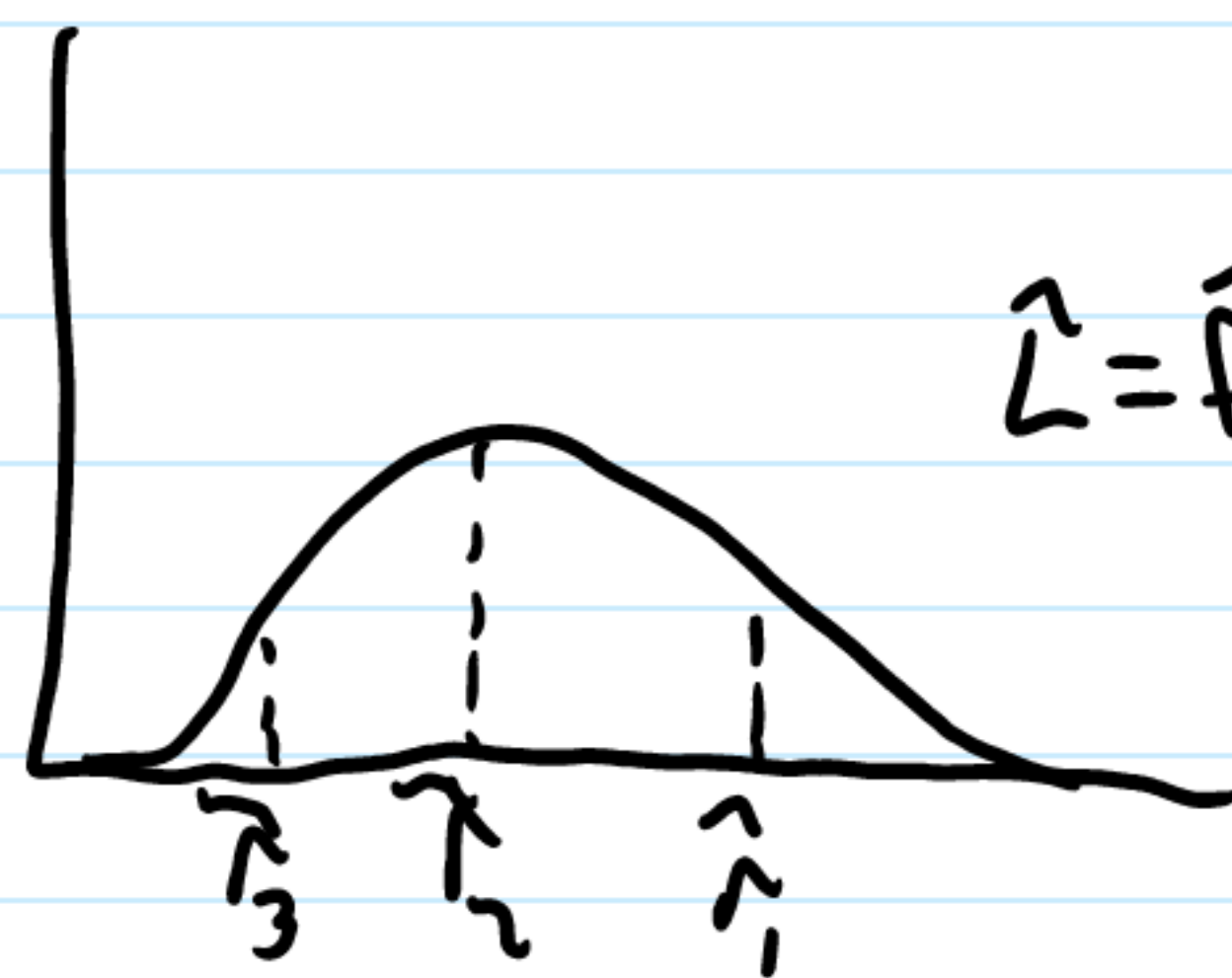


- 1) Domain knowledge
+ joint hypothesis tests
- 2) measures that guard against overfitting

↳ $AIC = 2k - 2\ln \hat{L} \rightarrow \text{good}$

↳ Bad
↳ smaller is better
↳ $\hat{L} = \text{likelihood function}$



$$\hat{L} = \hat{f}_1 \hat{f}_2 \hat{f}_3 \rightarrow \ln \hat{L} = \ln \hat{f}_1 + \ln \hat{f}_2 + \ln \hat{f}_3$$

$$\hookrightarrow \sum_{t=1}^T \ln(\hat{f}_t | \text{model})$$

↳ $BIC = \ln(T)k - 2\ln \hat{L}$

↳ smaller is better

↳ finite set of models

↳ tend to pick the right one at the limit

AIC set of models grows w/ sample

- 3) Empirical Evidence on out of sample prediction