

Stagflationary Stock Returns

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 - Why?

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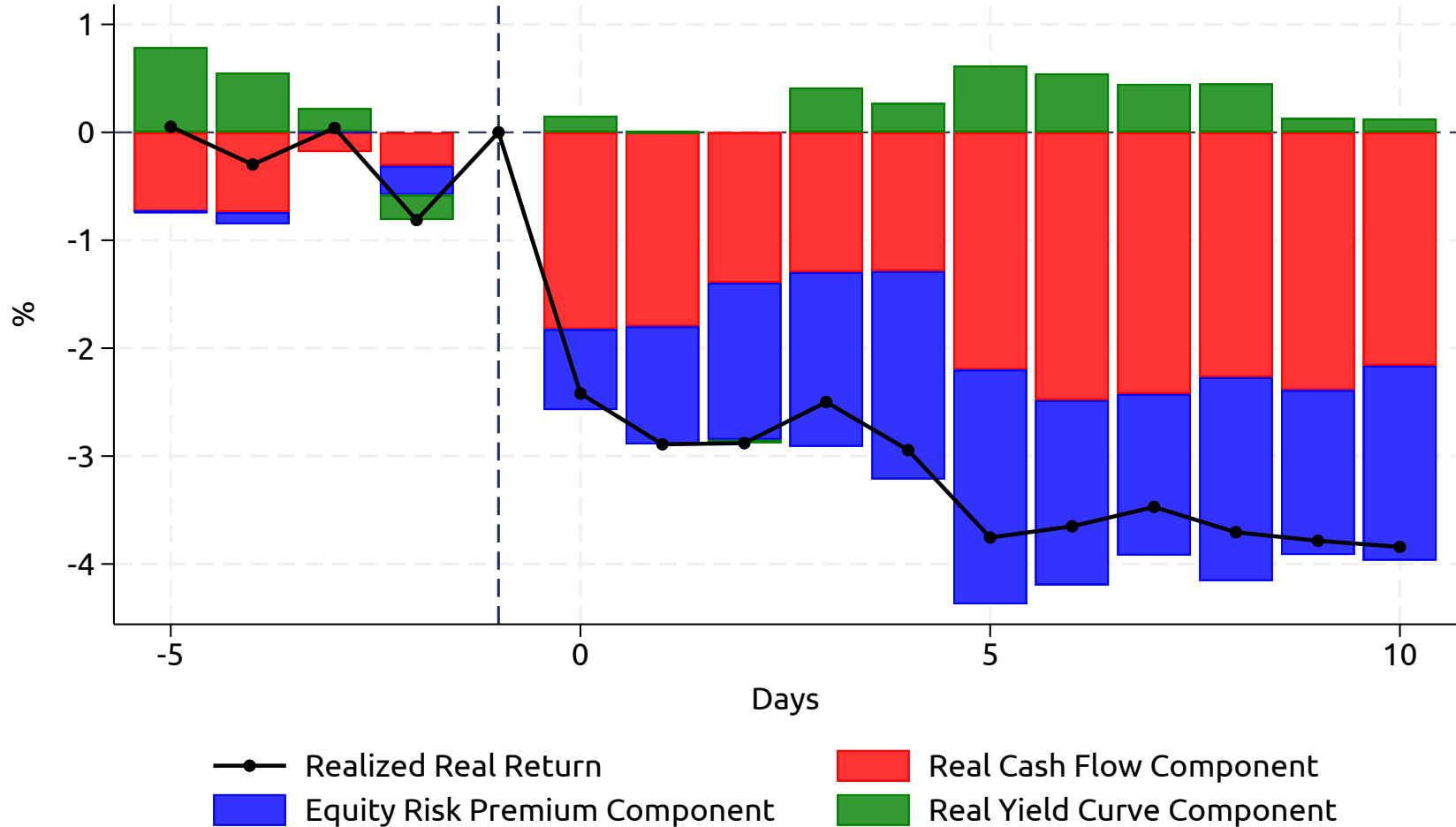
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- **Modigliani & Cohn (1979) + Campbell & Vuolteenaho (2004)**
 - ▶ Money Illusion: Investors discount real cashflows with nominal rates

This Paper: Let's Use a Decomposition

The authors leverage a stock price growth decomposition from Ben's previous work with Annette Vissing-Jorgensen, but you'll give you the intuition from the Gordon constant dividend growth model:

$$P_i = \frac{\prod_i^{\text{RLT}}}{(r_f - \pi) + (r_i - r_f)}$$

Decomposing the effect of Inflation on Stock Prices



What We Learn (Apparently)

Fisher (1930) Hypothesis – no effect through real discount rates

- ▶ Interest rates adjust 1-for-1 with inflation to clear capital markets

Fama (1981) Proxy Hypothesis

- ▶ Inflation is a proxy for lower real activity

Bekaert & Engstrom (2010) - [this is s a big part of the story!](#)

- ▶ Inflation affects Equity Risk Premia

Geske & Roll (1983) Pearce & Roley (1985)

- ▶ Higher Inflation → Higher Real Rates

Modigliani & Cohn (1979) + Campbell & Vuolteenaho (2004)

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2. What about money illusion?

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1. Why do investors revise downward their real cashflow expectations
 - ▶ Stagflationary Returns Hypothesis: inflation = cost shocks to firms
 - ▶ Cross-sectional evidence: firms with higher markups are naturally “insured” against cost inflation

2. What about money illusion?
 - ▶ Authors basically dismiss based on the principle that a real theory should be preferred to a behavioral theory

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- The research question is very clear
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- The closest attempt thus far to run a proper “horse race”
- The strategy of using a decomposition makes perfect sense.
- I also like the idea of using micro moments to say something about the drivers of the cashflow effect.

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- But it doesn't follow logically that it makes sense to just attribute all the residual variation to cost shocks.

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- Previous equation under money illusion and with the cashflow component directly measured:

$$P_i \approx \frac{\Pi_i^{\text{RLT}}}{(r_f - \pi) + (r_i - r_f) + \varepsilon + \phi \pi} \quad \phi \in [0, 1]$$

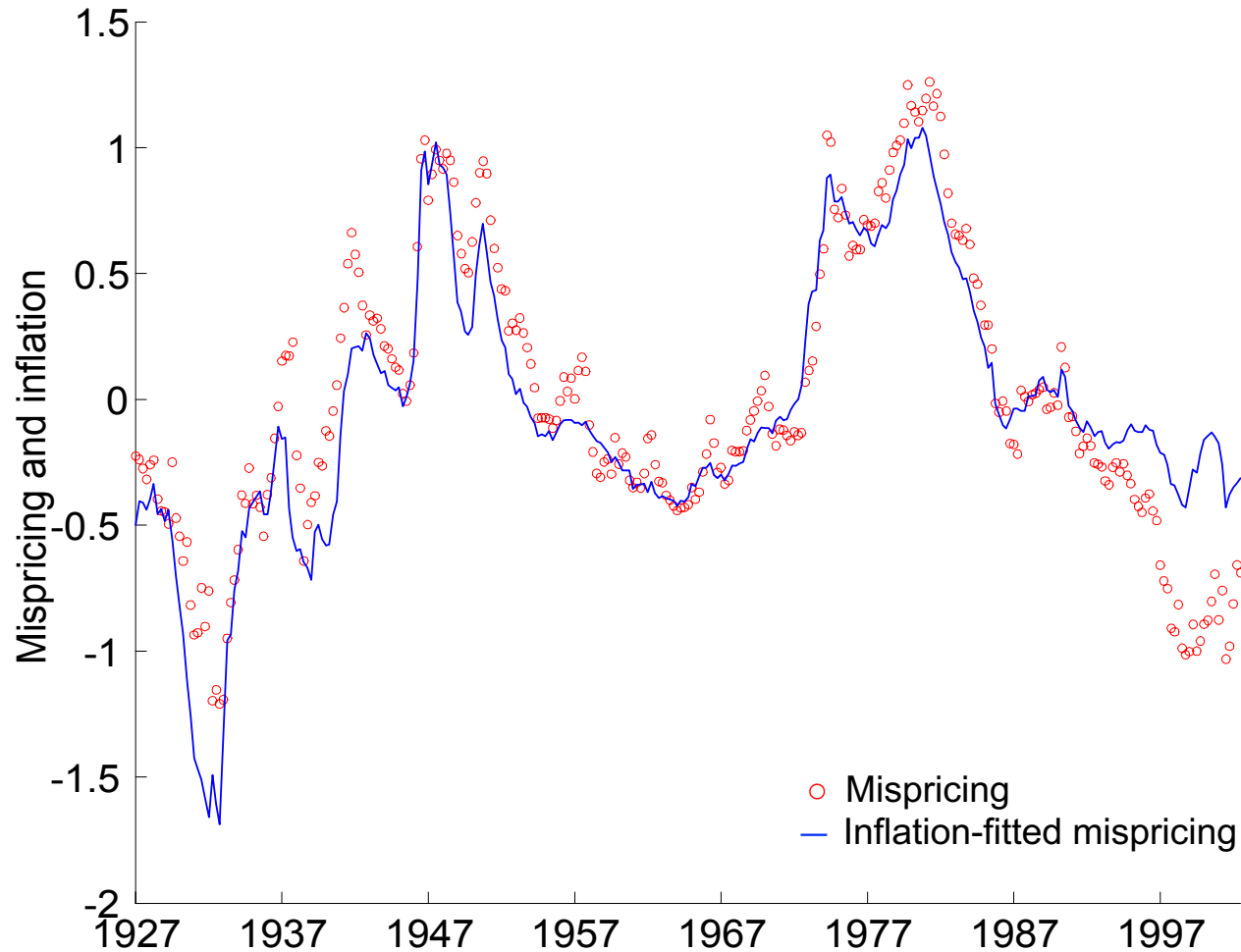
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- ▶ you get a residual component that correlates with inflation

Campbell & Vuolteenaho (2004)



Issue #3 – Internal Consistency

- The authors rely of heterogeneity in markups among firms to provide evidence in favor of their hypothesis. From Appendix C:

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- I realized that there's more that they can do with GHL.

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Idea – Decompose RCFC further by regressing:

$$\text{RCFC}_{it} = x_{it}^{\mathcal{D}} \cdot \Delta \mathcal{D}_t + x_{it}^{\mathcal{S}} \cdot \Delta \mathcal{S}_t + \phi \text{ Money Illusion}_t + (\alpha_i + \varepsilon_{it})$$

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(in the spirit of Campbell & Vuoltenahoo 2004)

A Truly General Decomposition

% Change in Stock price = contributions of

1. Real Interest Rates
2. Equity Risk Premium
3. **Aggregate Supply (Cost) Shock**
4. Aggregate Demand Shock
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6. Unexplained or Mispricing (residual)

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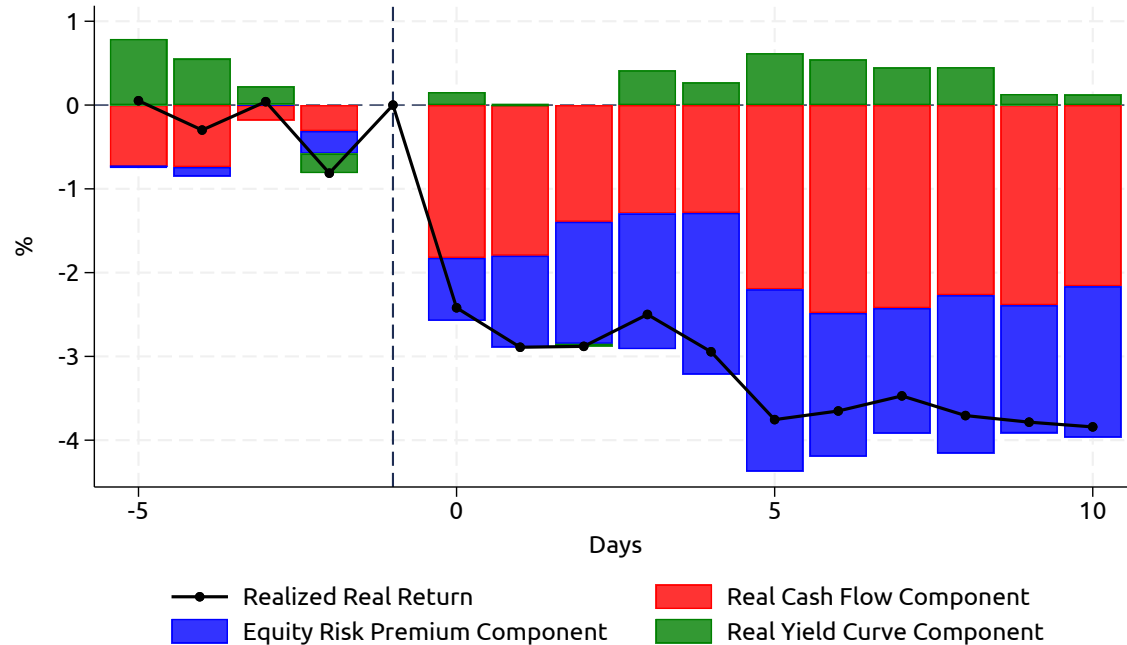
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→ I know it's a lot of work and your conclusions may change, but if you can pull it off in my view it would make this a top-5 paper.

Thanks for the opportunity to
discuss this very interesting paper!

Small rant: how is this still a thing?



This is the second paper that I discuss this year (and I refereed several more) that shows me a diff-in-diff / local projections graph where the pre-event window is half as long as the post-treatment window.