Discussion of "Measuring Economic Policy Uncertainty" by Baker, Bloom, and Davis

Eric Sims

University of Notre Dame

November 16, 2012

Overview

- Very interesting and topical paper
- Two contributions:
  1. Construct an index of policy uncertainty
  2. Look at how that index correlates with business cycle

My Discussion

- Three related themes:
  1. What is the index measuring?
  2. What is the mechanism accounting for empirical relationship between index and economic activity?
  3. How large are the effects?

The Index

- Index composed of three parts:
  1. News index
  2. Upcoming tax code expirations
  3. Forecast disagreement
- In baseline index, news component gets largest weight
- Disparate sources: both a strength and a weakness
  - Strength: broadest possible coverage
  - Weakness: very different kinds of policy – fiscal (tax code expirations) and monetary (CPI disagreement)
    - CPI disagreement may not even be related to policy: e.g. oil price shock uncertainty

News Index

- Search over ten major newspapers for words in three separate categories: "uncertainty," "economy," and "policy"
- Weighted to control for volume of news
- Potential concern: more talk about policy when there is a need for policy – e.g. when economy is weak
  - Increasing volume of news about economy when economy is bad?
  - Perhaps weight "uncertainty" mentions by overall number of stories about economy to partially address this issue
- Other concern: when journalists say "uncertainty," do they mean the same thing economists do?

Economists vs. Journalists

- What do economists and journalists mean by an increase in "uncertainty"?
- Economists: mean-preserving spread

$$\uparrow \ \text{var}(s_{t+j}), \quad \Delta E(s_{t+j}) = 0$$

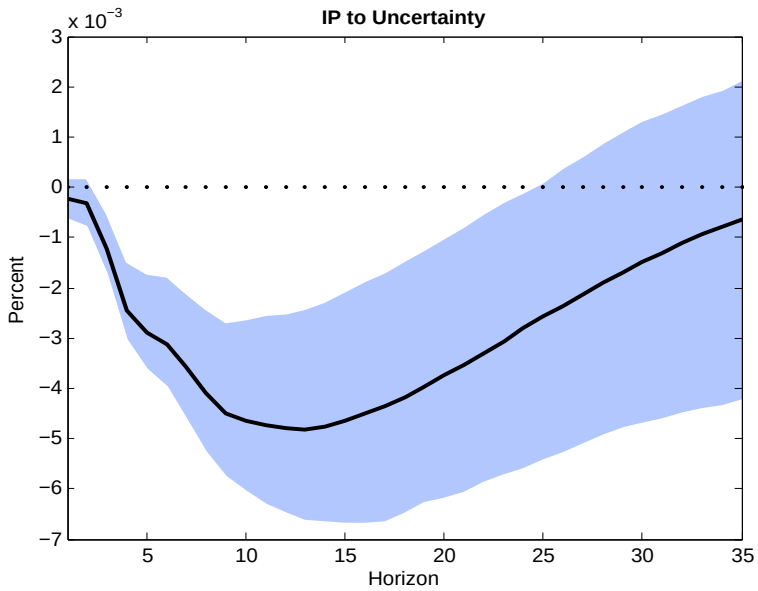
- Journalists: down-side risk

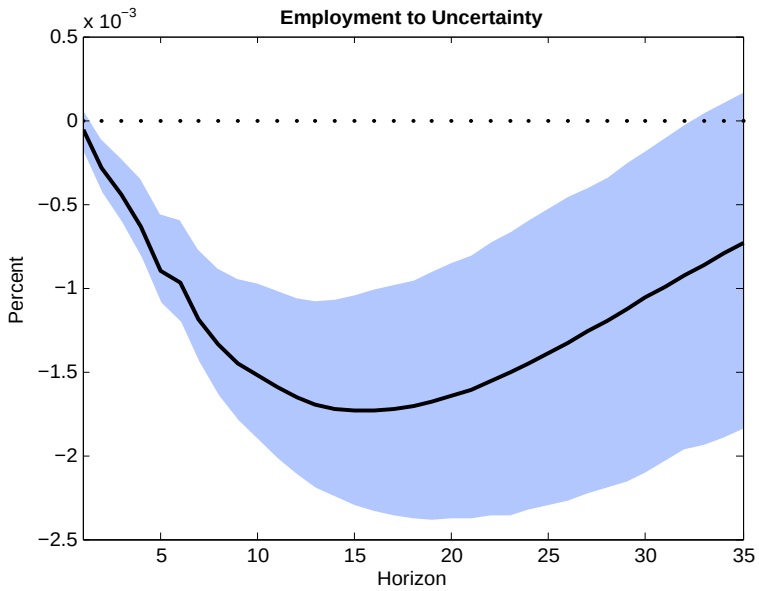
$$\uparrow \ \text{prob}(s_{t+j} < \underline{s})$$

What do Journalists Say?

- "... economic uncertainty as concerns about weak growth at home and abroad." – Phil Izzo, *WSJ*
- "I'd define economic uncertainty as a force depressing output by deterring businesses and/or consumers from making investments or purchases because they feel there's a high chance economic conditions will deteriorate or not improve enough in the future." – Dylan Matthews, *Washington Post*
- "It [uncertainty] seems prevalent at turning points in the business cycle. If we're headed into a recession, and the depth and severity of the recession is unknown, that's going to generate a whole lot of uncertainty." – Annie Lowrey, *NYT*

IRFs to Policy Uncertainty Index





What is the Mechanism?

- IRFs are quite protracted: small impact effects, takes more than a year for peak negative effect
  - IRFs look similar to Bachmann, Elstner, and Sims (2012) and Gilchrist, et al (2010)
- Not consistent with conventional "wait and see" dynamics from real options intuition
- Explanations:
  - Uncertainty index picking up bad news / low confidence
  - Financial frictions as opposed to physical adjustment frictions: Gilchrist, et al (2010); Arellano, et al (2011); Christiano, et al (2010); and others
  - Precautionary saving (Fernandez-Villaverde, et al, 2011) and nominal rigidities (Basu and Bundlick, 2011)
  - Search frictions: Schaal (2011)

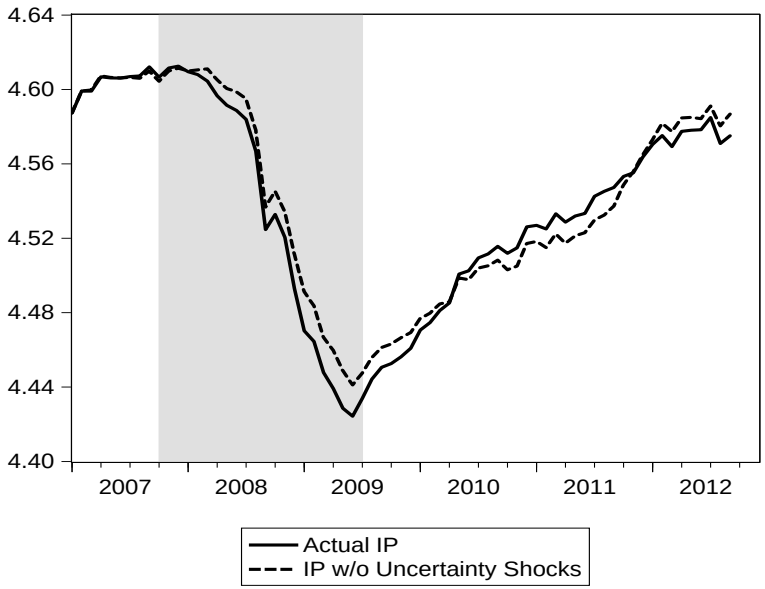
How Large are the Effects?

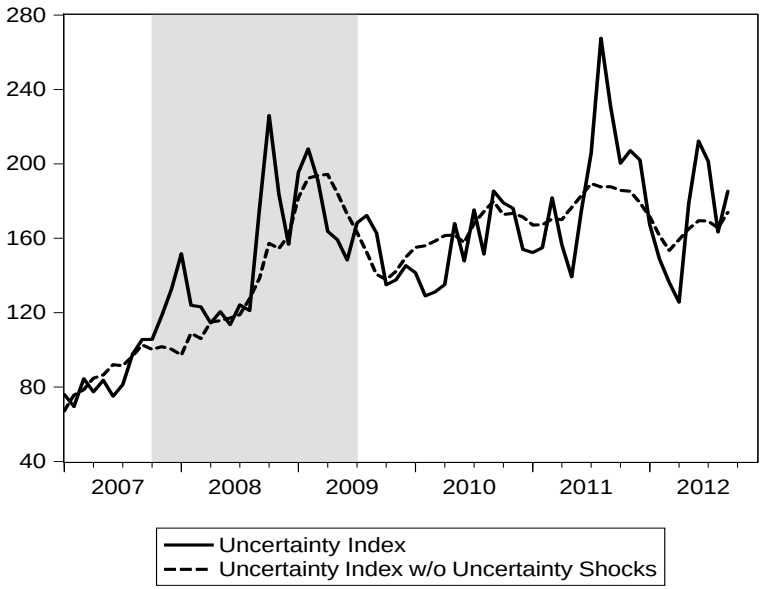
- BBD compute IRFs to a 112 point shock to uncertainty index (equal to rise in index from 2006-2011), find IP 4% lower
- This is about 8 times the standard deviation of uncertainty innovations in the VAR
- Largest realized uncertainty shock since 2006 is 66 points
- Also many negative realizations of shocks since 2006
- Uncertainty index reacts to other shocks in system via VAR coefficients (in particular IP and stock market innovations)

Variance Decomposition and Historical Decomposition

- Conventional variance decomposition:
  - Uncertainty shocks account for maximum of 14% of IP forecast error variance. Maximum of 5% if you include consumer confidence in VAR ordered first
  - At 2 year horizon, when ordered first in system without confidence, 40% of forecast error variance of uncertainty index accounted for by other orthogonal "shocks"
- Historical decomposition:
  - Take VAR coefficients and realized orthogonal "shocks" and simulate out data with or without some of the "shocks"
  - Counterfactual simulation: simulate data post 2006 in which all realizations of uncertainty shocks are 0. All other "shocks" as identified in data

Counterfactual Simulations





- At trough, uncertainty accounts for about 2 percentage points of IP decline
- Would have observed higher uncertainty without uncertainty shocks

Concluding Thoughts

- Nice paper: really important topic, produces an important new data series
- Concerns: interpreting series not straightforward, probably overstating economic impact of movements in series
- Agenda moving forward:
  - Exogenous variation in uncertainty series (e.g. Baker and Bloom, 2012)
  - Uncertainty as propagation mechanism for other shocks
  - Mechanisms other than physical adjustment frictions