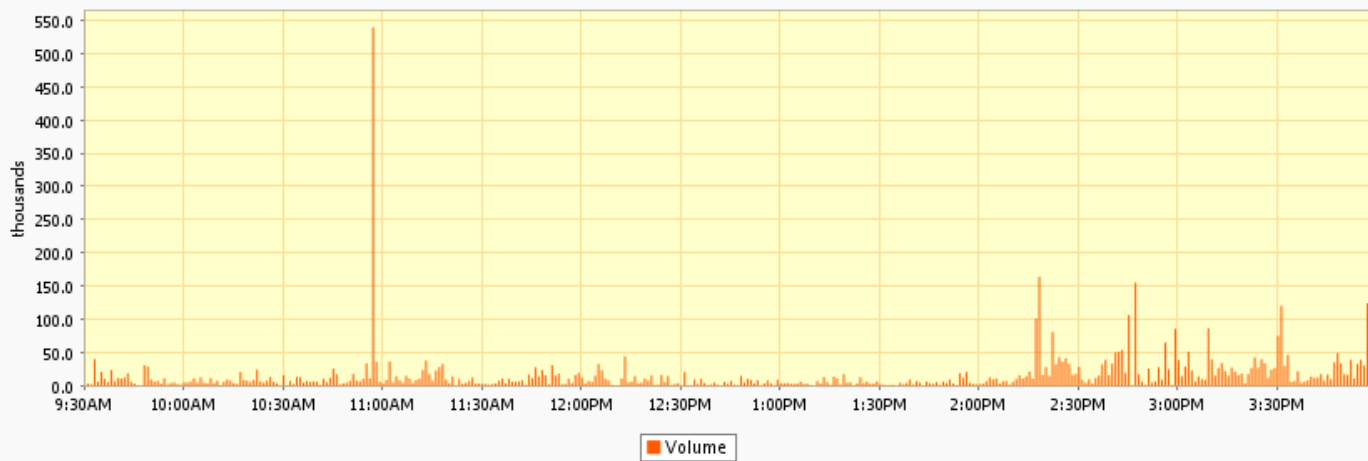
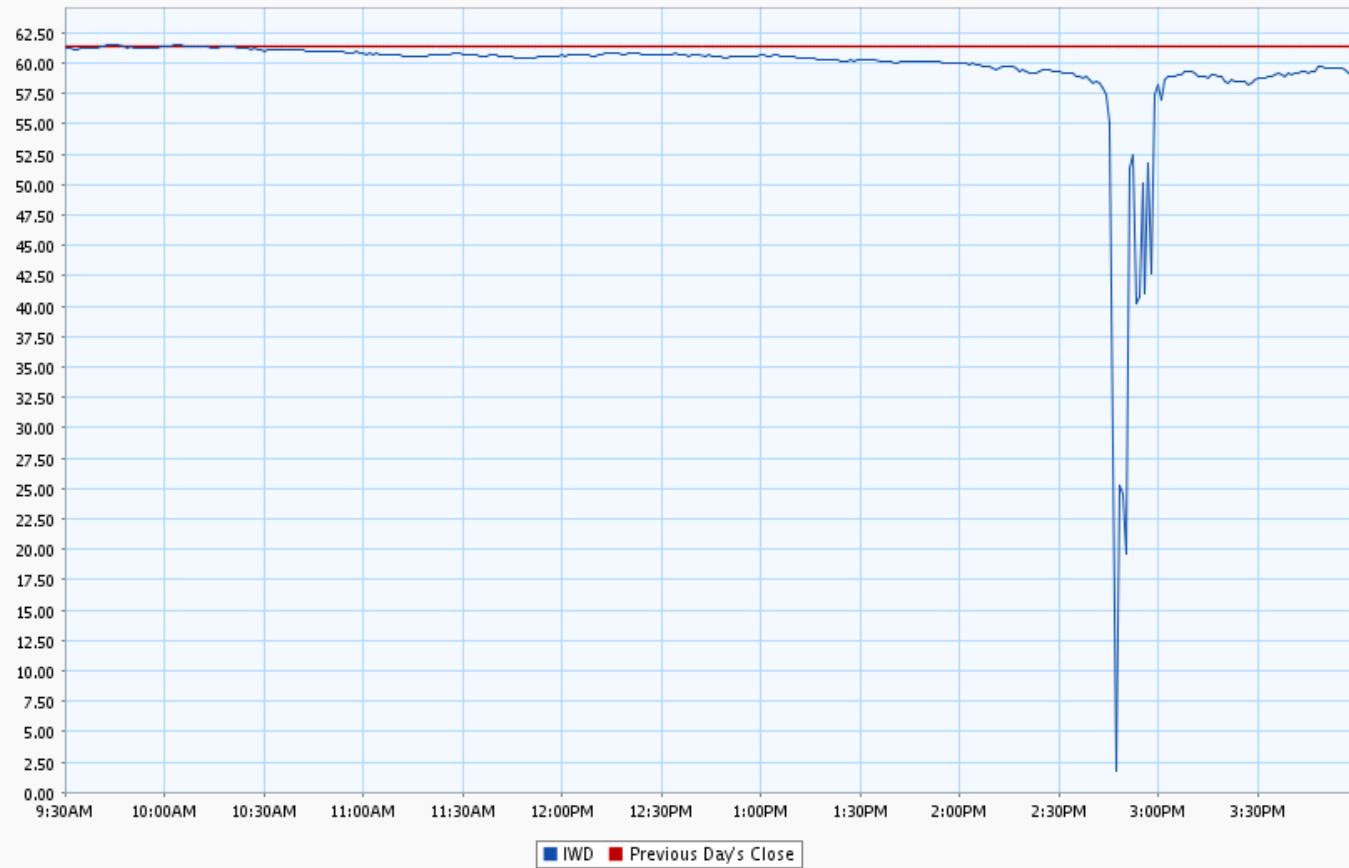


Quantitative Finance Major

Some Thoughts

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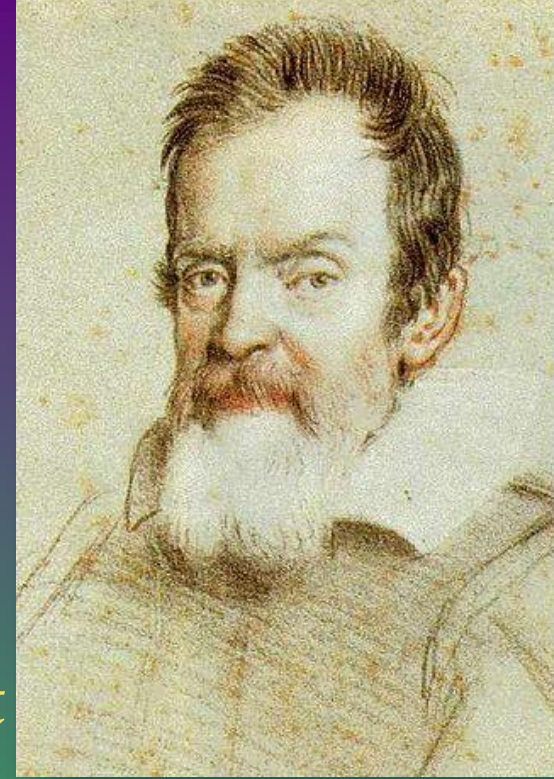
May 06, 2010 06:36PM

The most comprehensible thing about the financial world is that it is incomprehensible.



Galileo Galilei

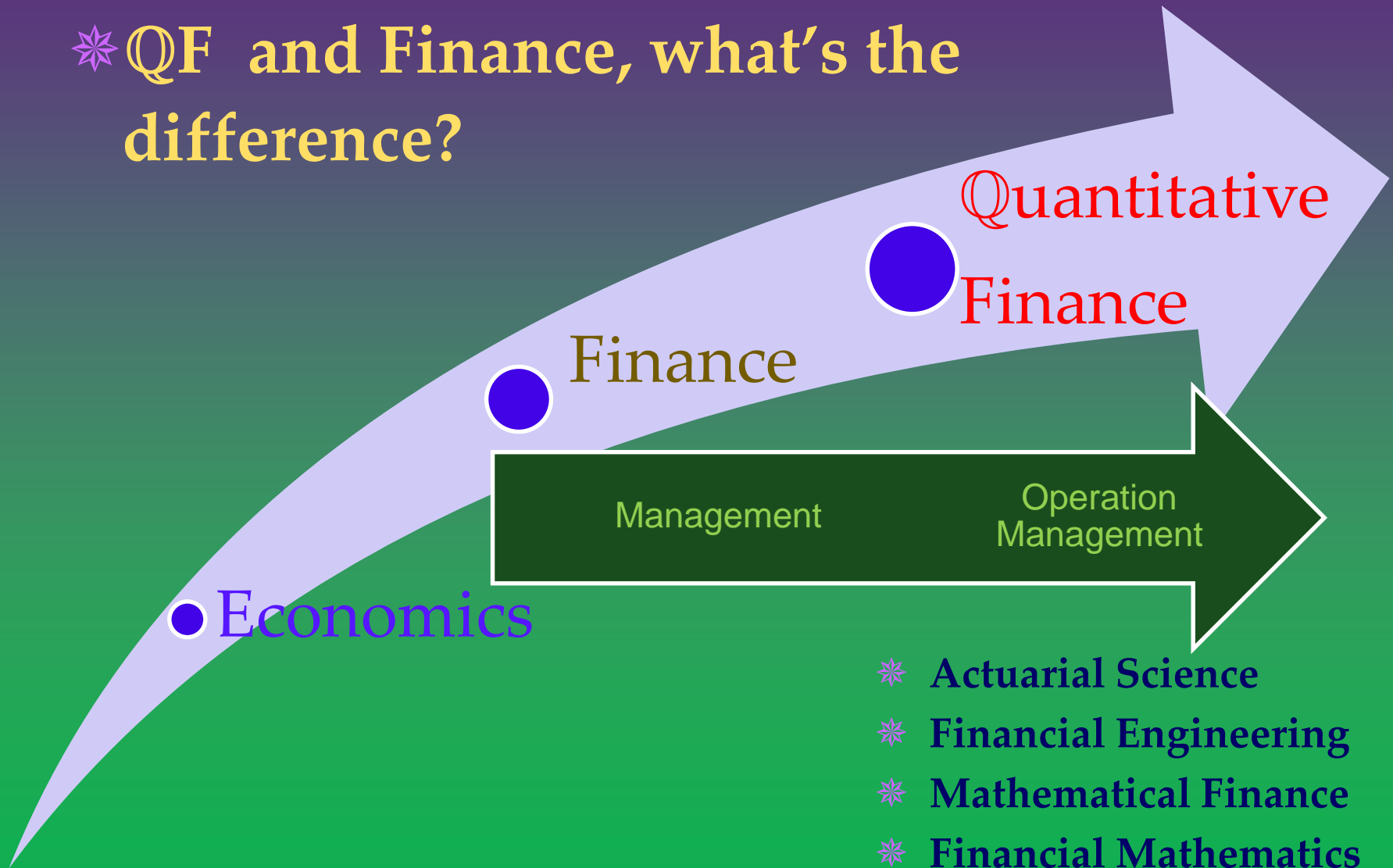
Philosophy is written in this grand book, which stands continually open before our eyes (I say **the 'Universe'**), but can not be understood without first learning to comprehend the language and know the characters as it is written. It is written in mathematical language, and its characters are triangles, circles and other geometric figures, without which it is impossible to humanly understand a word; without these one is wandering in a dark labyrinth.



https://en.wikiquote.org/wiki/Galileo_Galilei

Number One FAQ

* QF and Finance, what's the difference?



- * Actuarial Science
- * Financial Engineering
- * Mathematical Finance
- * Financial Mathematics
- * Computational Finance

Mathematics

- Calculus
- Probability
- Stochastic Calculus
- Differential Equations
- Linear Algebra (Matrix)
- Optimization

Data Science

- Statistics
- Big Data Analytics
- Numerical Methods
- MCMC
- Machine Learning, AI
- Python, R, Matlab, VBA, C++

Financial Industry

- Investments
- Risk management
- Sales & Trading
- Pricing & Hedging

Quantitative

Finance

Demystify

* High GPA requirement

* Difficult to score A in QF courses

* QF too narrow

* QF too difficult

* QF too many compulsory subjects, not flexible

Quantitative Finance Subjects

3 Core Subjects

- * QF 101: Quantitative Finance
- * QF 102: Investment Statistics
- * Q 205: Computing Technology for Finance

3 Electives

- * QF 206: Quantitative Trading Strategies
- * QF 207: Structured Products Sales & Trading
- * QF 305: Global Financial Risk Management

Flexibility: Other QF Electives

- * FNCE204 Analysis of Fixed Income Investment
 - * FNCE305 Analysis of Derivative Securities
 - * FNCE307 Portfolio Management
 - * FNCE312 Behavioral Finance
-
- * STAT306 Applied Stochastic Models
 - * STAT313 Quantitative Risk Analysis

Applications of \mathbb{Q} F

* Derivatives & Fixed Income Pricing

* Risk-Neutral measure \mathbb{Q}

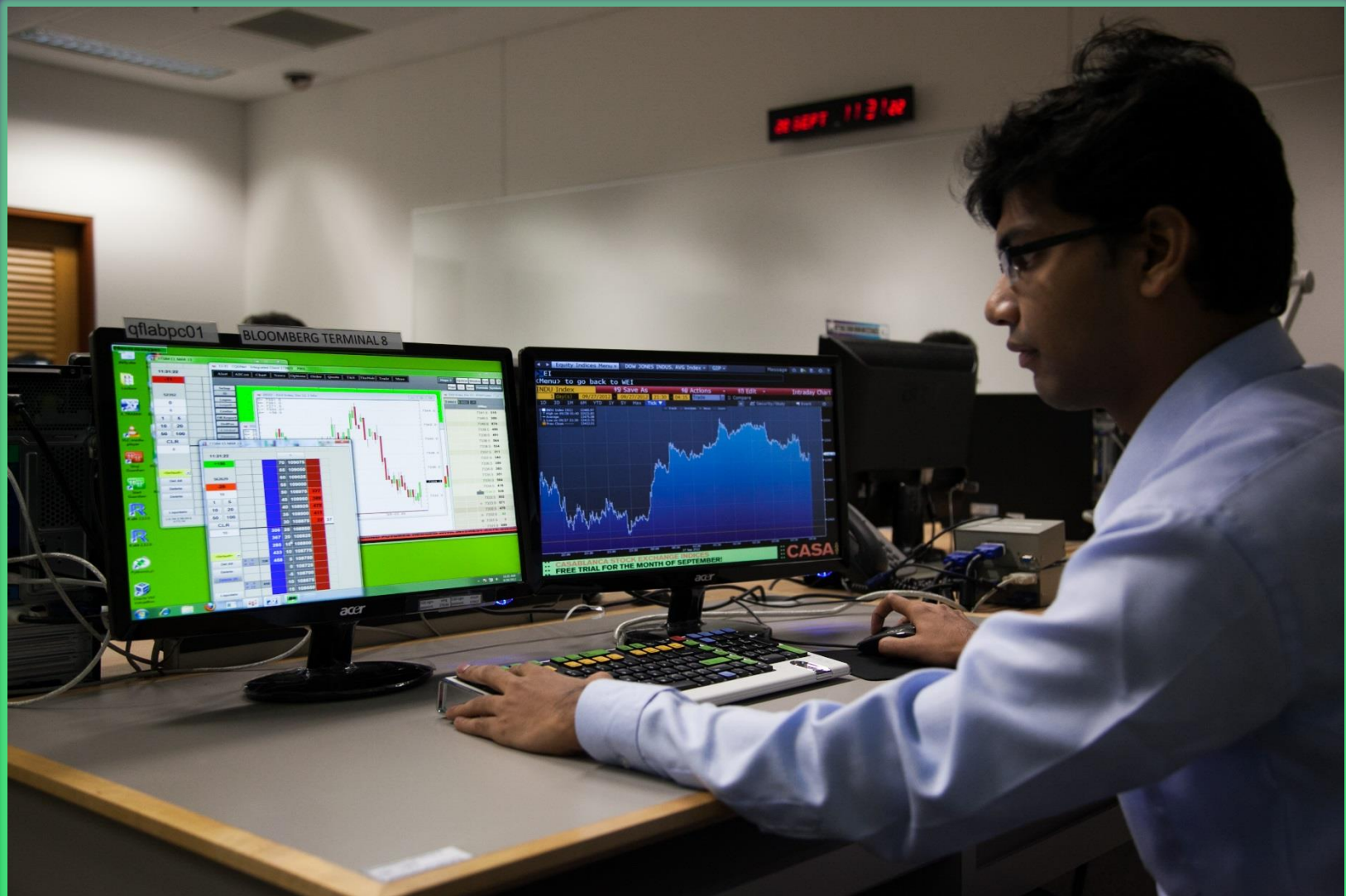
* Portfolio & risk management

* Generate alpha with minimal risk exposures

* Quantitative trading

* Short-term money making opportunities

Great Facilities!



MAS Quantitative Finance Award

- ✦ The Monetary Authority of Singapore (MAS) has targeted **Quantitative Finance** as a field to develop a pipeline of *specialist leaders*.
- ✦ MAS has set up the **Award** to encourage more LKCSB students (who hold pink IC) to major and excel in this exciting area.
- ✦ Awarded to QF major finishing 2nd year in QF.

CFE Prize

- ✦ To inspire and motivate students majoring in QF to achieve greater heights of excellence
- ✦ A best graduating QF student is selected every year.

Career, Career, and Career

- * Quantitative researcher/analyst/strategist
- * Quantitative risk analyst/manager
- * Quantitative developer
- * Quantitative associate (sales, trading, consultancy, etc.)

* Samples of Career Sites

* Linkedin

* Efinancialcareers

* indeed

* Recruit.net

* Jobs.com.sg

* Q.E.D.

Why Quant?

THE wave of the Future

- * QF major prepares you for a career in the financial industry, primarily in the management of risks, trading & hedging of financial products, as well as in the management of investment portfolios and trading opportunities.
- * By majoring in QF, your abilities to understand financial models and to perform data analysis on a large scale will give you the cutting edge in the highly competitive global job market.

Q&A

Thank You!