

Discussion of “The Market Price of Risk and
Macro-Financial Dynamics”
by Adrian, Duarte, and Iyer

Marco Grotteria

London Business School

May 2023

- Financial prices are forward-looking containing important signals regarding the evolution of the real economy and risks to the economic outlook
- Having a proper understanding of overall financial conditions and information embedded in prices therefore is key to households, policymakers, and investors (or academic scholars)
- Unfortunately the financial conditions indices proposed so far are empirically motivated and lack a solid link to economic theory

What the authors do

- The authors show that for a large set of models when a representative consumer with time separable utility exists, the market price of risk is equal, in equilibrium, to the volatility of aggregate consumption

$$\frac{C_{t+1}}{C_t} \approx E_t \left[\frac{C_{t+1}}{C_t} \right] + \eta_t \varepsilon_{t+1} = E_t \left[\frac{C_{t+1}}{C_t} \right] + \beta \frac{u'(C_t)}{u''(C_t)} \frac{1}{R_{ft}} \varepsilon_{t+1}$$

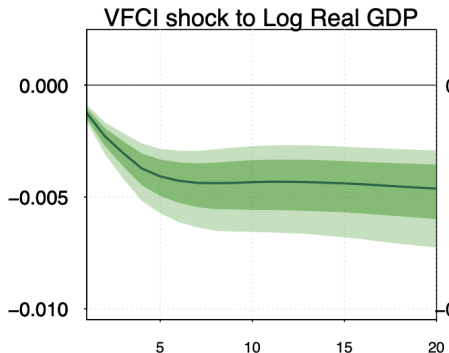
- For the purpose of asset pricing only the projection of consumption growth and consumption volatility onto the asset span \mathcal{M} (the set of cash flows that can be financed via some trading strategy) is priced.

What are the variables needed to proxy for η_t ?

- The authors choose 6 financial factors X_t that they argue span \mathcal{M}
- As a starting point I would have thought to use macroeconomic series (capturing common state variables) , but in any case ...
- It would be nice to see a motivation for the set of variables chosen

- Why only stocks and bonds?
- As a rather extreme example, why not the cross-section of assets and the over 200 trading strategies by Chen and Zimmermann? Or the more “basic” level of yields?

What is VFCI really capturing? Why is the response of GDP to VFCI immediate?



- If GDP growth is exogenously given (as in several models), this result should not be there
- Let's endogenize production for a second
- In most frameworks capital is predetermined and labor is in fixed supply
- If you were merely capturing an increase in uncertainty, it would probably imply lower firms' investments: again output cannot change immediately (it will decrease only in the periods after)
- $Y = C + I$ implies a consumption boom

- What is VFCI really capturing?
- My prior was that lots of the results in the paper were actually more consistent with models of intermediary frictions
- Can we use the impulse responses to learn anything about the “right” model?
- What are *financial conditions*?

Why GDP growth?

- The theory speaks about consumption not GDP growth.
- GDP growth can also have constant volatility as in canonical consumption-based asset pricing models
- It is important to use consumption-VFCI when explaining risk premia or macro dynamics
- I replicated the results in Table 5 and 6 for risk premia and the results go through also with consumption

- An interesting paper with lots of implications!
- I would like to see a closer link between the theoretical motivation and the empirical results
- I hope it's published well