# INTRODUCTION TO POLITICAL ANALYSIS

DEVELOPING THEORIES IN POLITICAL SCIENCE
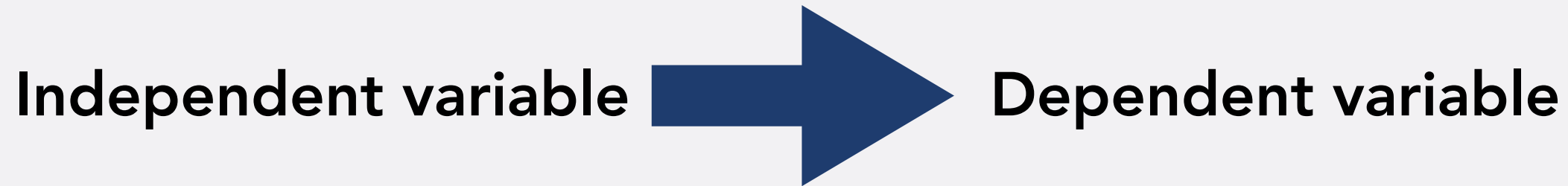
HOUSEKEEPING

- **First problem set due on Friday**
- **Another reading quiz due Wednesday**

RECAP

- Formulate research question
- Propose explanation/theory, hypotheses
- Data collection process
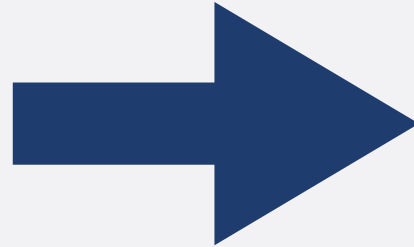- Use data to evaluate hypotheses
- Reassess explanation

WHAT ARE WE TRYING TO DO?

Independent variable ➡️ Dependent variable
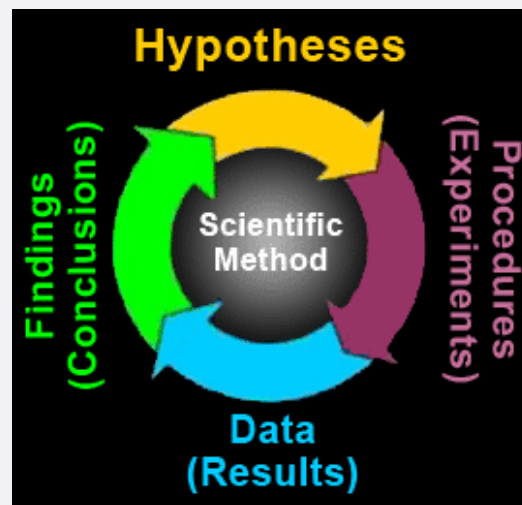
- Ultimate goal of research project:
  - _____ causes _____
  - Higher _____ causes higher _____
  - Higher _____ causes lower _____

EXAMPLE

Media/public attention → **Adoption of unpopular policies**
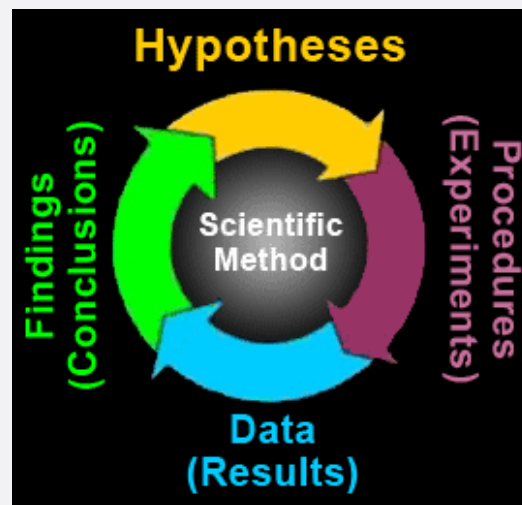
- **Research question: Do politicians adopt unpopular policies when media/public are distracted?**

GOOD RESEARCH QUESTIONS

- You should care about your research question
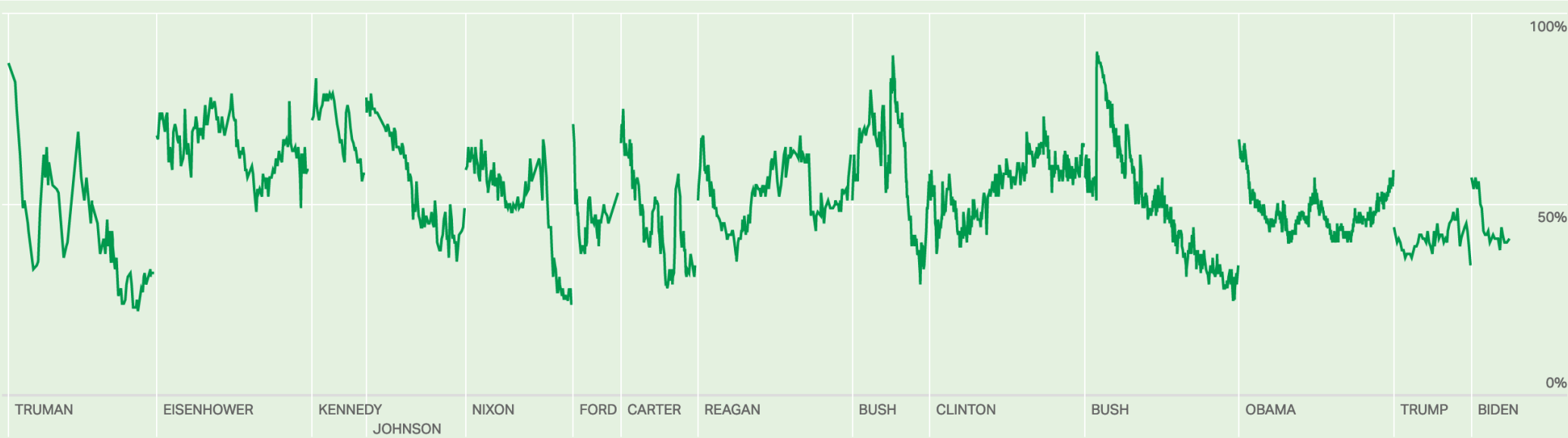- The question should not be normative
- The question should answer an important question in the real world and the scientific literature
- The question should not be too broad or too narrow

TODAY

- **Formulate research question**
- **Propose explanation/theory, hypotheses**
- **Data collection process**
- **Use data to evaluate hypotheses**
- **Reassess explanation**

TODAY

100%

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TRUMAN   EISENHOWER   KENNEDY   NIXON   FORD   CARTER   REAGAN   BUSH   CLINTON   BUSH   OBAMA   TRUMP   BIDEN
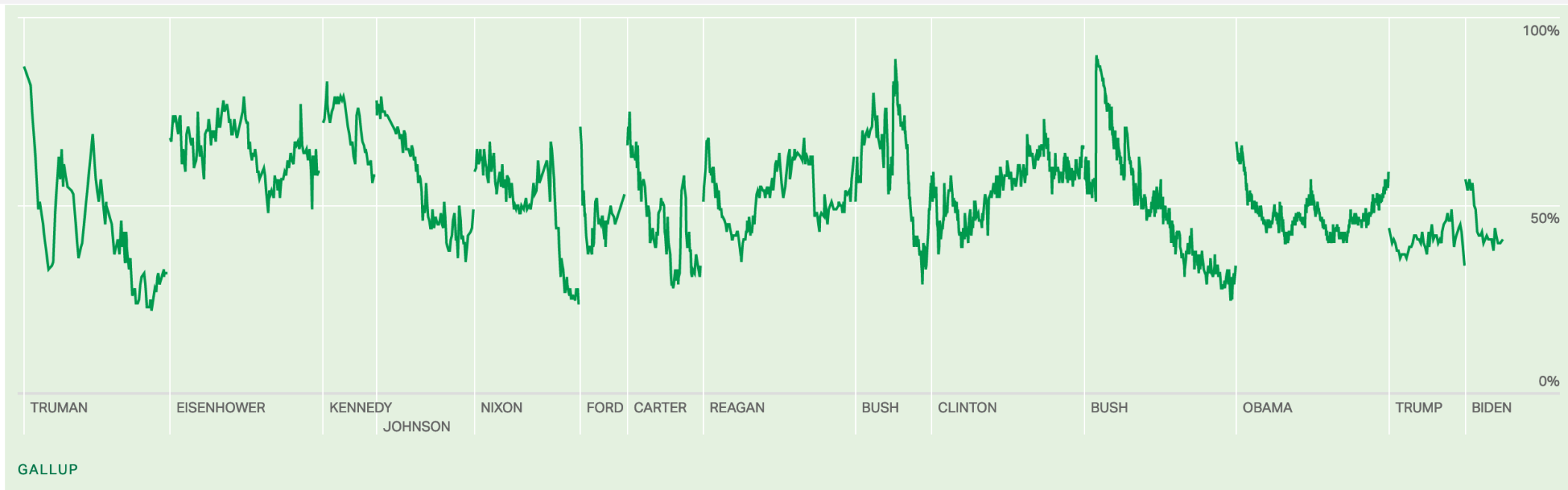
JOHNSON

TODAY

GALLUP

- **What determines Presidential Approval Rating?**

TODAY

- **What is a theory and how does it look?**
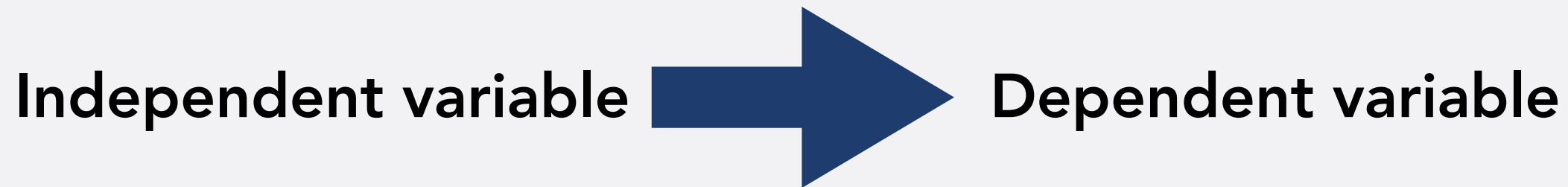- **What are hallmarks of good social science theories?**

THEORY

- **Theory: Description of how we think the world works**
  - with respect to our research question

Independent variable ➡ **Dependent variable**

- **Goal: Want to provide causal explanation for (variation in) dependent variable**
  - Higher _____ causes higher _____
  - Or: Higher _____ causes lower _____

VARIATION
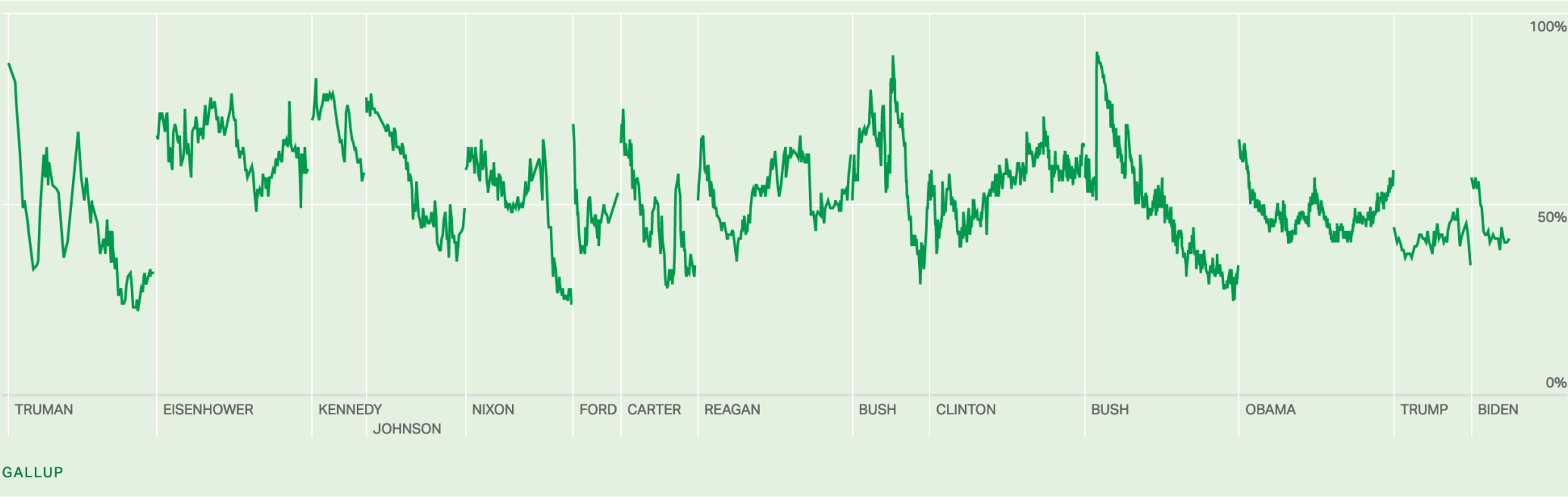
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TRUMAN   EISENHOWER   KENNEDY   NIXON   FORD CARTER   REAGAN   BUSH   CLINTON   BUSH   OBAMA   TRUMP   BIDEN

JOHNSON

THEORY

Independent variable ➡️ **Dependent variable**

- **Goal: Want to provide causal explanation for (variation in) dependent variable**
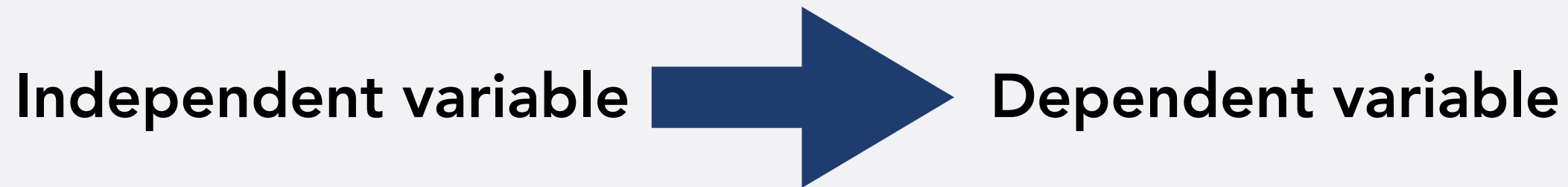 - **Higher _____ causes higher _____**
  - **Or: Higher _____ causes lower _____**

THEORY EXAMPLE

Independent variable ➡ **Presidential Approval Rating**
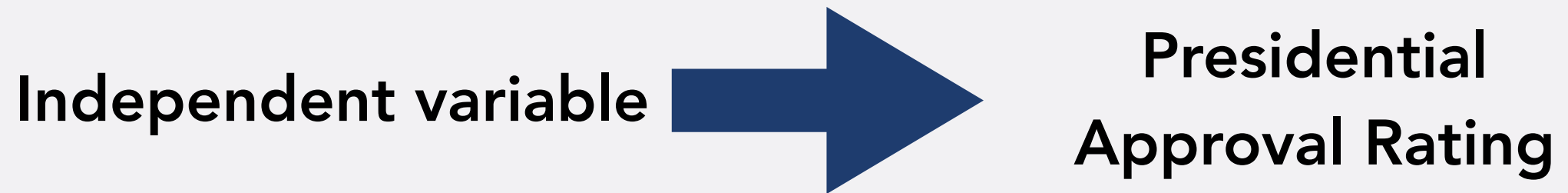
- Higher _____ causes higher <u>Presidential Approval Ratings</u>
- <u>Or:</u> Higher _____ causes lower <u>Presidential Approval Ratings</u>

THEORY EXAMPLE

EXAMPLE

Performance of economy → **Presidential Approval Rating**
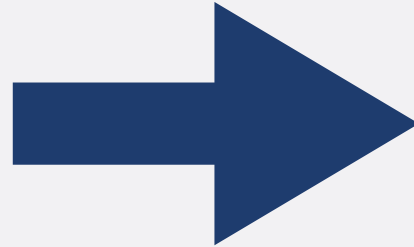
- **Better <u>economic performance</u> causes higher <u>Presidential approval rating</u>**

ITERATIVE APPROACH

- First: "What determines Presidential approval rating?"
- Now: "What is the effect of economic performance on Presidential approval rating?"
- Back and forth between question and theory
  - Potential refinement: "What is the effect of the unemployment rate on Presidential approval rating?"

CAUSAL THEORY

Independent variable ➡️ **Presidential Approval Rating**
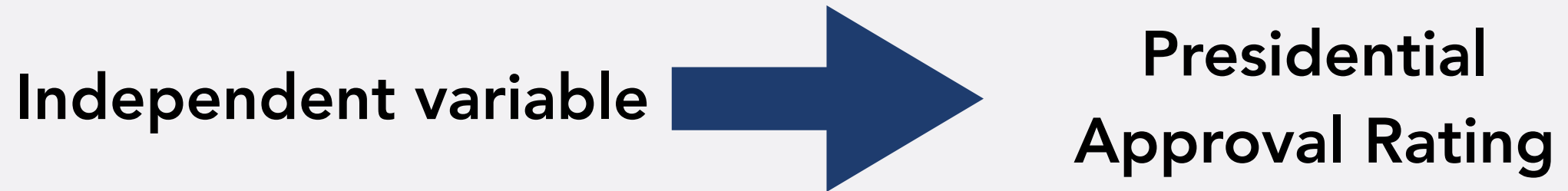
- Cannot just propose any independent variable
- Need to answer: Why do you think that this independent variable is *causally* related to the dependent variable?

A BAD THEORY

NFL: Whether Washington wins last home game before election

➡️
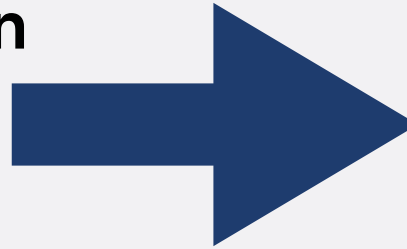
Presidential election: Whether incumbent party wins again

Year	Redskins Result	Election Result	Incumbent Party's White House Status	Rule Confirmed
1940	WIN vs. Steelers 37-10	Roosevelt (D) beats Willkie (R)	Keeps	Yes
1944	WIN vs. Rams 14-10	Roosevelt (D) def. Dewey (R)	Keeps	Yes
1948	WIN vs. Yanks 59-21	Truman (D) def. Dewey (R)	Keeps	Yes
1952	LOSE vs. Steelers 24-23	Eisenhower (R) def. Stevenson (D)	Loses	Yes
1956	WIN vs. Browns 20-9	Eisenhower (R) def. Stevenson (D)	Keeps	Yes
1960	LOSE vs. Brown 31-10	Kennedy (D) def. Nixon (R)	Loses	Yes
1964	WIN vs. Bears 27-20	Johnson (D) def. Goldwater (R)	Keeps	Yes
1968	LOSE vs. Giants 13-10	Nixon (R) def. Humphrey (D)	Loses	Yes
1972	WIN vs. Dallas 24-20	Nixon (R) def. McGovern (D)	Keeps	Yes
1976	LOSE vs. Cowboys 20-7	Carter (D) def. Ford (R)	Loses	Yes
1980	LOSE vs. Vikings 39-14	Reagan (R) def. Carter (D)	Loses	Yes
1984	WIN vs. Falcons 27-14	Reagan (R) def. Mondale (D)	Keeps	Yes
1988	WIN vs. Saints 27-24	Bush (R) def. Dukakis (D)	Keeps	Yes
1992	LOSE vs. Giants 24-7	Clinton (D) def. Bush (R)	Loses	Yes
1996	WIN vs. Colts 31-16	Clinton (D) def. Dole (R)	Keeps	Yes
2000	LOSE vs. Titans 27-21	Bush (R) def. Gore (D)	Loses	Yes
2004	LOSE vs. Packers 28-14	Bush (R) def. Kerry (D)	Keeps	No
2008	LOSE vs. Steelers 23-6	Obama (D) defeats McCain (R)	Loses	Yes
2012	LOSE vs. Panthers 21-13	Obama (D) defeats Romney (R)	Keeps	No
2016	WIN vs. Eagles 27-20	Clinton (D) v. Trump (R)	??	??

EXAMPLE

Performance of economy → **Presidential Approval Rating**
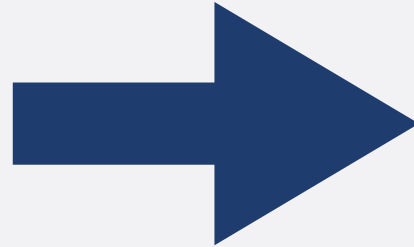
- **Better <u>economic performance</u> causes higher <u>Presidential approval rating</u>**
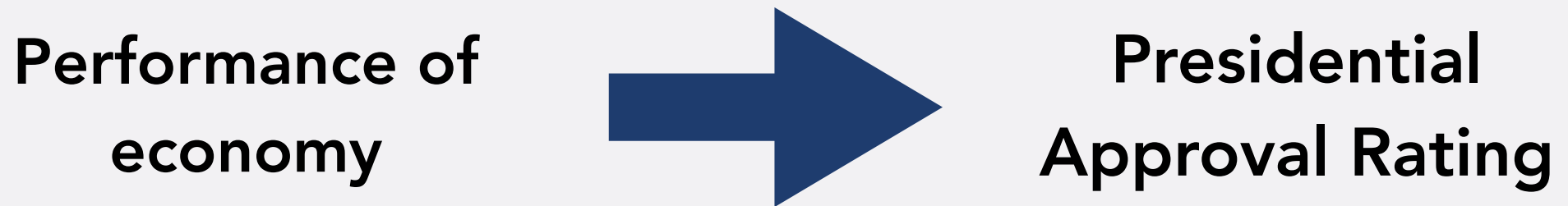 - Why?

EXAMPLE

Performance of economy → **Presidential Approval Rating**

- **Better <u>economic performance</u> causes higher <u>Presidential approval rating</u>**
  - Causal explanation: Because state of economy allows voters to make inference about how competent President is

ANOTHER EXAMPLE

Spending as percentage of GDP:

Country	Spending
United States	3.62
Greece	2.46
Poland	2.18
Estonia	2.04
United Kingdom	2.07
France	1.8
Turkey	1.69
Norway	1.49
Romania	1.44
Portugal	1.39
Croatia	1.38
Bulgaria	1.20
Denmark	1.18
Germany	1.18
Albania	1.16
Netherlands	1.16
Lithuania	1.14
Slovak Republic	1.12
Latvia	1.06
Canada	1.00
Czech Republic	0.97
Italy	0.95
Slovenia	0.95
Belgium	0.9
Spain	0.89
Hungary	0.85
Luxembourg	0.47
Iceland	0.1*

2% target

AN ASIDE

- **Two types of variation to explain**
  - **cross-sectional variation**
    - variation between *different observations* at *same point in time*
    - e.g. military spending of different countries in a certain year
  - **time-series variation**
    - variation within the *same observation over time*
    - e.g. Presidential approval rating

ANOTHER EXAMPLE

Spending as percentage of GDP:

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2% target

0   1%   2%   3%   4%
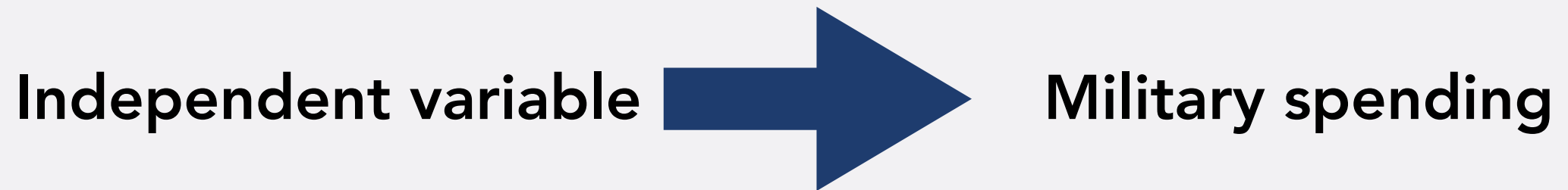
SOURCE: NATO
*ICELAND DOESN'T HAVE ARMED FORCES. DATA FOR ICELAND FROM WORLD BANK

ANOTHER EXAMPLE

Independent variable ➡️ **Military spending**

- Higher _____ causes higher <u>military spending</u>
- or: Higher _____ causes lower <u>military spending</u>

TODAY

- **What is a theory and how does it look?**
- What are hallmarks of good social science theories?

GOOD THEORIES

- *Good theory clarifies causal relationship between what does the explaining and what it to be explained*
  - Variable we want to explain: Dependent variable
  - Variable we use to explain the dependent variable: Independent variable
  - Theory must make clear *why* the independent variable explains the dependent variable (causal mechanism)

GOOD THEORIES

- **How to think about a causal mechanism**
  - **We examine human decision-making:**
    - Who are the actors that make the relevant decisions?
    - What are they trying to achieve?
    - What options do they have?
  - **How does the independent variable affect the relevant actors' decisions?**
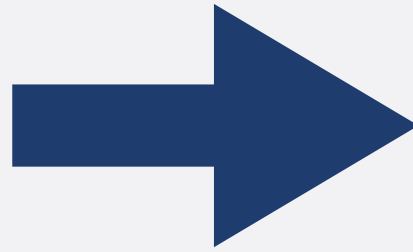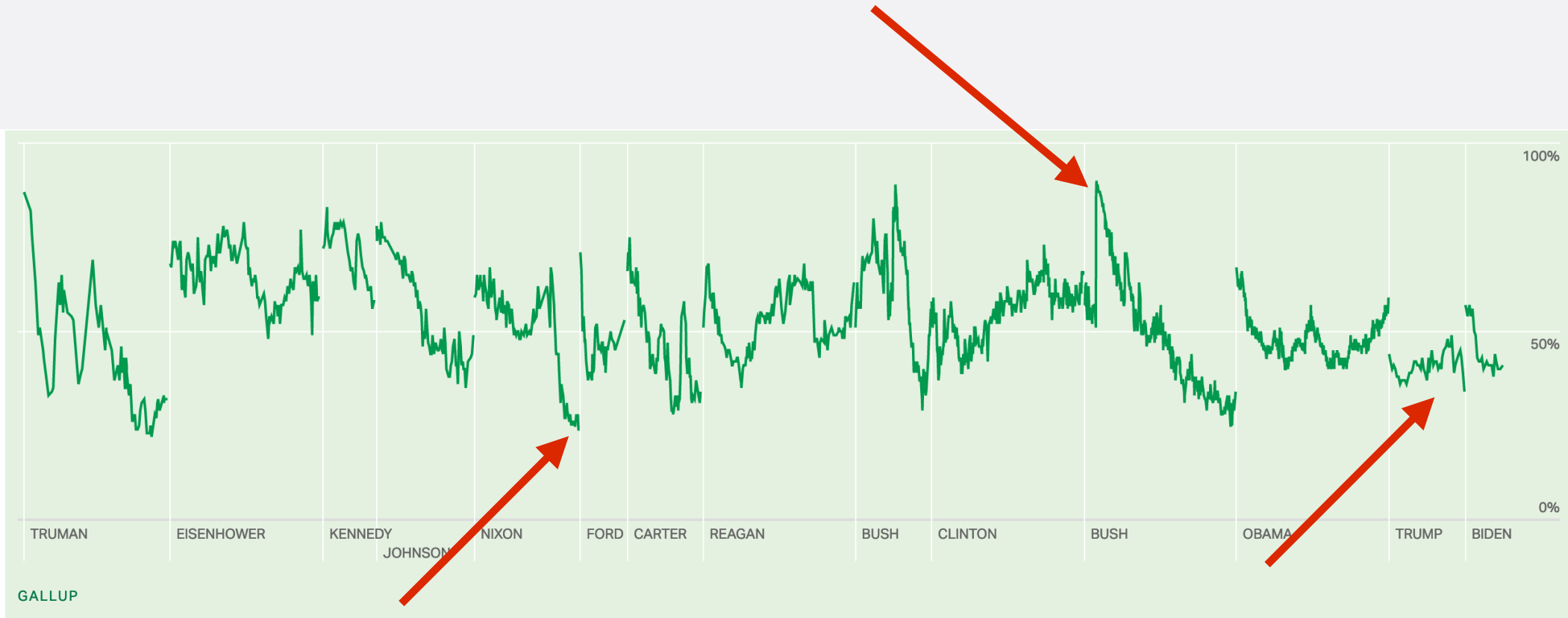
Performance of economy ➡️ **Presidential Approval Rating**

- Who are the actors that make the relevant decisions?
- What are they trying to achieve?
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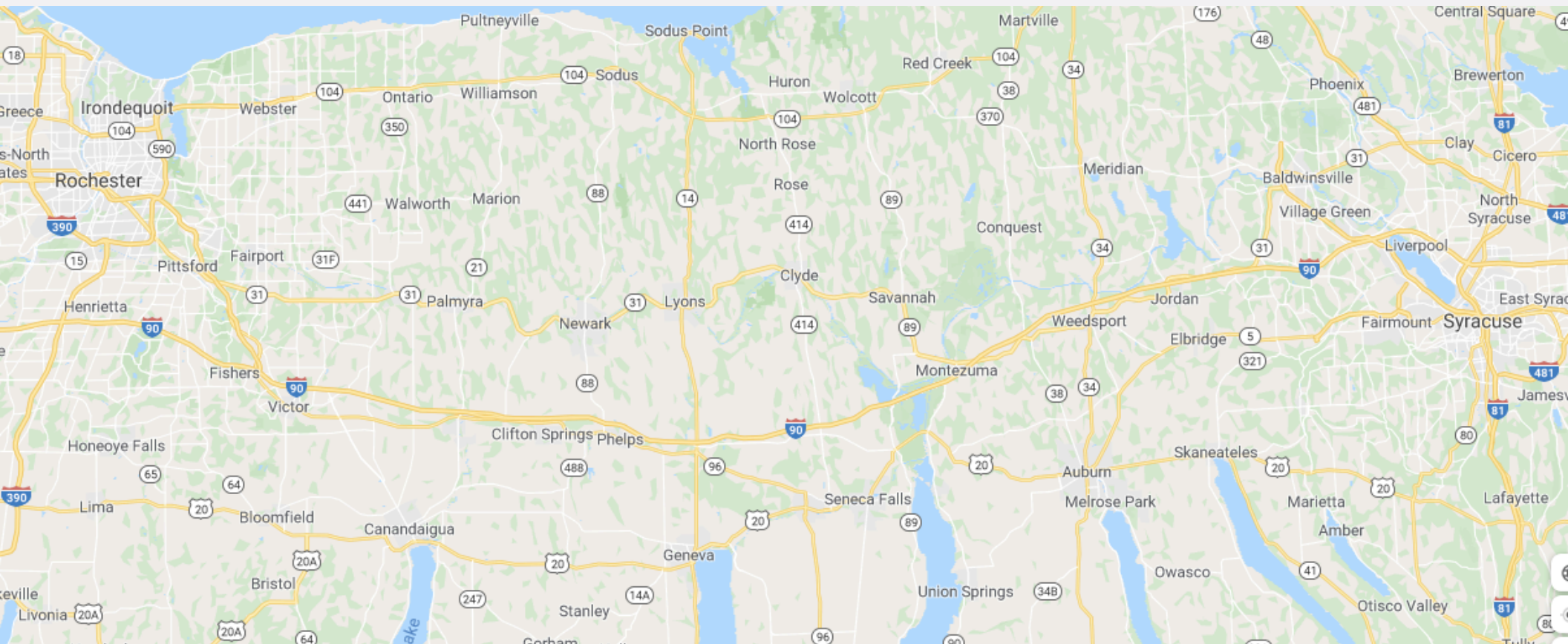- How does the independent variable affect the relevant actors' decision?

BUT...

- **Isn't such a simple theory unrealistic?**

YES...

TRUMAN EISENHOWER KENNEDY JOHNSON NIXON FORD CARTER REAGAN BUSH CLINTON BUSH OBAMA TRUMP BIDEN

100%

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GALLUP

YES, BUT...

THEORIES AS MAPS

- A theory is a map of how the world works
- Theory=simplification
- Simplification makes the theory useful
- Theory: Incomplete and simplified, but useful, description of social reality

GOOD THEORIES

- *Good theory concretely specifies the concepts it invokes*
    - Precisely explain what we mean by e.g. "performance of the economy"
    - Or "democracy", "corruption", etc.
    - Discuss in detail next class

GOOD THEORIES

- *Good theory is falsifiable*
  - Falsifiable = can be proven wrong
    - Falsifiable≠false: We don't aim to create theories that *are* false, but theories that *can potentially shown to be* false
  - "What evidence do I have to observe so I would conclude that a theory is wrong?"
    - If no answer to that, the theory is not falsifiable

GOOD THEORIES

- **Non-falsifiable theory: "The wars in Afghanistan and Iraq prevented terrorist attacks in the United States"**
- **Falsifiable theory: "Military invasions of states harboring terrorists reduce subsequent terrorist attacks"**