



ASSET SERVICES SIGMA- AGENT PERFORMANCE REPORT

October 2023

Executive Summary

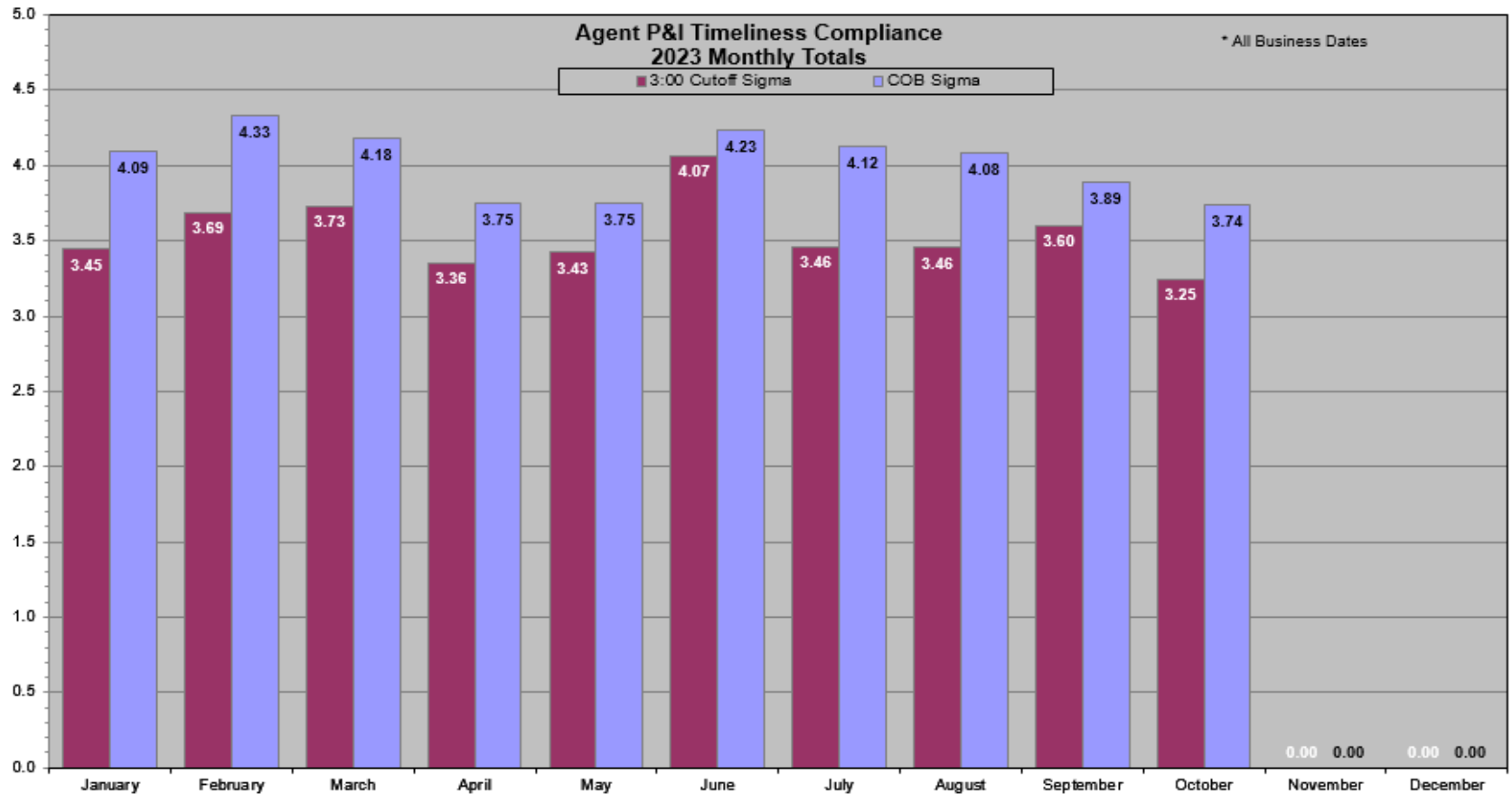
This report highlights the October 2023 performance of the top agents vs. industry targets. This report focuses on the following metrics:

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 October 2023 was 3.25σ (95.97)%. 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 (MONTH YEAR) was 3.57σ (98.05)%. This month's performance is below the target of 3.83σ (99.00%).

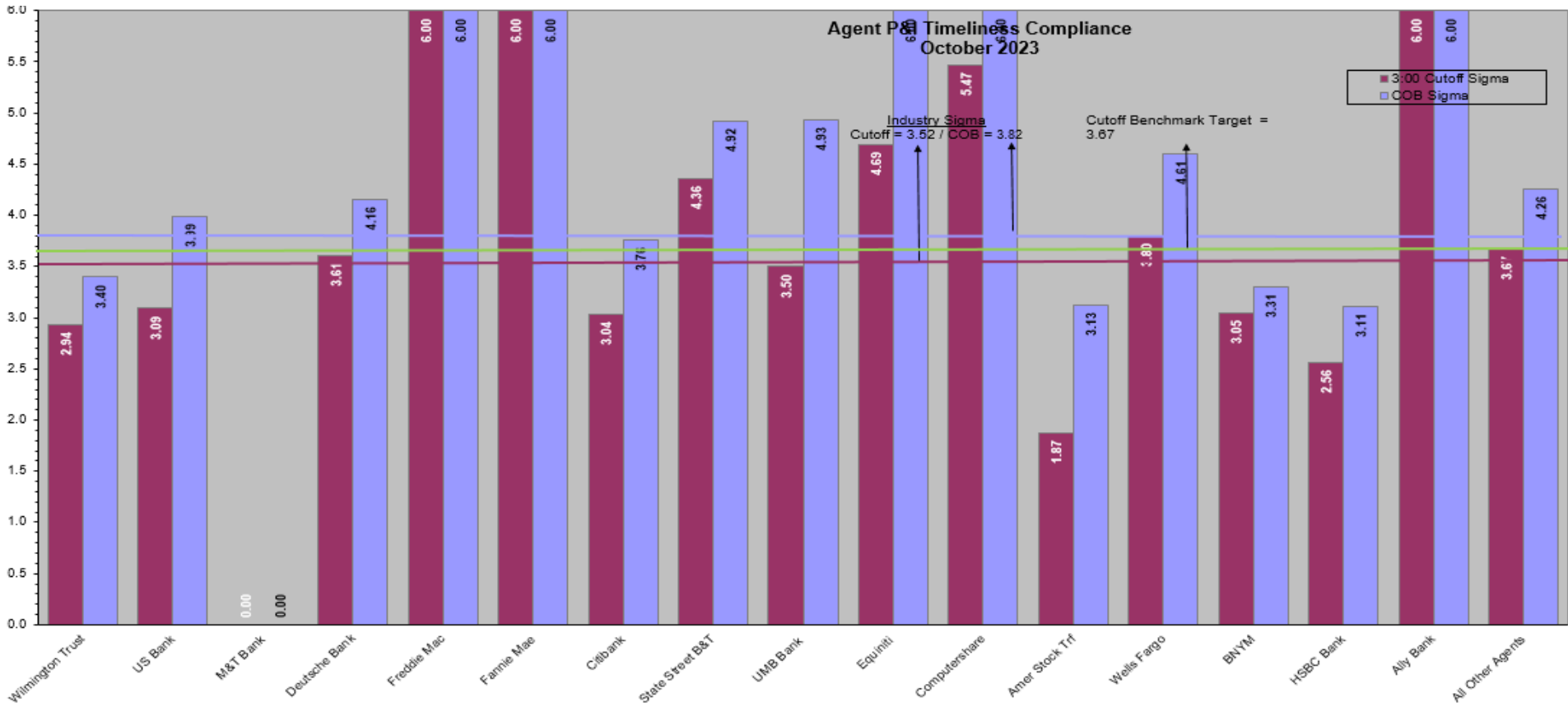
Please visit DTCC's web-site <http://dtcc.com/asset-services/asset-services-performance-metrics.aspx> for more detailed metric definitions and agent trend charts.

P&I Allocations Monthly Trend



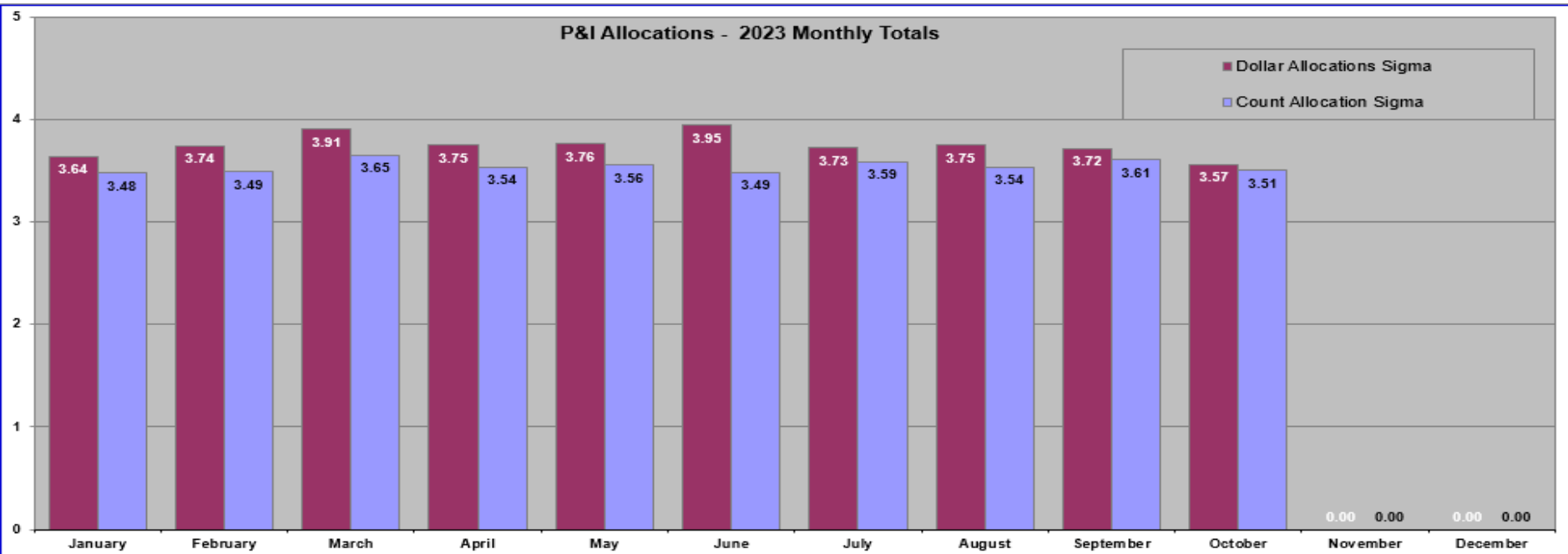
	January	February	March	April	May	June	July	August	September	October	November	December	YTD
Percent by 3:00 Cut-off	97.42%	98.58%	98.72%	96.83%	97.31%	99.49%	97.53%	97.49%	98.23%	95.97%			97.80%
Cutoff Sigma	3.45	3.69	3.73	3.36	3.43	4.07	3.46	3.46	3.60	3.25			3.51
Percent by COB	99.53%	99.77%	99.63%	98.77%	98.77%	99.69%	99.57%	99.51%	99.16%	98.74%			99.31%
COB Sigma	4.09	4.33	4.18	3.75	3.75	4.23	4.12	4.08	3.89	3.74			3.96

P&I Timeliness Compliance – Agent Performance



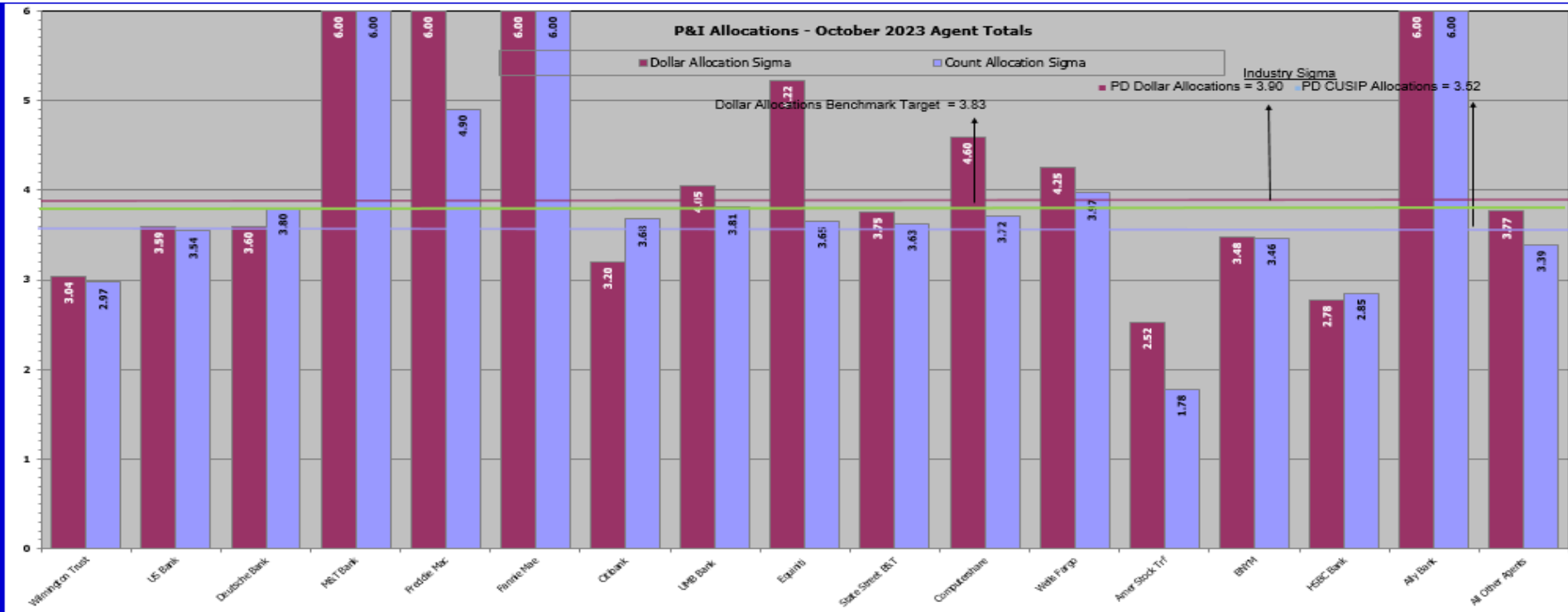
	Wilmington Trust	US Bank	M&T Bank	Deutsche Bank	Freddie Mac	Fannie Mae	Citibank	State Street B&T	Equiniti	Computershare	Amer Stock Trf	Wells Fargo	BNYM	HSBC Bank	Ally Bank	All Other Agents
% of Total Allocations	2.77%	17.04%	0.00%	3.85%	0.74%	0.05%	5.68%	2.14%	2.71%	7.76%	1.61%	7.54%	23.16%	0.15%	0.11%	24.08%
Percent by 3:00 Cutoff	92.45%	94.42%	#DIV/0!	98.25%	100.00%	100.00%	93.76%	99.79%	99.93%	100.00%	64.47%	98.93%	93.95%	85.60%	100.00%	98.49%
Cutoff Sigma	2.94	3.09	#DIV/0!	3.61	6.00	6.00	3.04	4.36	4.69	5.47	1.87	3.80	3.05	2.56	6.00	3.67
Variance from Industry Cutoff	-0.31	-0.16	#DIV/0!	0.36	2.75	2.75	-0.21	1.11	1.44	2.22	-1.37	0.56	-0.20	-0.68	2.75	0.42
Percent by COB	97.11%	99.36%	#DIV/0!	99.61%	100.00%	100.00%	98.81%	99.97%	100.00%	100.00%	94.81%	99.90%	96.45%	94.62%	100.00%	99.71%
COB Sigma	3.40	3.99	#DIV/0!	4.16	6.00	6.00	3.76	4.92	6.00	6.00	3.13	4.61	3.31	3.11	6.00	4.26

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			\$3472.590
Allocation \$ Percent	98.39%	98.76%	99.20%	98.77%	98.82%	99.28%	98.70%	98.79%	98.68%	98.05%			98.76%
Allocation \$ Sigma	3.64	3.74	3.91	3.75	3.76	3.95	3.73	3.75	3.72	3.57			3.74
Unallocated Impact (Billions \$)	\$5.001	\$3.467	\$3.201	\$3.753	\$4.104	\$2.907	\$4.500	\$3.781	\$5.391	\$7.046			\$43.151
Total CUSIP Expected	279,519	373,853	314,277	266,090	270,002	351,000	285,362	380,207	315,114	276,873			3,112,297
CUSIP Allocations %	97.60%	97.68%	98.44%	97.93%	98.02%	97.66%	98.16%	97.93%	98.25%	97.76%			97.94%
CUSIP Allocations Sigma	3.48	3.49	3.65	3.54	3.56	3.49	3.59	3.54	3.61	3.51			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			64,171

P&I Allocations – Agent Performance



AGENT	Wilmington Trust	US Bank	Deutsche Bank	M&T Bank	Freddie Mac	Fannie Mae	Citibank	Equiniti	State Street B&T	Computer share	Wells Fargo	Amer Stock Trf	BNYM	HSBC Bank	Allly Bank	All Other Agents
Total Expected / % of Industry	\$9.799	\$61.490	\$14.008	\$0.003	\$2.281	\$0.186	\$19.766	\$10.083	\$7.855	\$28.803	\$26.790	\$5.933	\$82.430	\$0.494	\$0.412	\$89.937
	2.71%	16.98%	3.87%	0.00%	0.63%	0.05%	5.46%	2.78%	2.17%	7.95%	7.40%	1.64%	22.76%	0.14%	0.11%	24.84%
Allocation \$ Percent	93.83%	98.18%	98.22%	100.00%	100.00%	100.00%	95.58%	99.99%	98.79%	99.90%	99.71%	84.70%	97.61%	89.96%	100.00%	98.83%
Allocation \$ Sigma	3.04	3.59	3.60	6.00	6.00	6.00	3.20	5.22	3.75	4.60	4.25	2.52	3.48	2.78	6.00	3.77
Variance from Industry \$ Sigma	-0.52	0.03	0.04	2.43	2.43	2.43	-0.36	1.66	0.19	1.03	0.69	-1.04	-0.09	-0.79	2.43	0.20
CUSIP Allocations % of Industry	92.97%	97.96%	98.94%	100.00%	99.97%	100.00%	98.53%	98.43%	98.32%	98.67%	99.33%	61.18%	97.50%	91.16%	100.00%	97.08%
Allocations Count	2.97	3.54	3.80	6.00	4.90	6.00	3.68	3.65	3.63	3.72	3.97	1.78	3.46	2.85	6.00	3.39
Variance from Industry CUSIP Sigma	-0.53	0.04	0.30	2.49	1.39	2.49	0.17	0.14	0.12	0.21	0.46	-1.72	-0.05	-0.66	2.49	-0.11