

Mathematics and Asset Management

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Why Asset Management?

Knowledge ► Power!

— Sir Francis Bacon, 1597

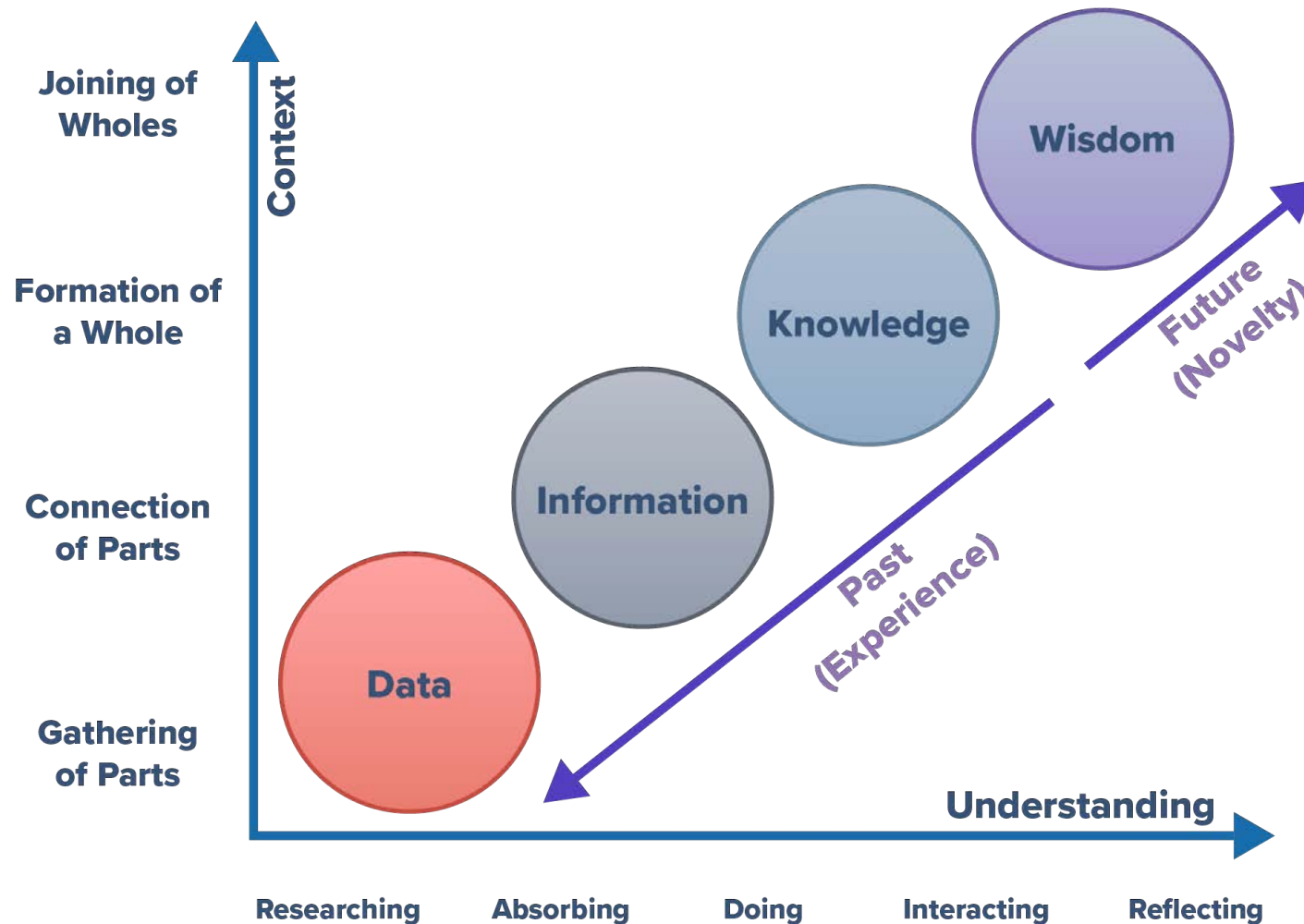
Knowledge about Money ►

More Money!!

— Kurtay Ogunc, 1997



“Intelligence Path”

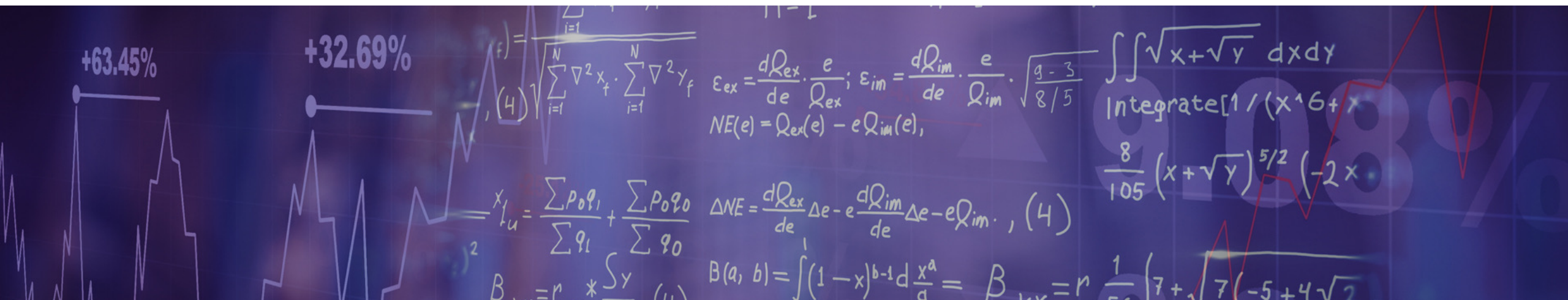


Knowledge
is having the right answer

Intelligence
is asking the right question

What is Unique about the Program?

This program is designed to prepare students for **ASSET MANAGEMENT**, which is a mathematically and statistically intensive field. Quantitative analysts, who build models to find patterns in financial markets, are called “quants.” Students may ultimately seek employment with asset management firms such as mutual funds, hedge funds, and ETF providers. In addition, there will be opportunities in quantitative research departments at major financial institutions.



What is a Financial Market?

“Any marketplace where buyers and sellers participate in the trade of assets such as equities, bonds, currencies, and derivatives.”

Investopedia



What is a “Fund”?

“A source of money that is allocated for a specific purpose...Investors can place money in different types of funds with the goal of earning money.

Examples include mutual funds, which gather money from numerous investors and invest it in a diversified portfolio of assets, and hedge funds, which invest the assets of high-net-worth individuals in a way that is designed to earn above-market returns.”

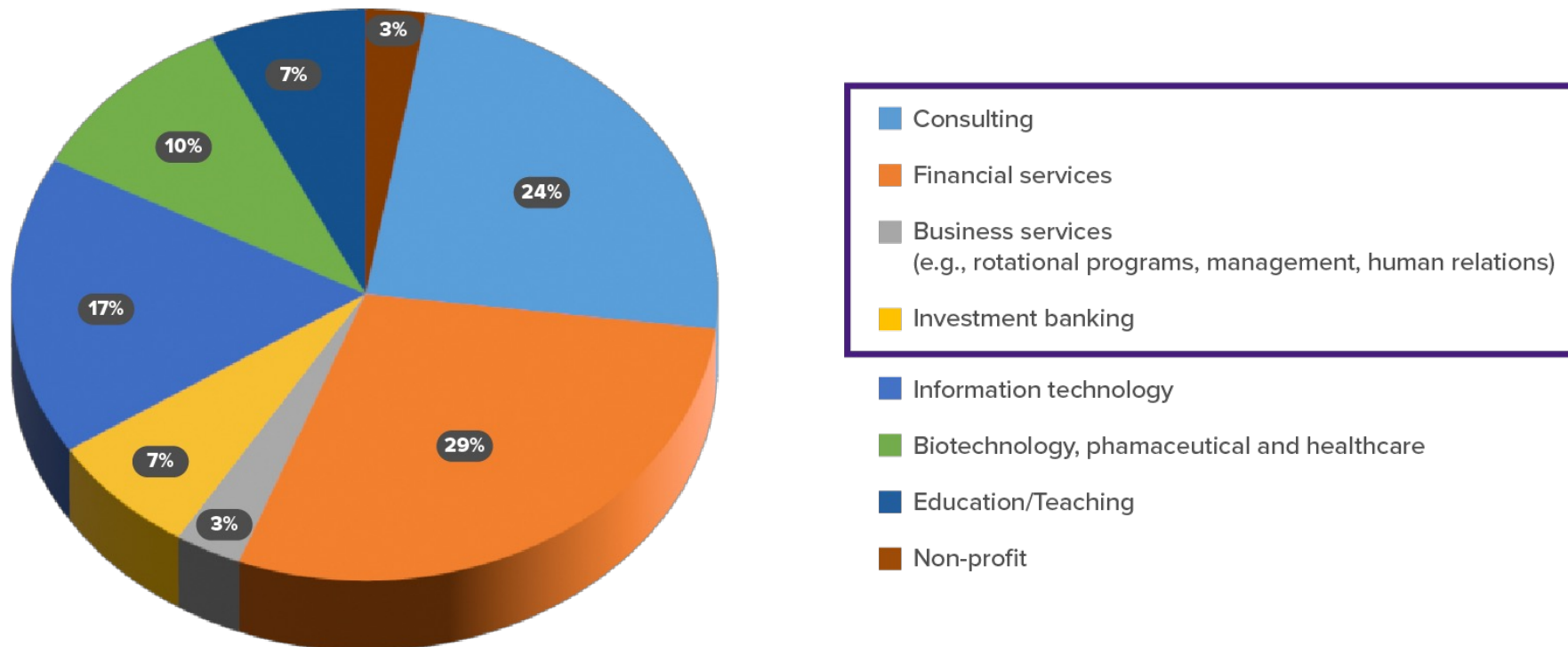
Investopedia











Why study Math + Asset Management?

JOB!

Industries of Full-Time Employed 2014 Mathematics Majors



10 HIGHEST-PAYING JOBS FOR "MATH GEEKS"

RANK	JOB TITLE	MEDIAN PAY	% MATH MAJORS	MOST COMMON DEGREE LEVEL
1.	 Data Scientist, IT	\$109,700	8%	Bachelor's
2.	 Quantitative Analyst	\$103,300	14%	Master's
3.	 Actuary	\$97,900	33%	Bachelor's
4.	 Data Modeler	\$91,200	18%	Master's
5.	 Senior Actuarial Analyst	\$86,600	40%	Bachelor's
6.	 Statistician	\$82,200	11%	Master's
7.	 Mathematician	\$81,700	70%	Master's
8.	 Research Analyst, Operations	\$81,700	10%	Master's
9.	 Statistical Analyst	\$74,700	11%	Bachelor's
10.	 Actuarial Analyst	\$73,800	27%	Bachelor's



Eight out of Business Insider's ten highest-paying jobs for "math geeks" are related to Asset Management!

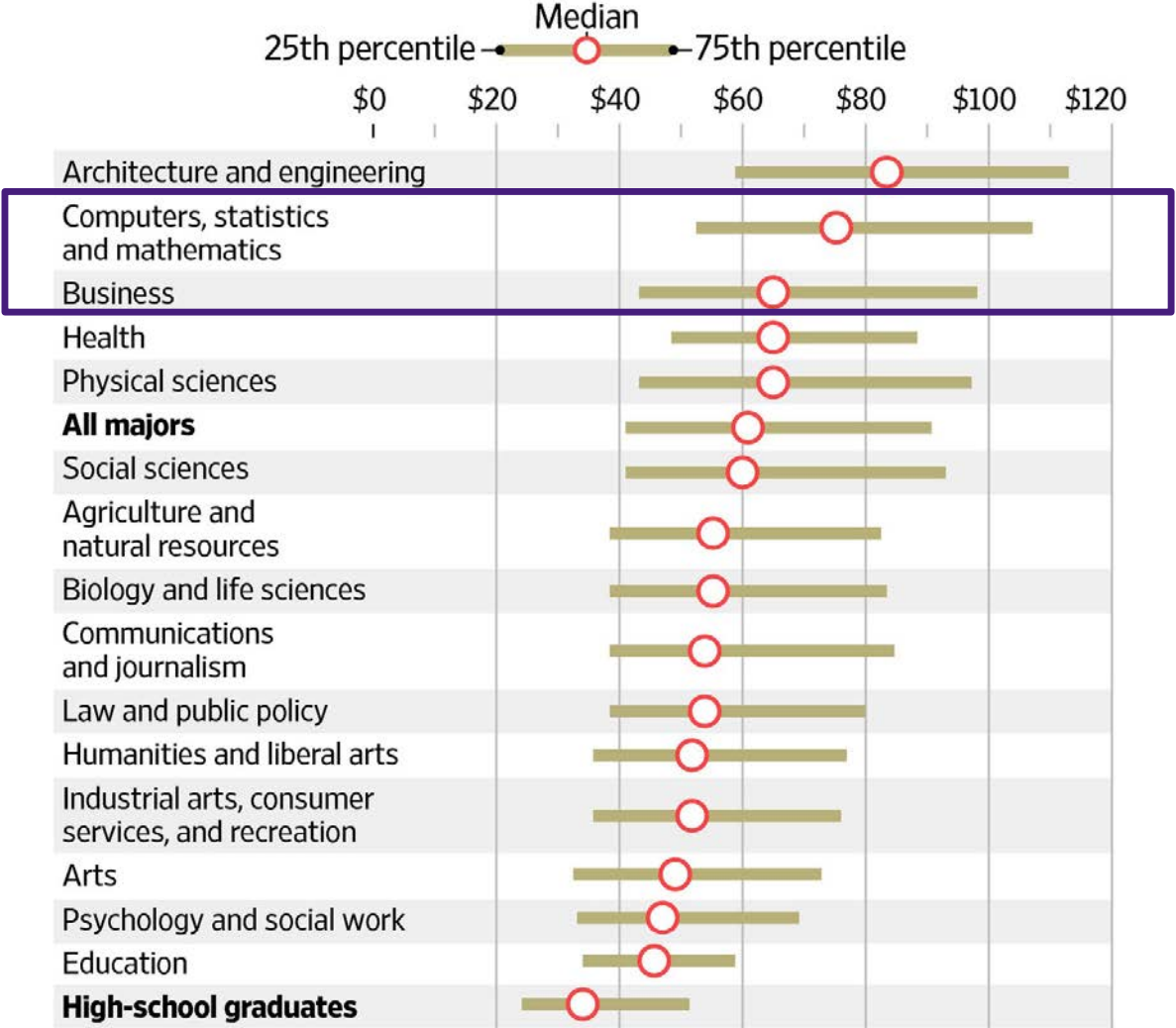
PayScale analyzed salaries from professionals with 5-8 years of experience who majored in math, ranking the professions with the highest median pay.

Income Inequality

Going to college pays off, but by how much depends greatly on the area of study.

Annual wages of college graduates by major over a career (ages 25–59)

In thousands of dollars



Source: Georgetown University

An Asset Management Career: Three Paths

- Fund Management
- Research
- Marketing

Fund Management

Job Title: Portfolio Manager

- Make strategic decisions to determine the composition of one or more funds
- Fast-paced, requires strong multitasking and analytical thinking skills, high energy, high stress, work with a team
- Compensation: \$1,000,000+ (sky is the limit!)





Research

Job Title: Research Analyst

- Collect data on a particular company, industry, or financial product and analyze its financial strength
- Intellectually stimulating, often self-paced, work may be individual or team-based, low stress, good for introverts
- Compensation: \$150,000-\$1,000,000

Marketing

Job Title: Marketing & Client Service Associate

- Sell complex financial products to institutional investors and HNWI's
- Travel (up to 80% out of the office), requires excellent presentation and negotiation skills, high energy, periods of high and low stress, work independently or on a team, good for extroverts
- Compensation: \$150,000-\$500,000





- “A non-profit organization dedicated to increasing the number of women in portfolio management and executive leadership in the asset management industry” www.girlswhoinvest.org
- Competitive Summer Intensive Programs at University of Pennsylvania and University of Notre Dame, and paid internship opportunities at global asset management firms.
- Open to **sophomore women ONLY!**

Women in Investment Management Initiative

- From the CFA Institute, “This initiative aims to improve investor outcomes by encouraging gender diversity in the investment management profession” – www.cfainstitute.org
- Women In Investment Management Network: connect with peers, share articles, join the conversation
- CFA Program Women’s Scholarships are available!



Additional Questions?

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