

# Hypothesis Testing

Economics

What a p-value says, and the four things it does not.

*Reading a p-value correctly.*

## It is not

The probability the hypothesis is true

The probability the result was chance

**A measure of effect size**

Evidence of practical importance

## It is

Conditional on the null being true

**Sensitive to sample size**

**One input among several**

Meaningless without the test being pre-specified

With a large enough sample, a trivially small effect becomes statistically significant. Always report the effect size too.