	Estimate				CI Coverage			Variance				Average Estimated Variance		
Scenario	Truth	MDAM-vary	MDAM-fix	IH	MDAM-vary	MDAM-fix	IH	Pre-missing	MDAM-vary	MDAM-fix	IH	MDAM-vary	MDAM-fix	IH
$X_1 = 0 \mid X_2 = 0$	0.681	0.677	0.677	0.549	99	99.2	0	1.2	3.6	3.4	1.9	5.9	6	2.4
$X_1 = 0 \mid X_2 = 1$	0.478	0.478	0.477	0.45	99.8	99.8	37.6	1.4	1.5	1.6	1.2	3	3	1.6
$X_2 = 0 \mid X_1 = 0$	0.593	0.59	0.59	0.451	99.2	99	0	1.3	3.3	3.3	1.6	5.9	5.9	2
$X_2 = 0 \mid X_1 = 1$	0.385	0.385	0.385	0.354	99.4	99.6	39.4	1.7	2.2	2.1	1.5	3.8	3.8	1.8
$Y_2 = 0 \mid Y_1 = 0$	0.371	0.37	0.37	0.352	99.2	99.2	85.8	1.8	2.2	2.3	2	3.3	3.3	3.1
$Y_2 = 0 \mid Y_1 = 1$	0.339	0.339	0.339	0.323	98.4	98.2	83.8	1.1	1.6	1.6	1.5	2	2	1.9
$Y_1 = 0 \mid Y_2 = 0$	0.426	0.426	0.426	0.416	98.4	98.4	95.8	2.3	3.1	3.1	3.1	4	4	4
$Y_1 = 0 \mid Y_2 = 1$	0.392	0.393	0.393	0.385	97.6	98.2	96.2	1	1.4	1.4	1.3	1.9	2	1.9
$X_2 = 0, Y_1 = 0$	0.223	0.223	0.223	0.177	99.8	99	0	0.5	0.7	0.7	0.5	1.2	1.2	0.7
$X_2 = 1, Y_1 = 0$	0.181	0.181	0.181	0.218	100	99.6	0	0.4	0.5	0.5	0.7	0.9	0.9	0.8
$X_2 = 0, Y_1 = 1$	0.282	0.281	0.281	0.225	98	97.4	0	0.6	0.7	0.7	0.6	1.6	1.5	0.8
$X_2 = 1, Y_1 = 1$	0.314	0.315	0.315	0.38	99.8	99.8	0	0.6	0.7	0.7	0.8	1.6	1.6	1.1
$Y_1 = 0 \mid X_1 = 0, X_2 = 0$	0.45	0.451	0.451	0.45	98	98	98.4	2.1	3	3	3.5	4.3	4.3	5.3
$Y_1 = 0 \mid X_1 = 0, X_2 = 1$	0.378	0.378	0.378	0.379	98.4	98.6	98.4	2.8	3.2	3.1	2.9	4.5	4.5	4.3
$Y_1 = 0 \mid X_1 = 1, X_2 = 0$	0.425	0.427	0.427	0.427	98.2	98.8	99	4.4	4.7	4.6	4.4	6.5	6.5	6.4
$Y_1 = 0 \mid X_1 = 1, X_2 = 1$	0.355	0.354	0.354	0.354	99	98.8	99.4	2.5	2.5	2.6	2.2	3.6	3.6	3.4
$Y_2 = 0 \mid X_1 = 0, X_2 = 0$	0.436	0.436	0.436	0.436	98	97.8	98.2	2	3	3	3.6	4.2	4.3	5.2
$Y_2 = 0 \mid X_1 = 0, X_2 = 1$	0.34	0.341	0.341	0.341	98.4	98.8	99	2.7	2.9	2.9	2.7	4.3	4.3	4.2
$Y_2 = 0 \mid X_1 = 1, X_2 = 0$	0.342	0.341	0.342	0.342	98.6	98	98.6	3.9	4	4.1	3.9	5.9	5.9	5.8
$Y_2 = 0 \mid X_1 = 1, X_2 = 1$	0.256	0.256	0.256	0.256	98.2	98.6	98.2	2.3	2.2	2.2	2	3	3	2.8
T_{X_1}	1668684	1672650	1672538	2018345	100	100	0	17.3	2	2.1	22.3	35.9	35.3	16.7
T_{X_2}	1415542	1420761	1420898	1720983	100	100	0	13.1	1.7	1.9	17.2	30.1	30.4	14.9
T_{Y_1}	2009840	2007949	2007935	2040086	95.2	95	87.4	19	20.5	20.2	21.9	19.3	19.6	19.2
T_{Y_2}	2186372	2186745	2186923	2245512	97	96	75.6	20.3	18.5	18.7	22	19.8	19.9	19.5
T_{Y_3}	2715114	2712295	2712131	2871289	100	100	37.6	50.2	26.5	27.1	55.3	88.4	86.7	44.6
T_{Y_4}	2329764	2327195	2326574	2483903	100	100	42.8	41.8	23.2	23.8	51.6	102.8	100.8	49.4

Table 1. Results from the simulation study presented in Xu and Reiter (2025) when $\theta_1 = -2$. Entries under the columns headed by "MD-vary" are for an MD-AM model where the working probabilities for missing X_1 vary across units. Entries under the columns headed by "MD-fix" are for an MD-AM model where the working probabilities for missing X_1 are the same across units. Results under the columns headed by "IH" are for an imputation model that does not use the marginal information; it uses a default implementation of MICE of item nonresponse imputation and a random hot deck for unit nonresponse imputation. Entries for the variances of the totals should be multiplied by 10^8 and the variances of the percentages should be multiplied by 10^{-4}.

	Estimate				CI Coverage			Variance				Average Estimated Variance		
Scenario	Truth	MDAM-vary	MDAM-fix	IH	MDAM-vary	MDAM-fix	IH	Pre-missing	MDAM-vary	MDAM-fix	IH	MDAM-vary	MDAM-fix	IH
$X_1 = 0 \mid X_2 = 0$	0.58	0.579	0.58	0.55	99.8	99.2	49.2	1.5	3.2	3.5	2.2	6.9	6.9	2.4
$X_1 = 0 \mid X_2 = 1$	0.456	0.457	0.457	0.45	99	98.6	95.2	1.4	1.2	1.2	1.2	2	2	1.6
$X_2 = 0 \mid X_1 = 0$	0.561	0.559	0.559	0.449	98.4	98.6	0	1.4	3	3.1	1.5	4.5	4.4	2
$X_2 = 0 \mid X_1 = 1$	0.437	0.436	0.436	0.353	100	100	0	1.4	1.5	1.5	1.5	4.8	4.8	1.8
$Y_2 = 0 \mid Y_1 = 0$	0.365	0.365	0.365	0.353	97.8	98	93	1.7	2.4	2.3	2.4	3.2	3.2	3.1
$Y_2 = 0 \mid Y_1 = 1$	0.333	0.332	0.332	0.321	97.8	97.6	91.2	1	1.5	1.5	1.3	2	2	1.9
$Y_1 = 0 \mid Y_2 = 0$	0.425	0.426	0.426	0.417	98.6	98.4	97	1.8	2.9	2.9	2.9	3.9	3.9	4
$Y_1 = 0 \mid Y_2 = 1$	0.39	0.39	0.39	0.383	98.2	98.6	96.6	1	1.3	1.3	1.2	1.9	1.9	1.9
$X_2 = 0, Y_1 = 0$	0.22	0.22	0.22	0.176	99.4	99.6	0	0.5	0.6	0.6	0.5	1.2	1.2	0.7
$X_2 = 1, Y_1 = 0$	0.182	0.182	0.182	0.219	98.2	99.4	0.2	0.4	0.5	0.5	0.6	0.9	0.9	0.8
$X_2 = 0, Y_1 = 1$	0.281	0.28	0.28	0.224	96.4	96.6	0	0.5	0.8	0.8	0.5	1.6	1.6	0.8
$X_2 = 1, Y_1 = 1$	0.316	0.317	0.317	0.381	99	95.4	0	0.6	0.7	0.7	0.8	1.7	1.6	1.1
$Y_1 = 0 \mid X_1 = 0, X_2 = 0$	0.449	0.451	0.451	0.451	98	98.2	98.2	2.4	3.3	3.3	3.7	4.7	4.7	5.3
$Y_1 = 0 \mid X_1 = 0, X_2 = 1$	0.378	0.378	0.378	0.378	99	99.2	99	2.8	2.9	2.9	2.7	4.5	4.5	4.3
$Y_1 = 0 \mid X_1 = 1, X_2 = 0$	0.425	0.425	0.426	0.425	99	98.8	99	3.4	4	4	4.2	6.1	6.1	6.5
$Y_1 = 0 \mid X_1 = 1, X_2 = 1$	0.354	0.354	0.354	0.354	97.6	97.6	97.8	2.3	2.6	2.6	2.4	3.6	3.6	3.4
$Y_2 = 0 \mid X_1 = 0, X_2 = 0$	0.436	0.437	0.437	0.437	99	99	99.2	2.5	3.1	3.1	3.5	4.6	4.6	5.3
$Y_2 = 0 \mid X_1 = 0, X_2 = 1$	0.341	0.34	0.34	0.34	98.4	98.4	98	2.8	2.8	2.9	2.7	4.3	4.3	4.1
$Y_2 = 0 \mid X_1 = 1, X_2 = 0$	0.341	0.341	0.341	0.341	99	98.6	98.4	3	3.9	3.9	4.1	5.5	5.5	5.9
$Y_2 = 0 \mid X_1 = 1, X_2 = 1$	0.256	0.256	0.256	0.256	97.8	97.8	99	2.2	2.2	2.2	2	3	3	2.8
T_{X_1}	1681580	1683448	1684188	2022119	100	100	0	15.9	2.1	2.1	2.1	36.6	36.2	16.6
T_{X_2}	1623906	1623542	1623159	1719155	100	100	35.2	17.2	1.7	1.9	1.9	34.2	34.1	14.8
T_{Y_1}	2016293	2014192	2013686	2040620	94.2	94	90.6	20.1	20.6	20.8	22.5	19.3	19.4	19.3
T_{Y_2}	2206653	2206079	2206330	2246016	96	96.2	85.4	21.2	19.3	19.4	23.4	19.8	20	19.4
T_{Y_3}	2549931	2552797	2554101	2883352	100	100	0.2	42.1	26.2	26.3	50.5	92.2	90.6	44.7
T_{Y_4}	2140963	2141940	2143244	2494236	100	100	0.4	39.6	24.9	26	52.2	105.8	104.7	49.7

Table 2. Results from the simulation study presented in Xu and Reiter (2025) when $\theta_1 = -0.5$. Entries under the columns headed by "MD-vary" are for an MD-AM model where the working probabilities for missing X_1 vary across units. Entries under the columns headed by "MD-fix" are for an MD-AM model where the working probabilities for missing X_1 are the same across units. Results under the columns headed by "IH" are for an imputation model that does not use the marginal information; it uses a default implementation of MICE of item nonresponse imputation and a random hot deck for unit nonresponse imputation. Entries for the variances of the totals should be multiplied by 10^8 and the variances of the percentages should be multiplied by 10^{-4}.