

# Tutorial 12 - ECON3360

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# Tutor Surveys



**For Online**



**For In-class**

# Mortgage Application Analysis - 1

- ▶ 1990 Boston: 28% of minority applicants denied mortgages.
- ▶ 9% of white applicants denied mortgages.
- ▶ Suggestion of potential discrimination.

## Mortgage Application Analysis - 2

- ▶ Relationship between mortgage outcome and minority status.
- ▶ Outcome: *approve* (1 = approved, 0 = not approved).
- ▶ Key variable: *white* (1 = white, 0 = black/Hispanic).

$$\text{approve} = \beta_0 + \beta_1 \text{white} + \text{controls} + u$$

- ▶ Data: `loanapp.dta`

## Problem 1 - Question 1

$$\text{approve} = \beta_0 + \beta_1 \text{white} + \text{controls} + u$$

- ▶ This study investigates whether the higher % of denial of loan application for minorities is due to discrimination or other characteristics that are associated with race.
- ▶ If there is discrimination against minorities, the coefficient on *white* should be positive and significant: white applicants get higher rates of mortgage applications approved than minorities.
- ▶ In contrast, if the difference in the % of mortgage denial is due to other characteristics that are associated with race (rather than the effect of race itself), the coefficient on *white* should not be different from zero.
- ▶ Importantly this assumes that we control for all relevant characteristics! Otherwise we have OVB and the coefficient on *white* cannot be given a causal interpretation.