Untitled

Student name

08 February, 2022

Contents

Instructions to use this template

1. Update the author and title fields in the above YAML section.
2. Edit the `refs.bib` file to include any extra references you have.
3. Click `Knit` to see what the output will look like 4 . Save the .Rmd file using the naming convention specified in class

Introduction

This should be introduce the statement to be critiqued in the context of modern financial research practices.

Critical literature

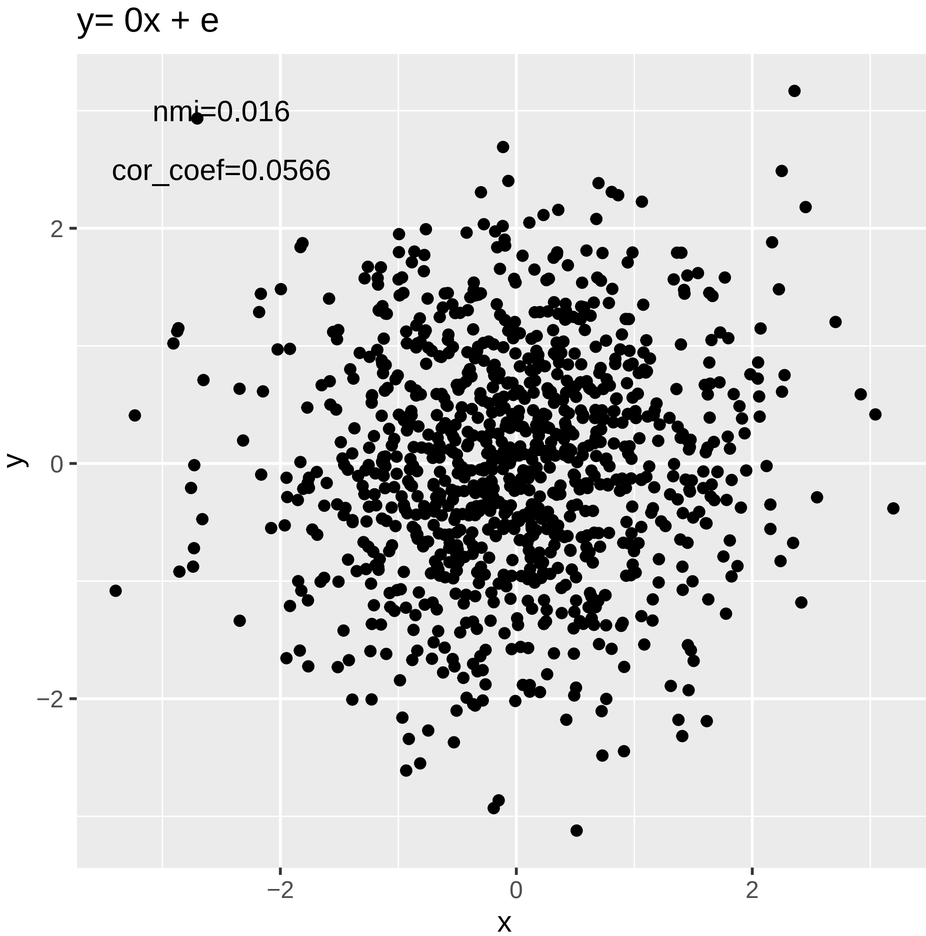
Use high-quality literature to illustrate the pros and cons of the argument.

Some examples of how to use the `.bib` to add references - In line `@Jensen2021` renders as Jensen (2021) - And `[@Jensen]` renders as (Jensen 2021)

Experimental evidence

Simulate some data to illustrate how FML can reveal results where traditional econometrics fail OR vice versa. You are free to use the lecture material as a starting point here. For example

```
# package which will do much of the heavy lifting
set.seed(1234) # set seed for random number generation
size=1000
df<-tibble(x=rnorm(size),y=0*x+rnorm(size))
bXY=numBins(nrow(df), corr=cor(df)[1,2])
y2D=discretize2d(df$x,df$y,numBins1 = bXY,numBins2 = bXY)
Hx=entropy(rowSums(y2D))
Hy=entropy(colSums(y2D))
nmi=mi.empirical(y2D)/min(Hx,Hy)
cor(df)[1,2]->cor_coef
```



Your conclusions

Summarise and state your critical assessment using any evidence you have provided in the previous sections.

Reference

This is where the citied references should appear when you render the document to a pdf

Chen, Andrew Y. 2019. "The Limits of P-Hacking: A Thought Experiment." Finance and Economics Discussion Series 2019-016. Washington: Board of Governors of the Federal Reserve System.

Jensen, Theis Ingerslev, Bryan T. Kelly, and Lasse Heje Pedersen. 2021a. "Is There a Replication Crisis in Finance?" *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3774514.

Jensen, Theis Ingerslev, Bryan T Kelly, and Lasse Heje Pedersen. 2021b. "Is There a Replication Crisis in Finance?"

López de Prado, Marcos. 2018. *Advances in Financial Machine Learning*. John Wiley & Sons.

———. 2020. "Machine Learning for Asset Managers." In *Elements in Quantitative Finance*. Cambridge University Press.

Raymer, Dorian M, and Douglas E Smith. 2007. "Spontaneous Knotting of an Agitated String." *Proc. Natl. Acad. Sci. U. S. A.* 104 (42): 16432–37.