Why econometrics?

- 1.5 billion monthly active users
- $14.6 billion in revenue year – mostly from advertising
- $10.3 billion in gross profit
- Current price around $94/share, market cap of about $266 billion
- P/E ratio of 96
  – Typical P/E ratio 20-25 range
- Why is Facebook so valuable?

Big Data refers to the idea that an enterprise can mine all the data it collects right across its operations to unlock golden nuggets of business intelligence.

Data have swept into every industry and business function and are now an important factor of production, alongside labor and capital.

Analyzing large data sets—so-called big data—will become a key basis of competition, underpinning new waves of productivity growth, innovation, and consumer surplus…
The story is similar in fields as varied as science and sports, advertising and public health — a drift toward data-driven discovery and decision-making. “It’s a revolution,” says Gary King, director of Harvard’s Institute for Quantitative Social Science. “We’re really just getting under way. But the march of quantification, made possible by enormous new sources of data, will sweep through academia, business and government. There is no area that is going to be untouched.”

Good News

• High demand for your skills

Good News

McKinsey & Company

The United States alone faces a shortage of 140,000 to 190,000 people with analytical expertise and 1.5 million managers and analysts with the skills to understand and make decisions based on the analysis of big data.

Bad News – Subject is Hard

Hilary Mason, chief scientist for the URL shortening service bit.ly, says a data scientist must have three key skills. “They can take a data set and model it mathematically and understand the math required to build those models; they can actually do that, which means they have the engineering skills…and finally they are someone who can find insights and tell stories from their data. That means asking the right questions, and that is usually the hardest piece.”

Is studying economics worth it?

The job market believes it is
• Job opening aggregator

• Search for SAS, SPSS, STATA
  – 17,388 hits