



UNC  
KENAN-FLAGLER  
BUSINESS SCHOOL

# Macro Trends and Factor Timing

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Discussant: **Andrei S. Gonçalves**

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# Outline

The Paper

My Comments

Final Remarks

## The Paper in a Nutshell

- Hard to build link between Macroeconomy and Asset Prices
- Paper does that in a cointegration framework:
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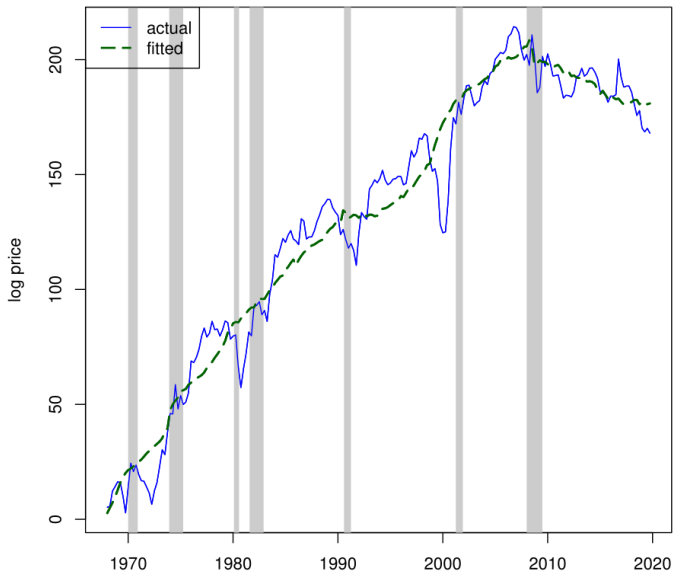
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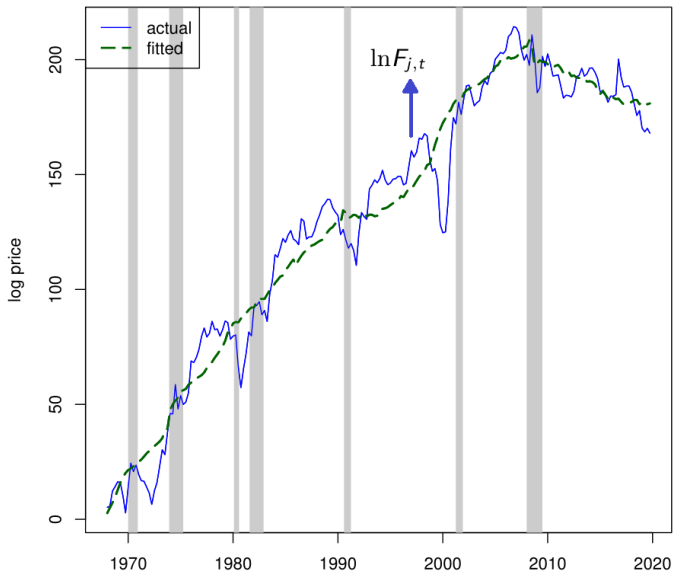
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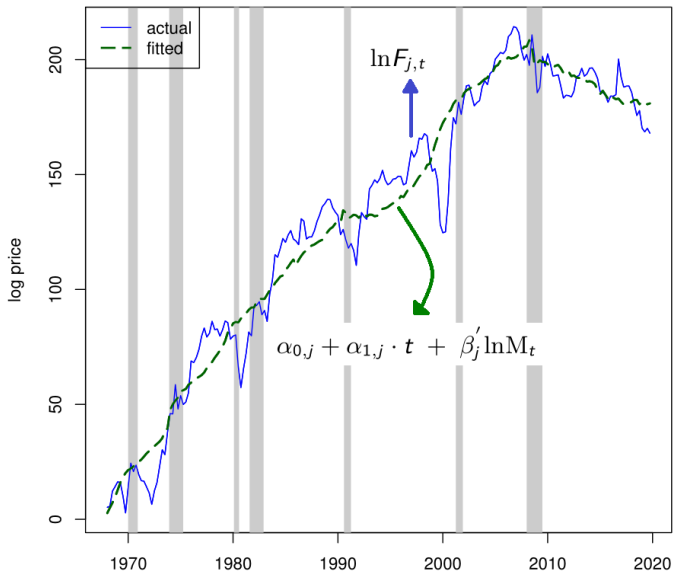
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**Panel A:** In-Sample

	MKT
ECT <sub>factor</sub> (-4)	-0.573*** (0.090)
Constant	4.875** (2.085)
Observations	204
R <sup>2</sup>	0.307

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**Panel A:** In-Sample

	MKT	SMB	HML	RMW	CMA
ECT <sub>factor</sub> (-4)	-0.573*** (0.090)	-0.296*** (0.057)	-0.573*** (0.101)	-0.488*** (0.152)	-0.526*** (0.107)
Constant	4.875** (2.085)	1.278 (1.745)	3.268** (1.511)	3.154*** (1.173)	3.503*** (1.162)
Observations	204	204	204	204	204
R <sup>2</sup>	0.307	0.195	0.282	0.199	0.266

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**Panel B: Out-Of-Sample R<sup>2</sup>**

	MKT	SMB	HML	RMW	CMA
From 1980	34.77***	17.73***	28.57***	18.7***	22.95***
From 1990	40.25***	18.02***	29.95***	17.68***	26.21***
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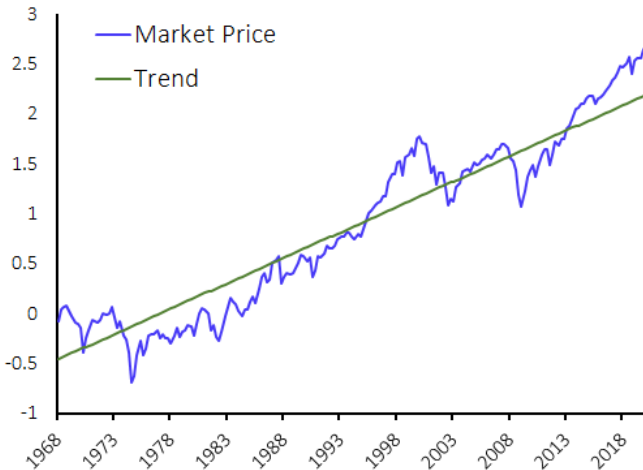
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Years	IS $w$ + IS $\mathbb{E}[r]$	IS $w$ + OOS $\mathbb{E}[r]$	OOS $w$ + OOS $\mathbb{E}[r]$
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## Other Comments

1. Campbell & Thompson (2008) certainty equivalent fee:

$$\frac{1}{\gamma} \cdot \left( \frac{R^2}{1 - R^2} \right) \cdot (1 + SR^2) = \frac{1}{5} \cdot \left( \frac{0.348}{1 - 0.348} \right) \cdot (1 + 0.30^2) = 11.6\%$$

Your exercise (Haddad, Kozak, and Santosh, 2020) yield much lower certainty equivalent fee. Why (economically speaking)?

2. More analysis to identify the effect of each variable in  $M_t$
3. Realized Volatility  $\times$  Liquidity Factor as volatility proxy
4. In Table 4, why is the  $dp R^2$  so low when predicting 5-year returns?  
Could correct for M&A (see Gonçalves (2021)).
5. Robustness to state variables is important
  - o One can have omitted stationary variables even if no omitted trend
  - o Use first 4 or all 8 PCAs (do not select based on PCA interpretation)

# Outline

The Paper

My Comments

Final Remarks

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  - Financial prices correct towards a macro trend
  - As such, returns of standard factors are highly predictable
  - All one needs is the cointegration residual
- It would be useful to:
- Good luck!

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