

FORECASTING THE FUTURE: THE KNOWABLE AND THE UNKNOWN

Coordinator: Ken Witty

We live in a world of predictions – the weather, the next president, next year's economy, the stock market, war in the Mideast, the Super Bowl, etc. But how good is our ability to predict the future and what is the best way to think about forecasting future events? Psychologist Philip Tetlock tracked some 284 experts –political scientists, economists and journalists – over many years. His results: most of the experts would have been beaten by "a dart-throwing chimpanzee", but a few were pretty good. What kind of mental processes result in successful forecasting? Can we predict the future and in what fields is this possible and where is it impossible.

Readings:

Nate Silver, *The Signal and The Noise*

Dan Gardner, *Future Babble: Why Pundits Are Hedgehogs and Foxes Know Best*

Philip Tetlock, *Superforecasting*

There will be a course pack with selections from *The Wisdom of Crowds* by James Surowiecki, *Thinking Fast and Slow* by Daniel Kahneman, *The Little Book of Behavioral Investing* by James Montier, *The Book of Predictions* by David Wallechinsky et al and newspaper and magazine articles about why humans need to predict the future, the human search for certainty and the forecasting success of prediction betting markets.

The course pack may number 200 – 250 pages and cost about \$12.

Ken Witty was a television producer and writer for CBS News, PBS Newshour, Wall Street Journal TV and his own production company specializing in economic and financial life. He co-coordinated "The Changing U.S. Economy" in Fall, 2015.

***** **Syllabus - A Work in Progress** *****

WEEK 1

INTRODUCTION

Why do we feel the need to know the future? How have cultures in the past sought to see the future? Looking backward at predictions from the past; why is it so difficult to forecast future events? What is predictable and what is not and why?

Readings: "The Signal and the Noise" pages 1-17, 33-46

"Future Babble" pp 7-28, 39- 53, 134-142

"10 Traditional Ways to See the Future" (10 short pages)

WEEK 2

HEDGEHOGS AND FOXES

How and why did Professor Philip Tetlock track 284 pundits over many years and what did he find out? Why are most well-known political pundits so bad at predictions? Why are hedgehogs worse than foxes?

Readings: "The Signal and the Noise" pp 50-73

"Future Babble" pp 81-117

Interview with Philip Tetlock pp. 1-16

WEEK 3

SUPERFORECASTING AND GEOPOLITICS– How to be a better forecaster, ways of thinking that improve predictions. How some ordinary forecasting participants on Tetlock's online project were better than experienced CIA analysts in predicting geopolitical events.

Readings:

'Superforecasting" pp. 88-96 and 102-104

"Future Babble" pp. 174-181, 203-208, 236-265

WEEK 4

THE SUPERFORECASTERS

Meet some of the winners of the Forecasting Tournament. Why are these individuals so good at predictions? What are the mental processes that they use?

Readings: "Superforecasting" pp. 105-130, 143-147, 166-173, 191-192

WEEK 5

THE WISDOM OF CROWDS

Why is it that groups of people can be better forecasters than a single expert?

What are the dynamics that make the wisdom of crowds possible?

Readings:

‘The Wisdom of Crowds’ pp. Introduction XI –XXI, 3-11,29-36, 273-282

“Superforecasting” pp 197-201, 204-207, 70-74

Economist on crowdsourcing medical diagnosis

WEEK 6

PREDICTION BETTING SITES

What are Prediction Betting Sites, how do they work and how accurate have they been? The Scottish independence election example; presidential election track record; Betting sites as a model of the wisdom of crowds.

Readings:

Wisdom of Crowds pp. 17-22, 79-83

WSJ InTrade Political Betting Site

Politico – “Meet the stock market for politics”

Wikipedia – prediction markets

“UK Bookies Are Betting Against Scottish Independence”

WEEK 7

STOCK MARKET FORECASTS

In no other field do we get so many forecasts and so many that are off the mark. Why are stock market predictions so difficult? And why do so many people listen to the forecasters?

Readings:

“Thinking Fast and Slow” pp. 212-217

“The Little Book of Behavioral Investing” James Montier pp.57-72

“The Signal and the Noise” pp. 329-369

WEEK 8

THE WEATHER

Weather forecasting is one of the fields where great success has been achieved thanks to use of supercomputers, satellites and human intelligence. How far into the future are weather forecasts accurate? Can forecasts avert catastrophes? How much better can forecasters be in the future?

Readings:

“The Signal and the Noise” pp 108-141

“Superforecasters” pp. 13-14

“Future Babble” pp 37-39

WEEK 9

THE ECONOMY

Economic forecasting is an industry in itself and yet economists have a terrible track record seeing into the future. Why is it so difficult to predict the future course of our economy? And why are economists overconfident about their abilities to predict?

Readings:

“The Signal and the Noise” pp. 19-46 and 179-203

WEEK 10

SPORTS

Can we predict the careers of professional athletes? Can we forecast the outcomes of sports events? Some people think they can. And what is Bayes reasoning, how does it work and how it can improve the record of a sports bettor?

Readings:

“The Signal and the Noise” pp. 74-86, 88-93, 101-107
232-261

James Montier – pp.73-77

“We’re Predicting the Career of Every NBA Player” by
Nate Silver p. 1- 14

WEEK 11

MEDICINE

When an infectious illness threatens to spread through the population, medical authorities like the CDC have to make predictions about how wide and how fast the disease will advance. How good are these predictions? How possible is it to make accurate forecasts? The stakes are high when it comes to public health.

Readings:

“The Signal and the Noise” pp. 204-231

WEEK 12

REVIEW

Readings:

“Superforecasters” pp. 277-285 The Ten
Commandments for Aspiring Superforecasters
“ The Signal and the Noise” pp. 446-454