IMF and Benchmark Forecasts

1 A short note on error handling

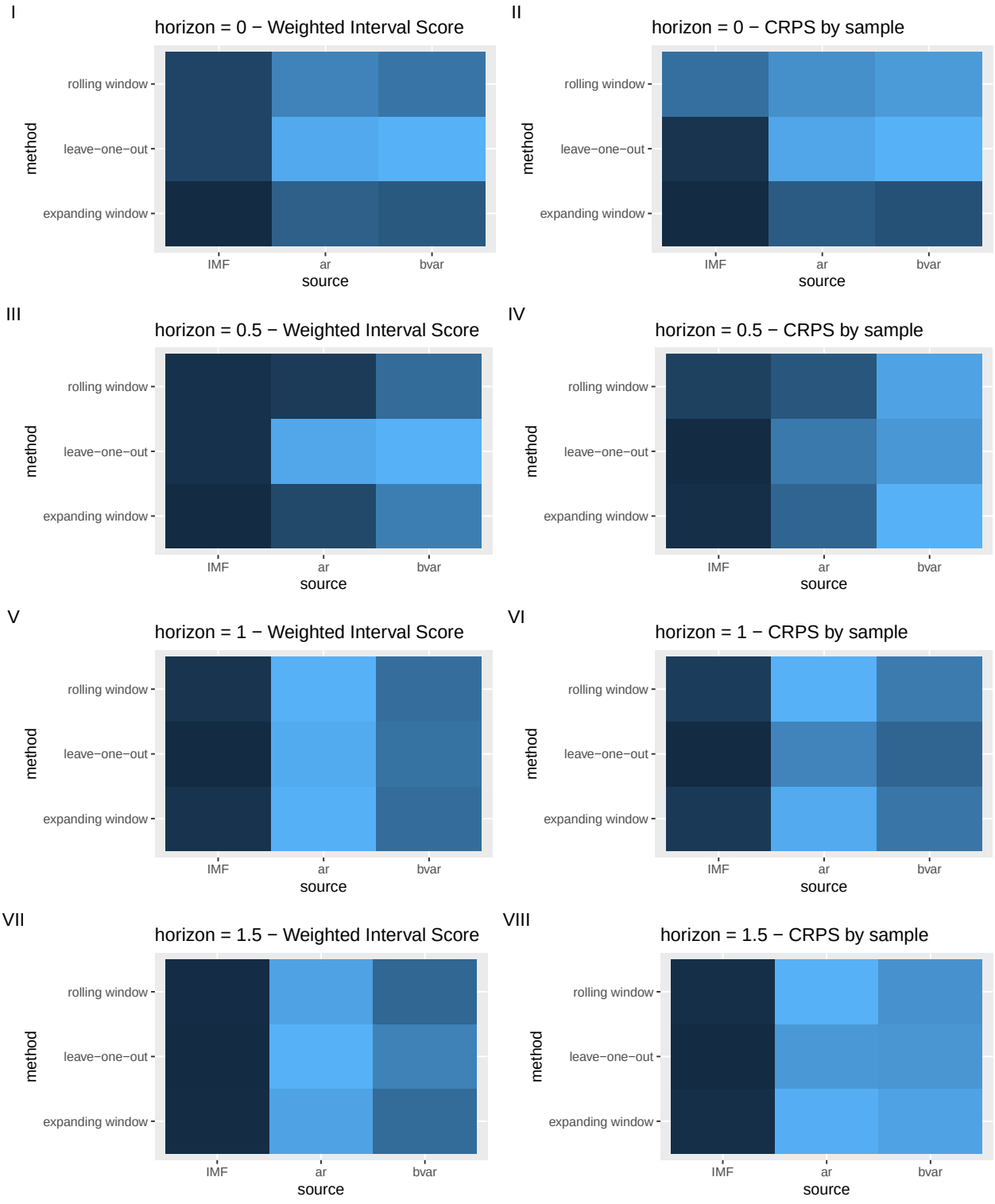
In almost all 72 cases, absolute error handling gives lower scores than directional error handling. The only exception is the inflation series for the IMF forecasts and horizon 0, where the expanding window and rolling window method give *slightly* lower scores for the directional methodology. We thus decide to focus on the absolute errors in this document.

2 Scores, by estimation method, Horizon and forecast source

	IMF	ar	bvar
horizon = 0			
expanding window_interval_score	0.115	0.123	0.122
expanding window_sample_crps	0.087	0.092	0.091
leave-one-out_interval_score	0.119	0.133	0.134
leave-one-out_sample_crps	0.088	0.099	0.100
rolling window_interval_score	0.119	0.128	0.126
rolling window_sample_crps	0.094	0.097	0.098
horizon = 0.5			
expanding window_interval_score	0.258	0.272	0.296
expanding window_sample_crps	0.182	0.208	0.241
leave-one-out_interval_score	0.261	0.313	0.317

leave-one-out_sample_crps	0.180	0.217	0.230
rolling window_interval_score	0.261	0.266	0.288
rolling window_sample_crps	0.191	0.201	0.235
horizon = 1			
expanding window_interval_score	0.448	0.737	0.590
expanding window_sample_crps	0.327	0.504	0.426
leave-one-out_interval_score	0.427	0.726	0.600
leave-one-out_sample_crps	0.302	0.448	0.400
rolling window_interval_score	0.451	0.739	0.591
rolling window_sample_crps	0.333	0.514	0.434
horizon = 1.5			
expanding window_interval_score	0.495	1.044	0.800
expanding window_sample_crps	0.346	0.627	0.602
leave-one-out_interval_score	0.487	1.103	0.903
leave-one-out_sample_crps	0.337	0.583	0.577
rolling window_interval_score	0.494	1.041	0.779
rolling window_sample_crps	0.347	0.632	0.570

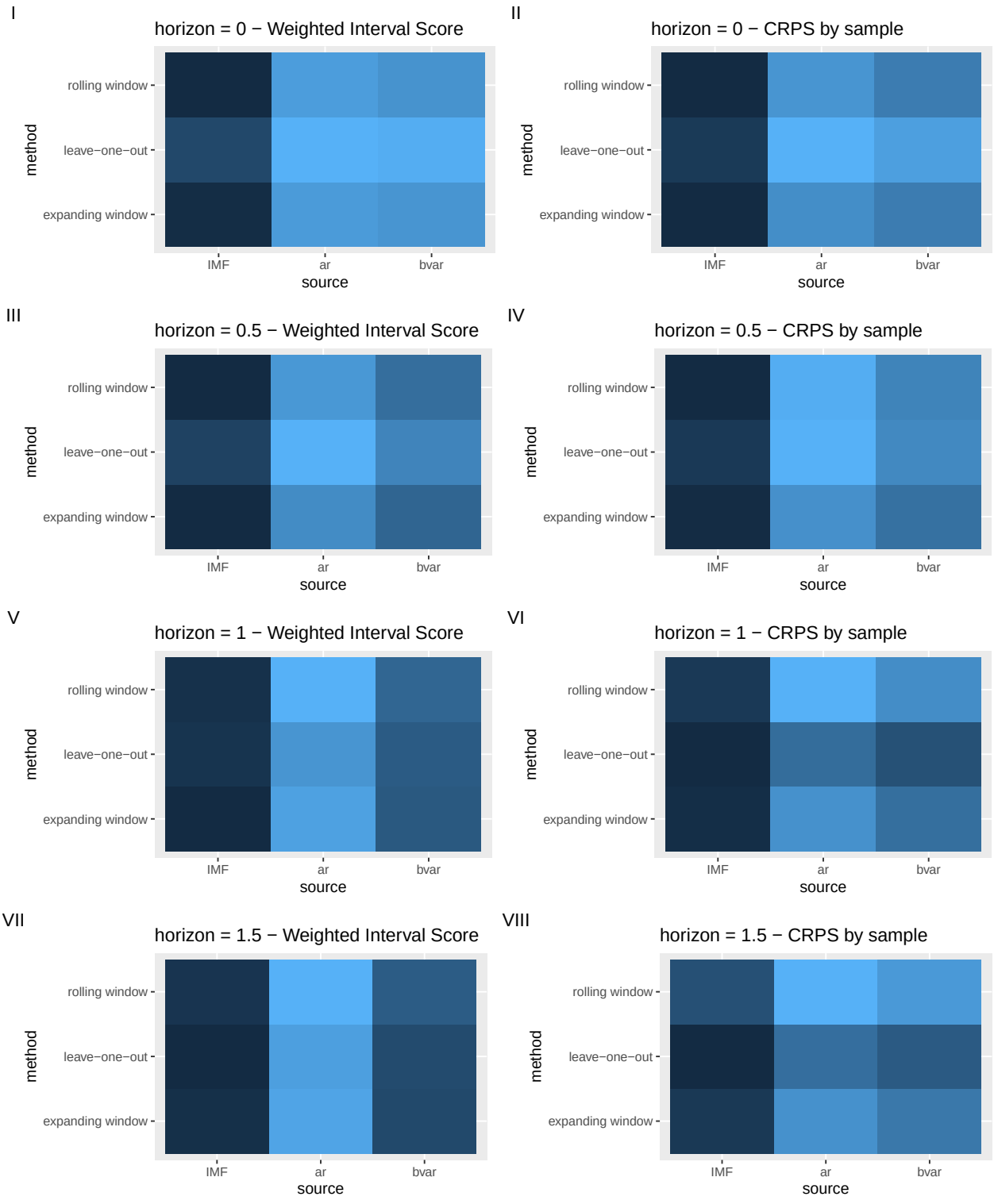
2.1 Inflation



2.2 GDP

	IMF	ar	bvar
horizon = 0			
expanding window_interval_score	0.241	0.301	0.298
expanding window_sample_crps	0.178	0.209	0.204
leave-one-out_interval_score	0.257	0.312	0.310
leave-one-out_sample_crps	0.183	0.219	0.214
rolling window_interval_score	0.240	0.302	0.297
rolling window_sample_crps	0.178	0.211	0.204
horizon = 0.5			
expanding window_interval_score	0.416	0.540	0.493
expanding window_sample_crps	0.298	0.383	0.358
leave-one-out_interval_score	0.448	0.583	0.531
leave-one-out_sample_crps	0.310	0.408	0.377
rolling window_interval_score	0.416	0.554	0.504
rolling window_sample_crps	0.297	0.405	0.373
horizon = 1			
expanding window_interval_score	0.837	1.090	0.942
expanding window_sample_crps	0.640	0.822	0.763
leave-one-out_interval_score	0.858	1.067	0.948
leave-one-out_sample_crps	0.634	0.759	0.709
rolling window_interval_score	0.851	1.122	0.970
rolling window_sample_crps	0.663	0.875	0.815
horizon = 1.5			
expanding window_interval_score	1.045	1.288	1.102
expanding window_sample_crps	0.790	0.937	0.897

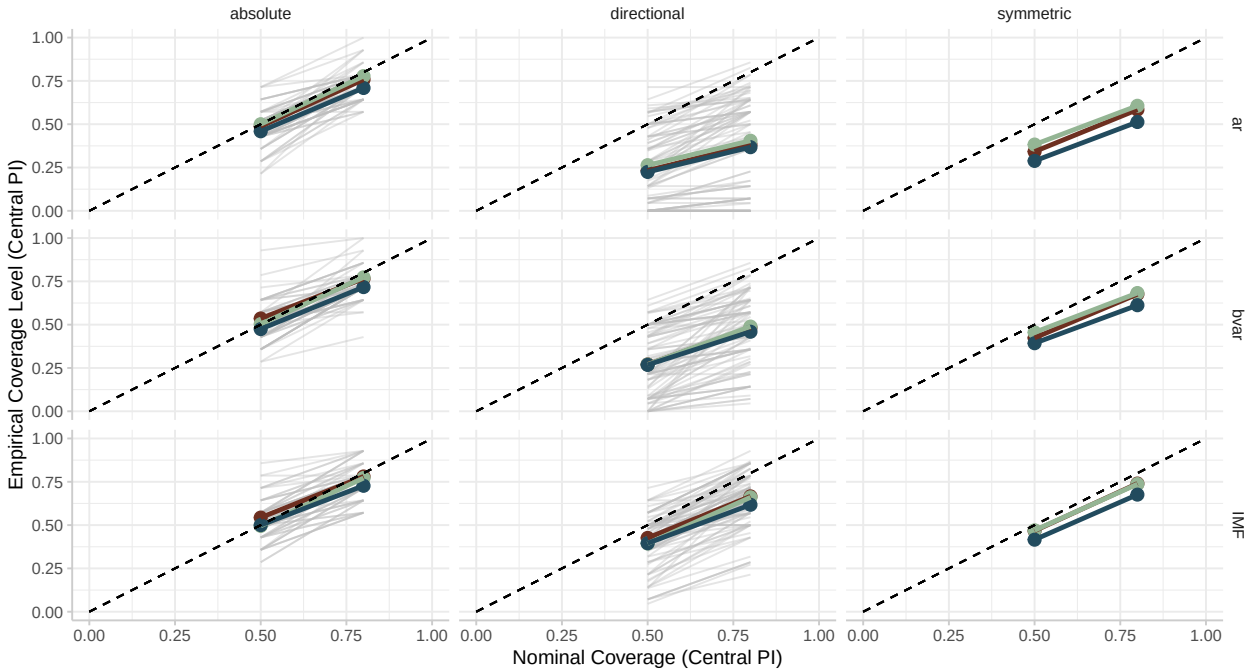
leave-one-out_interval_score	1.034	1.278	1.107
leave-one-out_sample_crps	0.765	0.882	0.849
rolling window_interval_score	1.056	1.312	1.143
rolling window_sample_crps	0.831	0.985	0.949


I
horizon = 0 − Weighted Interval Score
II
horizon = 0 − CRPS by sample
III
horizon = 0.5 − Weighted Interval Score
IV
horizon = 0.5 − CRPS by sample
V
horizon = 1 − Weighted Interval Score
VI
horizon = 1 − CRPS by sample
VII
horizon = 1.5 − Weighted Interval Score
VIII
horizon = 1.5 − CRPS by sample
method
rolling window
leave−one−out
expanding window
source
IMF
ar
bvar

3 Coverage, by target, methods and source

I

Real GDP Growth



II

Inflation