Tron Theorem 4.4.

$$C(\ell) = G_0(\underbrace{\Xi_a(e)}_{+}) + \underbrace{\Gamma_{-4}}_{+}$$

i) him (7 -> 20

Off i) and ii) hold, (10) chooses

the optimal/correct model.

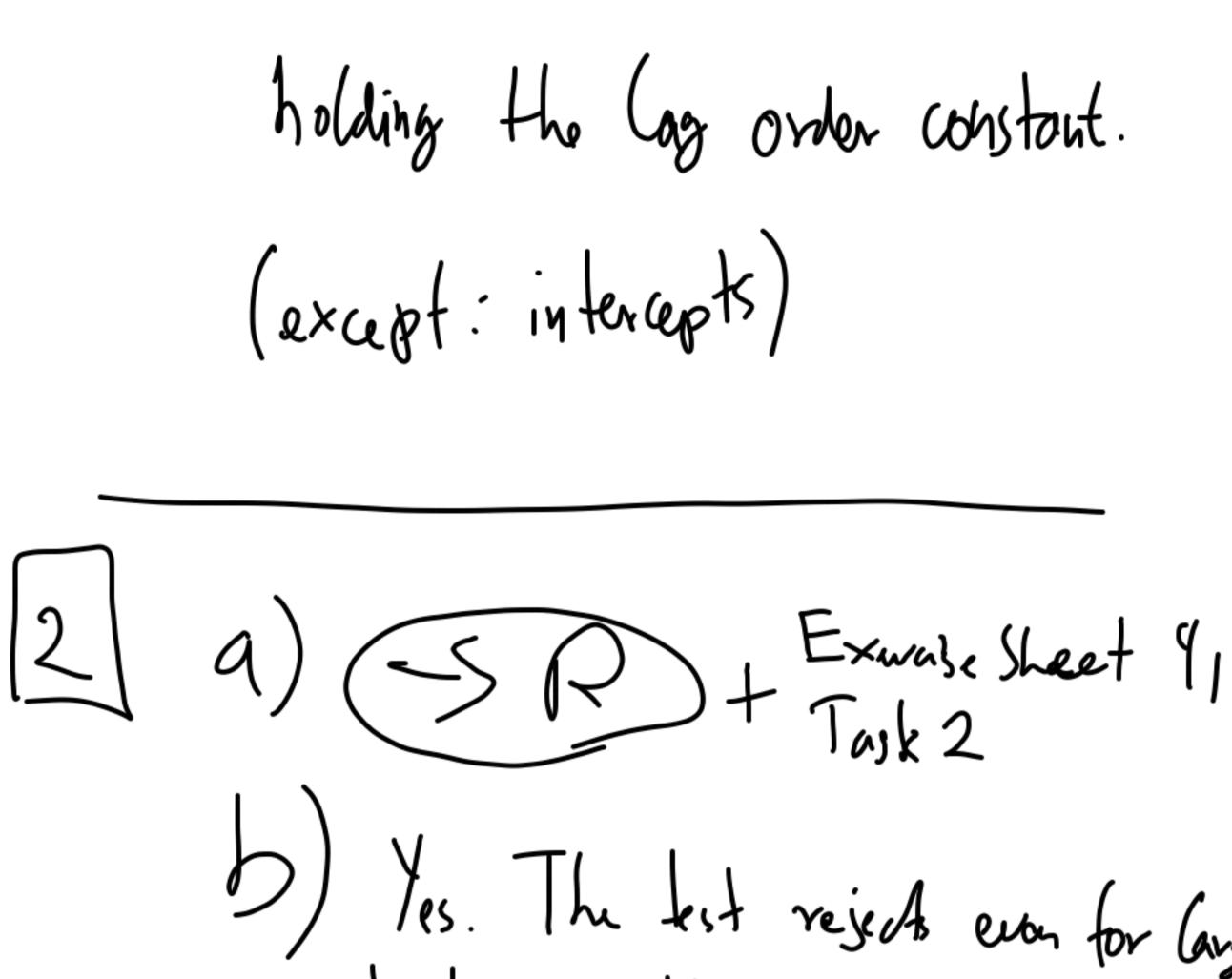
 $A1C: c_{7} = 2K^{2}$ $4i_{7-3} c_{7} = 2K^{2}$

BIC: $C_T = 600(T) \cdot K^2$ $lim_{T \to D} = 600(T) \cdot K^2 \to 0$

HQ: 4= 2.6g(6g(T)) K²
43.4 -> 20 V

Grange 4 -> 0 V

Note: C.K2 is the number of feely estimated parameters. Restrictions Can change that number even



M's so then must be a dynamic pattern for the VAR to model.

C) # coefficients

= K² P + K

p: Y: \(\) interest

data points (observations times

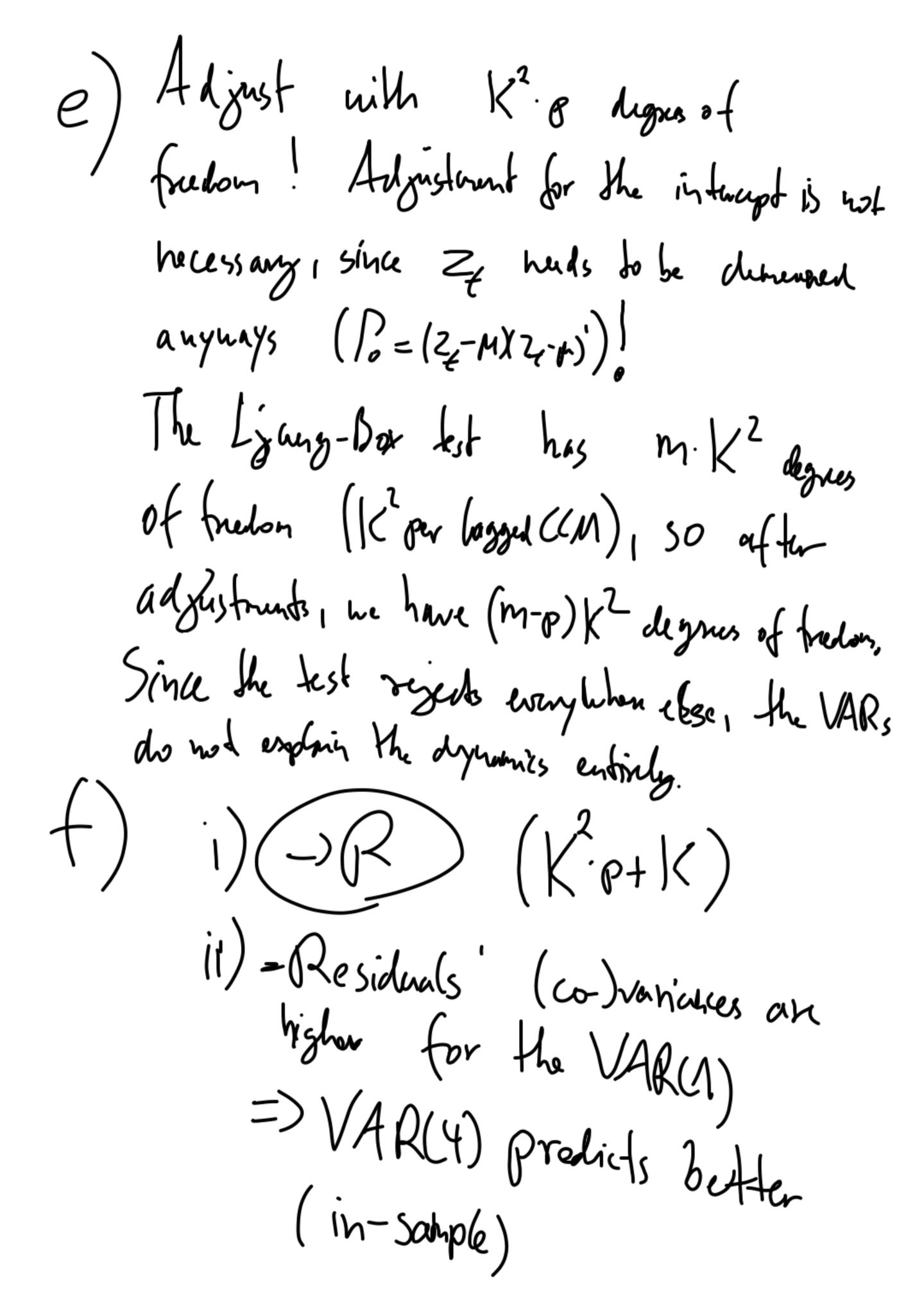
= 1. (dinersian)

$$\Rightarrow K \cdot T \geq K' \cdot r + K$$

$$\Rightarrow \frac{K'(r \cdot 1)}{K} \geq p$$

- d) AIC and HQ ax flat around the minima > 40 distinct optimum visible.
 - Conceivable reasons: Persistence, omitted variables, wrong functional form. -> The VAR may just work as an approximation.
- BIC is the most conservative JC.

 Minima at $P = \begin{cases} 2 & HR \\ 4 & AIC \end{cases}$



and. Estimating more coefficients with the same coefficients with the same coefficients with the same coefficient.

9) Again: $2^{2} \cdot p+k$ $= 2^{2} \cdot \{1\} + 2 = \{18\}$ 4h)i) h) litili) Same partern as in f),
but not that pronounced this fine. H Coelflichts is how larger and does H dufu points incruse less shurply if 16=2 compand

incruse less sharpy if K=2 composed for K=5 if pA. The thermore, then are less coefficients to model the same magnitude of correlation.

Then seems to be fur workhoon across time except Cags 20 to 24. Hence then is not much for a VAR to exploit.

b) O. The criteria support
the Lyung-Box test.

No important difference.

Then is a (most no Variation taken aways

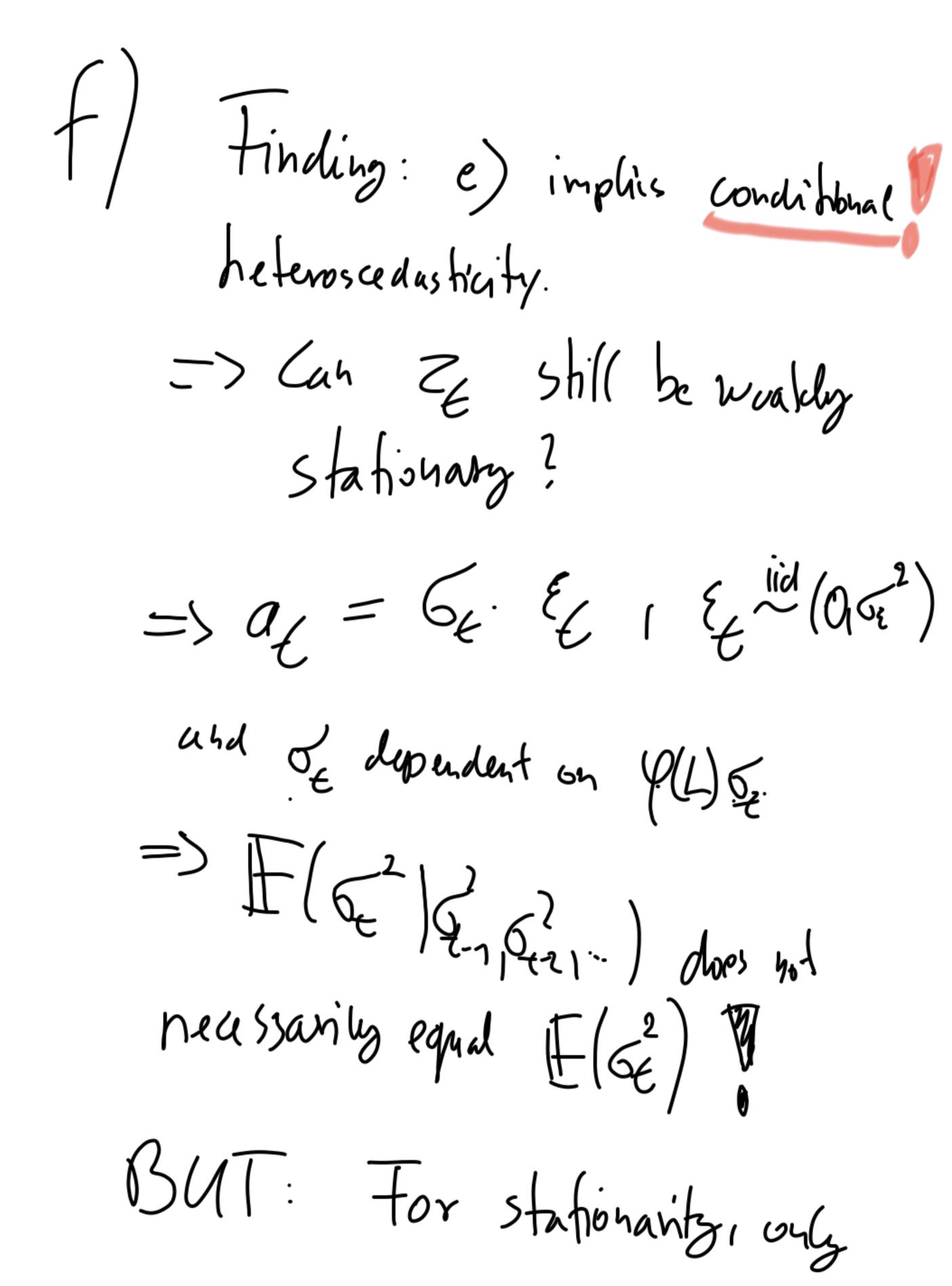
by the VARID.

d) No. (c) has shown that nothing has changed at all.

Plenty of Cayged cross-

- Critura saggest high Cag orders

=> Fifting a VAR appears Sensible.



the unconditional moments matter! The G(L) is a stable process and Ein (0,52) (house no Un Conditiona (he tens celasticity), the time senies Z is still weathy Stationung. (ahabogous to a VAR(p) ornoss When E(2/2/2/21) does not wassarily equal $\mu_z = E[z_{\ell}]$ Still, be haved proved those models to

be stationary under some Conditions