Parametric Reconciliation

Gaussian DGP

R.method	Log Score(%)			Energy Score(%)			Variogram Score(%)		
	1	2	3	1	2	3	1	2	3
Base	0.21	-0.07	-0.11	12.46	9.58	7.19	4.91	5.89	6.02
Bottom up	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MinT.Sam	6.24	6.48	6.80	21.55	17.36	13.60	15.74	15.75	15.51
MinT.Shr	6.28	6.84	7.09	21.44	17.33	13.60	15.65	15.98	15.58
OLS	-0.36	-0.13	-0.93	16.83	13.43	10.44	9.17	9.63	9.02
Optimal	6.01	6.43	7.11	8.08	13.75	15.10	-14.12	3.60	6.57
WLS	1.04	1.97	1.20	19.06	15.34	11.88	11.52	12.24	11.62

Non Gaussian DGP

R.method	Log Score(%)			Energy Score(%)			Variogram Score(%)		
	1	2	3	1	2	3	1	2	3
Base	-0.16	-0.05	0.07	7.18	7.37	7.13	-0.44	-0.35	-0.22
Bottom up	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MinT.Sam	4.57	4.76	4.38	12.94	14.07	13.44	1.78	2.16	2.07
MinT.Shr	4.14	4.53	4.46	12.92	14.13	13.39	1.63	2.18	2.20
OLS	1.01	0.52	0.83	9.73	10.28	10.18	0.50	0.52	0.87
Optimal	4.53	4.95	4.61	-3.31	3.48	2.41	-27.79	-19.37	-22.70
WLS	1.18	0.93	1.59	11.20	12.00	11.52	0.49	0.46	0.62

Comparing univariate predictive accuracy in aggregate levels

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## Warning in E.CRPS/Base_E.CRPS_BotTS_GausDGP: longer object length is not a
## multiple of shorter object length

## Warning in E.LS/Base_E.LS_BotTS_GausDGP: longer object length is not a
## multiple of shorter object length

## Warning in E.CRPS/Base_E.CRPS_BotTS_NonGausDGP: longer object length is not
## a multiple of shorter object length

## Warning in E.LS/Base_E.LS_BotTS_NonGausDGP: longer object length is not a
## multiple of shorter object length
```

For h=1

R.method	Gaussian DGP							Non-Gaussian DGP					
	Total.x	A.x	B.x	AA.x	AB.x	BA.x	BB.x	Total.y	A.y	B.y	AA.y	AB.y	BA.y
Base	0.00	0.00	0.00	0.00	0.00	0.00	8.11	0.00	0.00	0.00	0.00	0.00	0.00
Bottom up	-29.59	-2.99	-4.24	0.00	0.00	-5.94	8.11	-263.36	-0.72	-3.54	0.00	0.00	-0.81
MinT.Sam	-0.07	4.80	0.54	3.86	2.55	-2.34	8.20	0.24	0.44	5.18	0.61	3.73	2.46
MinT.Shr	-0.05	4.80	0.54	3.65	2.48	-2.36	8.20	0.27	0.45	5.18	-1.42	3.75	2.30
OLS	12.26	2.51	0.43	1.80	1.06	-3.41	7.59	49.53	0.38	2.58	-1.40	3.51	0.55
Optimal	13.86	1.37	-18.41	-0.28	-1.75	-6.75	4.13	70.23	-5.37	-287.34	-6.99	-2.02	-4.07
WLS	16.10	-3.73	-14.04	2.34	1.27	-3.08	0.45	75.34	4.86	-269.27	-1.38	3.36	0.91

R.method	Gaussian DGP							Non-Gaussian DGP					
	Total.x	A.x	B.x	AA.x	AB.x	BA.x	BB.x	Total.y	A.y	B.y	AA.y	AB.y	B...
Base	0.00	0.00	0.00	0.00	0.00	0.00	25.17	0.00	0.00	0.00	0.00	0.00	0
Bottom up	-134.06	-10.99	-15.42	-0.05	-0.14	-21.39	25.07	-485.01	-1.41	-9.35	-0.01	0.08	-1
MinT.Sam	-0.20	15.84	1.75	12.48	7.98	-7.53	25.38	0.24	1.34	12.79	1.39	9.67	6
MinT.Shr	-0.19	15.69	1.59	12.06	7.76	-7.61	25.35	0.26	1.52	12.88	-3.82	9.84	6
OLS	35.17	8.45	1.17	6.49	3.07	-11.45	23.77	74.22	1.30	6.77	-3.85	9.21	1
Optimal	37.22	3.37	-74.40	-2.85	-8.50	-27.27	11.28	85.14	-16.83	-599.74	-21.16	-7.42	-13
WLS	43.24	-13.62	-50.06	8.16	3.82	-10.32	1.12	87.17	12.20	-503.54	-3.90	8.85	2

For h=2

R.method	Gaussian DGP							Non-Gaussian DGP					
	Total.x	A.x	B.x	AA.x	AB.x	BA.x	BB.x	Total.y	A.y	B.y	AA.y	AB.y	BA.y
Base	0.00	0.00	0.00	0.00	0.00	0.00	18.99	0.00	0.00	0.00	0.00	0.00	0.00
Bottom up	9.87	-0.72	-4.28	0.00	0.00	-10.02	18.99	-8.05	-0.30	-3.12	0.00	0.00	-1.46
MinT.Sam	-0.28	2.65	0.57	3.51	1.80	-5.36	18.86	-0.02	0.43	6.80	0.64	4.66	2.44
MinT.Shr	-0.29	2.60	0.56	3.37	1.72	-5.34	18.90	-0.06	0.42	6.79	-1.50	4.67	2.26
OLS	-22.52	1.31	0.50	1.81	0.25	-6.72	18.12	30.16	0.20	3.28	-1.53	4.33	0.18
Optimal	-12.70	5.42	26.71	2.86	0.52	-6.42	17.11	34.04	-2.98	-7.45	-6.28	-0.19	-2.31
WLS	-27.45	-13.81	26.50	2.41	0.57	-6.17	5.10	12.65	7.09	-6.06	-1.55	4.11	0.71

R.method	Gaussian DGP							Non-Gaussian DGP					
	Total.x	A.x	B.x	AA.x	AB.x	BA.x	BB.x	Total.y	A.y	B.y	AA.y	AB.y	BA...
Base	0.00	0.00	0.00	0.00	0.00	0.00	46.71	0.00	0.00	0.00	0.00	0.00	0.0
Bottom up	-45.40	-5.11	-16.82	0.02	-0.05	-37.16	46.65	-185.36	-0.54	-8.18	0.08	-0.03	-3.5
MinT.Sam	-0.13	12.14	2.13	11.19	6.18	-17.67	46.49	0.26	1.29	16.54	1.60	11.95	6.7
MinT.Shr	-0.08	12.03	2.05	11.62	5.74	-17.91	46.64	0.32	1.44	16.71	-4.15	12.14	6.5
OLS	-14.62	6.88	1.64	7.06	0.78	-23.24	45.12	61.90	0.64	8.48	-4.32	11.30	1.1
Optimal	-10.80	10.78	22.61	7.57	-0.96	-25.69	41.91	71.52	-8.89	-184.63	-18.29	-1.88	-7.1
WLS	-10.18	-41.19	23.92	8.75	1.83	-21.19	14.60	70.13	17.33	-171.66	-4.30	10.76	2.5

For h=3

R.method	Gaussian DGP							Non-Gaussian DGP					
	Total.x	A.x	B.x	AA.x	AB.x	BA.x	BB.x	Total.y	A.y	B.y	AA.y	AB.y	BA.y
Base	0.00	0.00	0.00	0.00	0.00	0.00	29.16	0.00	0.00	0.00	0.00	0.00	0.00
Bottom up	34.32	1.21	-3.97	0.00	0.00	-14.82	29.16	56.40	-0.15	-2.89	0.00	0.00	-1.73
MinT.Sam	-0.40	-1.26	0.45	2.29	1.61	-9.34	28.94	-0.09	0.65	5.79	0.75	5.58	2.48
MinT.Shr	-0.42	-1.32	0.46	1.39	1.50	-9.27	28.99	-0.16	0.63	5.77	-1.74	5.60	2.34
OLS	-67.52	-0.68	0.48	0.27	-0.27	-10.97	28.06	-5.91	0.47	2.87	-1.78	5.14	0.07
Optimal	-24.58	10.50	51.73	2.73	3.03	-8.64	27.28	-12.25	-2.65	57.70	-7.44	0.17	-2.67
WLS	-85.70	-26.29	50.39	0.68	0.12	-10.26	10.40	-129.42	10.02	57.99	-1.71	4.84	0.75

R.method	Gaussian DGP							Non-Gaussian DGP					
	Total.x	A.x	B.x	AA.x	AB.x	BA.x	BB.x	Total.y	A.y	B.y	AA.y	AB.y	BA.y
Base	0.00	0.00	0.00	0.00	0.00	0.00	58.23	0.00	0.00	0.00	0.00	0.00	0.00
Bottom up	-22.10	-3.52	-16.10	-0.04	-0.09	-53.20	58.23	-80.43	-0.35	-8.48	-0.17	-0.05	-4.20
MinT.Sam	0.02	7.99	2.21	9.03	6.23	-29.83	57.85	0.21	1.88	14.24	1.88	14.20	6.81
MinT.Shr	-0.03	7.89	2.34	6.61	6.05	-29.59	57.94	0.15	1.75	14.18	-4.92	14.34	6.61
OLS	-47.20	4.67	2.04	2.52	0.48	-36.36	56.33	44.08	1.46	7.70	-4.75	13.40	0.90
Optimal	-30.12	13.11	42.74	4.33	5.29	-34.52	54.09	54.69	-8.71	-75.04	-22.55	-0.69	-8.13
WLS	-44.96	-60.44	42.85	3.92	1.71	-33.62	25.60	46.73	22.77	-66.37	-4.90	12.58	2.58