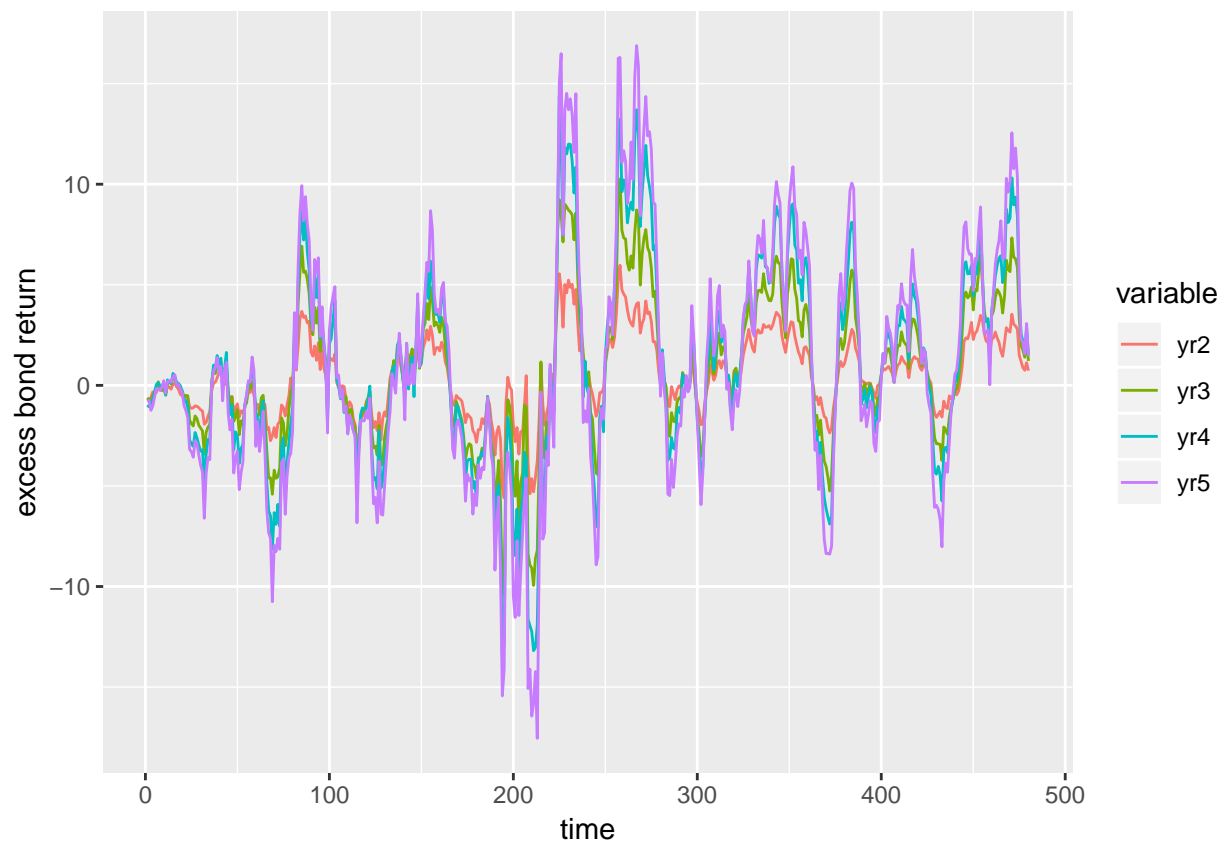


Lasso with NG data

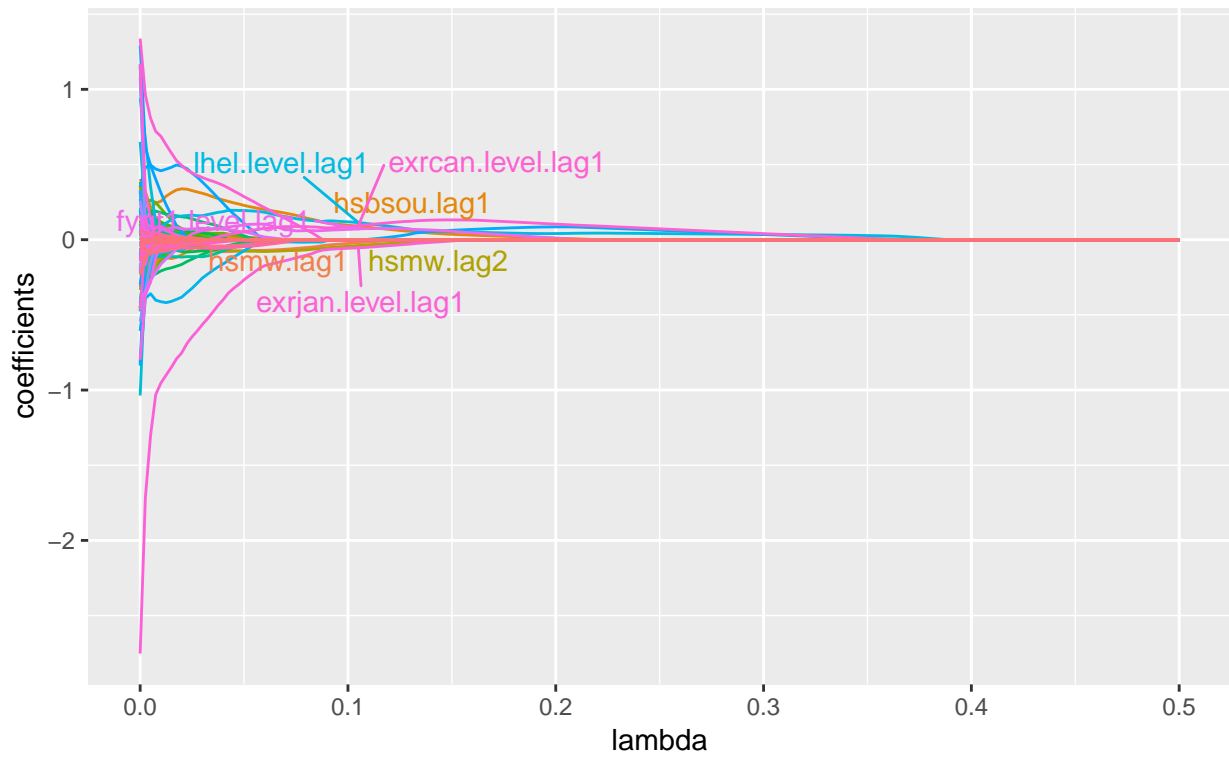
Shuofan Zhang

November 02, 2018



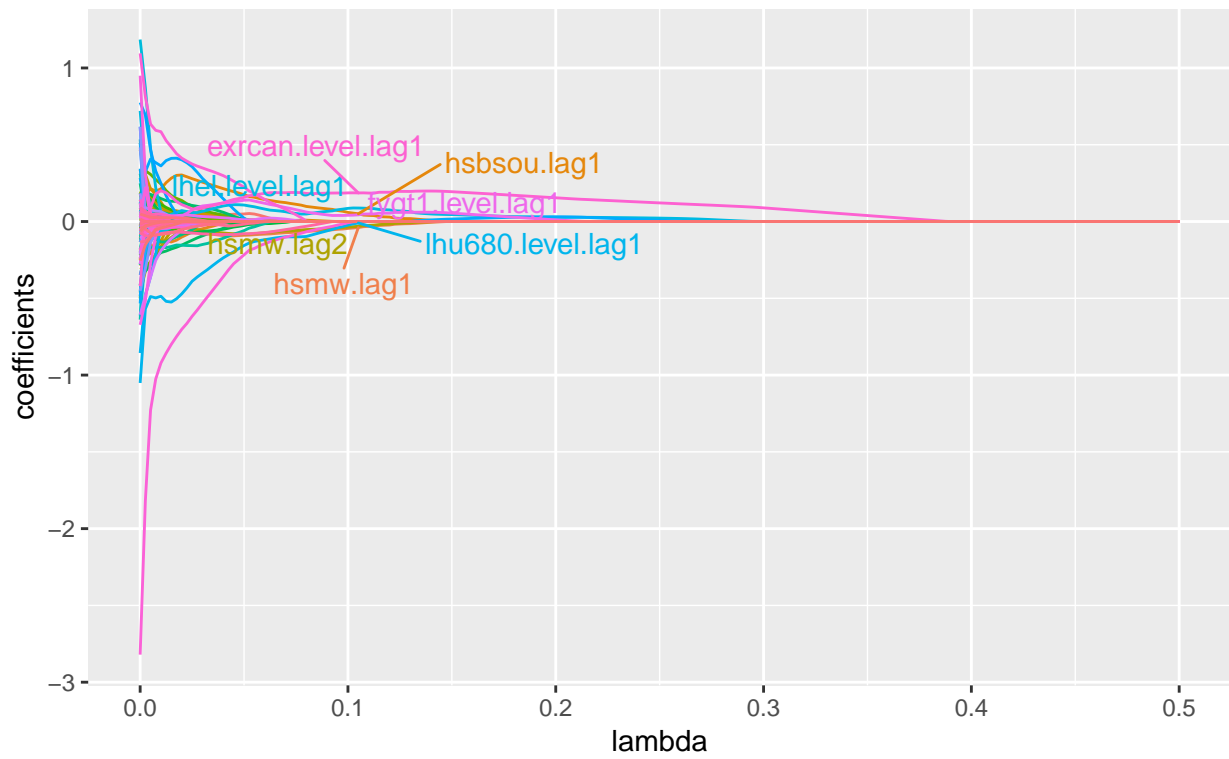
Series	Conclusion	Type	Lags
yr2	I(0) 1%	trend	12
yr3	I(0) 1%	trend	14
yr4	I(0) 1%	trend	14
yr5	I(0) 1%	trend	14

Coefficients trace plot



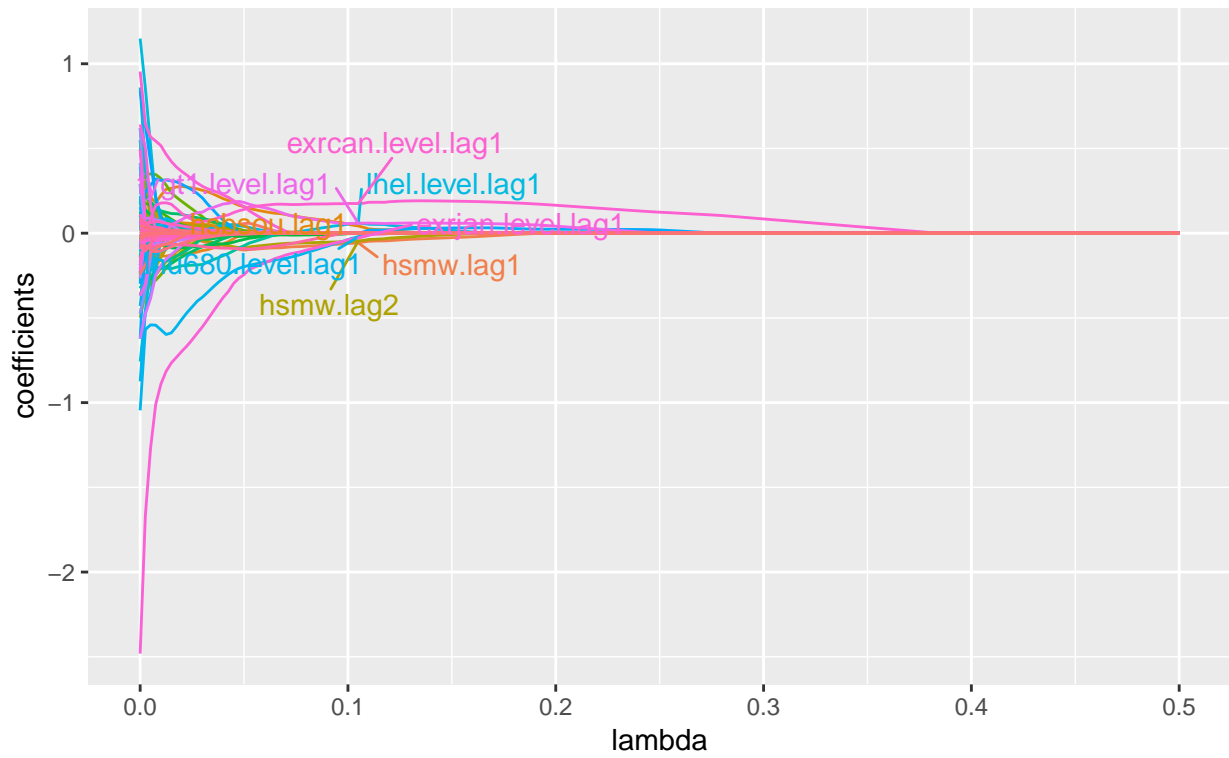
y = yr2

Coefficients trace plot



y = yr3

Coefficients trace plot



Coefficients trace plot

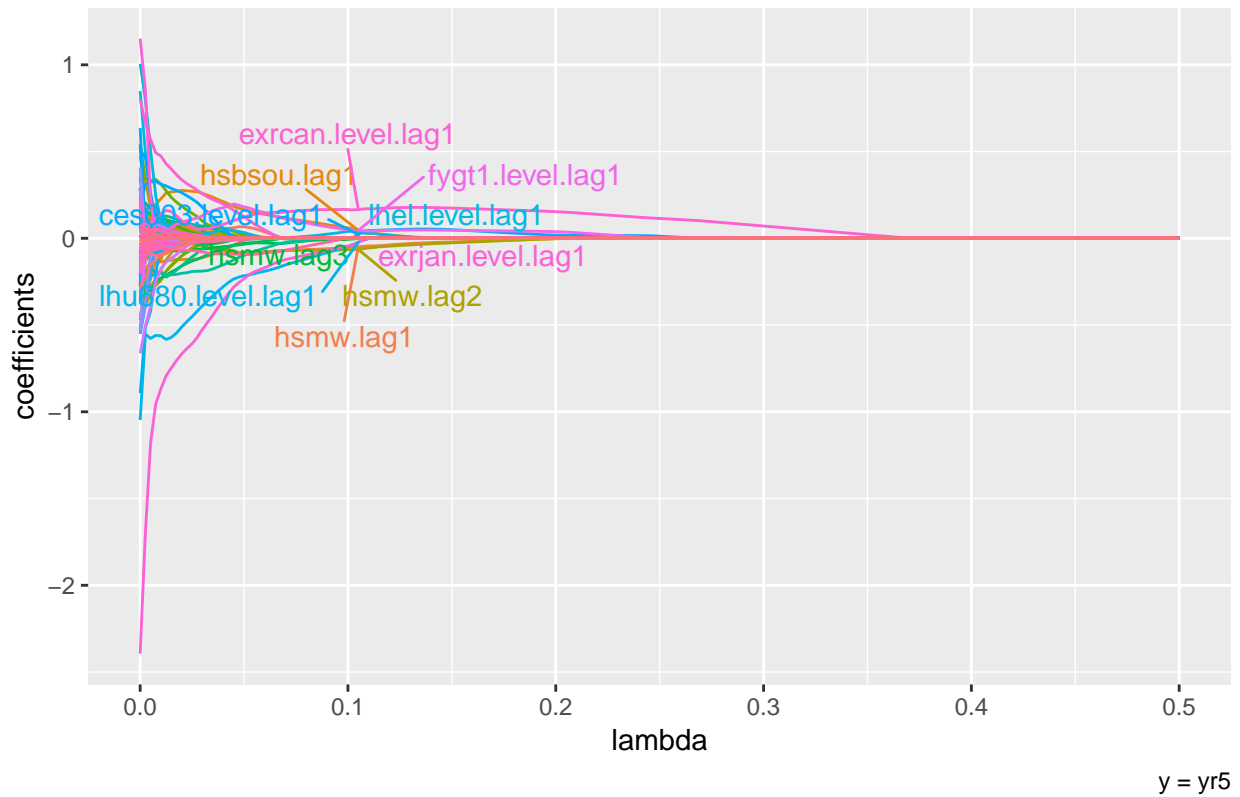


Table 2: Estimated non-zero coefficients with fixed lambda

Series	Yr2	Yr3	Yr4	Yr5
hsmw.lag1	-0.01982	-0.03925	-0.05667	-0.04936
hsbsou.lag1	0.08953	0.05053	0.04261	0.04545
hsmw.lag2	-0.03904	-0.0308	-0.04557	-0.06464
lhel.level.lag1	0.1138	0.08789	0.06072	0.037
fygt1.level.lag1	0.07153	0.04364	0.05803	0.0456
exrjan.level.lag1	-0.05376	NA	-0.0277	-0.02304
exrcan.level.lag1	0.0935	0.1862	0.1746	0.1656
lhu680.level.lag1	NA	-0.009502	-0.02122	-0.02264
hsmw.lag3	NA	NA	NA	-0.000545
ces003.level.lag1	NA	NA	NA	0.02176

Table 3: Data description

Short.description	Long.description
hsmw	Housing Starts:Midwest(Thous.U.)S.A.
hsbsou	Houses Authorized By Build. Permits:South(Thou.U.)S.A.
lhel	Index Of Help-Wanted Advertising In Newspapers (1967=100;Sa)
fygt1	Interest Rate: U.S.Treasury Const Maturities,1-Yr.(percentage Per Ann,Nsa)
exrjan	Foreign Exchange Rate: Japan (Yen Per U.S.\$)
exrcan	Foreign Exchange Rate: Canada (Canadian \$ Per U.S.\$)
lhu680	Unemploy.By Duration: Average(Mean)Duration In Weeks (Sa)
ces003	Employees On Nonfarm Payrolls - Goods-Producing

	Series	Conclusion	Type	Lags
1	hsmw.lag1	I(0) 10%	trend	3
2	hsbsou.lag1	I(1)	trend	1
3	hsmw.lag2	I(0) 10%	trend	3
4	lhel.level.lag1	I(0) 5%	trend	13
5	fygt1.level.lag1	I(1)	trend	6
6	exrjan.level.lag1	I(1)	trend	1
7	exrcan.level.lag1	I(1)	trend	1
12	lhu680.level.lag1	I(1)	trend	5
24	hsbsou.lag1	I(0) 5%	trend	12
26	hsmw.lag3	I(0) 10%	trend	3
27	lhel.level.lag1	I(0) 5%	trend	18
28	lhu680.level.lag1	I(0) 5%	trend	7
29	ces003.level.lag1	I(0) 5%	trend	4
30	fygt1.level.lag1	I(1)	trend	17
31	exrjan.level.lag1	I(0) 10%	trend	11
32	exrcan.level.lag1	I(1)	trend	18