Discussion of "Macro-Active Bond Mutual Funds" by Claire Yurong Hong, Jun Pan and Shiwen Tian

Calvin Dun Jia

HSBC Business School Peking University

2021 FMA Annual Conference October 22, 2021

Brief Summary

- empirically examines the market performance of government bond mutual funds with and without conditioning on important macro announcement days
 - 1. key findings
 - active gov bond funds outperform the market on GDP and FOMC announcement days by gaining through α
 - outperformance is persistent across announcement events
 - 2. the highlighted channel:
 - gov bond managers possess superior skills in processing macro relevant information
 - increased interest rate exposure change among proactive funds predict fed fund rate changes

Roadmap of Discussions

A super interesting and well excetuted paper

Some extensions/dimensions to think through

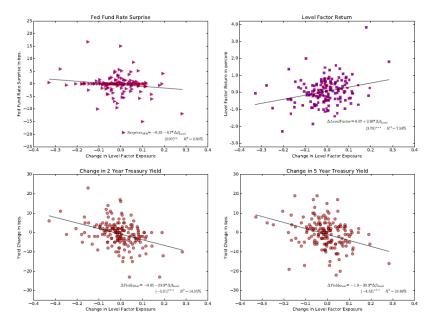
- source for extra α gain: inflation risk?
- conditional outperformance vs. conditional underperformance
- term structure and bigger picture on macro background and the Fed's policy innovation
- some framing and wording issues
- additional trivial things

Empirical Setting and Key Findings: Recap

Key specification:

- $\blacktriangleright R_t R_t^f = \alpha + \beta_M \cdot D(Macro \ t = 0) + \sum_j \beta^j \cdot Factor_j + e_t$
 - R_t^f : one-month T-bill rate on day t
 - significant estimates β_M when $D(Macro \ t=0)=1$
 - extra α earned on macro announcement days
 - active bond fund managers gain extra α because they have superior macro relevant skills (for processing information and predicting the market changes)

Evidence for Superior Skills: Recap



Suggestion 1

- \blacktriangleright Be more clear about the exact source behind this additional α
 - level factors of treasury bond nominal yields weighing across nominal rates of maturities indexed by *i*: $L_t = \sum_i w_{i,t} y_{i,t}$
 - Fisher Equations: $y_{i,t} = r_{i,t} + \pi^e_{i,t}$
 - Possibility 1: reduction in real rates across maturities $r_{i,t}$
 - Possibility 2: reduction in spot inflation and inflation expectations $\pi_{i,t}^{e}$
 - A easier check is to correlate the $\hat{\alpha}$ with measures of inflation expectations across different durations \Rightarrow if null, then it's about the real part (Cieslak and Povala, 2015; Cieslak, 2018; both RFS)
 - $y_{i,t}$ strongly driven by macro news related to GDP and FOMC
 - try give it a more structural interpretation? perhaps some active fund managers make better forecasts because they track inflation quite well?

Question 2

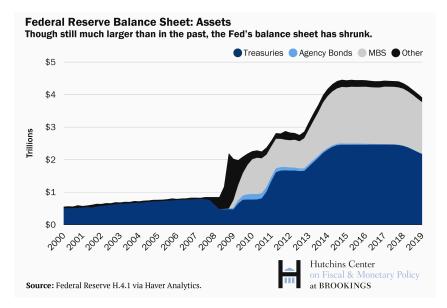
- how to jointly explain the coexistence of significant α > 0 on announcement days but α < 0 on non-announcement days?</p>
- current results: announcement extra α is concerntrated among funds with high return volatility and increased interest rate exposure
- are these gaining funds during announcement windows also lost excess returns by maintaining interest rate exposures? then what explains the return loss? time-varying skillness or some other funds performance are driving this negative α?

| | Equity Funds | | | | Government Bond funds | | | |
|--------------|--------------|--------|--------|-----|-----------------------|-------------|-----------|-----|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Alpha | 0.282^{*} | 0.136 | 0.090 | | -0.038 | 0.539*** | -0.525*** | |
| | [1.91] | [0.71] | [0.49] | | [-0.30] | [-3.51] | [-3.46] | |
| D[Macro t=0] | | 0.386 | | | | 1.320 * * * | | |
| | | [1.29] | | | | [4.92] | | |

Question 3

- so far silent on the duration/maturity risk exposure of government bond funds
- currently, the interest rate exposure is regressing fund returns on a level, slope and curvature factors
- perhaps some funds are gaining because they are particularly good at predicting some longer term rates? or they are much better guided by the FOMC announcements?
- expecially when the Fed after 07-08 financial crisis is taking FOMC communications to do Forward Guidance (McKay, Nakamura and Steisson, 2016 AER); operation twists of the Fed's practice also has an impact on the relativitity of short-term and longer-term rates.

Post-09: Fed's Behaviors on Gov Bond Purchasing



Concern 4

- should downplay the phrasing like "Macro economic news has little explanatory power for equity (e.g., Roll, 1988)." and bond funds "care more about macro such as Bill Gross commented" ...
 - macro news has very strong impacts on stock valuation dated back at least (Beaudry and Portier, 2006 AER; Bernanke and Kuttner, 2005 JF)
- it's intriguing (in fact an very interesting research question) that equity funds do not earn extra but equity returns do have strong announcement reactions like bond funds do
 - fixed income investment cares about macro conditions is unambigously true by itself

Additional Comments

- some more discussions on why GDP and FOMC announcements may matter while not so much for the others
- why mentioning disagreement as a condition, a bit more motivations?
- interesting to know more on why investors are not learning about fund macro skills?
- some more discussions or citations on why some bond fund managers with certain characteristics may carry persistent macro skill premium?

Additional Comments

- some more discussions on why GDP and FOMC announcements may matter while not so much for the others
- why mentioning disagreement as a condition, a bit more motivations?
- interesting to know more on why investors are not learning about fund macro skills?
- some more discussions or citations on why some bond fund managers with certain characteristics may carry persistent macro skill premium?
- a really fascinating paper and I truly learned a lot

Thank You Very Much