

Table S2 Comparison of $\rho_{FastEPRR}$, ρ_{gam} , ρ_{LDhat} and ρ_{comb} for each sample size measured by RMSE

Real	$n = 50$				$n = 100$				$n = 200$			
ρ	FastEPRR	gam	LDhat	combined	FastEPRR	gam	LDhat	combined	FastEPRR	gam	LDhat	combined
10	5.9	15.5	5.4	4.0	5.0	11.8	4.5	3.3	4.4	9.0	4.3	3.0
20	8.5	13.6	8.3	5.9	6.8	7.2	7.3	5.0	5.8	4.5	6.5	4.3
30	11.1	20.1	11.4	8.0	8.5	11.4	9.9	6.6	7.2	8.5	8.4	5.5
40	15.0	25.8	15.2	10.7	10.6	15.0	12.5	8.2	8.6	11.2	10.4	6.7
50	18.6	30.4	18.4	13.1	12.7	17.4	14.6	9.7	10.0	12.6	12.4	7.9
60	22.1	32.6	21.6	15.6	15.0	19.1	17.4	11.5	11.6	13.5	14.2	9.2
70	25.7	33.6	24.6	18.0	17.7	21.2	19.4	13.0	13.1	14.8	16.4	10.4
80	27.9	33.2	27.4	19.7	20.3	22.8	21.8	15.0	14.9	16.5	18.1	11.7
90	29.9	33.2	30.3	21.5	22.5	24.2	24.1	16.6	16.9	18.5	20.2	13.2
100	31.6	29.9	33.2	23.2	25.0	24.6	25.7	17.9	18.8	20.4	22.2	14.6
110	32.3	27.4	35.4	24.0	26.0	24.6	27.9	19.1	20.4	21.0	24.0	15.8
120	33.1	24.7	36.7	24.8	27.1	24.2	29.3	20.0	21.9	21.5	25.8	17.0
130	33.5	22.7	37.6	25.0	27.8	22.7	30.7	20.7	22.7	21.0	27.6	18.0
140	33.7	22.0	37.7	25.5	28.0	21.5	31.7	21.0	22.7	19.7	28.9	18.5
150	34.3	22.9	37.9	26.0	27.7	20.9	32.0	21.2	22.7	18.3	29.2	18.5

The parameters in Figure 1 were used, unless noted otherwise.