

Out-of sample MSE, excess bond return

12-Dec

With all 25 lags				
AR lags	AR MSE	y variable	model	NG
1-13	0.0442	yr2	LASSO 1	0.0627
			LASSO 2	0.0626
			LASSO 3	0.0626
1-25	0.0424	yr3	LASSO 1	0.0743
			LASSO 2	0.0747
			LASSO 3	0.0747
1-25	0.0467	yr4	LASSO 1	0.0799
			LASSO 2	0.0802
			LASSO 3	0.0802
1-25	0.0530	yr5	LASSO 1	0.0918
			LASSO 2	0.0903
			LASSO 3	0.0903

With only Significant lags				
AR lags	AR MSE	y variable	model	NG
1, 2, 5, 12, 13	0.0443	yr2	LASSO 1	0.0585
			LASSO 2	0.0566
			LASSO 3	0.0551
1, 2, 3, 4, 12, 13, 14, 24, 25	0.0459	yr3	LASSO 1	0.0728
			LASSO 2	0.0719
			LASSO 3	0.0719
1, 2, 12, 13, 14, 24, 25	0.0520	yr4	LASSO 1	0.0781
			LASSO 2	0.0764
			LASSO 3	0.0764
1, 2, 3, 12, 13, 14, 24, 25	0.0608	yr5	LASSO 1	0.0900
			LASSO 2	0.0849
			LASSO 3	0.0860

Note: After excluding insignificant lags, the out-of-sample M.S.E of AR increase, of LASSO decrease; but AR is still smaller than LASSO. Since NG, AIC, BIC (integration specification) have the same results for M.S.E, I only included NG this time.