Selected References

On Quantitative Finance and Trading

C.P. Kwong

February 2020

I gained my knowledge and academic qualifications largely by self study rather than attending classes. Therefore I can only live with no-fuss references and intelligible textbooks. The following is a small selection of those works (in reversed chronological order) that helped me to learn the subject and to prepare the present lectures. Also included are some interesting stories about quants I would like to share with you. For sure the list reflects my personal taste (and bias) in face of the huge volume of literatures and I believe you can find other alternatives that suit you the best. Nevertheless, enjoy!

<u>Quants and Their Approach to Trading</u>

- Gregory Zuckerman, *The Man Who Solved the Market: How Jim Simons Launched the Quant Revolution*, Portfolio/Penguin, 2019.
- Edward O. Thorp, *A Man for All Markets: From Las Vegas to Wall Street, How I Beat the Dealer and the Marke*t, Random House, 2017.
- Paul Wilmott and David Orrell, *The Money Formula: Dodgy Finance Pseudo Science and How Mathematicians Took Over the Markets*, Wiley, 2017.
- James O. Weatherall, *The Physics of Wall Street: A Brief History of Predicting the Unpredictable, Mariner Books*, 2014.
- William Poundstone, *Fortune's Formula: The Untold Story of the Scientific Betting System That Beat the Casinos and Wall Street*, Hill and Wang, 2005.
- Roger Lowenstein, *When Genius Failed: The Rise and Fall of Long-Term Capital Management*, Random House, 2000.

<u>Mathematical Finance</u>

- Mark H.A. Davis, *Mathematical Finance: A Very Short Introduction*, Oxford University Press, 2019.
- Steven Shreve, *Stochastic Calculus for Finance I: The Binomial Asset Pricing Model*, Springer, 2004. *Stochastic Calculus for Finance II: Continuous-Time Models*, Springer, 2010.

<u>Financial Data Analysis</u>

- Terence C. Mills and Raphael N. Markellos, *The Econometric Modeling of Financial Time Series, 3rd ed.*, Cambridge University Press, 2008.
- Carol Alexander, *Market Models: A Guide to Financial Data Analysis*, Wiley, 2001.

Quantitative Investment Concepts

- David G. Luenberger, *Investment Science, 2nd ed.*, Oxford University Press, 2013.

Option Basics

- Adam S. Iqbal, *Volatility: Practical Options Theory*, Wiley, 2018.
- Emanuel Derman and Michael B. Miller, *The Volatility Smile*, Wiley, 2016.
- Euan Sinclair, *Volatility Trading, 2nd ed.*, Wiley, 2013.
- Paul Wilmott, *The Mathematics of Financial Derivatives: A Student Introduction*, Cambridge University Press, 1995.

High-Frequency Trading

- Álvaro Cartea, Sebastian Jaimungal, and José Penalva, *Algorithmic and High-Frequency Trading*, Cambridge University Press, 2015.

Quantitative Risk Management

- Michael B. Miller, *Quantitative Financial Risk Management*, Wiley, 2019.

Recent Trends

- Tony Guida (ed.), *Big Data and Machine Learning in Quantitative Investment*, Wiley, 2019.
- Marko Kolanovic and Rajesh T. Krishnamachari, *Big Data and AI Strategies: Machine Learning and Alternative Data Approach to Investing*, J.P. Morgan, 2017.