

PSC 400

SYRACUSE UNIVERSITY

**DATA ANALYTICS**

**FOR POLITICAL**

**SCIENCE**

**EXTENSIONS TO REGRESSION**

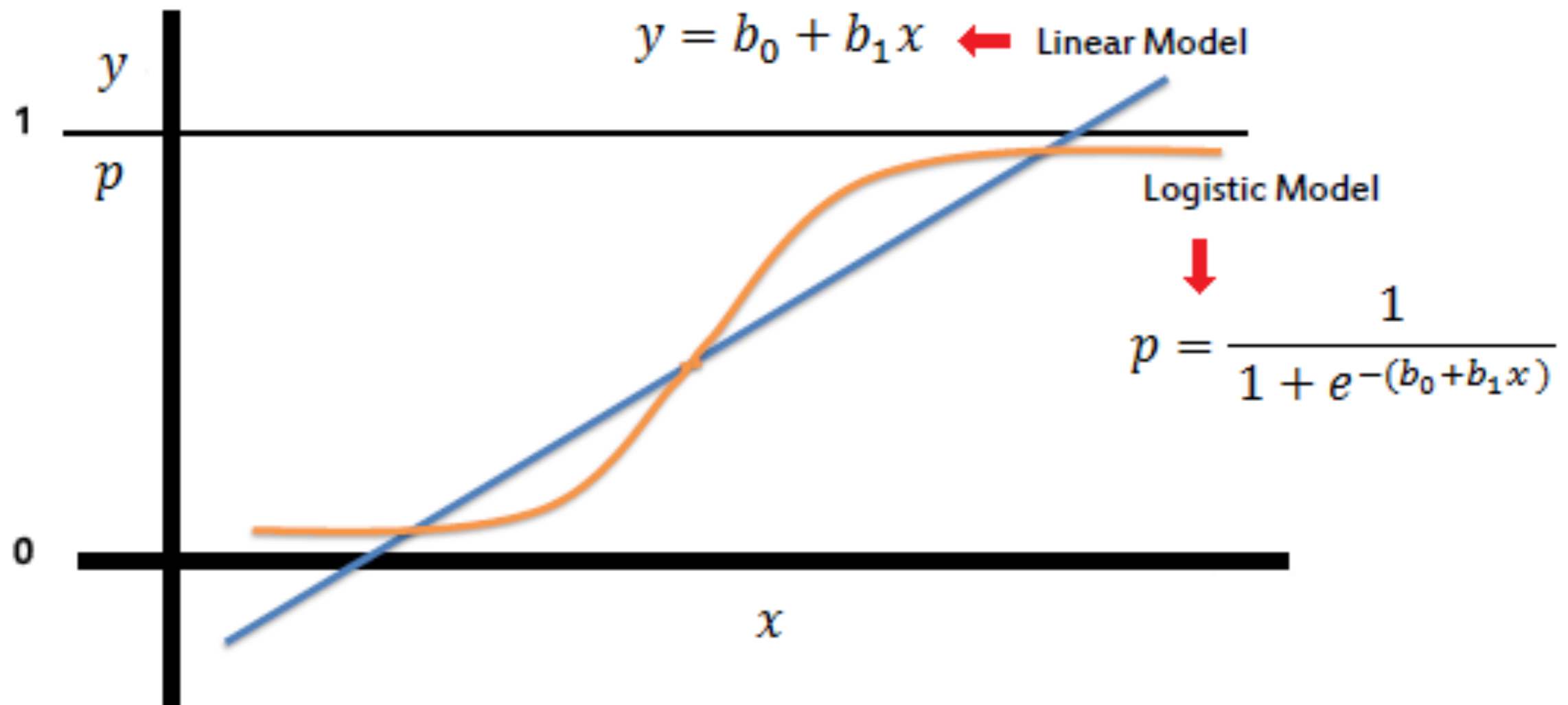
# EXPLORATION SURVEY



# EXERCISE

- `cces19.csv`
- What is the effect of age on whether respondents are registered to vote or not?
  - Control for: female, partisanship, nohighschool, collegeorhigher, nonwhite, married, employed
  - Plot predicted probability of being registered depending on age

# LINEAR VS. LOGIT



# RECAP

- **You can now run regressions**
  - **With binary or continuous dependent variables**
  - **With binary, categorical, or continuous independent variables**
  - **Estimating separate effects depending on values of another variable (interaction effects)**
  - **Estimating non-linear effects**

# RECAP

- **You can display results of regressions**
  - **Predicted values of dependent variable (graphs, numbers)**
  - **Including confidence intervals**

# PREDICTION

- **How good are polls at predicting election outcomes?**
  - **How well do state-level polls from shortly before the election predict who will win each state?**

# PREDICTION

**Table 4.1. 2008 US Presidential Election Data.**

<i>Variable</i>	<i>Description</i>
state	abbreviated name of the state
state.name	unabbreviated name of the state
Obama	Obama's vote share (percentage)
McCain	McCain's vote share (percentage)
EV	number of Electoral College votes for the state

**Table 4.2. 2008 US Presidential Election Polling Data.**

<i>Variable</i>	<i>Description</i>
state	abbreviated name of the state in which the poll was conducted
Obama	predicted support for Obama (percentage)
McCain	predicted support for McCain (percentage)
Pollster	name of the organization conducting the poll
middate	middate of the period when the poll was conducted

- **polls08.csv and pres08.csv**