SW and ADF test (Inflation)

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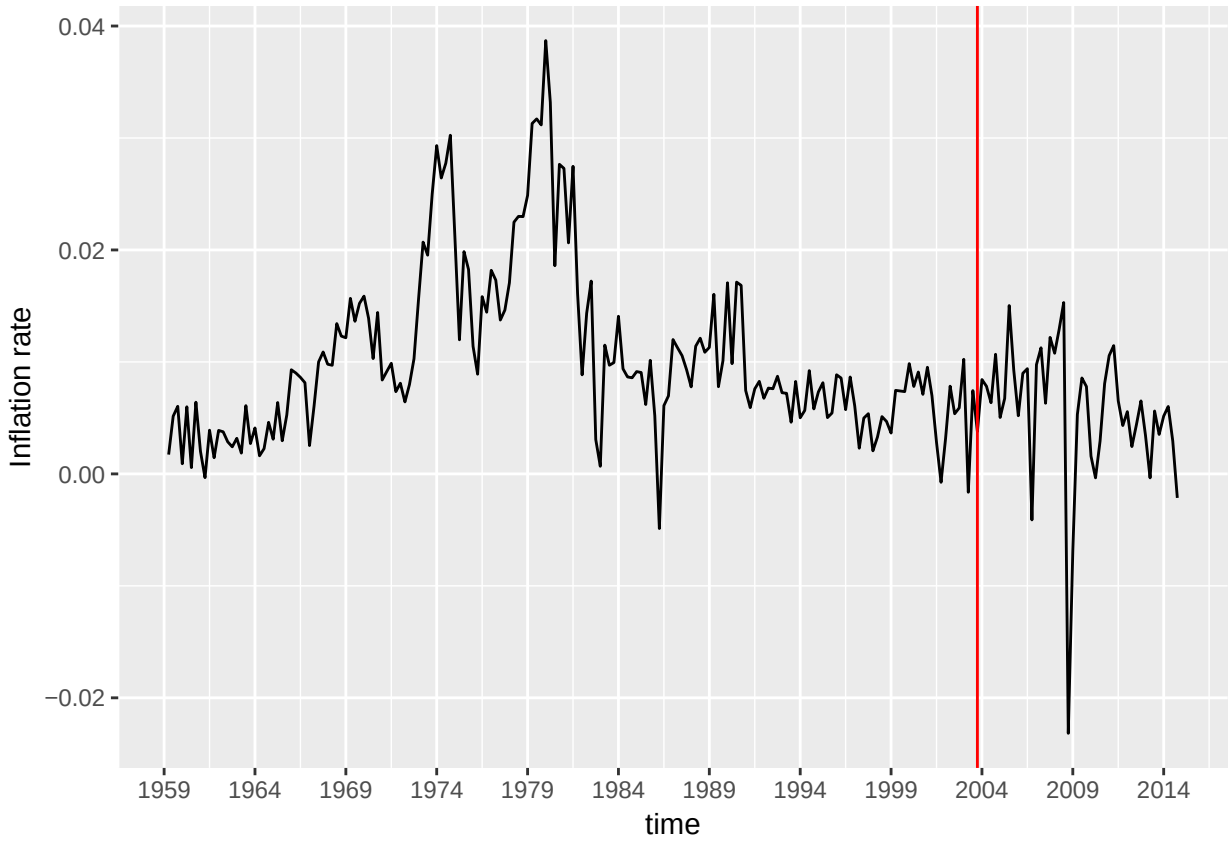
- Stock and Watson twice differenced the CPI to make it stationary.
- ADF test with AIC/BIC conclude Inflation as I(0) with full set of observations.
- ADF test with AIC/BIC conclude Inflation as I(1) with the first 80% of observations.



Inflation as I(0)

Table 1: out-of-sample MSE, when the dependent variable is inflation

	SW	AIC	BIC
LASSO 1	0.7649	0.7189	0.732
LASSO 2	1.399	0.8646	0.8219
LASSO 3	0.7413	0.7642	0.7626

- AIC chooses 3 lags for Inflation.
- The out-of-sample MSE of AR(3) is 2.266.

- The estimated AR(1) coefficient is 0.7565.

Table 2: ADF test for Inflation

Series	Conclusion	Type	Lags
Inflation	I(0)	trend	2
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y.train	I(1)	drift	3
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Inflation as I(1)

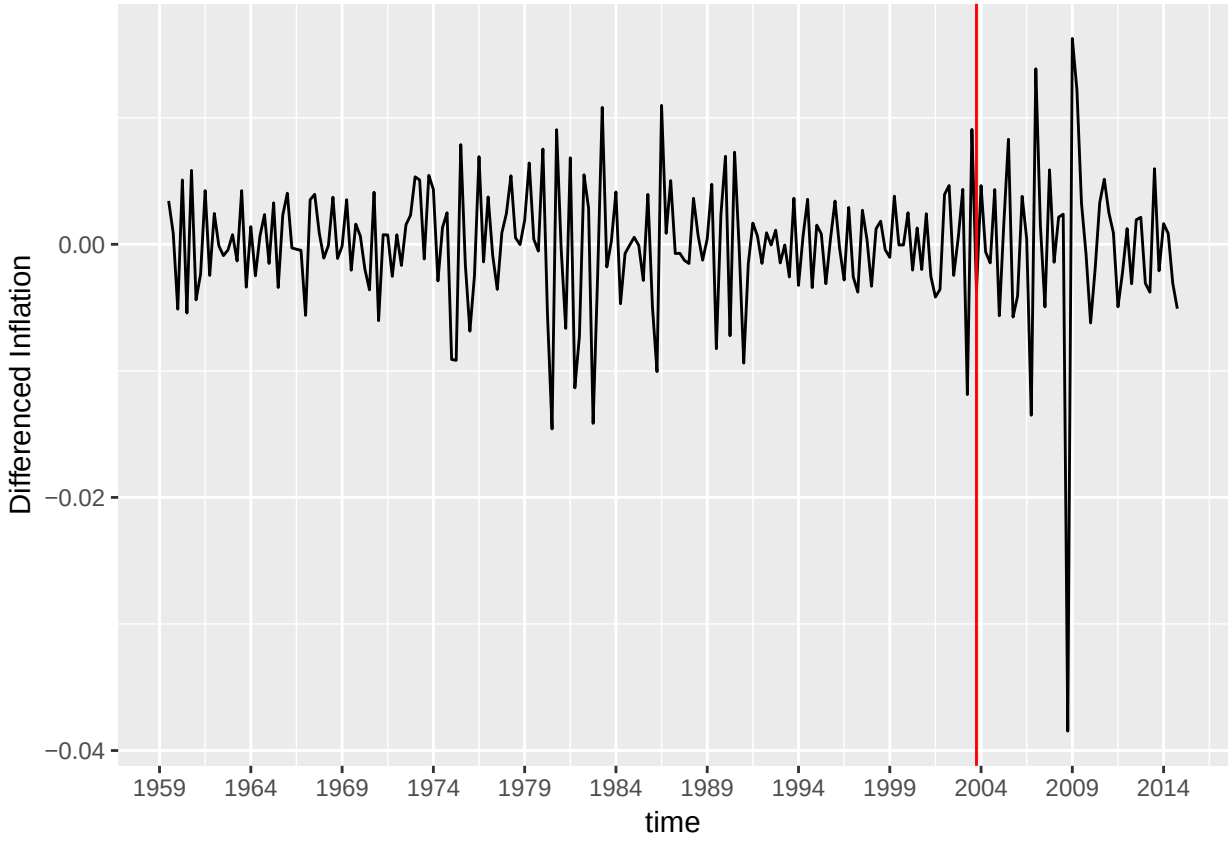

Table 3: out-of-sample MSE, when the dependent variable is first-differenced inflation

	SW	AIC	BIC
LASSO 1	2.091	2.298	2.298
LASSO 2	2.216	2.058	2.069
LASSO 3	2.075	2.064	2.076

- AIC chooses 4 lags for the first-differenced inflation.
- The out-of-sample MSE of AR(4) is 1.969.
- The estimated AR(1) coefficient is -0.2728.