Bad News, Good News: Coverage and Response Asymmetries
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Research questions
1. Do newspapers cover negative and positive economic developments symmetrically?
2. Do agents’ information and expectations react symmetrically to bad and good news about the economy?
3. Does consumption react symmetrically to bad and good news about the economy?

U-news indexes
Construct two monthly indexes of bad and good news about US unemployment using newspaper articles from Dow Jones Factiva

- U-news\(^+\): number of articles in which “unemployment” appears close to word denoting increase or high level
- U-news\(^-\): number of articles in which “unemployment” appears close to word denoting decrease or low level

Using the indexes, we define two measures of news coverage:
1. **Tone**: prevailing tone of news on unemployment
   \[ \text{U-Tone} = \text{U-news}^+ - \text{U-news}^- \]
2. **Total information**: overall media coverage of unemployment
   \[ \text{U-Total} = \text{U-news}^+ + \text{U-news}^- \]

Nonlinear SVAR model
Explore potential asymmetries using a Threshold SVAR:
\[ y_t = (1 - F(x_t)) [a + A(L)] y_{t-1} + F(x_t) [b + B(L)] y_{t-1} + \varepsilon_t \]
- \[ y_t = \Delta U_t \text{ U-tone}\]
- \[ F(x_t) = \begin{cases} 0 & \text{if } \Delta U_{t-1} \leq 0 \\ 1 & \text{if } \Delta U_{t-1} > 0 \end{cases} \]
- \[ A(L) \text{ parameters when } \Delta U_{t-1} < 0 \text{ and } B(L) \text{ when } \Delta U_{t-1} > 0 \]
- \[ \varepsilon_t \sim WN(0, \Sigma) \]

Test if increases and reductions in \( U_t \) induce asymmetric media coverage by studying IRFs to an orthogonal innovation in \( \Delta U_t \):
- Define \( u_t = S^{-1} \varepsilon_t \), \( S \) is the Cholesky factor of \( \Sigma \), i.e. \( SS^T = \Sigma \)
- \( u^+ \) and \( u^- \) is the innovation in \( \Delta U_t \) orthogonal to \( u_{t-1} \)

Novelty: the sign of \( u_{t-1} \) defines the relevant state for the IRFs
- When \( u_{t-1} > 0 \), IRF is \( \beta(L) = (I - B(L)L)^{-1} S, \beta_1(L) \)
- When \( u_{t-1} < 0 \), IRF is \( \alpha(L) = (I - A(L)L)^{-1} S, \alpha_1(L) \)

The effects of bad and good news shocks
We study asymmetries in news coverage of economic events and in the effects of news on agents’ information, expectations and consumption

- Construct two indicators of bad and good news about unemployment using three major US newspapers
- Use a Threshold SVAR model to show:
  1. No significant negativity bias in media coverage of economic events
  2. Bad news increase agents’ information and agreement about future outcomes more than good news
  3. Agents’ expectations react more to bad than to good news
  4. Consumption reacts to bad news but not to good news

Conclusions