

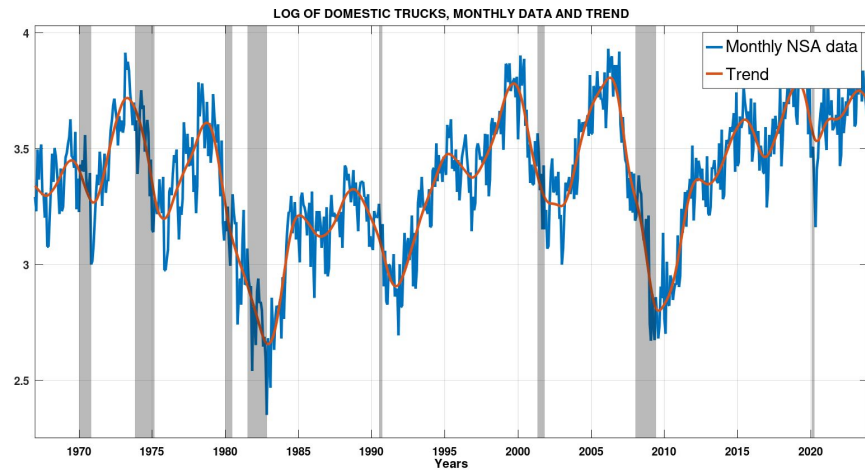
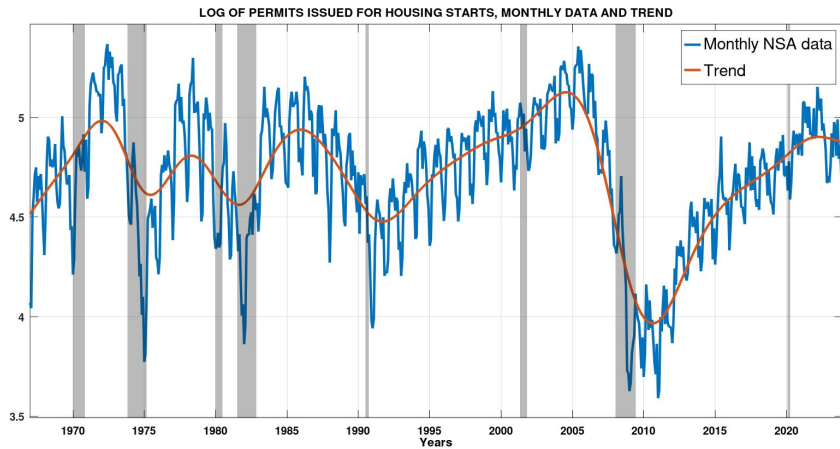
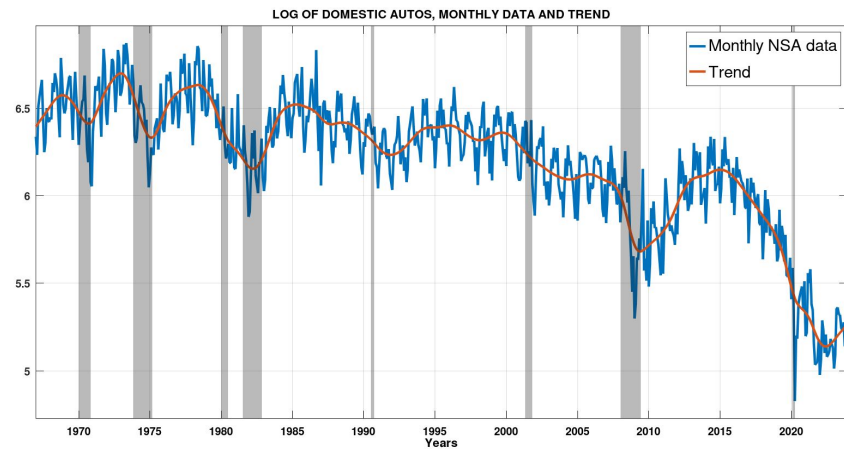
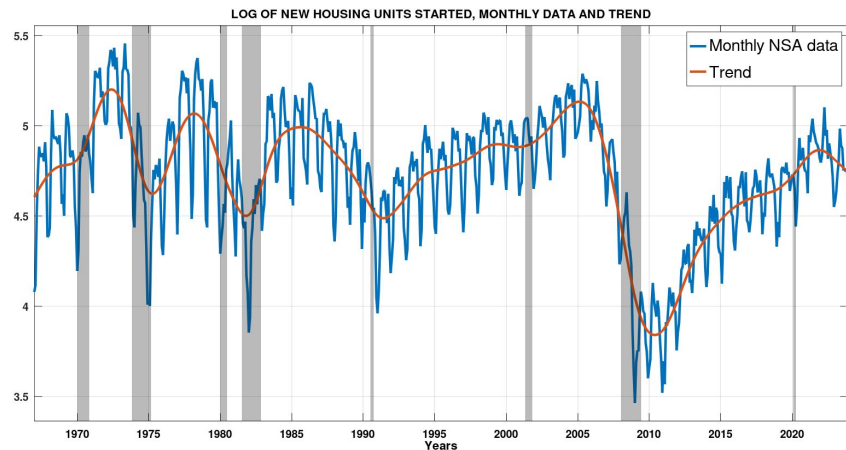


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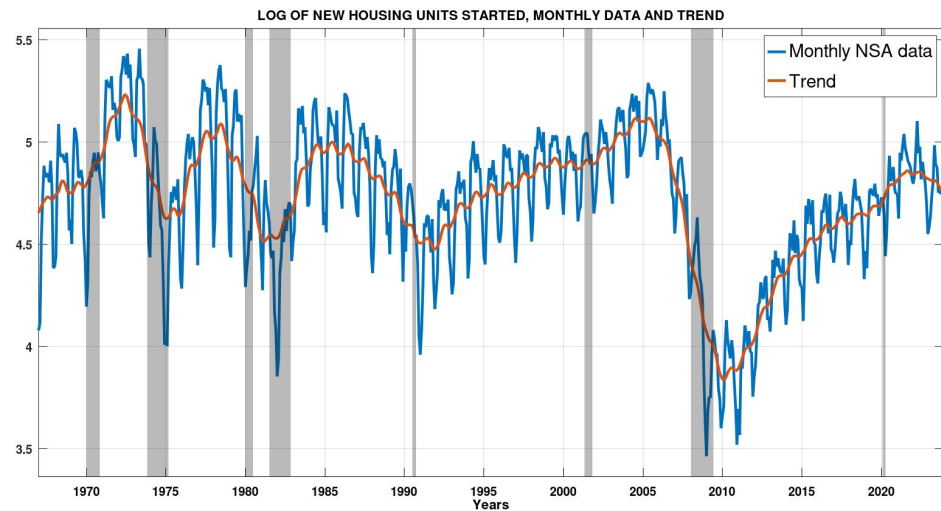
Bachelor's Degree in Economics
Bachelor's Thesis
Diana Shilovskaya

(I) Variable selection

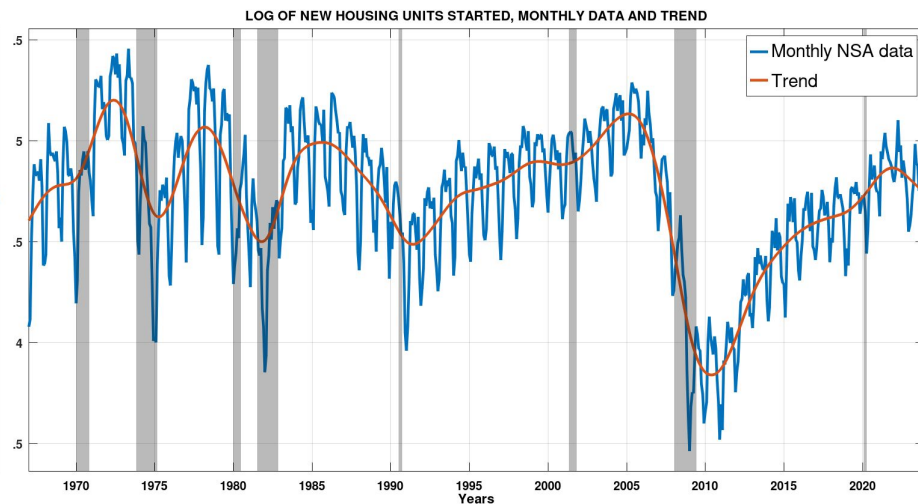


(II) Trend estimation

Trend estimated with Moving Average filter (31).

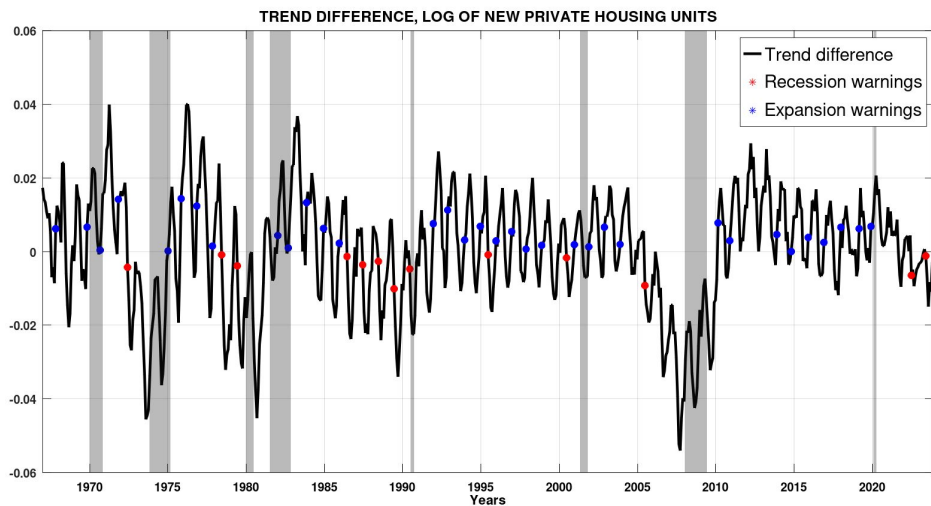


Trend estimated with LDHR algorithm

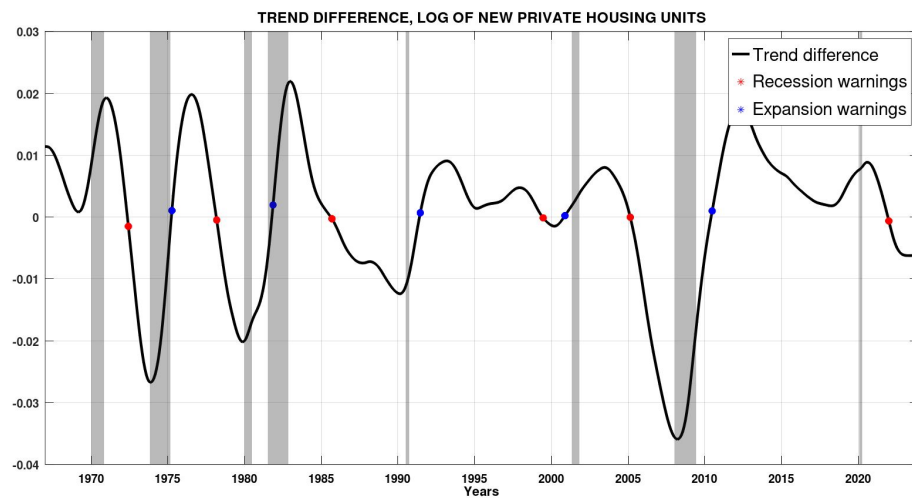


(III) First difference of estimated trend

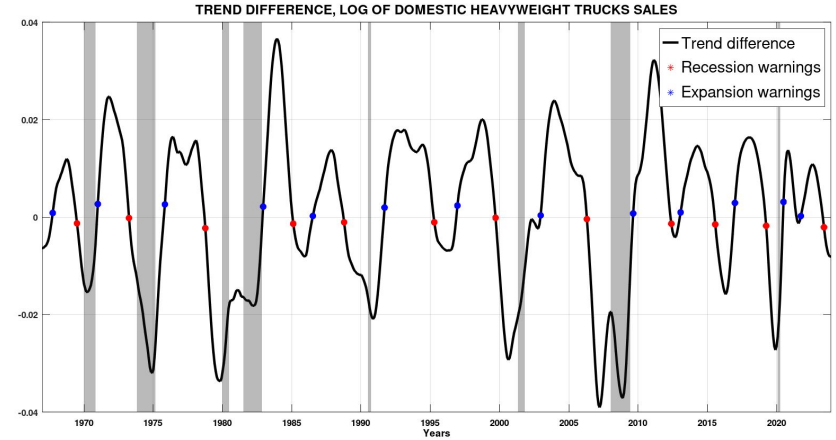
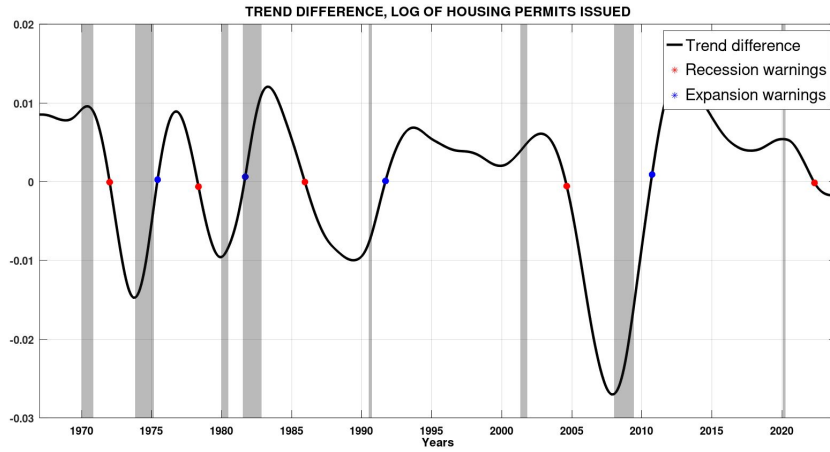
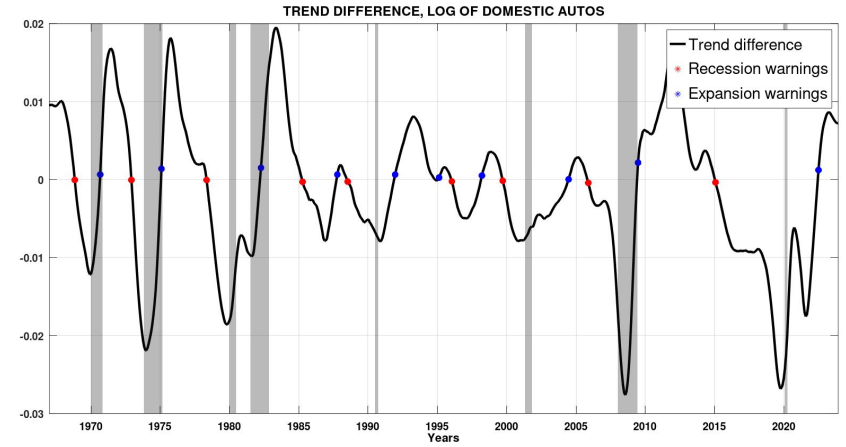
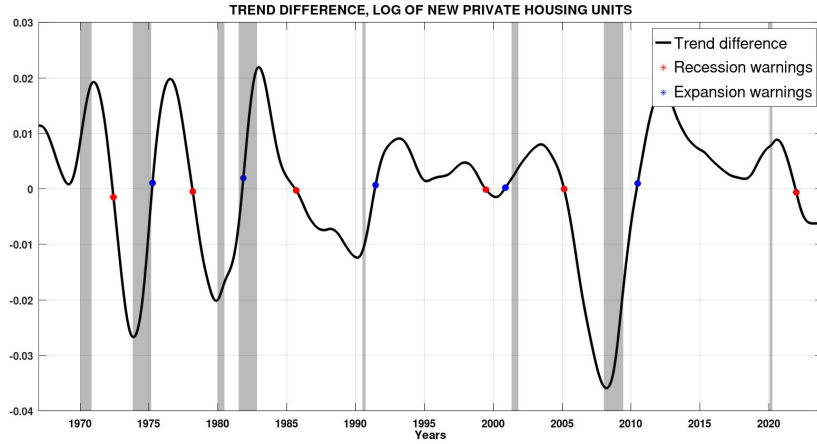
Trend difference with Moving Average filter (31).



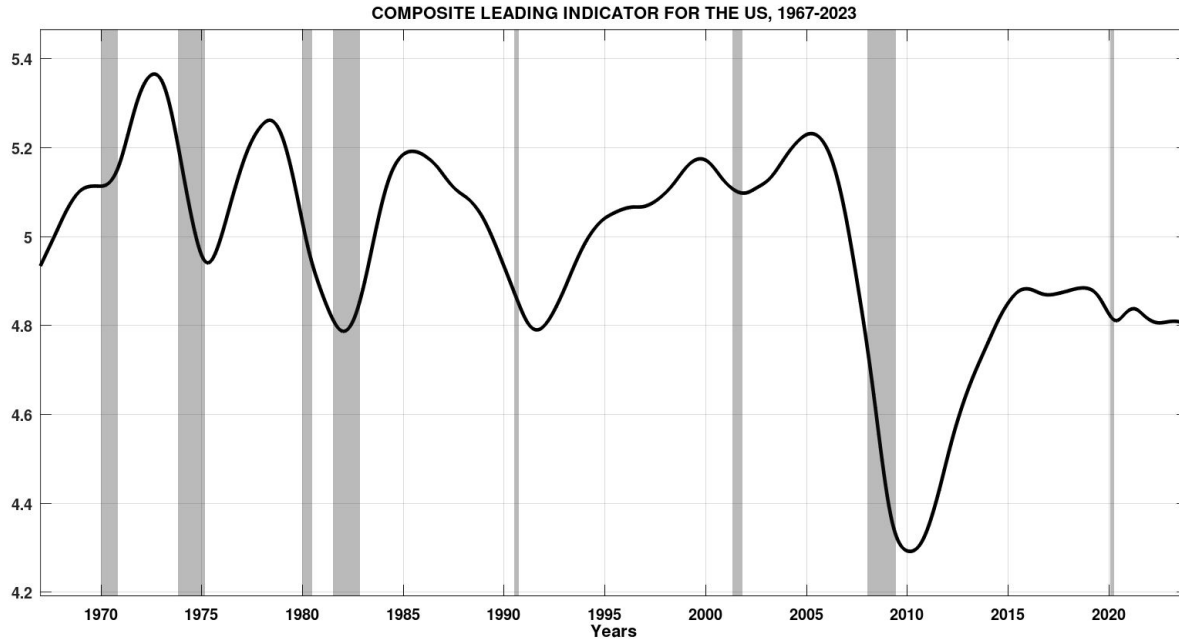
Trend difference with LDHR algorithm



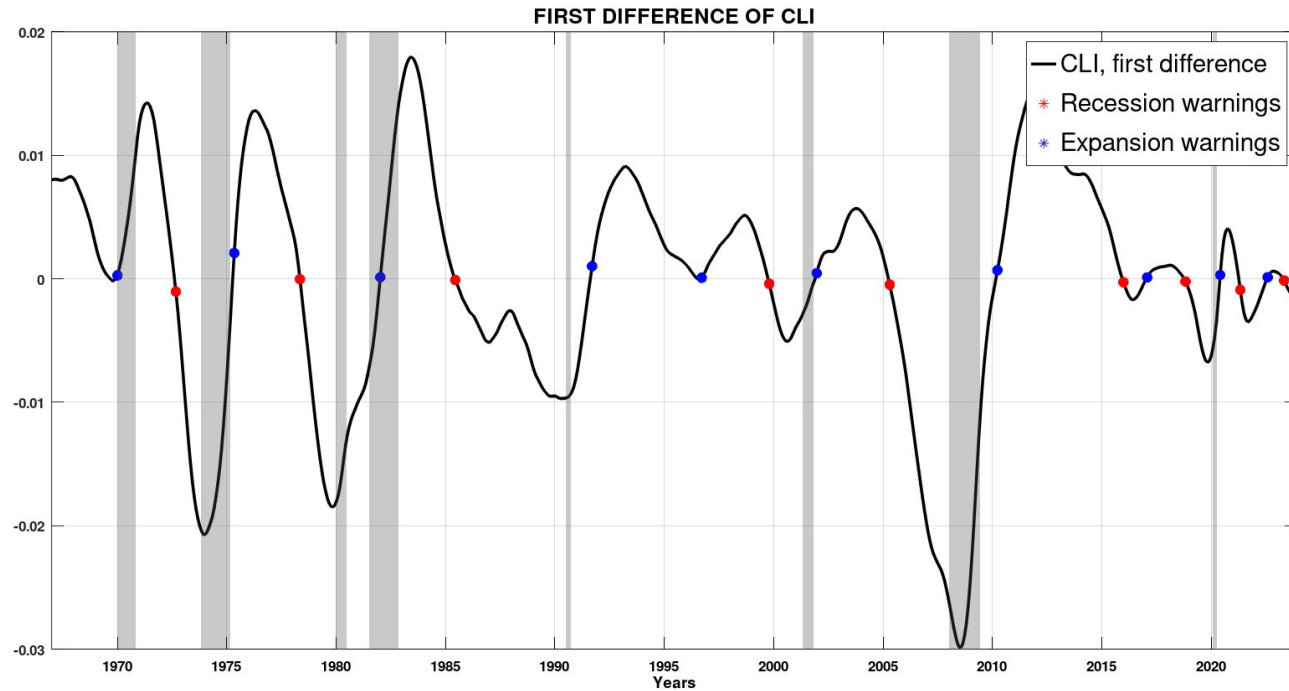
(IV) Variable suitability



(V) CLI from log of houses started, log of permits issued,
log of domestic autos, log of heavy weight trucks



(VI) Business cycle dating using the first difference of CLI



(VII) CLI performance review

Recession warning, CLI	Recession beginning, NBER
Oct-72	Nov-73
Jun-78	Jan-80
no warning	Jul-81
Jul-85	Jul-90
Nov-99	Apr-01
May-05	Dec-07
Jan-16	
Nov-18	Feb-20
May-21	