Policy Regime Change against Chronic Deflation? Policy Option under a Long-term Liquidity Trap

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Interesting paper

- Use a unique monthly longitudinal survey panel dataset of *expectations* of inflation (π) and interest rates (i)
- Study the effect of the "first arrow" of Abenomics on the expectations
  - Did BoJ's commitment to 2% π influence market expectations?
  - Did the relationship between Ei and $E\pi$ change?
    - ★ The authors interpret this as indicative of the stance of BoJ's monetary policy
  - Findings (medians):
    - ★ 3-months-ahead expectations of JGB yields have shown some sign of stabilization
    - ★ $E\pi$ rose slightly at 1Y, 2Y, but unchanged (1%) at 10Y horizons
    - ★ Insignificant and declining relationship between Ei and $E\pi$
- Interpret through a lens of a New Keynesian 3-equation model: a decline of $Ei - -E\pi$ relationship feasible

Comments: Great dataset

- Fantastic data
- Direct measures of market expectations very interesting and useful
  - Rare and detailed dataset of over 16,000 observations
  - Exactly what I would want to discuss market expectations
  - Important new dataset
- The literature typically imputes expectations from actions, which requires layers of assumptions
  - Here, they know what the expectations are, exactly
- This opens up numerous other questions one could answer:
  - How precise are their expectations? Are they biased? Are they rational? Etc.

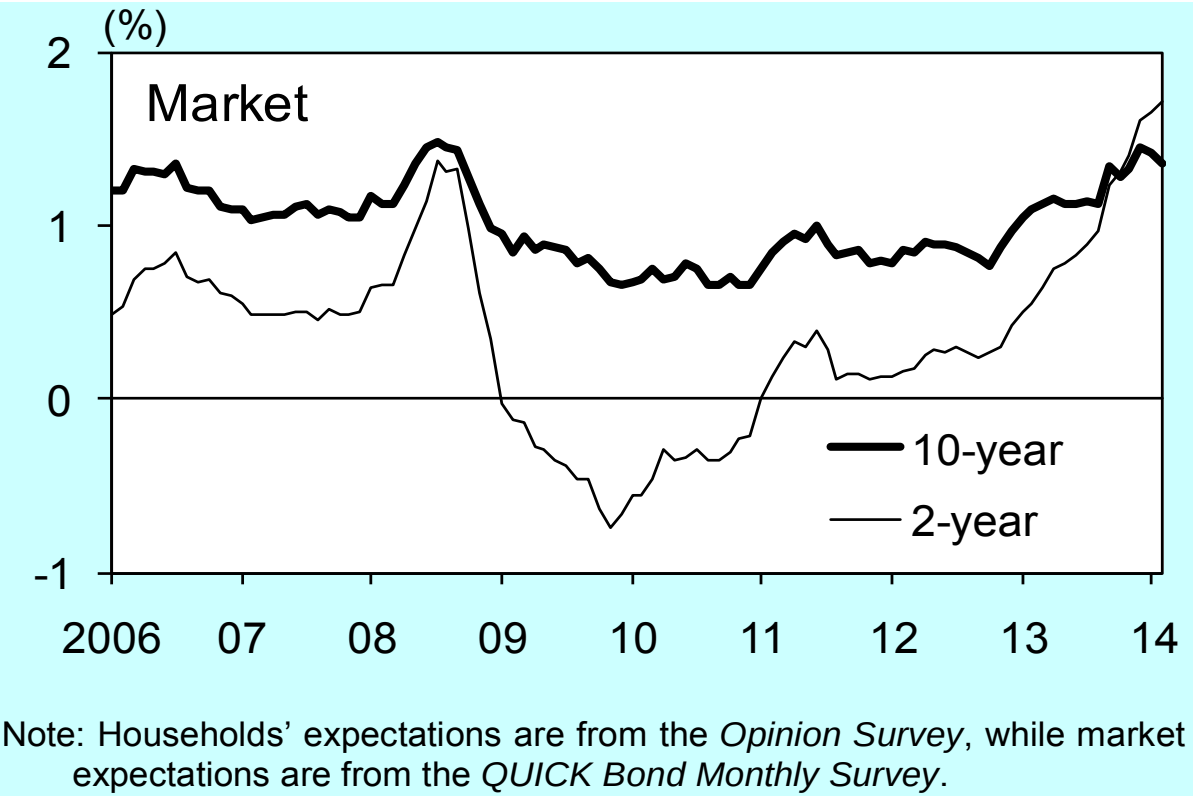
Comments: More information about the data

- However, I want more details
  - Who exactly are the people surveyed?
  - Do you have any information about them?
  - Is the data longitudinal?
  - Do they constitute a representative market sample?
  - Data quality? Outliers? Cleaning?
  - What are the questions being asked?

- This would help to establish quality
- Questions of robustness of results:
  - Did foreign-based and Japan-based respondents expectations differ (as in the literature?)
  - How good are these forecasters at forecasting?
    - ★ Do your results hold in a sub-group of "precise" forecasters?

It seems you need more recent data

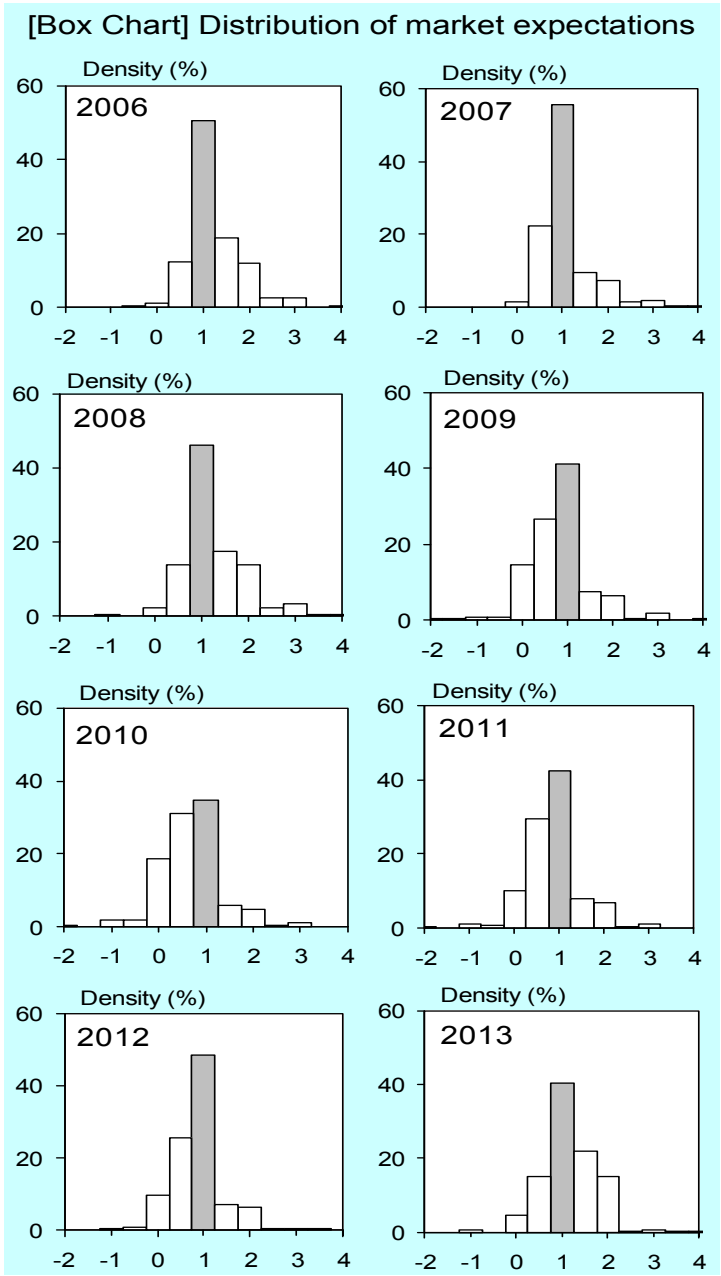
- Figure 3 from Nishiguchi et al., BOJ Review 2014-E-1, QSS data
- 10Y $E\pi$ is increasing



Note: Households' expectations are from the *Opinion Survey*, while market expectations are from the *QUICK Bond Monthly Survey*.

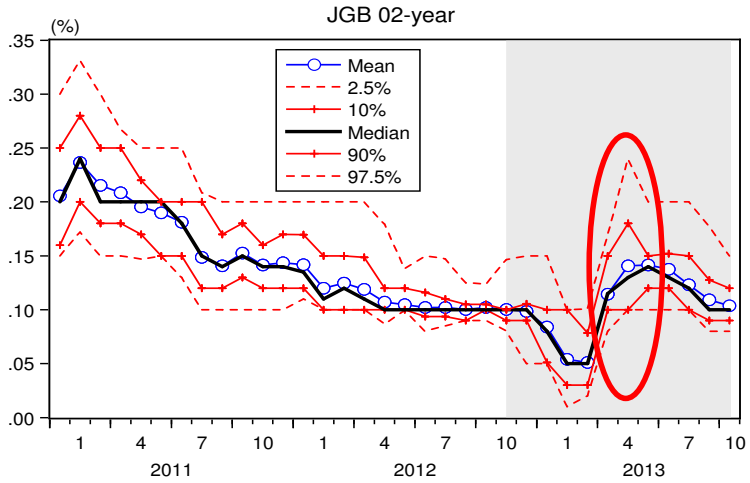
Median may obscure the dynamics

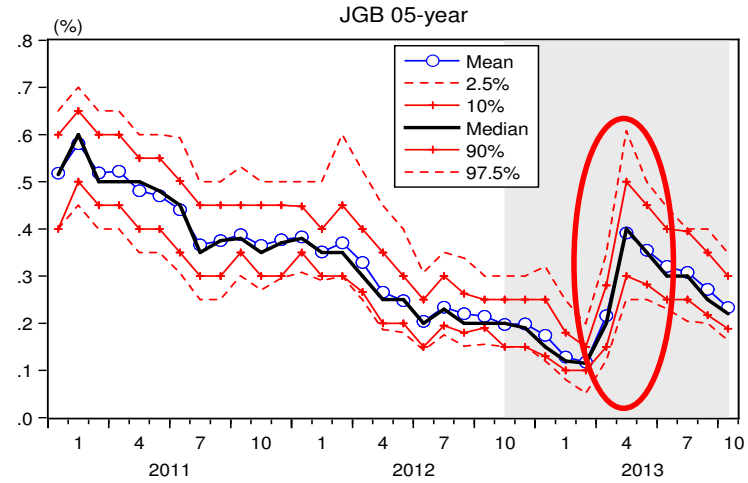
- You use the median expectation
- But in your CPI data (from Nishiguchi et al. 2014) there is distributional shift of expectations to the right
- Median does not capture well this distributional shift
- At the least, you could use a mean
- Or perhaps some inter-quartile difference
- If the trend continues, clearly the median *will* eventually increase

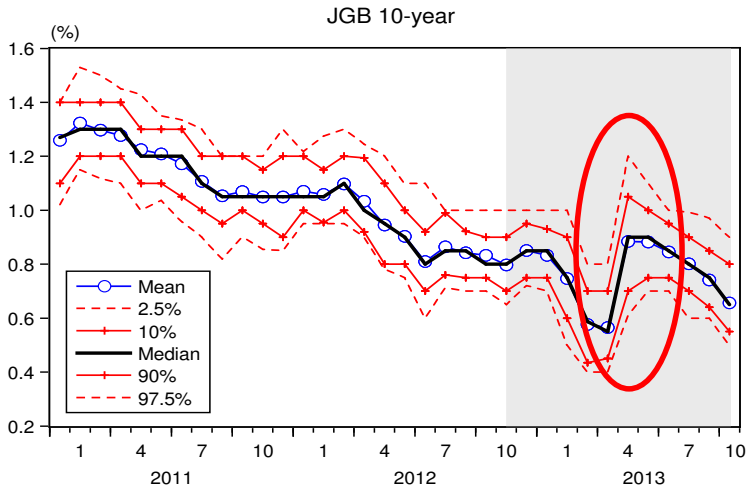


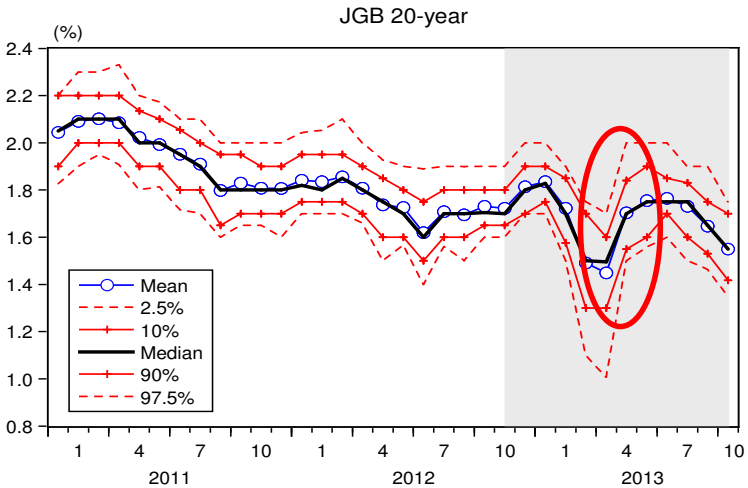
Change of methodology in April 2013

- Spikes in April 2013: are they due to changed methodology?
- How did the methodology change?









Comments: Use longer expectations measure

- You use 3-months-ahead expectations of bond yields
  - At 3 month frequencies, only about 20% of prices are adjusted (if we interpret stickiness through Calvo pricing)
  - Inflation is slow to adjust
- But you also have data on 6-months-ahead expectations
- Why not use the longer (6-months) expectations to uncover evidence of the expectations channel?
- However, I think the bigger issue for your results is that 10-year CPI expectations seem fixed at 1%

Comments: Time length

- Is the data too short to draw convincing conclusions?
  - In your paper, only 12 monthly observations after Abenomics begun
  - Expectations can be rigid: you quote Kuroda (2013) as saying that, in Japan, $E\pi$ is backward-looking
  - History of low inflation
- Perhaps inflation expectations simply haven't adjusted in one year
  - You may be mis-interpreting a longer delay in expectations adjustment for a lack of policy effectiveness
- Give it more time: need more post-Oct/2013 data

Comments: No lasting nominal effects?

- While there is movement upwards in the 1Y and 2Y $E\pi$, there is *no* movement in 10Y $E\pi$
- Authors note that, since Abenomics begun, other nominal variables moved strongly:
  - Depreciation of JPY
  - Strong increase in TOPIX
  - Some increase in the actual inflation
- These seem consistent with the 1Y and 2Y $E\pi$
- To be consistent with the 10Y $E\pi$, they require expected appreciation of JPY at 2-10Y horizon
- Can you extract 10Y exchange rate expectations from the FOREX market to support the sticky 10Y $E\pi$? Or are the 10Y $E\pi$ not very reliable?

Comments: Estimation strategy

- I would like to see more discussion of the fixed effects (FE) results
  - Slopes in FE only capture the time-series variation

Comments: Identification

- You identify implicitly through a 3-equation model
  - It's not easy to solve this with ZLB
  - I cannot see an explicit expectations channel: discuss the intuition more
  - Explain the structure more. E.g., why does your IS curve $(\hat{x}_t = E_t\hat{x}_{t+1} - \sigma(\hat{i}_t - E_t\hat{\pi}_{t+1}) + \nu_t)$ have expected output gap in it?

- You model Abenomics as an increase in the variance of the *shock* to Taylor rule.
  - Really? I'd think a widely known policy change would be modeled as a change (decline) in the slope of the Taylor rule.
  - This would explain the observed decline in $\hat{\alpha}$ immediately

- When you discuss your empirical results with the model, you calculate $\hat{\alpha}$ as a slope across respondents
  - But this doesn't match at all the fixed effects results, in which the slope estimate only uses time-variation, not respondent-variation
  - I would like to see a more careful matching of the model with the empirical results

Comments: Modeling credibility?

- Is the monetary policy inflation target of 2% credible?
- Can your results reflect a lack of credibility of a 2% target?
- Could the Bank of Japan be "too conservative"?
- Reverse the time-inconsistency / MP credibility problem in the Barro - Gordon (1983) model:
  - Following the adjustment of $E\pi$ *upwards*, central bank would contract to stick to the original target
  - That way, the economic activity picks up, and the central bank maintains lower inflation
  - However, this makes the 2% target incredible; announcement is ignored
- Rogoff's (1985) solution: appoint a non-conservative central banker
- Likely far-fetched, but maybe can offer some food for thought

Expectations can be difficult to manage

- The year before the Reserve Bank of New Zealand invented inflation targeting