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

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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 $\alpha$.
   - 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 executed paper

Some extensions/dimensions to think through

- source for extra $\alpha$ 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:

  $\Delta t - R^f = \alpha + \beta_M \cdot D(Macro \ t = 0) + \sum_j \beta_j \cdot Factor_j + e_t$

  - $R^f$: one-month T-bill rate on day $t$
  - significant estimates $\beta_M$ when $D(Macro \ t = 0) = 1$
  - extra $\alpha$ earned on macro announcement days
  - active bond fund managers gain extra $\alpha$ because they have superior macro relevant skills (for processing information and predicting the market changes)
Evidence for Superior Skills: Recap

Fed Fund Rate Surprise

Level Factor Return

Change in 2 Year Treasury Yield

Change in 5 Year Treasury Yield

\[
\Delta \text{LevelFactor} = 0.97 + 2.36 \times \Delta \text{BLevel} \\
(3.70)^{**} \quad R^2 = 7.54\%
\]

\[
\Delta \text{Yield}_2Y = -0.85 - 283 \times \Delta \text{BLevel} \\
(-5.81)^{**} \quad R^2 = 14.35\%
\]

\[
\Delta \text{Yield}_5Y = -1.0 - 30.9 \times \Delta \text{BLevel} \\
(-4.53)^{**} \quad R^2 = 16.89\%
\]
Suggestion 1

- Be more clear about the exact source behind this additional $\alpha$

- 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: $y_{i,t} = r_{i,t} + \pi_{i,t}^e$

- 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 $\alpha > 0$ on announcement days but $\alpha < 0$ on non-announcement days?

- current results: announcement extra $\alpha$ is concentrated 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 $\alpha$?

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<th>Equity Funds</th>
<th>Government Bond funds</th>
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<tbody>
<tr>
<td></td>
<td>(1) (2) (3) (4) (5)</td>
<td>(6) (7) (8)</td>
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<tr>
<td>Alpha</td>
<td>0.282*</td>
<td>-0.539***</td>
</tr>
<tr>
<td></td>
<td>[1.91]</td>
<td>[-3.51]</td>
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<tr>
<td>D[Macro t=0]</td>
<td>0.386</td>
<td>1.320***</td>
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<tr>
<td></td>
<td>[1.29]</td>
<td>[4.92]</td>
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<td></td>
<td>0.136 0.090</td>
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<td></td>
<td>[0.71] [0.49]</td>
<td>[-0.30]</td>
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<td></td>
<td>-0.038</td>
<td>-0.525***</td>
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<td>[-0.30] [-3.46]</td>
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*Significance levels: * p < 0.1, ** p < 0.05, *** p < 0.01.
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?

- especially 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 relativitivity of short-term and longer-term rates.
Post-09: Fed’s Behaviors on Gov Bond Purchasing

Federal Reserve Balance Sheet: Assets
Though still much larger than in the past, the Fed’s balance sheet has shrunk.

- Treasuries
- Agency Bonds
- MBS
- Other

Source: Federal Reserve H.4.1 via Haver Analytics.
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 unambiguously 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