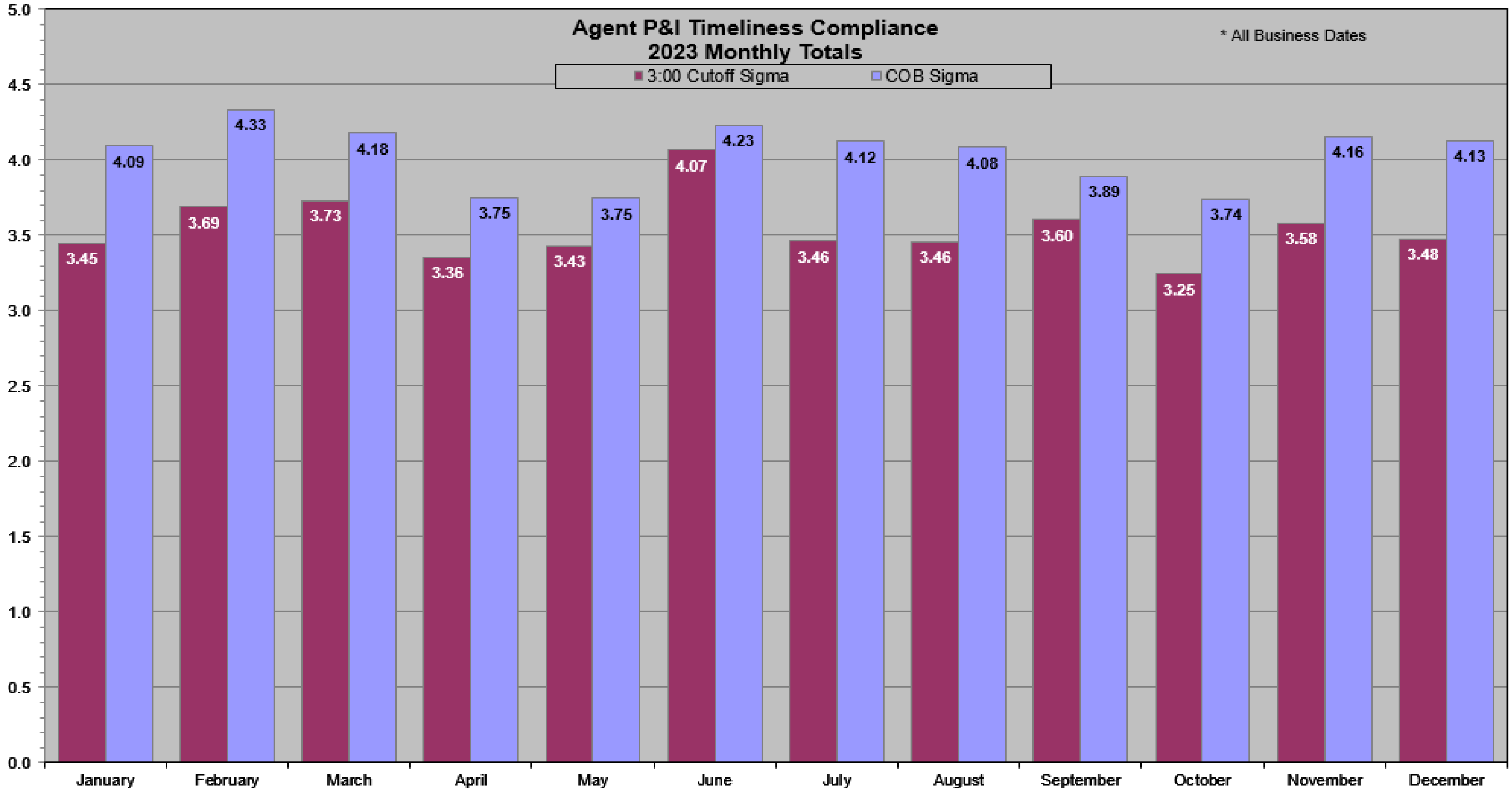
This report highlights the December 2023 performance of the top agents vs. industry targets. This report focuses on the following metrics:

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 December 2023 was 3.48σ (97.61)%. 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 December 2023 was 3.66σ (98.47)%. This month's performance is below the target of 3.83σ (99.00%).

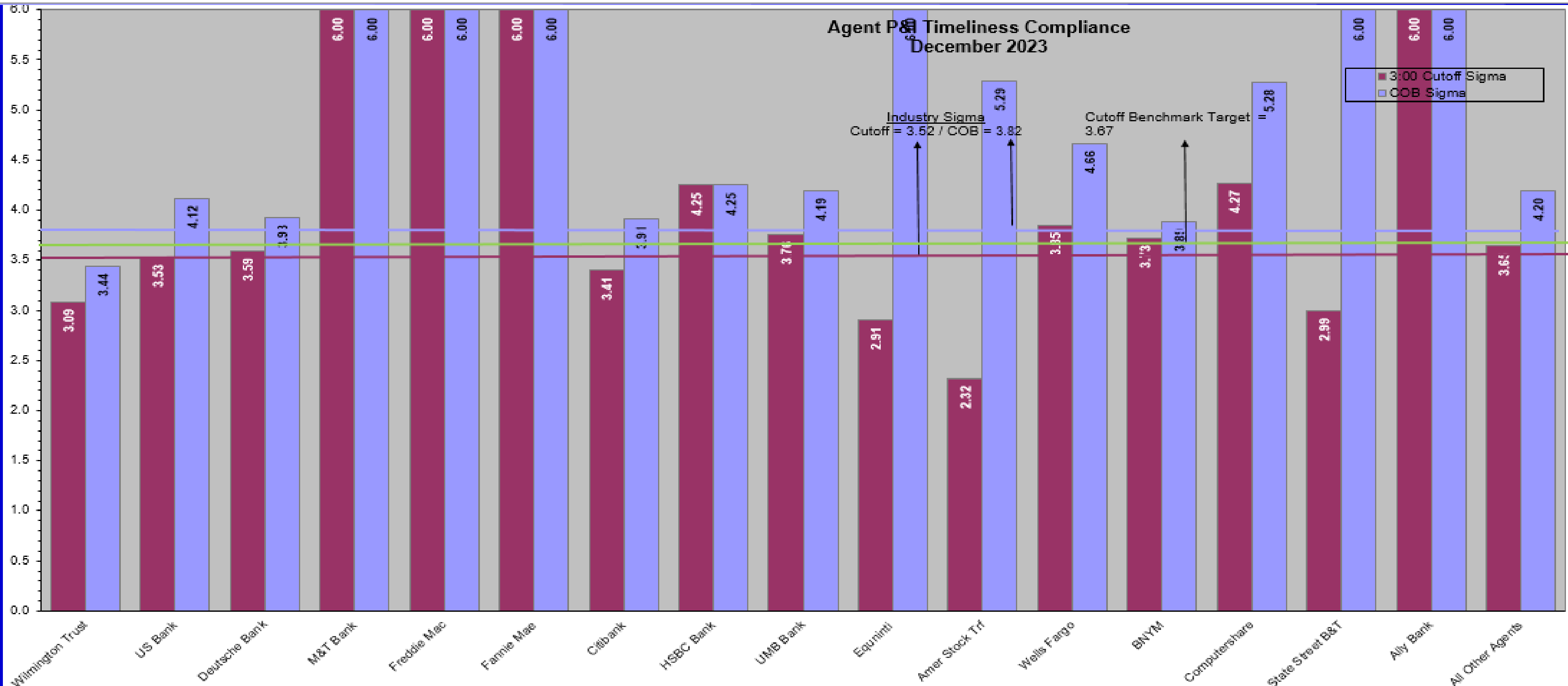
Please visit DTCC's web-site http://dtcc.com/asset-services/asset-services-performance-metrics.aspx for more detailed metric definitions and agent trend charts.

P&I Allocations Monthly Trend



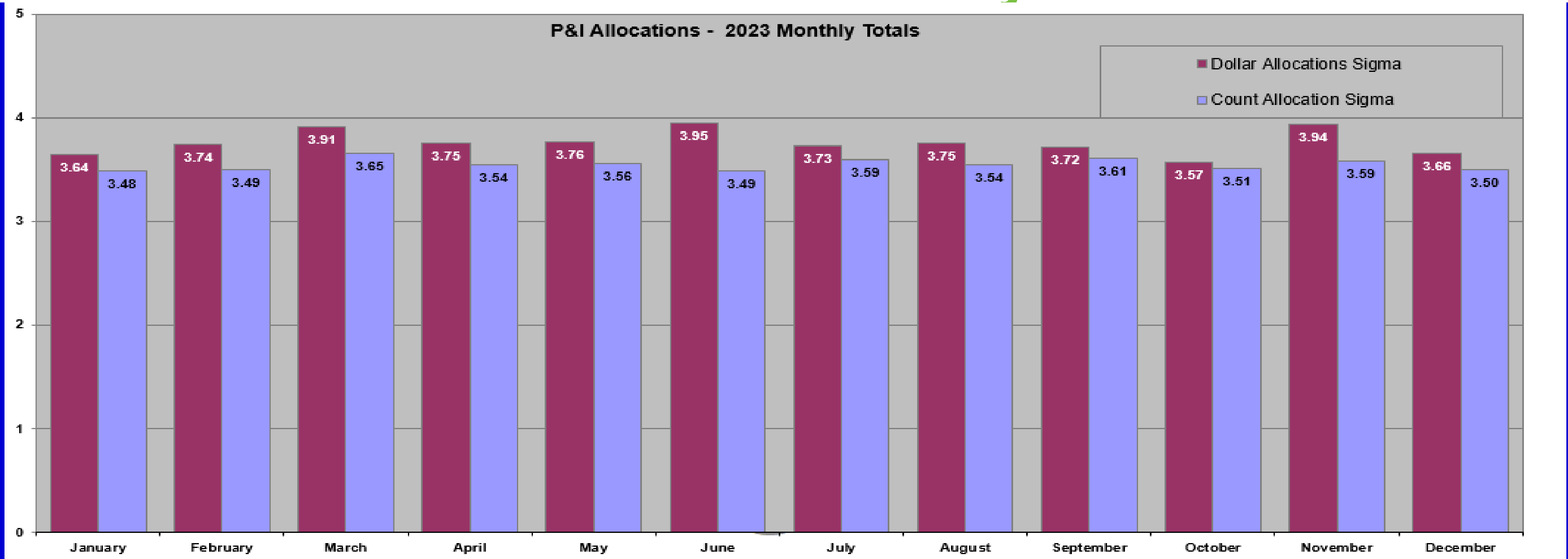
	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Percent by 3:00 Cut-off	97.42%	98.58%	98.72%	96.83%	97.31%	99.49%	97.53%	97.49%	98.23%	95.97%	98.12%	97.61%	97.80%
Cutoff Sigma	3.45	3.69	3.73	3.36	3.43	4.07	3.46	3.46	3.60	3.25	3.58	3.48	3.51
Percent by COB	99.53%	99.77%	99.63%	98.77%	98.77%	99.69%	99.57%	99.51%	99.16%	98.74%	99.60%	99.57%	99.36%
COB Sigma	4.09	4.33	4.18	3.75	3.75	4.23	4.12	4.08	3.89	3.74	4.16	4.13	3.99

P&I Timeliness Compliance – Agent Performance



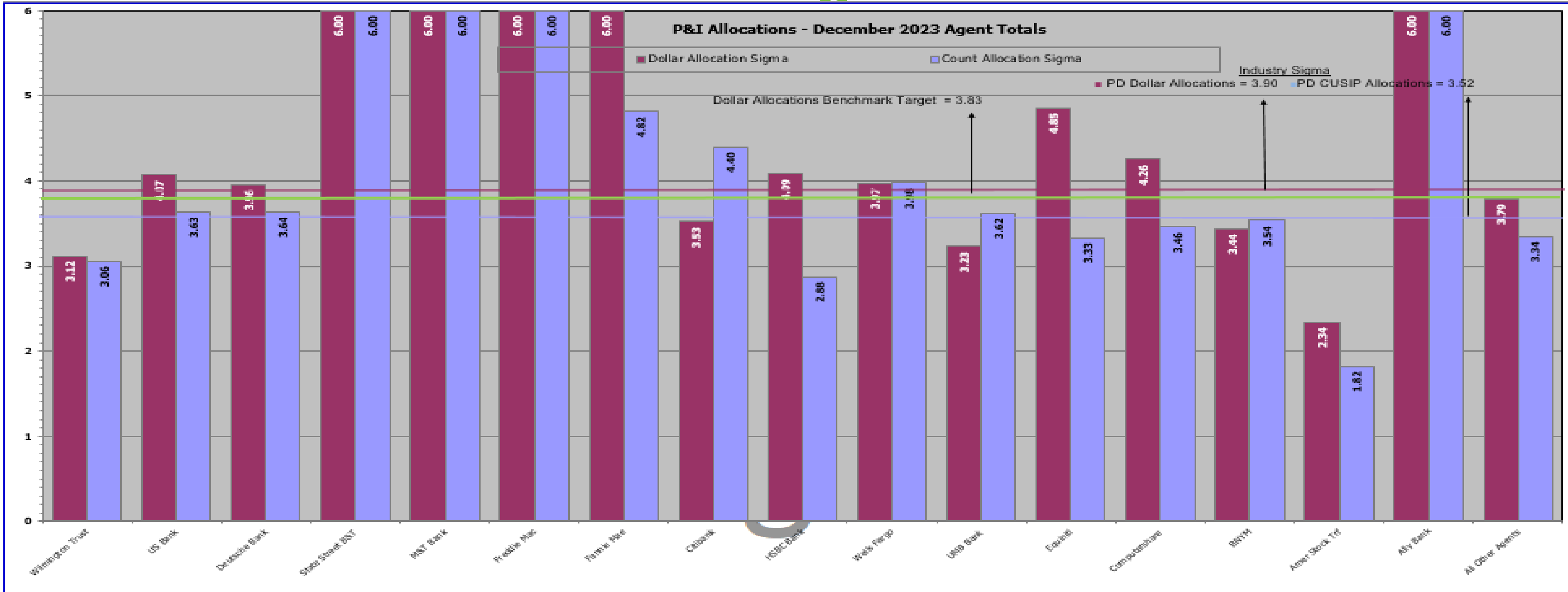
	Wilmington Trust	US Bank	Deutsche Bank	M&T Bank	Freddie Mac	Fannie Mae	Citibank	HSBC Bank	Equninti	Amer Stock Trf	Wells Fargo	BNYM	Computershare	State Street B&T	Ally Bank	All Other Agents
% of Total Allocations	2.59%	10.49%	2.87%	0.00%	0.84%	0.04%	4.36%	0.13%	3.68%	1.70%	4.89%	19.71%	15.99%	6.71%	0.52%	24.58%
Percent by 3:00 Cut-off	94.35%	97.88%	98.18%	100.00%	100.00%	100.00%	97.19%	99.70%	92.03%	79.35%	99.06%	98.70%	99.72%	93.21%	100.00%	98.42%
Cutoff Sigma	3.09	3.53	3.59	6.00	6.00	6.00	3.41	4.25	2.91	2.32	3.85	3.73	4.27	2.99	6.00	3.65
Variance from Industry Cutoff	-0.39	0.05	0.11	2.52	2.52	2.52	-0.07	0.77	-0.57	-1.16	0.37	0.25	0.79	-0.49	2.52	0.17
Percent by COB	97.41%	99.56%	99.24%	100.00%	100.00%	100.00%	99.21%	99.70%	100.00%	99.99%	99.92%	99.15%	99.99%	100.00%	100.00%	99.65%
COB Sigma	3.44	4.12	3.93	6.00	6.00	6.00	3.91	4.25	6.00	5.29	4.66	3.89	5.28	6.00	6.00	4.20

P&I Allocations Monthly Trend



	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Total Expected Allocations (Billions)	$310.070	$279.829	$401.819	$305.027	$346.512	$402.100	$345.064	$312.277	$407.756	$362.136	$327.171	$421.596	$4221.356
Allocation $ Percent	98.39%	98.76%	99.20%	98.77%	98.82%	99.28%	98.70%	98.79%	98.68%	98.05%	99.26%	98.46%	98.77%
Allocation $ Sigma	3.64	3.74	3.91	3.75	3.76	3.95	3.73	3.75	3.72	3.57	3.94	3.66	3.75
Unallocated Impact (Billions $)	$5.001	$3.467	$3.201	$3.753	$4.104	$2.907	$4.500	$3.781	$5.391	$7.046	$2.433	$6.484	$52.069
Total CUSIP Expected	279,519	373,853	314,277	266,090	270,002	351,000	285,362	380,207	315,114	276,873	267,093	347,810	3,727,200
CUSIP Allocations %	97.60%	97.68%	98.44%	97.93%	98.02%	97.66%	98.16%	97.93%	98.25%	97.76%	98.15%	97.73%	97.93%
CUSIP Allocations Sigma	3.48	3.49	3.65	3.54	3.56	3.49	3.59	3.54	3.61	3.51	3.59	3.50	3.54
Unallocated Impact (Count)	6,698	8,669	4,898	5,507	5,349	8,226	5,238	7,874	5,520	6,192	4,950	7,901	77,022

P&I Allocations – Agent Performance



AGENT	Wilmington Trust	US Bank	Deutsche Bank	State Street B&T	M&T Bank	Freddie Mac	Fannie Mae	Citibank	HSBC Bank	Wells Fargo	Equiniti	Computershare	BNYM	Amer Stock Trf	Ally Bank	All Other Agents
Total Expected / % of Industry	$10.381	$43.475	$12.098	$28.348	$0.001	$3.579	$0.153	$18.305	$0.465	$20.698	$16.454	$68.343	$81.747	$7.261	$2.668	$105.307
	2.46%	10.31%	2.87%	6.72%	0.00%	0.85%	0.04%	4.34%	0.11%	4.91%	3.90%	16.21%	19.39%	1.72%	0.63%	24.98%
Allocation $ Percent	94.74%	99.49%	99.30%	100.00%	100.00%	100.00%	100.00%	97.86%	99.52%	99.33%	99.96%	99.71%	97.38%	80.08%	100.00%	98.90%
Allocation $ Sigma	3.12	4.07	3.96	6.00	6.00	6.00	6.00	3.53	4.09	3.97	4.85	4.26	3.44	2.34	6.00	3.79
Variance from Industry $ Sigma	-0.54	0.41	0.30	2.34	2.34	2.34	2.34	-0.14	0.42	0.31	1.19	0.59	-0.22	-1.32	2.34	0.13
CUSIP Allocations %	94.05%	98.36%	98.37%	100.00%	100.00%	100.00%	99.95%	99.81%	91.57%	99.34%	96.65%	97.51%	97.92%	62.64%	100.00%	96.74%
CUSIP Allocations Sigma	3.06	3.63	3.64	6.00	6.00	6.00	4.82	4.40	2.88	3.98	3.33	3.46	3.54	1.82	6.00	3.34
Variance from Industry CUSIP Sigma	-0.45	0.13	0.13	2.49	2.49	2.49	1.31	0.89	-0.63	0.47	-0.18	-0.05	0.03	-1.69	2.49	-0.16