

# Being a good presenter is essential to being a successful research economist

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- Part of communicating research is being a good writer
- Presentation skills are increasingly important

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- Your research is useless if you can't convey its message to others
- Part of communicating research is being a good writer
- Presentation skills are increasingly important
- When you give a talk, the audience is doing three things:
  1. Wondering if they should care about what you're talking about
  2. Trying to understand the contribution of your research
  3. Evaluating you

# **Your introduction should try to achieve the following goals.**

## **You have 5 to 10 minutes.**

- Convince the audience that your research is important
  - Your research question addresses an unsettled economic issue
  - The question addresses an important public policy issue
  - Enthusiasm helps!
- Clearly state your research question. You need a precise statement
- Convey your strategy for addressing the question. What is the paper's "lever"?
  - What datasets / methods will you use?
  - What is novel about the datasets / theory / empirical strategy?
  - Why should the audience believe you?
- Preview results
  - Give audience a taste of where you're going
  - This piece can sometimes be omitted

# It is remarkably easy to screw up an introduction

- A lot of presenters use a “Literature” slide to motivate the research via its connection to prior work. These slides are almost always terrible.

## Literature

- **Oil and gas:** Covert 2016, Yergin 2008, Kellogg 2014, Rockefeller 1906, Hotelling 1931
- **Structural modeling:** Reiss and Wolak 2008, Bresnahan 1989, Berry, Levinson, Pakes 1995, Bajari, Benkard, Levin 2008
- **Externalities:** Chay and Greenstone 2005, Pigou 1920, Baumol 1972
- **Hard math:** Baumol 1977, Leonard and van Long 1992

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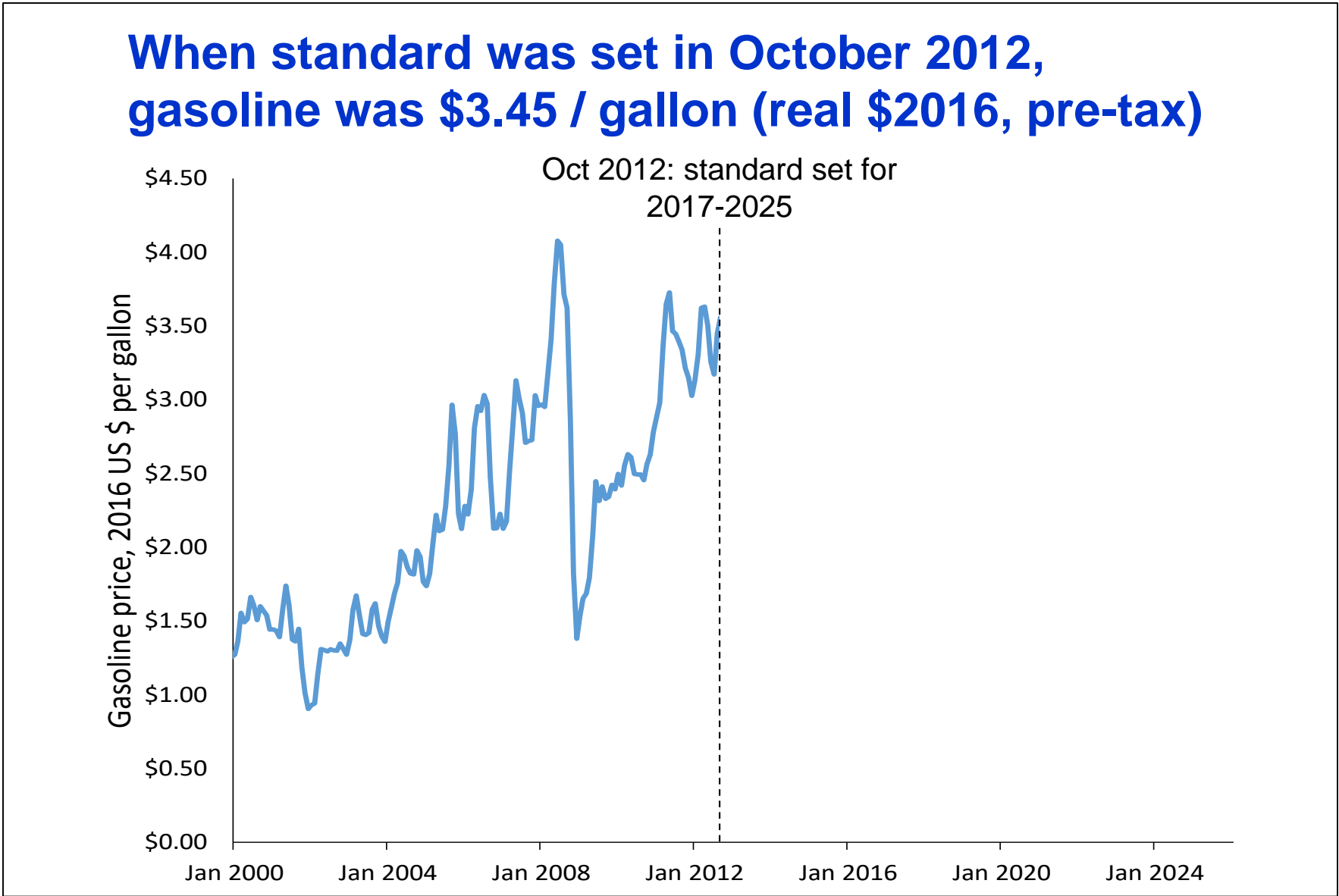
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**Motivate your work by economics and/or policy,  
not the economics literature**

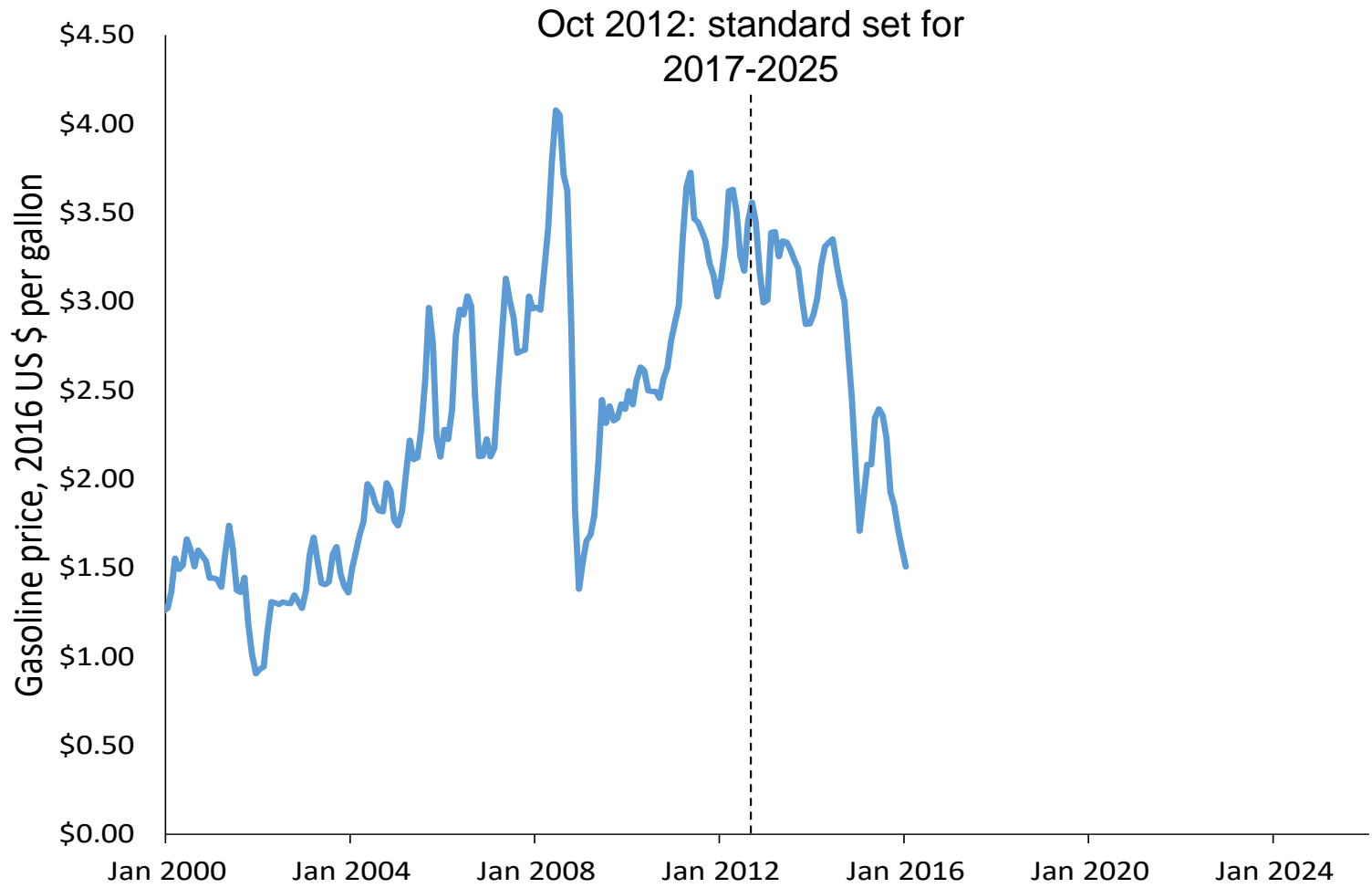
# Good motivations connect real problems to the research question

**When standard was set in October 2012,  
gasoline was \$3.45 / gallon (real \$2016, pre-tax)**



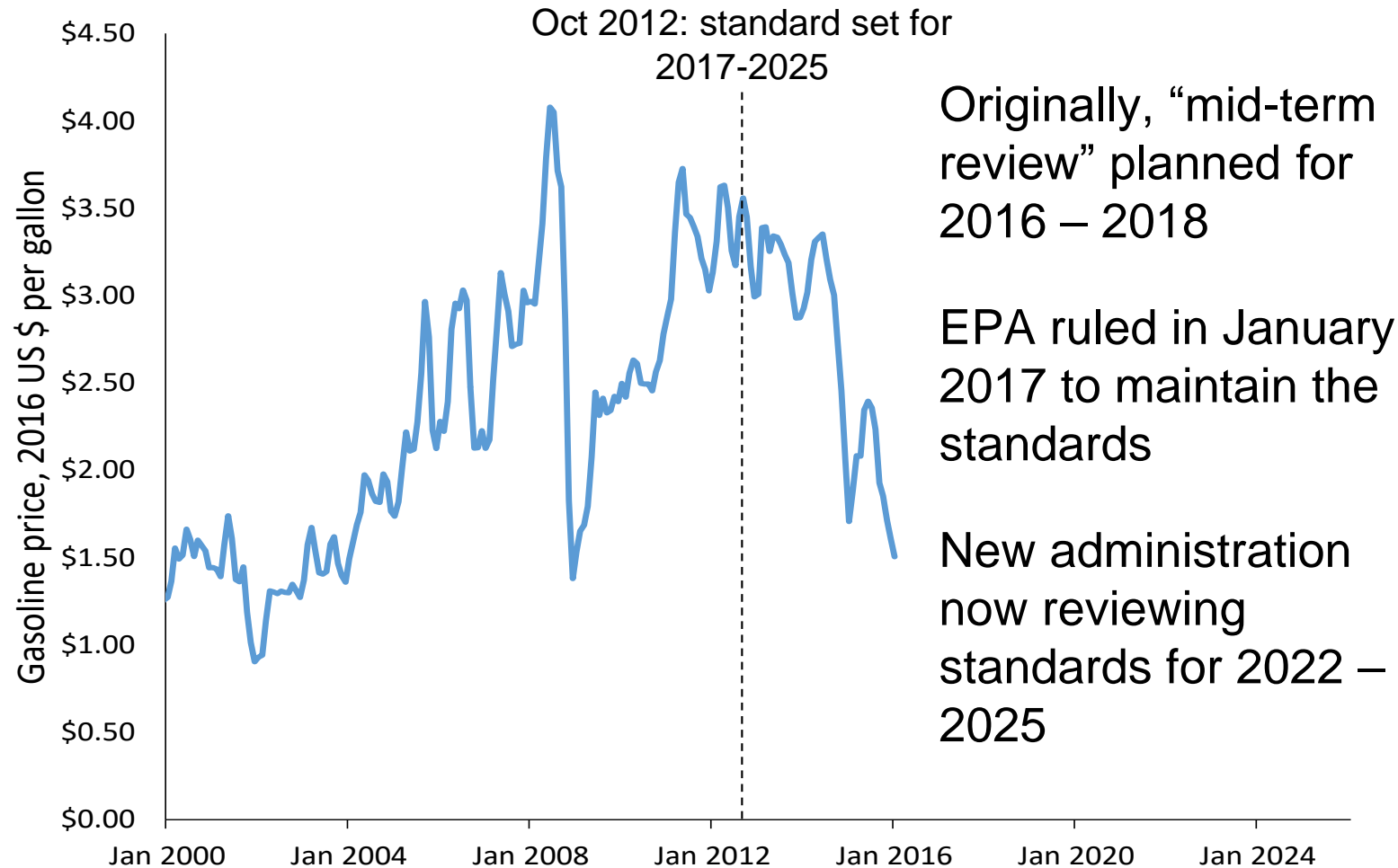
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**When standard was set in October 2012,  
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# Good motivations connect real problems to the research question

## Gasoline prices have fallen sharply since October 2012. Should the standard be revised?





# Good motivations connect real problems to the research question

## How should fuel economy policy address fuel price uncertainty?

### RESEARCH QUESTIONS

1. What are the benefits of a fixed standard vs a standard that varies with the price of gasoline?
  - Direct application of Weitzman (1974)
  - Gasoline price shocks act as shocks to marginal compliance cost
  - A gasoline price-indexed standard can be equivalent to a tax on inefficient vehicles

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2. If policy is constrained to use a fixed standard:
  - How to set the level of the standard?
  - Should the standard be attribute-based?

# Unclear research questions will bring on questions from a confused audience

- Example of a poorly phrased research question:
  - “I estimate the effect of a carbon tax on power plant emissions.”
    - Questions audience will ask: Do you mean a short-run or long-run effect? Do you hold capacity fixed? Is the carbon tax local, national, or global?
- Significant improvement:
  - “This paper asks two questions regarding the long run impact of California’s cap and trade plan:
    - 1.What is the long run impact of cap and trade on regional generation capacity?
    - 2.What is the long run impact on regional CO<sub>2</sub> emissions, taking cross-state “leakage” into account?”

## Tie the research question to the paper's “lever”

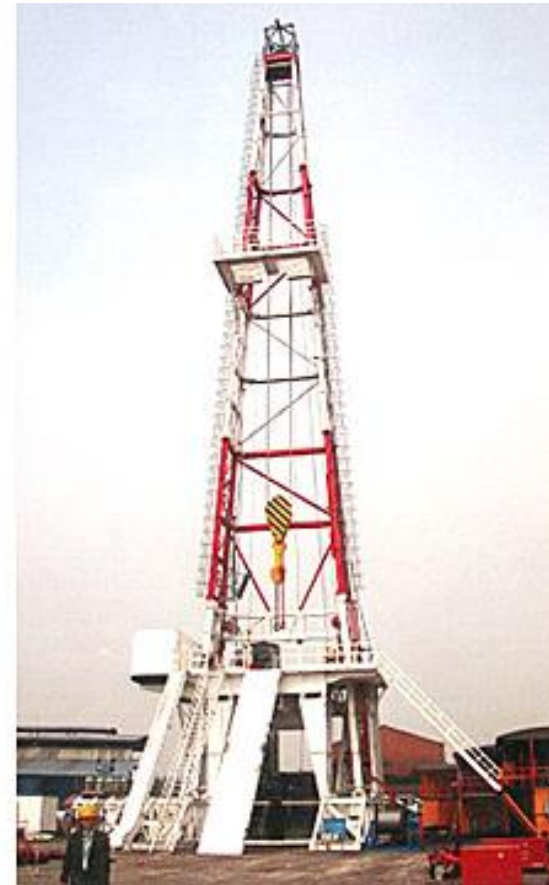
**This paper empirically examines the extent to which firms respond to changes in uncertainty**

- Setting: drilling of onshore oil wells in Texas
- Primary question: How does drilling activity respond to changes in the expected volatility of the price of oil?
- Empirical strategy: Use a dynamic model of investment timing decisions to examine the extent to which firm responses to changes in volatility accord with theory
  - More than a simple “yes/no” test of whether or not firms respond at all

# Tie the research question to the paper's “lever”

## Advantages of the setting and approach of this paper

1. Data on individual irreversible investments
  - Drilling of individual wells
2. Data on the investments' expected payoffs and payoff volatility
  - NYMEX oil futures and futures options
3. Can treat drilling as a single agent dynamic optimization problem
  - Allows comparison of volatility response in the data to that prescribed by theory



# “Table of contents” or “Roadmap” slides are usually a waste of time

## TYPICAL ROADMAP SLIDE

### Roadmap

1. Theory
2. Data
3. Estimation
4. Results
5. Conclusions

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## TYPICAL ROADMAP SLIDE

### Roadmap

1. Theory
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4. Results
5. Conclusions

- This is useless. There is no news here
- This is the order everyone expects you to use
- Only use a roadmap if your talk is unusually sequenced
- Can sometimes roadmap subsections (e.g. proof outline)

## Once you are past the introduction, remember that you are telling a story

- When drafting slides and preparing what you will say, put yourself in the audience's place and think about what you would need to hear to follow along
  - Every slide has a purpose; it should fit into the narrative
  - The audience should be able to look at a slide and know its role in the story, even if they've "tuned out" to you speaking
  - Use "message titles" (hat tip: Meghan Busse and Florian Zettelmeyer)
    - Don't use uninformative titles like "Data" or "Results"
    - Good message title: "Results indicate a significant impact of particulate pollution on domestic pet fatalities"



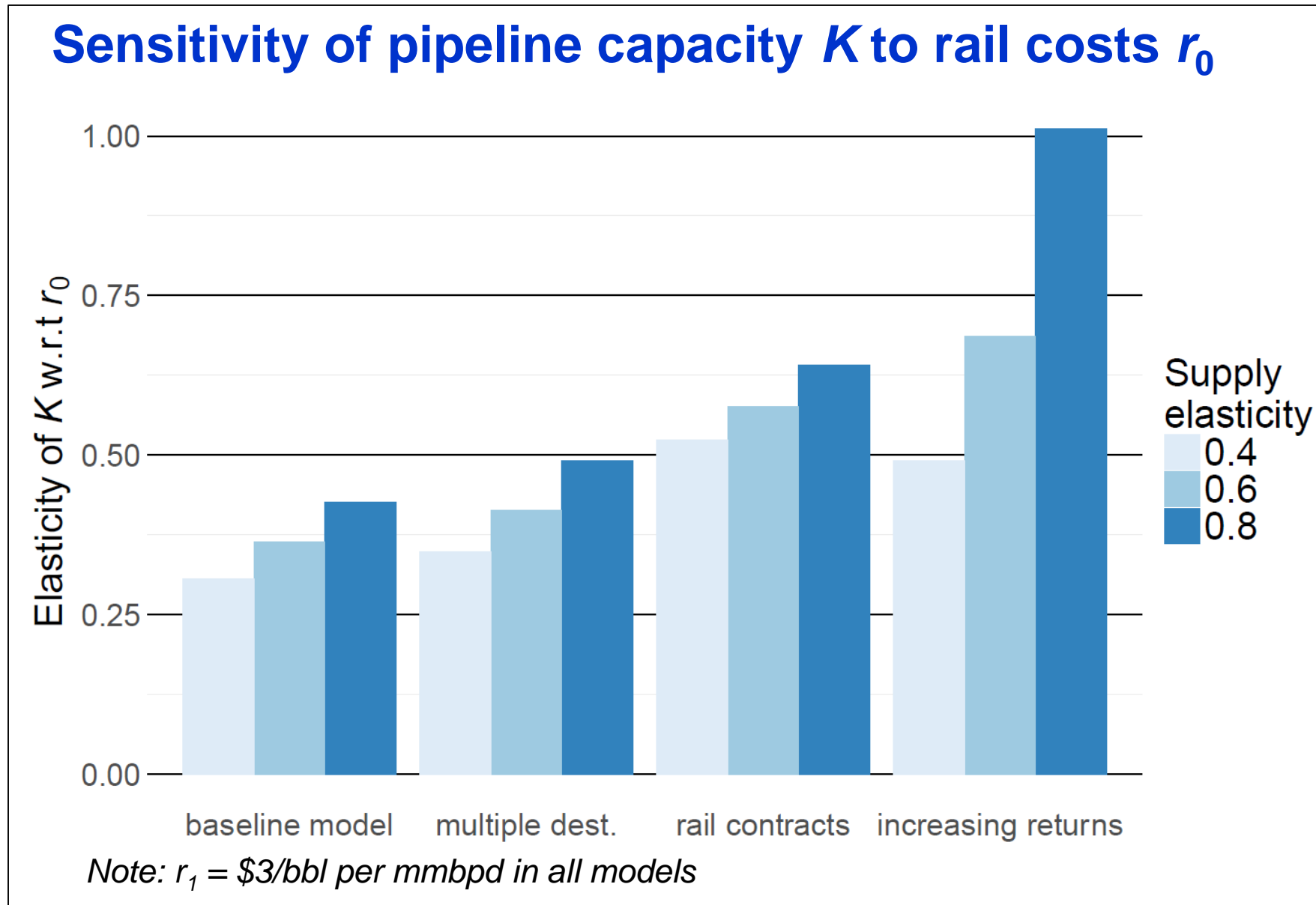
## Message titles from this talk so far:

1. Being a good presenter is essential to being a successful research economist
2. Your introduction should try to achieve the following goals. You have 5 to 10 minutes.
3. It is remarkably easy to screw up an introduction
4. Good motivations connect real problems to the research question
5. Unclear research questions will bring on questions from a confused audience
6. Tie the research question to the paper's "lever"
7. "Table of contents" or "Roadmap" slides are usually a waste of time
8. Once you are past the introduction, remember that you are telling a story

# Advice for presenting theoretical / empirical models and numerical results

- When presenting a model, simplify simplify simplify!
  - If the model in the paper is complicated, is there a simple case (e.g. functional form) that allows a simple exposition?
  - Whenever possible, convey intuition using graphs rather than equations
  - Avoid chains of equations on slides. Convey intuition!
- Summary statistics and regression results: avoid big tables showing lots of coefficients
  - Don't display numbers you don't plan on talking about
  - Highlight the key statistics the audience should know
  - Reserve the big tables for backup slides in case someone asks
- Use message titles to keep the audience focused on the story each slide tells

## Example: figures can be more effective than tables for conveying results



## Other miscellaneous presentation tips / notes:

- Use a number of words per slide that feels comfortable to you, within reason
  - You should NOT be able to read your whole presentation from your slides
  - The slides in this slide deck are too dense for a research presentation (these slides are more like handouts)
- Use widescreen (16:9) slide format
  - More visually appealing
- Delivery / posture: There are many possible presentation “styles”. Do what is comfortable to you, though there are some do’s / don’t’s
  - Eye contact: look at people in different parts of the room, one at a time
  - Appear open to audience questions (posture: show your thumbs!)

## Other miscellaneous presentation tips / notes:

- Always number your slides. This makes it easier for audience members to give you comments afterwards
- Rehearse! Always know which slide is coming next and what the next “message” is
- Don’t bring handwritten notes of what you plan to say.
  - Yes, this can be terrifying. But your talk will be better for it (it will seem much more natural). And once you get used to it, this will feel completely normal
- (For our class only) If there is an aspect of the paper that you don’t understand, bring it up during the talk. We can then discuss it later.
  - Obviously, not an issue when presenting your own work (I hope!)
- Another resource: Jesse Shapiro’s “How to Give an Applied Micro Talk” slides on Canvas readings

# What are the responsibilities of a discussant?

- A good discussion will do the following:
  - Comment on the importance of the paper. Are the authors over or under-selling here?
  - Are there implications of the paper that the authors haven't considered?
  - What were the most important things that you learned from the paper?
- Comment on the paper's strategy
  - What are the strengths and weaknesses? Modeling, data, hidden assumptions, identification, estimation procedure, etc.
  - What additional work would you like the authors to do?
    - To extend the paper's conclusions, or to help you believe the results
  - Are there alternative approaches to the question that the authors should consider?

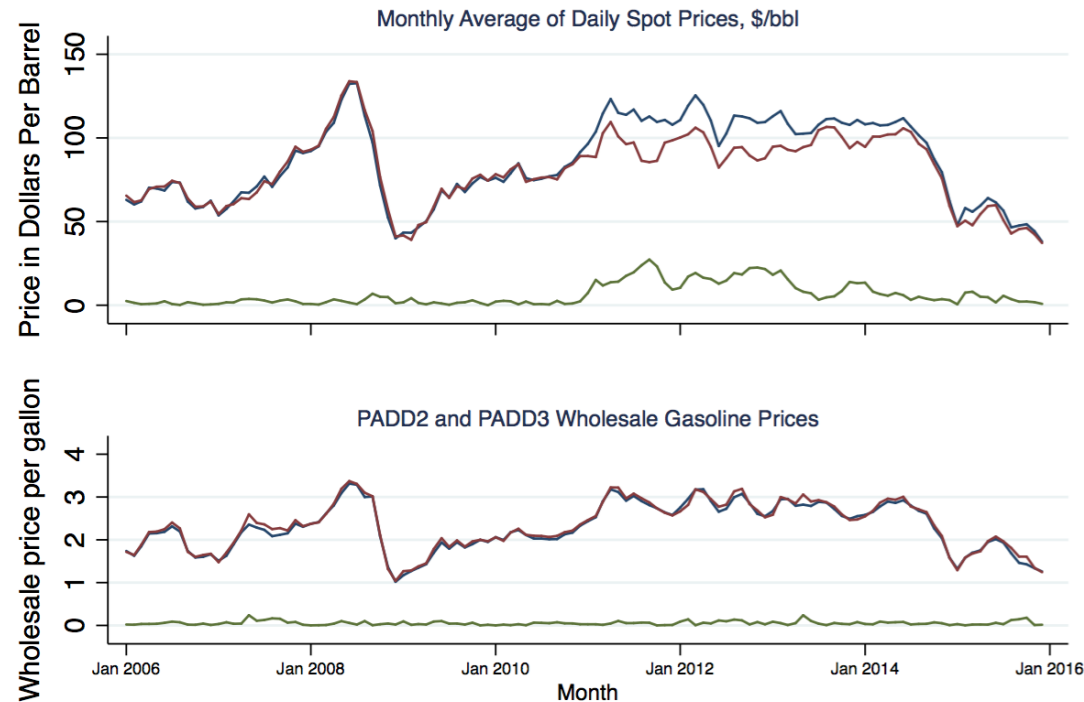
# Miscellaneous tips for a good discussion

- Feel free to bring external material into your presentation
  - Institutional facts that aren't noted by the authors
  - Additional analyses of the authors' results / data

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## The Midwest oil glut did not pass through to refined product prices



Source: EIA



# Miscellaneous tips for a good discussion

- Feel free to bring external material into your presentation
  - Institutional facts that aren't noted by the authors
  - Additional analyses of the authors' results / data
- Be courteous
  - Even if you really dislike the paper, don't say so directly
  - Focus more on offering suggestions for improvement rather than noting problems with the paper
    - Though if there are serious problems without a clear solution, do note them
  - State what you learned from reading the paper
  - Your audience is the audience, not just the presenters!
- Other tips relevant to any presentation also apply
  - Rehearse, don't read off of notes, posture, etc.