Global Technical Incerto Reading Club

Session 3 – Chapters 6-7

11 May 2021

Agenda

- **Reading Club – Details (Ron Richman) (5 min)**
- **Chapter 6**
  - **James Sharpe**
- **Appendix**
  - **Ron Richman**
- **Chapter 7**
  - **7.1 – 7.2 - Ron Richman**
  - **7.3 – 7.7 – Fergal McGovern**

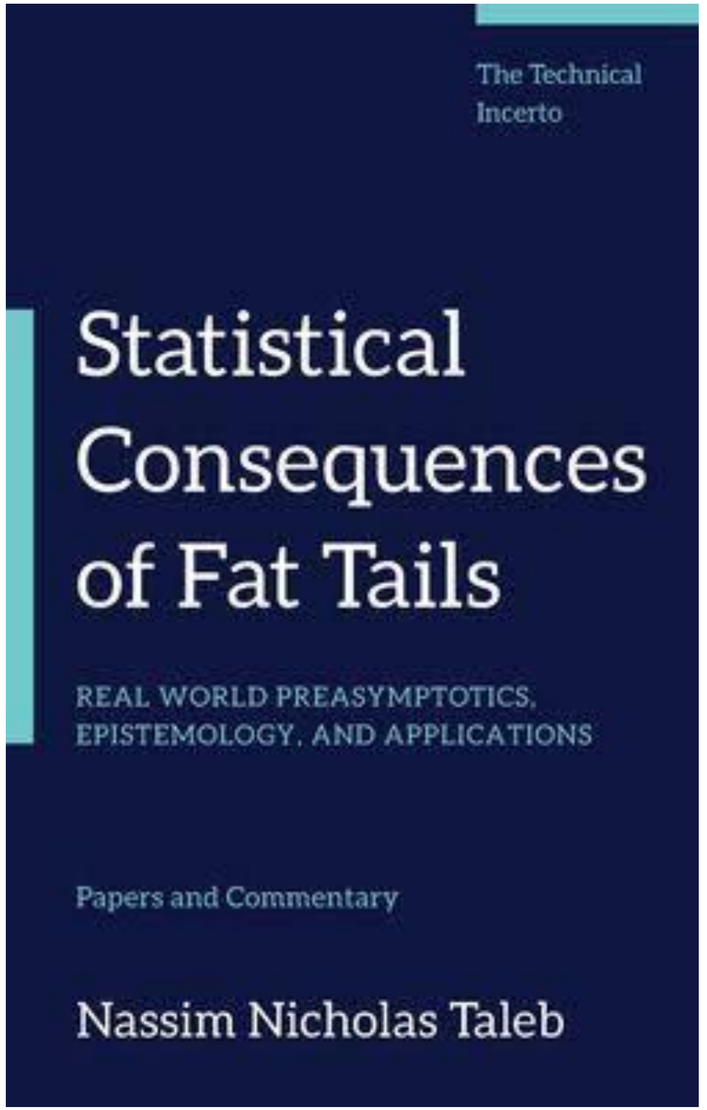
Reading Club

- **Group of people interested in learning more about Nassim Taleb's risk, statistical and finance works in the Technical Incerto.**
- **Aim to read through the first volume of this series during 2021 and beyond**
- **Statistical Consequences of Fat Tails: Real World Preasymptotics, Epistemology, and Applications**
- https://arxiv.org/abs/2001.10488
- **Aims:**

  Benefit of large group reading together

  Monthly presentation and discussion

  Make code to reproduce/apply results freely available



Reading Club (2)

- **Acknowledge Network of Consulting Actuaries (NoCA) for Zoom access**

  https://www.noca.uk/

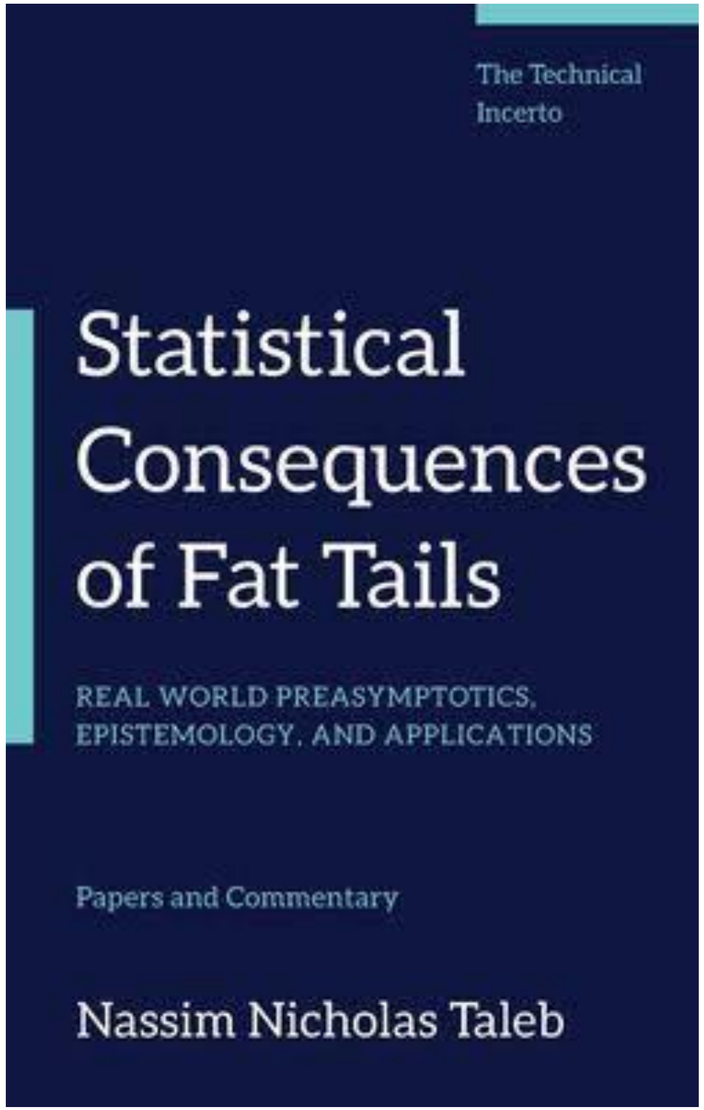
- **Thank you to Jake Billings for the reading club website and link to recordings:**

  http://www.techincertoreadingclub.com/

- **GitHub repository containing discussions and code:**

  https://github.com/Technical-Incerto-Reading-Club

- **Thank you to all contributors to date**



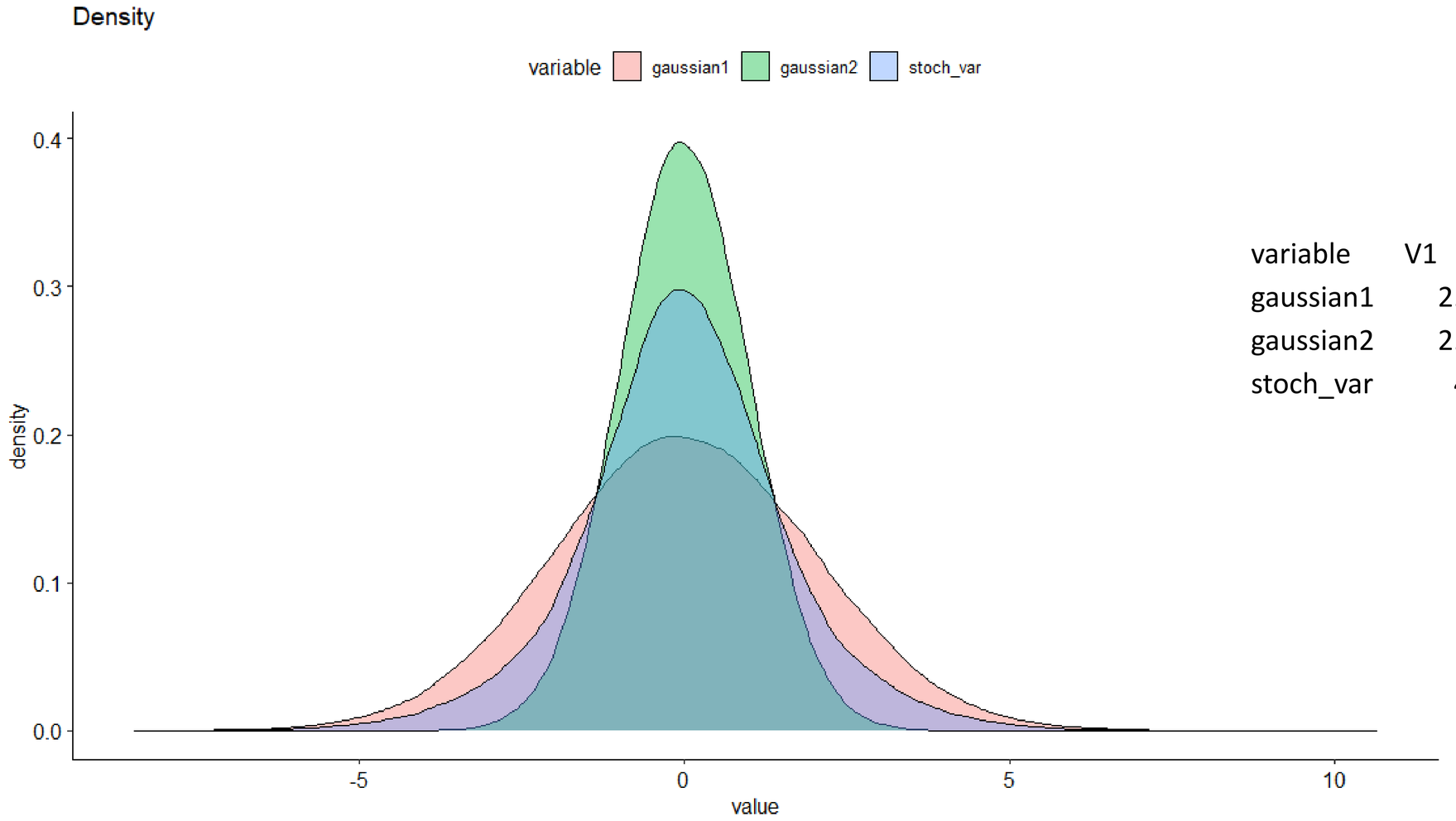
Appendix and Chapter 7.1-7.2

- **Appendix**
  What happens if we have a multi-modal distribution?

- **Chapter 7.1-7.2**

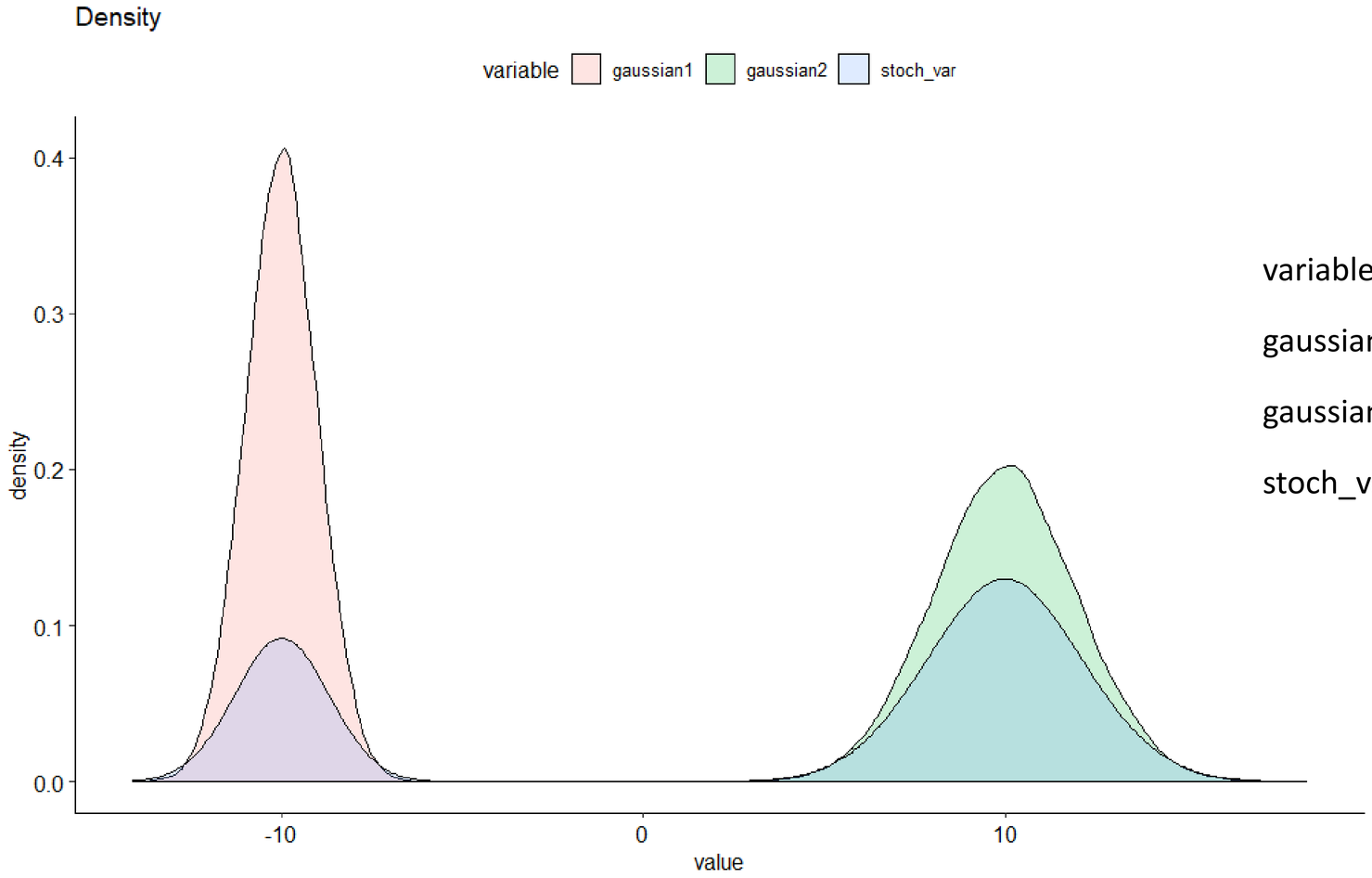
  Law of large numbers
  Central Limit Theorem

Gaussian – Stochastic sigma



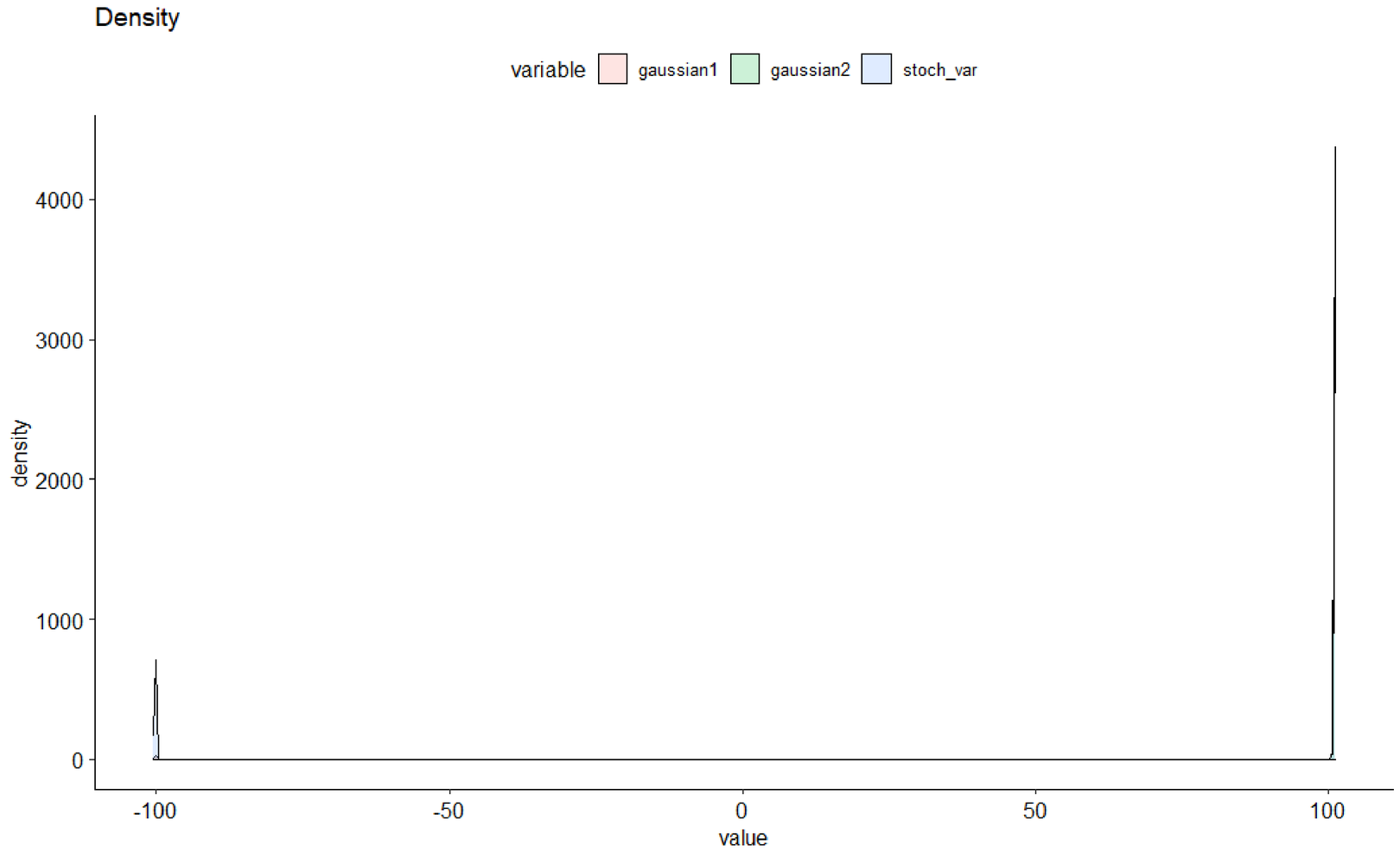
variable	V1
gaussian1	2.999753
gaussian2	2.999753
stoch_var	4.08226

Gaussian – Stochastic mu + sigma (W&P)



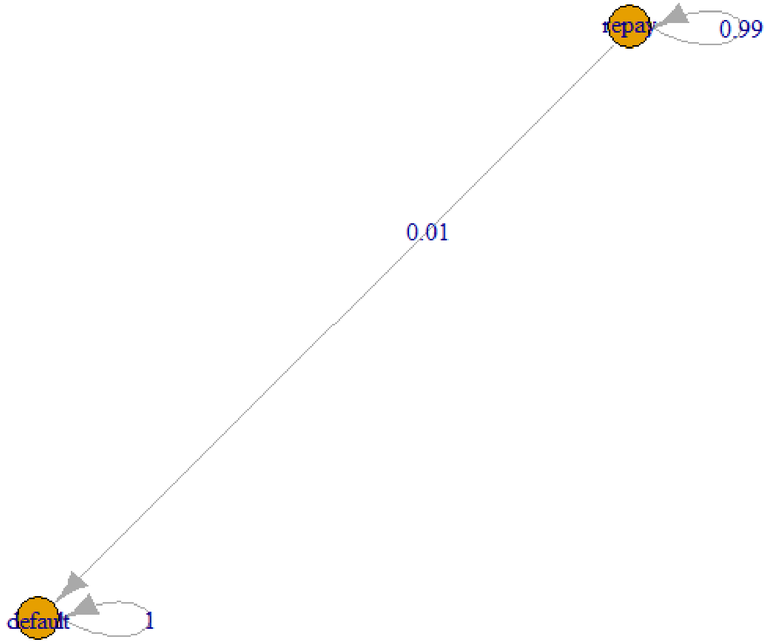
variable	kurtosis
gaussian1	3.005097
gaussian2	3.005097
stoch_var	1.772342

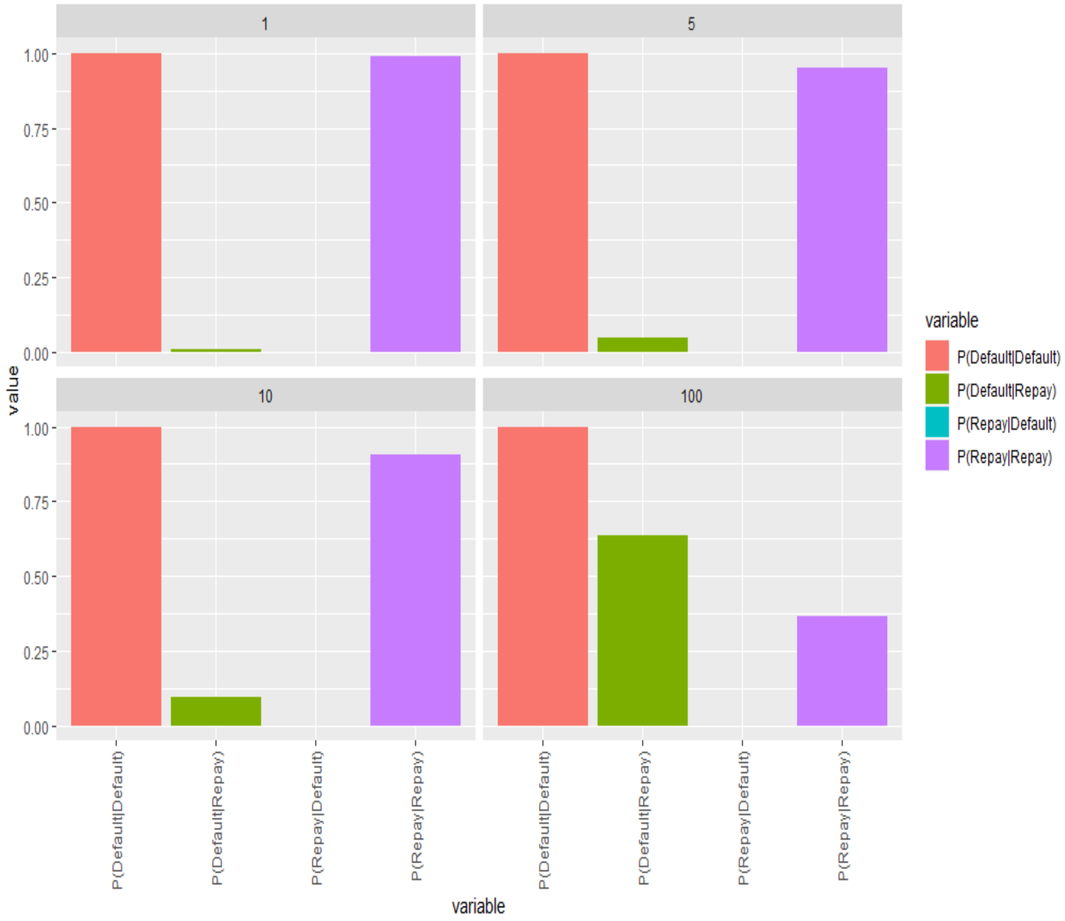
Gaussian – Stochastic mu + sigma (Bond)



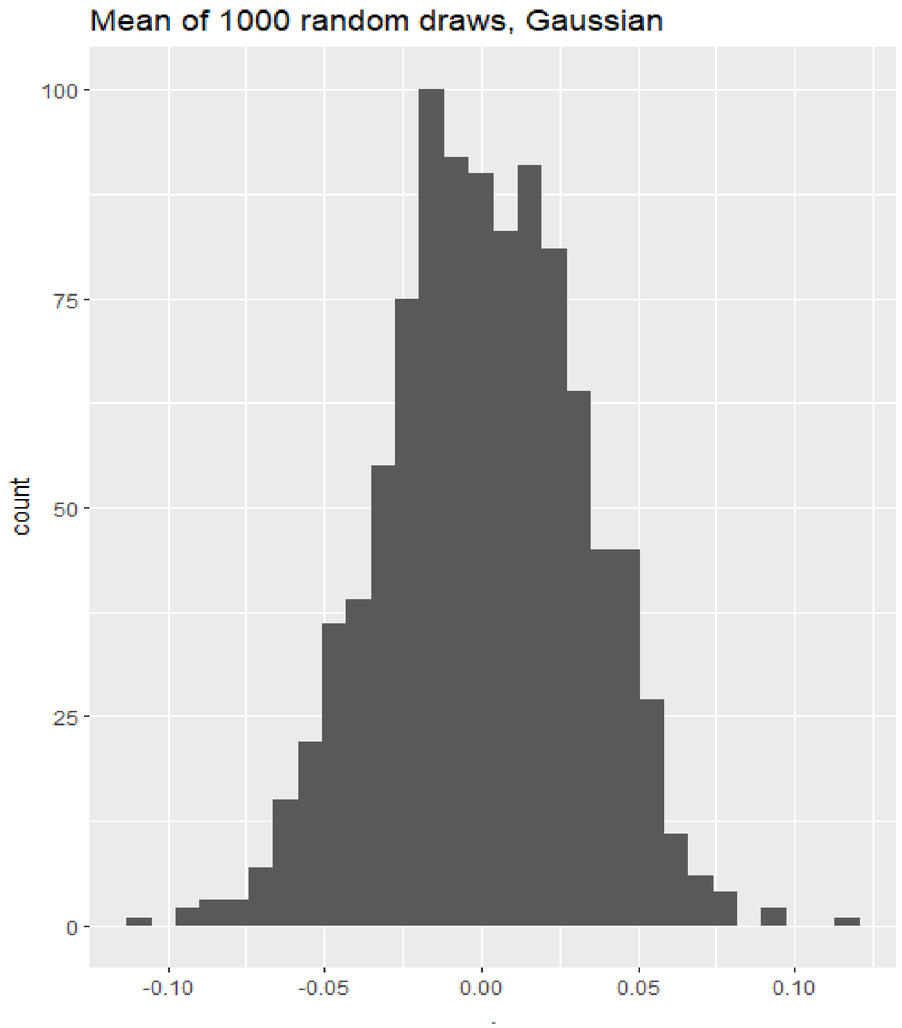
variable	V1
gaussian1	3.002826
gaussian2	3.002826
stoch_var	3.252816

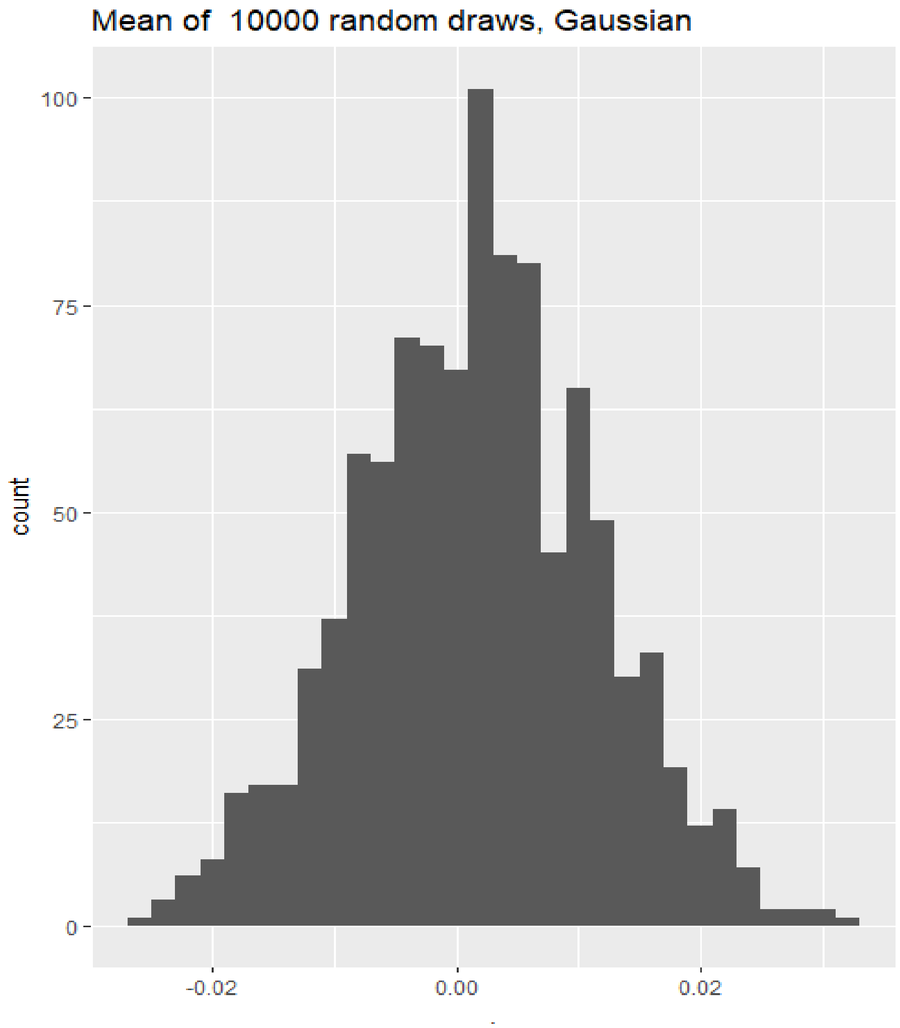
Markov chain – credit risk



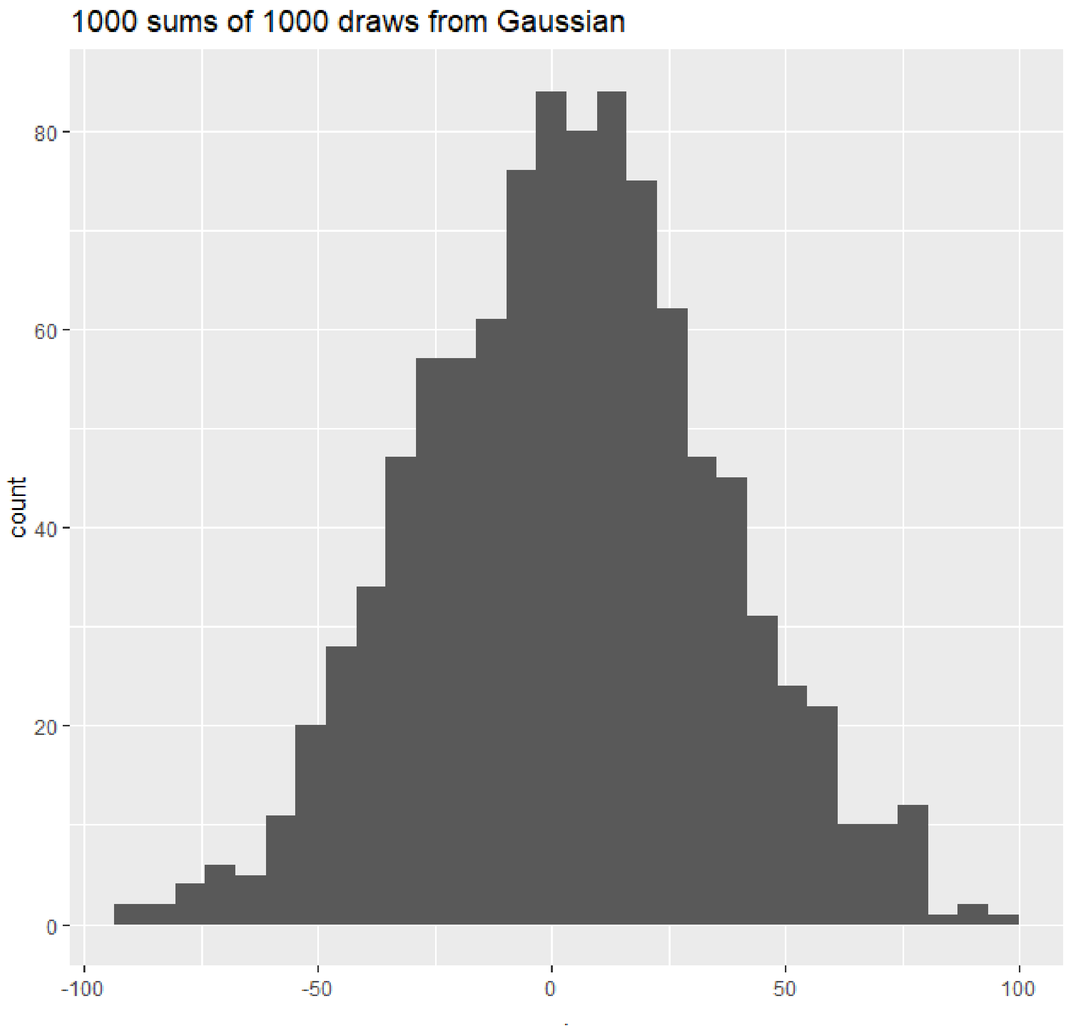


Law of Large Numbers





LLN - Stable


1000 sums of 1000 draws from Gaussian
count
80
60
40
20
0
-100
-50
0
50
100

Meetup Session 4

- **To cover Chapters 8-9 in the book**

  Chapter 8: How much data do you need? An operational metric for fat-tailedness
  Chapter 9: Extreme values and hidden tails

- **Schedule in mid June**

- **Call for volunteers**

  Presentation – Chapter 8 – 1 Hour

  Presentation – Chapter 9 – 1 Hour

  Code backing the monthly presentation – R/Python