

Discussion of “Macro-Active Bond Mutual Funds”

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What this paper does

- Estimates active government bond funds' alpha on macro and non-macro days based on a four-factor model using the PC of Barclay UST return indices
- Documents significant alpha only on macro days, particularly on FOMC and GDP announcements
 - Designs an investment strategy based on the pattern
 - Individual funds' past 24-month macro alpha predicts future macro alpha
 - Such alpha is related to idiosyncratic vol
 - Macro alpha co-moves with macro calendar and increases in disagreement
 - Duration change of these funds predicts FOMC yield curve change

My main take-away

- The active government bond fund managers seem skilled in delivering alpha but only on macro days
- There is evidence that such skill is related to market timing through duration change
- The alpha is small in absolute magnitude (~ 0.7 bp per day for all macro, 1 bp for FOMC, 2.5 bp for GDP), but can still be meaningful

Comment 1. How to reconcile with existing literature on mutual fund manager skill?

- Bond mutual funds do not outperform (e.g. Elton, Gruber, and Blake 1995)
- A subset of bond mutual funds may have skills in timing the market, such as government bond mutual funds (Huang and Wang, 2014)
- This paper offers a new perspective on government bond mutual funds' timing ability by focusing on macro events. This is an extension of Huang and Wang (2014).
- The AUM of this sector represents 4% of total actively managed bond funds in 2019.

Another look at fund performance

	Government Bond Fund			Equity Fund			Other Bond Funds and Passive Indices				
	IG	HY	Muni	Barclay UST	Barclay AGG						
Macro	0.690*** [3.65]	0.726*** [3.77]		0.381 [1.26]	0.361 [1.19]						
FOMC			1.099** [2.06]			0.855 [1.06]	0.599 [0.82]	0.439 [0.45]	0.940 [1.52]	0.321 [1.24]	0.344 [0.80]
GDP			2.463*** [4.65]			2.303*** [3.26]	2.772*** [4.06]	5.289*** [4.50]	1.942*** [3.05]	-0.164 [-0.71]	-0.154 [-0.50]
CCI			0.814* [1.81]			0.477 [0.71]	1.191** [2.18]	2.931*** [3.20]	2.100*** [3.62]	-0.147 [-0.66]	-0.487 [-1.47]
NFP			-0.140 [-0.34]			0.171 [0.26]	-0.038 [-0.07]	-1.195** [-2.04]	-0.733* [-1.73]	-0.364 [-1.28]	0.281 [0.79]
CPI			-0.317 [-0.88]			-0.065 [-0.10]	-0.745 [-1.47]	-0.885 [-1.54]	-0.441 [-0.97]	-0.451* [-1.85]	-0.566 [-1.47]
CSI			0.737 [1.46]			0.657 [1.10]	0.308 [0.77]	0.539 [0.83]	-0.194 [-0.49]	-0.380 [-1.50]	-0.351 [-1.17]
DGO			0.216 [0.56]			-0.395 [-0.50]	0.512 [1.10]	-1.256 [-1.41]	-0.380 [-0.97]	0.030 [0.14]	0.167 [0.56]
RS			0.173 [0.34]			-0.610 [-0.86]	0.048 [0.11]	0.470 [0.74]	-0.128 [-0.34]	-0.226 [-1.06]	-0.102 [-0.37]
NHS			0.790 [1.56]			0.038 [0.05]	0.655 [1.39]	0.911 [1.29]	0.565 [1.37]	0.305 [1.20]	0.135 [0.41]
Level	0.275*** [116.72]	0.274*** [118.31]	0.274*** [119.72]	0.024*** [7.92]	0.024*** [7.92]	0.023*** [7.78]	0.408*** [30.42]	0.351*** [25.38]	0.648*** [51.42]	0.431*** [342.76]	0.428*** [51.44]
Slope30	0.298*** [46.85]	0.297*** [47.92]	0.297*** [48.46]	0.042*** [4.68]	0.043*** [4.80]	0.043*** [4.81]	0.363*** [29.16]	0.373*** [16.14]	0.291*** [29.16]	0.360*** [108.80]	0.334*** [39.63]
Slope10	0.081*** [5.79]	0.074*** [5.40]	0.074*** [5.42]	-0.019 [-1.04]	-0.020 [-1.12]	-0.020 [-1.13]	0.024 [0.97]	-0.019 [-0.53]	-0.133*** [-5.66]	0.114*** [14.41]	0.014 [0.72]
Stock	0.008*** [5.14]	0.007*** [4.89]	0.007*** [4.89]	0.785*** [332.71]	0.783*** [334.92]	0.783*** [335.56]	0.016*** [7.84]	0.045*** [16.35]	0.001 [0.29]	0.003*** [4.48]	0.010*** [6.42]
Intercept	0.085 [0.79]	-0.146 [-0.45]	-0.098 [-0.30]	0.204 [1.06]	1.975*** [3.70]	2.009*** [3.79]	0.134 [0.29]	1.095* [1.96]	0.992** [2.19]	0.499*** [3.62]	0.527 [1.49]

Comment 2. What is special about government bond mutual funds?

- Why do other bond fund managers not pick up such alpha?
 - Not able to
 - Too small in magnitude
 - Constraints in the mandate

Comment 3. Alpha or beta

- The macro alpha increases in disagreement and absolute surprise. However, the directional information contained in macro surprise seems less impactful – is a risk premium explanation plausible (Hu, et al, 2021)?

		Panel A. FOMC-Alpha								
		Disagreement	Surprise	Surprise	Treasury	Treasury	Level	Slope30	Slope10	VIX
All funds	Coeff.	0.656**	-0.535	0.973**	0.220	1.081*	0.994**	0.075	0.973*	-0.146
	t-stat	[2.29]	[-0.92]	[2.16]	[0.35]	[1.70]	[2.08]	[0.13]	[1.86]	[-0.27]
Active funds	Coeff.	2.737***	-1.123	2.266**	0.130	2.326*	2.817**	0.350	2.403*	0.088
	t-stat	[3.17]	[-0.90]	[2.27]	[0.11]	[1.75]	[2.24]	[0.29]	[1.92]	[0.06]

		Panel B. GDP-Alpha								
		Disagreement	Surprise	Surprise	Treasury	Treasury	Level	Slope30	Slope10	VIX
All funds	Coeff.	1.520***	1.060*	0.960*	0.179	2.189***	2.080***	1.439**	2.187***	1.363*
	t-stat	[3.13]	[1.85]	[1.72]	[0.25]	[3.84]	[4.28]	[2.20]	[3.12]	[1.70]
Active funds	Coeff.	2.511***	0.825	1.494*	-0.075	1.198	0.873	-0.051	1.823*	1.798*
	t-stat	[3.18]	[0.89]	[1.70]	[-0.08]	[1.30]	[0.85]	[-0.05]	[1.71]	[1.70]

Minor comments on execution

- Trading costs in the investment strategy – is it free to trade these funds without front-and or back-end loads in order to earn 1–2 bp in each round trip? There can be other fees such as subscription fee, redemption fee, and commission charged directly by the broker.
- For FOMC events, the FED forward guidance has increased the number of FOMC related event days significantly: FED Jackson Hole symposium, interviews of FOMC members