1 Results of $\mathcal{M}_1$

Table 1: 30 Monte Carlo simulations of $\mathcal{M}_1$ for $\mathcal{B}_u$ with varying n and σ_α

		Guess			LOOCV with k random draws			Distance to y_{1,T_1^*+1}			
n	σ_α	$\delta_{\hat{\alpha}_{\text{adj}}}$	$\delta_{\hat{\alpha}_{\text{wadj}}}$	$\delta_{\hat{\alpha}_{\text{IVW}}}$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{adj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{wadj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{IVW}}})$	Original	$\hat{\alpha}_{\text{adj}}$	$\hat{\alpha}_{\text{wadj}}$	$\hat{\alpha}_{\text{IVW}}$
	5	1 (0)	1 (0)	1 (0)	0.95 (0.02)	0.95 (0.02)	0.95 (0.02)	52.37 (2.81)	13.52 (2.04)	14.81 (2.26)	13.53 (2.06)
	10	1 (0)	1 (0)	1 (0)	0.94 (0.02)	0.91 (0.02)	0.94 (0.02)	51.99 (3.05)	15.32 (2.06)	16.83 (2.3)	15.36 (2.09)
5	25	0.97 (0.03)	0.97 (0.03)	0.97 (0.03)	0.77 (0.03)	0.78 (0.03)	0.78 (0.03)	51.02 (4.81)	24.15 (3.17)	25.45 (3.74)	24.14 (3.25)
	50	0.8 (0.07)	0.77 (0.08)	0.73 (0.08)	0.51 (0.05)	0.56 (0.05)	0.53 (0.05)	55.67 (7.6)	44.98 (5.57)	48.53 (6.13)	45.16 (5.6)
	100	0.63 (0.09)	0.63 (0.09)	0.53 (0.09)	0.51 (0.04)	0.52 (0.03)	0.55 (0.04)	84.29 (12.32)	88.51 (11.19)	97.3 (11.55)	88.67 (11.22)
	5	1 (0)	1 (0)	1 (0)	0.95 (0.02)	0.93 (0.02)	0.95 (0.02)	50.61 (2.75)	12.03 (1.79)	12.61 (1.74)	12.11 (1.82)
	10	1 (0)	1 (0)	1 (0)	0.91 (0.02)	0.9 (0.02)	0.91 (0.02)	51.54 (3.05)	13.84 (1.92)	13.8 (1.96)	13.99 (1.95)
10	25	1 (0)	1 (0)	1 (0)	0.77 (0.03)	0.77 (0.03)	0.78 (0.03)	54.34 (4.69)	20.97 (3.1)	20.15 (3.21)	21.25 (3.12)
	50	0.8 (0.07)	0.8 (0.07)	0.7 (0.09)	0.57 (0.03)	0.59 (0.03)	0.56 (0.03)	63.44 (7.02)	35.39 (5.74)	34.34 (5.84)	35.72 (5.76)
	100	0.63 (0.09)	0.6 (0.09)	0.43 (0.09)	0.46 (0.05)	0.45 (0.03)	0.47 (0.05)	88.4 (12.01)	66.89 (11.24)	65.18 (11.46)	66.86 (11.37)
	5	1 (0)	1 (0)	1 (0)	0.97 (0.01)	0.95 (0.02)	0.97 (0.01)	54.1 (2.7)	11.47 (2.02)	12.58 (1.92)	11.61 (2)
	10	1 (0)	1 (0)	1 (0)	0.91 (0.02)	0.91 (0.02)	0.91 (0.02)	54.79 (2.84)	12.99 (2.39)	13.48 (2.4)	13.08 (2.39)
15	25	1 (0)	1 (0)	0.97 (0.03)	0.73 (0.03)	0.76 (0.03)	0.71 (0.03)	56.91 (4.4)	21.85 (3.69)	22.44 (3.58)	21.85 (3.68)
	50	0.93 (0.05)	0.93 (0.05)	0.87 (0.06)	0.56 (0.04)	0.59 (0.05)	0.57 (0.04)	65.97 (6.7)	39.06 (6.38)	41.53 (5.74)	38.85 (6.37)
	100	0.7 (0.09)	0.67 (0.09)	0.63 (0.09)	0.44 (0.04)	0.47 (0.03)	0.45 (0.04)	90.79 (12.51)	74.94 (12.13)	79.8 (10.84)	74.17 (12.15)
	5	1 (0)	1 (0)	1 (0)	0.97 (0.01)	0.96 (0.01)	0.97 (0.01)	52.01 (2.43)	10.27 (1.62)	10.11 (1.66)	10.41 (1.63)
	10	1 (0)	1 (0)	1 (0)	0.96 (0.02)	0.93 (0.02)	0.96 (0.02)	54.22 (2.84)	12.77 (1.86)	12.16 (1.91)	12.8 (1.87)
25	25	0.97 (0.03)	0.97 (0.03)	0.97 (0.03)	0.84 (0.03)	0.85 (0.03)	0.84 (0.03)	60.85 (4.87)	22.14 (3.38)	21.16 (3.37)	22.21 (3.36)
	50	1 (0)	1 (0)	0.9 (0.06)	0.66 (0.05)	0.6 (0.04)	0.66 (0.05)	72.52 (8.76)	40.45 (6.32)	39.73 (6.16)	40.73 (6.25)
	100	0.8 (0.07)	0.73 (0.08)	0.7 (0.09)	0.57 (0.05)	0.53 (0.04)	0.57 (0.05)	102.42 (15.73)	79.07 (12.33)	78.91 (11.91)	79.94 (12.12)

Table 2: 30 Monte Carlo simulations of $\mathcal{M}_1$ for $\mathcal{B}_u$ with varying σ and σ_α

		Guess			LOOCV with k random draws			Distance to y_{1,T_1^*+1}			
σ	σ_α	$\delta_{\hat{\alpha}_{\text{adj}}}$	$\delta_{\hat{\alpha}_{\text{wadj}}}$	$\delta_{\hat{\alpha}_{\text{IVW}}}$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{adj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{wadj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{IVW}}})$	Original	$\hat{\alpha}_{\text{adj}}$	$\hat{\alpha}_{\text{wadj}}$	$\hat{\alpha}_{\text{IVW}}$
	5	1 (0)	1 (0)	1 (0)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	48.77 (1.65)	7.14 (1.22)	7.77 (1.25)	7.26 (1.21)
	10	1 (0)	1 (0)	1 (0)	0.97 (0.01)	0.97 (0.01)	0.97 (0.01)	47.1 (2.32)	10.4 (1.72)	12.1 (1.73)	10.51 (1.72)
5	25	1 (0)	1 (0)	1 (0)	0.81 (0.03)	0.84 (0.03)	0.81 (0.03)	44.03 (4.05)	22.38 (3.42)	26.23 (3.54)	22.5 (3.4)
	50	0.97 (0.03)	0.97 (0.03)	0.9 (0.06)	0.64 (0.04)	0.63 (0.04)	0.63 (0.04)	47.72 (6.35)	42.94 (6.5)	50.34 (6.81)	43.03 (6.47)
	100	0.67 (0.09)	0.63 (0.09)	0.57 (0.09)	0.5 (0.05)	0.51 (0.04)	0.5 (0.04)	72.88 (11.48)	84.74 (12.69)	98.56 (13.51)	84.85 (12.62)
	5	1 (0)	1 (0)	1 (0)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	49.1 (2.79)	12.33 (1.96)	12.84 (1.99)	12.54 (1.93)
	10	1 (0)	1 (0)	1 (0)	0.96 (0.01)	0.96 (0.01)	0.96 (0.01)	47.42 (3.32)	14.44 (2.43)	15.77 (2.48)	14.65 (2.41)
10	25	1 (0)	1 (0)	0.97 (0.03)	0.8 (0.03)	0.83 (0.03)	0.8 (0.03)	44.87 (4.71)	24.76 (3.99)	28.81 (4.05)	25.09 (3.94)
	50	0.97 (0.03)	0.93 (0.05)	0.9 (0.06)	0.65 (0.04)	0.64 (0.04)	0.65 (0.04)	49.9 (6.64)	44.8 (6.89)	52.51 (7.13)	45.06 (6.85)
	100	0.63 (0.09)	0.63 (0.09)	0.57 (0.09)	0.52 (0.05)	0.55 (0.04)	0.49 (0.05)	74.62 (11.8)	85.94 (13.05)	100.73 (13.67)	86.14 (12.99)
	5	1 (0)	1 (0)	1 (0)	0.82 (0.03)	0.82 (0.03)	0.83 (0.03)	51.82 (5.58)	28.83 (4.36)	29.08 (4.47)	29.2 (4.29)
	10	1 (0)	1 (0)	1 (0)	0.8 (0.03)	0.8 (0.03)	0.78 (0.04)	51.37 (5.7)	29.93 (4.79)	31.03 (4.85)	30.44 (4.71)
25	25	1 (0)	0.97 (0.03)	0.93 (0.05)	0.75 (0.04)	0.74 (0.04)	0.75 (0.04)	51.77 (6.36)	37.51 (5.98)	40.78 (6.1)	37.99 (5.92)
	50	0.83 (0.07)	0.83 (0.07)	0.8 (0.07)	0.6 (0.05)	0.59 (0.04)	0.59 (0.05)	57.39 (8.25)	53.52 (8.71)	62.34 (8.6)	54.02 (8.66)
	100	0.63 (0.09)	0.57 (0.09)	0.57 (0.09)	0.49 (0.05)	0.53 (0.04)	0.5 (0.05)	80.22 (13.49)	92.77 (14.41)	108.3 (14.81)	93.51 (14.29)
	5	0.73 (0.08)	0.67 (0.09)	0.67 (0.09)	0.55 (0.05)	0.51 (0.04)	0.55 (0.05)	67.29 (9.18)	57.37 (8.43)	57.45 (8.66)	58.08 (8.26)
	10	0.77 (0.08)	0.67 (0.09)	0.67 (0.09)	0.53 (0.05)	0.53 (0.04)	0.53 (0.05)	67.72 (9.24)	58.18 (8.8)	58.99 (8.96)	58.92 (8.65)
50	25	0.77 (0.08)	0.73 (0.08)	0.7 (0.09)	0.53 (0.05)	0.55 (0.05)	0.53 (0.05)	69.36 (9.85)	62.1 (10.11)	65.26 (10.16)	63.15 (9.93)
	50	0.73 (0.08)	0.7 (0.09)	0.63 (0.09)	0.53 (0.05)	0.5 (0.04)	0.53 (0.05)	75.13 (11.58)	76.15 (11.97)	82.62 (12.17)	77.1 (11.85)
	100	0.63 (0.09)	0.6 (0.09)	0.53 (0.09)	0.52 (0.05)	0.55 (0.04)	0.5 (0.05)	98.34 (15.85)	108.03 (17.49)	125.76 (17.14)	108.99 (17.39)
	5	0.5 (0.09)	0.33 (0.09)	0.4 (0.09)	0.42 (0.04)	0.49 (0.04)	0.41 (0.04)	114.58 (15.95)	114.76 (16.6)	114.79 (17.05)	115.96 (16.28)
	10	0.5 (0.09)	0.33 (0.09)	0.37 (0.09)	0.42 (0.04)	0.46 (0.04)	0.42 (0.04)	115.61 (16)	115.49 (16.93)	115.95 (17.35)	116.81 (16.6)
100	25	0.5 (0.09)	0.37 (0.09)	0.37 (0.09)	0.39 (0.04)	0.46 (0.04)	0.39 (0.05)	118.76 (16.45)	117.96 (18.14)	120.56 (18.37)	119.47 (17.82)
	50	0.57 (0.09)	0.37 (0.09)	0.43 (0.09)	0.46 (0.05)	0.51 (0.05)	0.45 (0.05)	124.94 (17.83)	125.31 (20.27)	131.64 (20.36)	127.15 (19.96)
	100	0.53 (0.09)	0.43 (0.09)	0.4 (0.09)	0.48 (0.05)	0.53 (0.03)	0.49 (0.05)	146.49 (20.97)	153.41 (24.01)	166.43 (24.35)	155.32 (23.75)

Table 3: 30 Monte Carlo simulations of $\mathcal{M}_1$ for $\mathcal{B}_f$ with varying n and σ_α

		Guess			LOOCV with k random draws			Distance to y_{1,T_1^*+1}			
n	σ_α	$\delta_{\hat{\alpha}_{\text{adj}}}$	$\delta_{\hat{\alpha}_{\text{wadj}}}$	$\delta_{\hat{\alpha}_{\text{IVW}}}$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{adj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{wadj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{IVW}}})$	Original	$\hat{\alpha}_{\text{adj}}$	$\hat{\alpha}_{\text{wadj}}$	$\hat{\alpha}_{\text{IVW}}$
	5	1 (0)	1 (0)	1 (0)	0.94 (0.02)	0.94 (0.02)	0.94 (0.02)	50.11 (2.43)	11.11 (1.85)	13.2 (1.91)	10.97 (1.85)
	10	1 (0)	1 (0)	1 (0)	0.93 (0.02)	0.93 (0.02)	0.93 (0.02)	50.03 (2.81)	13.68 (1.86)	15.89 (1.88)	13.62 (1.86)
5	25	1 (0)	1 (0)	1 (0)	0.78 (0.03)	0.77 (0.03)	0.79 (0.03)	49.82 (4.54)	21.75 (2.6)	24.99 (2.53)	21.98 (2.61)
	50	1 (0)	1 (0)	0.93 (0.05)	0.61 (0.05)	0.61 (0.04)	0.61 (0.05)	57.05 (6.07)	36.31 (4.58)	40.79 (4.79)	36.97 (4.62)
	100	0.97 (0.03)	0.97 (0.03)	0.67 (0.09)	0.45 (0.05)	0.49 (0.05)	0.45 (0.05)	88.65 (7.05)	65.85 (9.15)	76.22 (9.13)	67.41 (9.28)
	5	1 (0)	1 (0)	1 (0)	0.96 (0.02)	0.96 (0.02)	0.96 (0.02)	50.21 (2.49)	10.87 (1.57)	10.89 (1.62)	10.85 (1.53)
	10	1 (0)	1 (0)	1 (0)	0.94 (0.02)	0.94 (0.02)	0.94 (0.02)	49.02 (2.76)	13.62 (1.6)	14.02 (1.74)	13.67 (1.56)
10	25	1 (0)	1 (0)	0.93 (0.05)	0.75 (0.05)	0.81 (0.03)	0.76 (0.05)	45.91 (4.58)	24.55 (3.3)	24.27 (4.09)	24.43 (3.27)
	50	0.97 (0.03)	0.97 (0.03)	0.77 (0.08)	0.61 (0.05)	0.66 (0.04)	0.62 (0.05)	49.9 (7.12)	44.63 (7.23)	44.98 (8.51)	43.98 (7.2)
	100	0.87 (0.06)	0.87 (0.06)	0.63 (0.09)	0.53 (0.05)	0.48 (0.04)	0.54 (0.05)	74.74 (13.07)	89.35 (14.73)	89.56 (17.32)	87.87 (14.63)
	5	1 (0)	1 (0)	1 (0)	0.94 (0.02)	0.94 (0.02)	0.94 (0.02)	53.03 (2.15)	9.39 (1.51)	11.1 (1.66)	9.4 (1.47)
	10	1 (0)	1 (0)	1 (0)	0.91 (0.03)	0.91 (0.03)	0.91 (0.03)	52.46 (2.66)	11.65 (1.87)	14 (2.06)	11.79 (1.82)
15	25	1 (0)	1 (0)	1 (0)	0.77 (0.04)	0.76 (0.03)	0.76 (0.04)	52.76 (4.47)	23.88 (3.47)	26.97 (3.82)	23.95 (3.47)
	50	1 (0)	1 (0)	0.9 (0.06)	0.59 (0.04)	0.59 (0.04)	0.59 (0.04)	59.8 (7.66)	46.85 (6.7)	52.97 (6.8)	47.12 (6.69)
	100	0.97 (0.03)	0.9 (0.06)	0.8 (0.07)	0.47 (0.04)	0.47 (0.03)	0.47 (0.04)	95.95 (12.52)	96.35 (12.82)	107.42 (12.67)	97 (12.77)
	5	1 (0)	1 (0)	1 (0)	0.92 (0.02)	0.93 (0.02)	0.92 (0.02)	55.1 (2.73)	11.66 (1.93)	13.34 (2.08)	11.77 (1.92)
	10	1 (0)	1 (0)	1 (0)	0.89 (0.02)	0.91 (0.02)	0.89 (0.02)	55 (3)	13.63 (1.93)	14.94 (2.04)	13.67 (1.93)
25	25	1 (0)	1 (0)	1 (0)	0.79 (0.04)	0.77 (0.04)	0.79 (0.04)	55.02 (4.34)	21.29 (2.6)	22.14 (2.77)	21.17 (2.64)
	50	1 (0)	1 (0)	0.87 (0.06)	0.59 (0.04)	0.63 (0.04)	0.61 (0.05)	58 (6.77)	35.88 (4.69)	38.22 (4.85)	36.02 (4.69)
	100	1 (0)	0.97 (0.03)	0.7 (0.09)	0.49 (0.04)	0.51 (0.04)	0.47 (0.04)	71.18 (12.1)	68.53 (9.01)	74.18 (9.38)	69.17 (8.94)

Table 4: 30 Monte Carlo simulations of $\mathcal{M}_1$ for $\mathcal{B}_f$ with varying σ and σ_α

		Guess			LOOCV with k random draws			Distance to y_{1,T_1^*+1}			
σ	σ_α	$\delta_{\hat{\alpha}_{\text{adj}}}$	$\delta_{\hat{\alpha}_{\text{wadj}}}$	$\delta_{\hat{\alpha}_{\text{IVW}}}$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{adj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{wadj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{IVW}}})$	Original	$\hat{\alpha}_{\text{adj}}$	$\hat{\alpha}_{\text{wadj}}$	$\hat{\alpha}_{\text{IVW}}$
	5	1 (0)	1 (0)	1 (0)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	49.62 (1.34)	6.69 (0.77)	6.83 (0.86)	6.72 (0.74)
	10	1 (0)	1 (0)	1 (0)	0.98 (0.01)	0.97 (0.02)	0.98 (0.01)	48.43 (1.96)	10.21 (1.29)	10.17 (1.61)	10.19 (1.28)
5	25	1 (0)	1 (0)	0.97 (0.03)	0.79 (0.03)	0.83 (0.02)	0.79 (0.03)	45.46 (4.33)	22.21 (3.62)	22.48 (4.25)	21.88 (3.6)
	50	0.97 (0.03)	0.97 (0.03)	0.73 (0.08)	0.62 (0.05)	0.67 (0.04)	0.63 (0.05)	48.82 (7.36)	44.59 (7.37)	44.76 (8.66)	43.85 (7.32)
	100	0.93 (0.05)	0.93 (0.05)	0.63 (0.09)	0.52 (0.05)	0.49 (0.05)	0.53 (0.05)	74.59 (13.36)	89.83 (14.92)	90.85 (17.33)	88.25 (14.81)
	5	1 (0)	1 (0)	1 (0)	0.96 (0.02)	0.96 (0.02)	0.96 (0.02)	50.21 (2.49)	10.87 (1.57)	10.89 (1.62)	10.85 (1.53)
	10	1 (0)	1 (0)	1 (0)	0.94 (0.02)	0.94 (0.02)	0.94 (0.02)	49.02 (2.76)	13.62 (1.6)	14.02 (1.74)	13.67 (1.56)
10	25	1 (0)	1 (0)	0.93 (0.05)	0.75 (0.05)	0.81 (0.03)	0.76 (0.05)	45.91 (4.58)	24.55 (3.3)	24.27 (4.09)	24.43 (3.27)
	50	0.97 (0.03)	0.97 (0.03)	0.77 (0.08)	0.61 (0.05)	0.66 (0.04)	0.62 (0.05)	49.9 (7.12)	44.63 (7.23)	44.98 (8.51)	43.98 (7.2)
	100	0.87 (0.06)	0.87 (0.06)	0.63 (0.09)	0.53 (0.05)	0.48 (0.04)	0.54 (0.05)	74.74 (13.07)	89.35 (14.73)	89.56 (17.32)	87.87 (14.63)
	5	1 (0)	0.97 (0.03)	0.97 (0.03)	0.73 (0.04)	0.75 (0.03)	0.74 (0.04)	53.85 (5.67)	27.64 (3.65)	26.5 (3.93)	27.35 (3.57)
	10	1 (0)	0.97 (0.03)	0.97 (0.03)	0.73 (0.04)	0.75 (0.03)	0.72 (0.04)	52.88 (5.55)	27.72 (3.65)	27.22 (3.87)	27.55 (3.58)
25	25	0.97 (0.03)	0.97 (0.03)	0.9 (0.06)	0.65 (0.05)	0.69 (0.04)	0.63 (0.05)	51.06 (5.81)	34.43 (3.84)	35.67 (4.15)	34.48 (3.76)
	50	0.87 (0.06)	0.77 (0.08)	0.7 (0.09)	0.54 (0.05)	0.59 (0.05)	0.55 (0.05)	55.05 (7.13)	52.38 (6.22)	52.41 (7.77)	52.1 (6.2)
	100	1 (0)	0.87 (0.06)	0.6 (0.09)	0.51 (0.05)	0.49 (0.05)	0.48 (0.05)	75.13 (12.85)	91.17 (13.96)	90.79 (16.82)	90.39 (13.83)
	5	0.9 (0.06)	0.77 (0.08)	0.8 (0.07)	0.51 (0.05)	0.47 (0.04)	0.52 (0.05)	66.08 (10.43)	55.58 (7.37)	54.79 (7.57)	54.65 (7.27)
	10	0.87 (0.06)	0.73 (0.08)	0.73 (0.08)	0.49 (0.05)	0.49 (0.04)	0.49 (0.04)	64.11 (10.44)	55.29 (7.19)	53.48 (7.69)	54.85 (7)
50	25	0.8 (0.07)	0.7 (0.09)	0.7 (0.09)	0.48 (0.05)	0.47 (0.05)	0.49 (0.05)	62.24 (10.1)	55.85 (7.31)	56.56 (7.52)	55.44 (7.24)
	50	0.7 (0.09)	0.67 (0.09)	0.63 (0.09)	0.49 (0.05)	0.54 (0.04)	0.48 (0.05)	65.53 (10.01)	68.53 (7.56)	71.85 (7.98)	68.61 (7.44)
	100	0.9 (0.06)	0.8 (0.07)	0.6 (0.09)	0.46 (0.05)	0.53 (0.05)	0.51 (0.05)	85.95 (12.65)	104.55 (12.28)	105.56 (15.21)	103.99 (12.25)
	5	0.7 (0.09)	0.43 (0.09)	0.53 (0.09)	0.37 (0.04)	0.42 (0.05)	0.37 (0.04)	112.06 (17.96)	111.81 (14.87)	111.78 (14.92)	109.72 (14.68)
	10	0.67 (0.09)	0.47 (0.09)	0.53 (0.09)	0.38 (0.04)	0.43 (0.05)	0.38 (0.04)	110.61 (17.81)	110.68 (14.77)	110.47 (14.9)	109 (14.52)
100	25	0.7 (0.09)	0.47 (0.09)	0.5 (0.09)	0.39 (0.05)	0.46 (0.05)	0.39 (0.05)	106.24 (17.67)	110.56 (14.13)	108.12 (15.04)	109.6 (13.82)
	50	0.67 (0.09)	0.5 (0.09)	0.53 (0.09)	0.46 (0.05)	0.42 (0.05)	0.46 (0.05)	102.84 (17.66)	111.5 (14.54)	114.27 (14.69)	110.64 (14.41)
	100	0.83 (0.07)	0.67 (0.09)	0.5 (0.09)	0.45 (0.05)	0.39 (0.05)	0.46 (0.05)	118.84 (16.75)	136.28 (15.17)	144.32 (15.66)	136.65 (14.88)

2 Results of $\mathcal{M}_2$

Table 5: 30 Monte Carlo simulations of $\mathcal{M}_2$ for $\mathcal{B}_u$ with varying n and σ_α

		Guess			LOOCV with k random draws			Distance to y_{1,T_1^*+1}			
n	σ_α	$\delta_{\hat{\alpha}_{\text{adj}}}$	$\delta_{\hat{\alpha}_{\text{wadj}}}$	$\delta_{\hat{\alpha}_{\text{IVW}}}$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{adj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{wadj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{IVW}}})$	Original	$\hat{\alpha}_{\text{adj}}$	$\hat{\alpha}_{\text{wadj}}$	$\hat{\alpha}_{\text{IVW}}$
	5	1 (0)	1 (0)	1 (0)	0.92 (0.02)	0.96 (0.01)	0.92 (0.02)	65.47 (4.77)	19.92 (3.57)	21.86 (3.99)	20.27 (3.62)
	10	1 (0)	1 (0)	1 (0)	0.9 (0.02)	0.92 (0.02)	0.9 (0.02)	65.67 (4.9)	20.66 (3.74)	22.92 (4.2)	21.1 (3.75)
5	25	0.97 (0.03)	1 (0)	0.97 (0.03)	0.8 (0.02)	0.81 (0.02)	0.8 (0.03)	66.29 (5.83)	27.98 (4.21)	30.3 (4.87)	28.3 (4.18)
	50	0.83 (0.07)	0.87 (0.06)	0.87 (0.06)	0.55 (0.05)	0.57 (0.04)	0.55 (0.05)	70.59 (7.46)	43.1 (6.19)	46.31 (6.8)	43.07 (6.16)
	100	0.47 (0.09)	0.73 (0.08)	0.47 (0.09)	0.48 (0.04)	0.48 (0.04)	0.46 (0.04)	89.82 (10.49)	76.74 (11.42)	79.78 (12.26)	76.69 (11.33)
	5	1 (0)	1 (0)	1 (0)	0.95 (0.02)	0.95 (0.02)	0.95 (0.02)	55.66 (4.28)	16.36 (2.48)	17.51 (2.41)	16.6 (2.45)
	10	1 (0)	1 (0)	1 (0)	0.92 (0.02)	0.91 (0.03)	0.92 (0.02)	55.91 (4.71)	18.28 (2.85)	19.38 (2.88)	18.44 (2.83)
10	25	0.9 (0.06)	0.97 (0.03)	0.93 (0.05)	0.77 (0.04)	0.79 (0.04)	0.75 (0.04)	59.43 (6.1)	29.01 (4.24)	32.1 (4.3)	28.84 (4.26)
	50	0.77 (0.08)	0.8 (0.07)	0.77 (0.08)	0.55 (0.04)	0.64 (0.04)	0.55 (0.04)	69.34 (9.45)	52.52 (6.75)	58.05 (7.28)	52.28 (6.76)
	100	0.63 (0.09)	0.7 (0.09)	0.63 (0.09)	0.53 (0.04)	0.53 (0.05)	0.51 (0.04)	104.19 (15.88)	99.93 (12.83)	113.77 (13.42)	99.57 (12.81)
	5	1 (0)	1 (0)	1 (0)	0.92 (0.02)	0.93 (0.02)	0.92 (0.02)	51.78 (2.74)	12.66 (2.48)	13.89 (2.48)	12.64 (2.49)
	10	1 (0)	1 (0)	1 (0)	0.92 (0.02)	0.91 (0.02)	0.92 (0.02)	51.82 (3.04)	13.93 (2.52)	16 (2.63)	14.05 (2.53)
15	25	1 (0)	1 (0)	1 (0)	0.83 (0.03)	0.83 (0.03)	0.83 (0.03)	51.94 (4.56)	21.27 (2.93)	24.49 (3.69)	21.75 (2.92)
	50	0.9 (0.06)	0.93 (0.05)	0.9 (0.06)	0.71 (0.03)	0.67 (0.04)	0.69 (0.04)	55.22 (7.06)	35.85 (4.63)	42.72 (5.93)	36.41 (4.71)
	100	0.7 (0.09)	0.73 (0.08)	0.7 (0.09)	0.54 (0.05)	0.61 (0.04)	0.54 (0.05)	76.44 (10.75)	67.79 (8.77)	79.49 (11.44)	68.57 (8.96)
	5	1 (0)	1 (0)	1 (0)	0.9 (0.03)	0.91 (0.02)	0.9 (0.03)	62.23 (6.88)	21.29 (5.9)	19.29 (5.88)	21.34 (5.93)
	10	1 (0)	1 (0)	1 (0)	0.87 (0.03)	0.89 (0.02)	0.87 (0.03)	61.28 (7.09)	22.96 (5.91)	20.81 (5.89)	23.02 (5.94)
25	25	1 (0)	1 (0)	1 (0)	0.73 (0.03)	0.74 (0.04)	0.73 (0.03)	61.9 (7.5)	30.04 (6.46)	28.76 (6.46)	30.17 (6.48)
	50	0.83 (0.07)	0.87 (0.06)	0.83 (0.07)	0.55 (0.05)	0.56 (0.05)	0.55 (0.05)	67.46 (9.23)	45.5 (8.55)	47.38 (8.62)	45.67 (8.58)
	100	0.77 (0.08)	0.73 (0.08)	0.77 (0.08)	0.48 (0.05)	0.49 (0.04)	0.49 (0.05)	91.08 (14.54)	81.72 (14.24)	85.72 (15.39)	82.3 (14.24)

Table 6: 30 Monte Carlo simulations of $\mathcal{M}_2$ for $\mathcal{B}_u$ with varying σ and σ_α

		Guess			LOOCV with k random draws			Distance to y_{1,T_1^*+1}			
σ	σ_α	$\delta_{\hat{\alpha}_{\text{adj}}}$	$\delta_{\hat{\alpha}_{\text{wadj}}}$	$\delta_{\hat{\alpha}_{\text{IVW}}}$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{adj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{wadj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{IVW}}})$	Original	$\hat{\alpha}_{\text{adj}}$	$\hat{\alpha}_{\text{wadj}}$	$\hat{\alpha}_{\text{IVW}}$
	5	1 (0)	1 (0)	1 (0)	0.97 (0.01)	0.97 (0.01)	0.97 (0.01)	49.95 (2.46)	12.36 (1.71)	11.71 (1.55)	12.13 (1.71)
	10	1 (0)	1 (0)	1 (0)	0.92 (0.02)	0.92 (0.02)	0.92 (0.02)	51.25 (2.88)	13.14 (1.88)	14.55 (1.7)	12.84 (1.87)
5	25	0.97 (0.03)	1 (0)	1 (0)	0.81 (0.03)	0.84 (0.03)	0.81 (0.03)	54.85 (4.6)	19.32 (3.07)	20.87 (3.45)	19.75 (3.13)
	50	0.77 (0.08)	0.8 (0.07)	0.77 (0.08)	0.59 (0.04)	0.62 (0.03)	0.58 (0.04)	60.57 (8.15)	43.17 (5.49)	47.62 (5.88)	43.59 (5.63)
	100	0.67 (0.09)	0.63 (0.09)	0.67 (0.09)	0.45 (0.04)	0.49 (0.04)	0.49 (0.04)	71.15 (10.52)	72.15 (9.61)	80.17 (9.52)	71.7 (9.57)
	5	0.97 (0.03)	1 (0)	0.97 (0.03)	0.91 (0.02)	0.91 (0.02)	0.91 (0.02)	48.65 (3.85)	18.3 (2.4)	19.78 (2.31)	18.64 (2.39)
	10	1 (0)	1 (0)	1 (0)	0.9 (0.02)	0.93 (0.02)	0.91 (0.02)	52.46 (4.4)	16.52 (3.06)	15.86 (3.18)	16.46 (3.06)
10	25	1 (0)	1 (0)	1 (0)	0.79 (0.04)	0.81 (0.03)	0.8 (0.04)	64.81 (4.93)	24.85 (3.5)	24.78 (3.7)	24.94 (3.58)
	50	0.87 (0.06)	0.9 (0.06)	0.87 (0.06)	0.57 (0.04)	0.61 (0.04)	0.57 (0.04)	65.69 (6.74)	40.16 (5.47)	37.29 (5.35)	39.44 (5.49)
	100	0.63 (0.09)	0.67 (0.09)	0.63 (0.09)	0.43 (0.04)	0.47 (0.03)	0.43 (0.04)	67.98 (10.7)	65.69 (8.35)	78.45 (9.42)	67.75 (8.58)
	5	1 (0)	1 (0)	1 (0)	0.73 (0.03)	0.74 (0.03)	0.73 (0.03)	58.32 (7.69)	39.37 (7.46)	39.16 (7.89)	39.6 (7.47)
	10	1 (0)	1 (0)	1 (0)	0.71 (0.04)	0.73 (0.05)	0.73 (0.04)	65.93 (5.72)	33.34 (5.91)	34.04 (5.49)	33.05 (5.89)
25	25	0.9 (0.06)	0.97 (0.03)	0.93 (0.05)	0.67 (0.04)	0.68 (0.03)	0.66 (0.04)	56.05 (7.5)	39.49 (5.25)	35.65 (4.98)	39.73 (5.26)
	50	0.77 (0.08)	0.8 (0.07)	0.77 (0.08)	0.59 (0.04)	0.62 (0.04)	0.59 (0.04)	60.85 (7.93)	46.55 (6.83)	47.97 (7.4)	47.23 (6.73)
	100	0.67 (0.09)	0.7 (0.09)	0.63 (0.09)	0.53 (0.05)	0.53 (0.04)	0.53 (0.05)	95.21 (12.76)	98.68 (11.57)	99.87 (13.28)	98.77 (11.61)
	5	0.77 (0.08)	0.7 (0.09)	0.77 (0.08)	0.6 (0.04)	0.61 (0.03)	0.61 (0.04)	71.05 (8.49)	52.9 (8.7)	57.45 (9.57)	53.05 (8.59)
	10	0.63 (0.09)	0.63 (0.09)	0.63 (0.09)	0.57 (0.04)	0.57 (0.05)	0.57 (0.04)	68.23 (7.38)	44.22 (5.95)	55.53 (6.2)	44.63 (5.86)
50	25	0.73 (0.08)	0.67 (0.09)	0.77 (0.08)	0.55 (0.04)	0.55 (0.04)	0.57 (0.04)	69.78 (10.51)	63.97 (9.49)	68.82 (9.79)	64.33 (9.47)
	50	0.83 (0.07)	0.8 (0.07)	0.83 (0.07)	0.55 (0.04)	0.51 (0.05)	0.55 (0.04)	64.9 (11.37)	66.61 (10.07)	73.22 (10.92)	67.06 (9.99)
	100	0.47 (0.09)	0.53 (0.09)	0.47 (0.09)	0.49 (0.04)	0.51 (0.04)	0.49 (0.04)	92.78 (12)	73.61 (11.81)	78.33 (10.92)	74.37 (11.63)
	5	0.5 (0.09)	0.47 (0.09)	0.47 (0.09)	0.49 (0.05)	0.48 (0.04)	0.47 (0.05)	125.13 (15.27)	104.01 (14.95)	100.33 (13.71)	105.4 (14.95)
	10	0.4 (0.09)	0.4 (0.09)	0.37 (0.09)	0.49 (0.03)	0.51 (0.05)	0.51 (0.04)	106.46 (14.76)	101.82 (14.64)	110.6 (14.95)	98.85 (14.69)
100	25	0.63 (0.09)	0.57 (0.09)	0.63 (0.09)	0.49 (0.04)	0.48 (0.04)	0.51 (0.04)	142.91 (16.43)	132.29 (18.34)	146.26 (17.96)	132.06 (18.25)
	50	0.57 (0.09)	0.57 (0.09)	0.57 (0.09)	0.5 (0.05)	0.5 (0.05)	0.49 (0.04)	114.36 (15.46)	93 (16.26)	95.41 (15.89)	91.92 (15.98)
	100	0.33 (0.09)	0.3 (0.09)	0.3 (0.09)	0.49 (0.05)	0.49 (0.05)	0.48 (0.05)	150.5 (20.71)	148.07 (17.57)	151.26 (17.18)	148.96 (17.71)

Table 7: 30 Monte Carlo simulations of $\mathcal{M}_2$ for $\mathcal{B}_f$ with varying n and σ_α

		Guess			LOOCV with k random draws			Distance to y_{1,T_1^*+1}			
n	σ_α	$\delta_{\hat{\alpha}_{\text{adj}}}$	$\delta_{\hat{\alpha}_{\text{wadj}}}$	$\delta_{\hat{\alpha}_{\text{IVW}}}$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{adj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{wadj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{IVW}}})$	Original	$\hat{\alpha}_{\text{adj}}$	$\hat{\alpha}_{\text{wadj}}$	$\hat{\alpha}_{\text{IVW}}$
	5	1 (0)	1 (0)	1 (0)	0.89 (0.02)	0.9 (0.02)	0.89 (0.02)	51.92 (4.04)	19.23 (2.55)	20.64 (2.76)	19.36 (2.52)
	10	1 (0)	1 (0)	1 (0)	0.89 (0.02)	0.89 (0.02)	0.89 (0.02)	52.58 (4.35)	21.57 (2.58)	23.38 (2.86)	21.72 (2.5)
5	25	1 (0)	1 (0)	1 (0)	0.78 (0.03)	0.83 (0.02)	0.79 (0.03)	55.01 (5.84)	30.3 (3.59)	31.98 (4.36)	30.2 (3.5)
	50	0.9 (0.06)	0.97 (0.03)	0.93 (0.05)	0.66 (0.04)	0.65 (0.04)	0.65 (0.04)	64.42 (8.11)	50 (5.78)	52.56 (6.92)	49.55 (5.7)
	100	0.77 (0.08)	0.97 (0.03)	0.8 (0.07)	0.57 (0.04)	0.53 (0.04)	0.57 (0.04)	91.51 (13.2)	94.26 (10.41)	97.26 (12.57)	93.61 (10.27)
	5	1 (0)	1 (0)	1 (0)	0.91 (0.02)	0.92 (0.02)	0.91 (0.02)	52.34 (4)	17.23 (2.96)	18.54 (2.83)	17.39 (2.95)
	10	1 (0)	1 (0)	1 (0)	0.89 (0.02)	0.89 (0.02)	0.89 (0.02)	52.59 (4.04)	19.02 (3.24)	20.95 (3.13)	19.23 (3.24)
10	25	1 (0)	1 (0)	1 (0)	0.75 (0.03)	0.78 (0.03)	0.77 (0.03)	54.07 (4.97)	27.66 (4.55)	31.79 (4.47)	27.84 (4.61)
	50	0.83 (0.07)	1 (0)	0.8 (0.07)	0.59 (0.04)	0.63 (0.04)	0.59 (0.04)	60.32 (7.53)	47.7 (7.04)	52.97 (7.54)	47.78 (7.17)
	100	0.8 (0.07)	0.93 (0.05)	0.8 (0.07)	0.47 (0.04)	0.51 (0.04)	0.46 (0.04)	85.6 (12.99)	89.85 (12.82)	100.74 (13.61)	90.4 (12.91)
	5	1 (0)	1 (0)	1 (0)	0.91 (0.02)	0.93 (0.02)	0.91 (0.02)	49.85 (4.01)	18.07 (2.88)	18.38 (2.71)	18.04 (2.88)
	10	1 (0)	1 (0)	1 (0)	0.87 (0.02)	0.89 (0.02)	0.87 (0.02)	48.73 (4.3)	19.45 (2.97)	19.35 (2.86)	19.32 (2.99)
15	25	1 (0)	1 (0)	1 (0)	0.75 (0.03)	0.78 (0.03)	0.76 (0.03)	47.06 (5.13)	26.16 (3.31)	26.81 (3.13)	26.23 (3.33)
	50	0.93 (0.05)	1 (0)	0.9 (0.06)	0.61 (0.04)	0.69 (0.03)	0.64 (0.04)	48.75 (6.86)	40.27 (4.43)	42.09 (4.49)	40.77 (4.38)
	100	0.67 (0.09)	1 (0)	0.63 (0.09)	0.55 (0.04)	0.51 (0.04)	0.55 (0.04)	64.29 (11.11)	68.85 (8.27)	74.08 (8.72)	69.91 (8.14)
	5	1 (0)	1 (0)	1 (0)	0.95 (0.02)	0.94 (0.02)	0.95 (0.02)	57.6 (6.94)	21.58 (5.9)	20 (5.86)	21.58 (5.9)
	10	1 (0)	1 (0)	1 (0)	0.93 (0.02)	0.91 (0.02)	0.93 (0.02)	56.8 (7.01)	22.2 (5.97)	20.47 (5.89)	22.22 (5.97)
25	25	1 (0)	1 (0)	1 (0)	0.78 (0.04)	0.79 (0.04)	0.77 (0.04)	56.58 (7.49)	28.96 (6.49)	27.06 (6.19)	29.03 (6.48)
	50	0.9 (0.06)	1 (0)	0.9 (0.06)	0.57 (0.04)	0.6 (0.04)	0.58 (0.04)	64.33 (8.75)	47.16 (8.28)	46.3 (7.26)	47.35 (8.25)
	100	0.83 (0.07)	1 (0)	0.8 (0.07)	0.49 (0.04)	0.48 (0.04)	0.5 (0.04)	95.61 (13.02)	90.1 (13.29)	86.81 (11.75)	90.55 (13.23)

Table 8: 30 Monte Carlo simulations of $\mathcal{M}_2$ for $\mathcal{B}_f$ with varying σ and σ_α

		Guess			LOOCV with k random draws			Distance to y_{1,T_1^*+1}			
σ	σ_α	$\delta_{\hat{\alpha}_{\text{adj}}}$	$\delta_{\hat{\alpha}_{\text{wadj}}}$	$\delta_{\hat{\alpha}_{\text{IVW}}}$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{adj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{wadj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{IVW}}})$	Original	$\hat{\alpha}_{\text{adj}}$	$\hat{\alpha}_{\text{wadj}}$	$\hat{\alpha}_{\text{IVW}}$
	5	1 (0)	1 (0)	1 (0)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	53.27 (2.59)	10.91 (1.7)	11.77 (1.55)	10.8 (1.69)
	10	1 (0)	1 (0)	1 (0)	0.91 (0.02)	0.95 (0.02)	0.92 (0.02)	50.86 (3.83)	18.06 (2.18)	17.26 (2.17)	18.25 (2.17)
5	25	0.97 (0.03)	1 (0)	0.97 (0.03)	0.83 (0.03)	0.89 (0.02)	0.83 (0.03)	60.52 (3.97)	16.09 (2.4)	19.83 (3.05)	15.87 (2.38)
	50	0.87 (0.06)	1 (0)	0.87 (0.06)	0.67 (0.04)	0.69 (0.03)	0.67 (0.04)	54.65 (6.95)	51.79 (6.87)	53.83 (7.26)	52.6 (6.91)
	100	0.7 (0.09)	0.93 (0.05)	0.77 (0.08)	0.52 (0.04)	0.51 (0.04)	0.51 (0.05)	104.73 (13)	88.31 (12.16)	88.88 (12.63)	86.72 (12.35)
	5	1 (0)	1 (0)	1 (0)	0.93 (0.02)	0.93 (0.02)	0.93 (0.02)	58.17 (4.18)	18.17 (2.61)	16.59 (2.39)	18.09 (2.63)
	10	1 (0)	1 (0)	1 (0)	0.86 (0.03)	0.89 (0.03)	0.87 (0.03)	52.81 (4.07)	19.05 (2.49)	19.67 (2.66)	18.95 (2.53)
10	25	0.97 (0.03)	1 (0)	0.97 (0.03)	0.78 (0.03)	0.82 (0.03)	0.79 (0.03)	61.53 (5.69)	28.55 (4.07)	31.82 (4.27)	28.76 (4.07)
	50	0.93 (0.05)	1 (0)	0.9 (0.06)	0.66 (0.04)	0.67 (0.04)	0.66 (0.04)	56.31 (8.03)	47.33 (4.89)	41.44 (4.39)	46.86 (4.79)
	100	0.77 (0.08)	0.97 (0.03)	0.7 (0.09)	0.54 (0.05)	0.54 (0.04)	0.55 (0.04)	84.38 (11.62)	82.91 (11.77)	84.5 (12.39)	84.3 (11.93)
	5	0.97 (0.03)	1 (0)	1 (0)	0.78 (0.03)	0.77 (0.03)	0.79 (0.03)	56.35 (6.1)	25.54 (4.06)	30.49 (4.61)	25.94 (4.02)
	10	1 (0)	1 (0)	1 (0)	0.81 (0.03)	0.79 (0.03)	0.81 (0.03)	49.8 (5.24)	25.04 (4.38)	26.74 (3.64)	24.86 (4.38)
25	25	1 (0)	1 (0)	1 (0)	0.72 (0.03)	0.77 (0.03)	0.71 (0.03)	54.21 (6.51)	44.17 (6.66)	43.41 (6.95)	43.89 (6.63)
	50	0.87 (0.06)	0.97 (0.03)	0.87 (0.06)	0.55 (0.04)	0.57 (0.04)	0.52 (0.04)	66.51 (7.86)	46.19 (8.04)	44.83 (9.31)	46.54 (8.27)
	100	0.9 (0.06)	1 (0)	0.87 (0.06)	0.54 (0.04)	0.54 (0.04)	0.56 (0.04)	109.21 (13.29)	78.47 (12.45)	83.99 (12)	78.57 (12.75)
	5	0.83 (0.07)	0.73 (0.08)	0.8 (0.07)	0.54 (0.04)	0.57 (0.04)	0.55 (0.04)	75.29 (10.75)	63.51 (8.3)	64.25 (8.88)	63.32 (8.4)
	10	0.77 (0.08)	0.8 (0.07)	0.77 (0.08)	0.53 (0.04)	0.55 (0.05)	0.53 (0.04)	57.59 (6)	48.51 (8.32)	50.58 (8.63)	48.08 (8.36)
50	25	0.73 (0.08)	0.8 (0.07)	0.73 (0.08)	0.58 (0.04)	0.58 (0.04)	0.57 (0.04)	77.21 (12.03)	54.73 (9.47)	54.76 (10.24)	54.2 (9.62)
	50	0.8 (0.07)	0.83 (0.07)	0.8 (0.07)	0.59 (0.04)	0.53 (0.04)	0.6 (0.04)	90.48 (10.21)	68.88 (9.2)	68.28 (10.48)	68.8 (9.28)
	100	0.5 (0.09)	0.73 (0.08)	0.53 (0.09)	0.51 (0.05)	0.48 (0.05)	0.51 (0.05)	111.09 (17.54)	102.47 (16.68)	110.15 (15.87)	101.53 (16.52)
	5	0.43 (0.09)	0.37 (0.09)	0.43 (0.09)	0.47 (0.04)	0.47 (0.04)	0.47 (0.04)	214.07 (67.4)	195.46 (67.65)	197.51 (68.45)	196.58 (67.51)
	10	0.63 (0.09)	0.6 (0.09)	0.67 (0.09)	0.51 (0.04)	0.49 (0.04)	0.51 (0.04)	120.85 (15.39)	114.79 (15.51)	119.19 (15.75)	114.02 (15.74)
100	25	0.57 (0.09)	0.6 (0.09)	0.57 (0.09)	0.51 (0.04)	0.53 (0.04)	0.49 (0.04)	97.84 (13.75)	95.02 (14.88)	100.04 (16.94)	96.23 (14.71)
	50	0.53 (0.09)	0.43 (0.09)	0.5 (0.09)	0.47 (0.04)	0.49 (0.05)	0.49 (0.05)	141.22 (24.51)	136.11 (25.73)	150.62 (27.62)	135.26 (25.39)
	100	0.63 (0.09)	0.63 (0.09)	0.63 (0.09)	0.43 (0.04)	0.41 (0.04)	0.45 (0.04)	95.53 (12.8)	103.01 (14.12)	103.31 (16.27)	105.79 (14.32)

3 Boundary Case $2p < n$

Table 9: 30 Monte Carlo simulations of $\mathcal{M}_2$ for $\mathcal{B}_u$ with varying n and σ_α ($p = 2$, boundary case)

		Guess			LOOCV with k random draws			Distance to y_{1,T_1^*+1}			
n	σ_α	$\delta_{\hat{\alpha}_{\text{adj}}}$	$\delta_{\hat{\alpha}_{\text{wadj}}}$	$\delta_{\hat{\alpha}_{\text{IVW}}}$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{adj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{wadj}}})$	$\bar{\mathcal{C}}^{(k)}(\delta_{\hat{\alpha}_{\text{IVW}}})$	Original	$\hat{\alpha}_{\text{adj}}$	$\hat{\alpha}_{\text{wadj}}$	$\hat{\alpha}_{\text{IVW}}$
	1	1 (0)	1 (0)	1 (0)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	59.12 (2.5)	10.73 (1.34)	13.54 (1.81)	10.59 (1.35)
	5	1 (0)	1 (0)	1 (0)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	59.57 (2.63)	11.24 (1.61)	15.42 (2.06)	11.19 (1.61)
5	10	0.97 (0.03)	1 (0)	0.97 (0.03)	0.91 (0.03)	0.93 (0.02)	0.91 (0.02)	60.13 (3.08)	13.77 (2.03)	18.82 (2.68)	13.85 (2.01)
	25	0.83 (0.07)	0.9 (0.06)	0.83 (0.07)	0.72 (0.04)	0.75 (0.04)	0.71 (0.04)	62.49 (5.1)	26.53 (3.52)	34.4 (4.71)	26.62 (3.5)
	50	0.67 (0.09)	0.7 (0.09)	0.7 (0.09)	0.49 (0.06)	0.53 (0.05)	0.5 (0.06)	72.46 (7.97)	50.17 (6.54)	63.61 (8.47)	50.25 (6.55)
	1	1 (0)	1 (0)	1 (0)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	61.13 (2.17)	9.58 (1.52)	12.21 (1.89)	9.58 (1.56)
	5	1 (0)	1 (0)	1 (0)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	61.3 (2.08)	9.18 (1.44)	11.89 (1.68)	9.25 (1.47)
10	10	1 (0)	1 (0)	1 (0)	0.97 (0.01)	0.98 (0.01)	0.97 (0.01)	61.52 (2.28)	10.97 (1.39)	13.32 (1.63)	11.05 (1.41)
	25	0.97 (0.03)	0.93 (0.05)	0.97 (0.03)	0.77 (0.04)	0.77 (0.04)	0.78 (0.04)	62.17 (4.11)	20.07 (2.64)	21.84 (3.38)	20.17 (2.61)
	50	0.73 (0.08)	0.8 (0.07)	0.77 (0.08)	0.56 (0.04)	0.61 (0.03)	0.55 (0.04)	63.99 (7.96)	38.79 (5.64)	44.19 (6.71)	38.87 (5.57)
	1	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)	56.41 (1.85)	9.71 (1.24)	9.15 (0.99)	9.77 (1.26)
	5	1 (0)	1 (0)	1 (0)	1 (0)	0.99 (0.01)	1 (0)	56.41 (2.35)	11.91 (1.43)	10.65 (1.32)	11.96 (1.46)
15	10	1 (0)	1 (0)	1 (0)	0.98 (0.01)	0.97 (0.01)	0.98 (0.01)	56.42 (3.08)	14.71 (1.85)	14.3 (1.74)	14.77 (1.88)
	25	0.87 (0.06)	0.97 (0.03)	0.87 (0.06)	0.82 (0.04)	0.77 (0.04)	0.83 (0.04)	57.92 (4.93)	24.04 (3.34)	27.4 (3.46)	24.2 (3.36)
	50	0.7 (0.09)	0.77 (0.08)	0.7 (0.09)	0.63 (0.04)	0.61 (0.04)	0.62 (0.04)	68.27 (6.57)	42.03 (5.63)	50.98 (6.57)	42.24 (5.68)
	1	1 (0)	1 (0)	1 (0)	0.99 (0.01)	0.99 (0.01)	0.99 (0.01)	57.87 (2.42)	10.38 (1.54)	14.29 (1.36)	10.35 (1.55)
	5	1 (0)	1 (0)	1 (0)	0.98 (0.01)	0.98 (0.01)	0.98 (0.01)	58.2 (2.44)	10.55 (1.6)	14.05 (1.62)	10.51 (1.61)
25	10	1 (0)	1 (0)	1 (0)	0.95 (0.02)	0.94 (0.02)	0.95 (0.02)	58.6 (2.71)	11.43 (1.92)	15.05 (2.08)	11.41 (1.93)
	25	0.97 (0.03)	0.93 (0.05)	0.93 (0.05)	0.77 (0.04)	0.79 (0.03)	0.77 (0.04)	59.81 (4.47)	19.09 (3.21)	24.74 (3.61)	19.05 (3.21)
	50	0.8 (0.07)	0.83 (0.07)	0.8 (0.07)	0.61 (0.04)	0.65 (0.04)	0.61 (0.04)	64.73 (7.53)	35 (6.02)	44.55 (6.94)	34.89 (6.02)