

Discussion of
“Measuring the Effects of Expectations Shocks”
(by Ana B. Galvão and Michael P. Clements)

Thomas Götz, Deutsche Bundesbank

Bbk Macro Workshop, 18 October 2019

The views expressed in this presentation are ours and are not necessarily reflective of views at the Deutsche Bundesbank. Any errors or omissions are our responsibility.

Summary

■ Main contributions...

- Survey-based (SPF) measure of expectations about future GDP growth to derive **expectations shocks** that are not related to fundamentals.
- **Real-time mixed-frequency VAR** à la Ghysels (2016) to estimate the expectation shocks.
- **“Macroeconomist’s VAR”** on last-vintage (maybe true) values to study the transmission of the shocks through the macroeconomy.
 - Introduction of an IV estimator for specific circumstances.
- Comparison with **alternative shocks** (news or other belief-based shocks).

Summary

■ Main contributions...

- Survey-based (SPF) measure of expectations about future GDP growth to derive **expectations shocks** that are not related to fundamentals.
- Real-time mixed-frequency VAR à la Ghysels (2016) to estimate the expectation shocks.
- “Macroeconomist’s VAR” on last-vintage (maybe true) values to study the transmission of the shocks through the macroeconomy.
 - Introduction of an IV estimator for specific circumstances.
- Comparison with **alternative shocks** (news or other belief-based shocks).

Summary

■ Main contributions...

- Survey-based (SPF) measure of expectations about future GDP growth to derive **expectations shocks** that are not related to fundamentals.
- **Real-time mixed-frequency VAR** à la Ghysels (2016) to estimate the expectation shocks.
- “**Macroeconomist’s VAR**” on last-vintage (maybe true) values to study the transmission of the shocks through the macroeconomy.
 - Introduction of an IV estimator for specific circumstances.
- Comparison with **alternative shocks** (news or other belief-based shocks).

Summary

■ Main contributions...

- Survey-based (SPF) measure of expectations about future GDP growth to derive **expectations shocks** that are not related to fundamentals.
- **Real-time mixed-frequency VAR** à la Ghysels (2016) to estimate the expectation shocks.
- **“Macroeconomist’s VAR”** on last-vintage (maybe true) values to study the transmission of the shocks through the macroeconomy.
 - Introduction of an IV estimator for specific circumstances.
- Comparison with **alternative shocks** (news or other belief-based shocks).

Summary

■ Main contributions...

- Survey-based (SPF) measure of expectations about future GDP growth to derive **expectations shocks** that are not related to fundamentals.
- **Real-time mixed-frequency VAR** à la Ghyssels (2016) to estimate the expectation shocks.
- **“Macroeconomist’s VAR”** on last-vintage (maybe true) values to study the transmission of the shocks through the macroeconomy.
 - Introduction of an IV estimator for specific circumstances.
- Comparison with **alternative shocks** (news or other belief-based shocks).

Summary (cont'd)

■ Main findings...

- Accounting for real-time data (and high-frequency information) is key to obtain correctly estimated expectation shocks.
- Correct determination of shock transmission depends on the **nature of data revisions** (news/noise), whether **true values are eventually released** and on the **law of motion of activity series** (holds in first-releases/true values).
 - Results suggest short-run positive effects on GDP, consumption, investment and hours worked.
- Expectation shocks appears to be a complementary (to news and consumer confidence shocks) source of business cycle variation; a “**business confidence**” shock.

Summary (cont'd)

■ Main findings...

- **Accounting for real-time data** (and high-frequency information) is key to obtain correctly estimated expectation shocks.
- Correct determination of shock transmission depends on the **nature of data revisions** (news/noise), whether **true values are eventually released** and on the **law of motion of activity series** (holds in first-releases/true values).
 - Results suggest short-run positive effects on GDP, consumption, investment and hours worked.
- Expectation shocks appears to be a complementary (to news and consumer confidence shocks) source of business cycle variation; a “**business confidence**” shock.

Summary (cont'd)

■ Main findings...

- **Accounting for real-time data** (and high-frequency information) is key to obtain correctly estimated expectation shocks.
- Correct determination of shock transmission depends on the **nature of data revisions** (news/noise), whether **true values are eventually released** and on the **law of motion of activity series** (holds in first-releases/true values).
 - Results suggest short-run positive effects on GDP, consumption, investment and hours worked.
- Expectation shocks appears to be a complementary (to news and consumer confidence shocks) source of business cycle variation; a “business confidence” shock.

Summary (cont'd)

■ Main findings...

- **Accounting for real-time data** (and high-frequency information) is key to obtain correctly estimated expectation shocks.
- Correct determination of shock transmission depends on the **nature of data revisions** (news/noise), whether **true values are eventually released** and on the **law of motion of activity series** (holds in first-releases/true values).
 - Results suggest short-run positive effects on GDP, consumption, investment and hours worked.
- Expectation shocks appears to be a complementary (to news and consumer confidence shocks) source of business cycle variation; a **“business confidence” shock**.

What I like about the paper

- Interesting research question.
- Contribution and goal of the paper clear.
- Combines data revisions, MF variables and structural aspects.
- Gives guidelines on applied use, depending on the assumed setting (news/noise etc.).
- The paper is well-written and appears already quite “final”.
- I learned a lot...

What I like about the paper

- Interesting research question.
- Contribution and goal of the paper clear.
- Combines data revisions, MF variables and structural aspects.
- Gives guidelines on applied use, depending on the assumed setting (news/noise etc.).
- The paper is well-written and appears already quite “final”.
- I learned a lot...

What I like about the paper

- Interesting research question.
- Contribution and goal of the paper clear.
- Combines data revisions, MF variables and structural aspects.
- Gives guidelines on applied use, depending on the assumed setting (news/noise etc.).
- The paper is well-written and appears already quite “final”.
- I learned a lot...

What I like about the paper

- Interesting research question.
- Contribution and goal of the paper clear.
- Combines data revisions, MF variables and structural aspects.
- Gives guidelines on applied use, depending on the assumed setting (news/noise etc.).
- The paper is well-written and appears already quite “final”.
- I learned a lot...

What I like about the paper

- Interesting research question.
- Contribution and goal of the paper clear.
- Combines data revisions, MF variables and structural aspects.
- Gives guidelines on applied use, depending on the assumed setting (news/noise etc.).
- The paper is well-written and appears already quite “final”.
- I learned a lot...

What I like about the paper

- Interesting research question.
- Contribution and goal of the paper clear.
- Combines data revisions, MF variables and structural aspects.
- Gives guidelines on applied use, depending on the assumed setting (news/noise etc.).
- The paper is well-written and appears already quite “final”.
- I learned a lot...

Comments I

■ The Real-Time VAR model

- “Not using information available to the forecaster to calculate expectations shocks will result in erroneous estimates”. (p. 9)
- Make sure expectations shocks are “shocks”, not including “components known to the forecasters but wrongly missing from our VAR”. (p. 12)
- Are SP, R, IP, NP, π (and the Y's) enough to guarantee that?
- The requirement seems to call for a larger-dimensional model, e.g., a mixed-frequency factor model or a large BVAR (as in Banbura et al., 2010).
 - The latter is in common frequency, but one could specify the model in monthly frequency as well (monthly survey variable and/or missing observations, handled via the Kalman filter), no?
- I realize such a model has to be set up in real time, though.

Comments I

■ The Real-Time VAR model

- “Not using information available to the forecaster to calculate expectations shocks will result in erroneous estimates”. (p. 9)
- Make sure expectations shocks are “shocks”, not including “components known to the forecasters but wrongly missing from our VAR”. (p. 12)
- Are SP, R, IP, NP, π (and the Y's) enough to guarantee that?
- The requirement seems to call for a larger-dimensional model, e.g., a mixed-frequency factor model or a large BVAR (as in Banbura et al., 2010).
 - The latter is in common frequency, but one could specify the model in monthly frequency as well (monthly survey variable and/or missing observations, handled via the Kalman filter), no?
- I realize such a model has to be set up in real time, though.

Comments I

■ The Real-Time VAR model

- “Not using information available to the forecaster to calculate expectations shocks will result in erroneous estimates”. (p. 9)
- Make sure expectations shocks are “shocks”, not including “components known to the forecasters but wrongly missing from our VAR”. (p. 12)
- Are SP, R, IP, NP, π (and the Y’s) enough to guarantee that?
- The requirement seems to call for a larger-dimensional model, e.g., a mixed-frequency factor model or a large BVAR (as in Banbura et al., 2010).
 - The latter is in common frequency, but one could specify the model in monthly frequency as well (monthly survey variable and/or missing observations, handled via the Kalman filter), no?
- I realize such a model has to be set up in real time, though.

Comments II

■ **Nowcasts to measure expectations shocks**

- Are nowcast not more related to an assessment of the current business situation, whereas short-term forecasts (one-/two-quarters ahead) are related to expectations.
- In Germany, the two main ifo survey questions are formulated precisely in this manner.
- In how far is the survey-based measure of consumer confidence by Barsky and Sims (2012), that is apparently based on the Michigan survey, different from your expectations measure?
- Emphasize the difference; especially as you write “that the responses of macro variables to expectations shocks are qualitatively similar to the response to confidence shocks”. (Introduction)

Comments II

■ **Nowcasts to measure expectations shocks**

- Are nowcast not more related to an assessment of the current business situation, whereas short-term forecasts (one-/two-quarters ahead) are related to expectations.
- In Germany, the two main ifo survey questions are formulated precisely in this manner.
- In how far is the survey-based measure of consumer confidence by Barsky and Sims (2012), that is apparently based on the Michigan survey, different from your expectations measure?
- Emphasize the difference; especially as you write “that the responses of macro variables to expectations shocks are qualitatively similar to the response to confidence shocks”. (Introduction)

Comments II

■ **Nowcasts to measure expectations shocks**

- Are nowcast not more related to an assessment of the current business situation, whereas short-term forecasts (one-/two-quarters ahead) are related to expectations.
- In Germany, the two main ifo survey questions are formulated precisely in this manner.
- In how far is the survey-based measure of consumer confidence by Barsky and Sims (2012), that is apparently based on the Michigan survey, different from your expectations measure?
- Emphasize the difference; especially as you write “that the responses of macro variables to expectations shocks are qualitatively similar to the response to confidence shocks”. (Introduction)

- **“Real-time” shocks in fully-revised data**
 - Why is it standard to consider the responses of fully-revised data to “real-time” shocks?
 - Would it not be of interest as well to compute the real-time responses?
 - Are “final” estimates necessarily the “best” ones? Given the widespread attention devoted to first releases, I would be equally interested in the effects on them, for example.
 - You seem to show them in Figure 6, yet from the text it seems as if “final” estimates are the one right way to go.

Some more aspects

- Why is the variable set for the two VARs partly different (why not include all series from the Macroeconomist's VAR into the one for measuring the shocks)?
- Section 2.3 (illustrating the effects of data revisions) already discusses issues on estimating the responses to expectations shocks (section 3); I suggest you a slight re-ordering.
- There are tests on whether revisions are news or noise, or not?
- The instrumented Macroeconomist's VAR is the robust choice; I would thus stress the outcomes based on this model more.

Some more aspects

- Why is the variable set for the two VARs partly different (why not include all series from the Macroeconomist's VAR into the one for measuring the shocks)?
- Section 2.3 (illustrating the effects of data revisions) already discusses issues on estimating the responses to expectations shocks (section 3); I suggest you a slight re-ordering.
- There are tests on whether revisions are news or noise, or not?
- The instrumented Macroeconomist's VAR is the robust choice; I would thus stress the outcomes based on this model more.

Some more aspects

- Why is the variable set for the two VARs partly different (why not include all series from the Macroeconomist's VAR into the one for measuring the shocks)?
- Section 2.3 (illustrating the effects of data revisions) already discusses issues on estimating the responses to expectations shocks (section 3); I suggest you a slight re-ordering.
- There are tests on whether revisions are news or noise, or not?
- The instrumented Macroeconomist's VAR is the robust choice; I would thus stress the outcomes based on this model more.

Some more aspects

- Why is the variable set for the two VARs partly different (why not include all series from the Macroeconomist's VAR into the one for measuring the shocks)?
- Section 2.3 (illustrating the effects of data revisions) already discusses issues on estimating the responses to expectations shocks (section 3); I suggest you a slight re-ordering.
- There are tests on whether revisions are news or noise, or not?
- The instrumented Macroeconomist's VAR is the robust choice; I would thus stress the outcomes based on this model more.

Thank you for your attention

