

Currency Anomalies

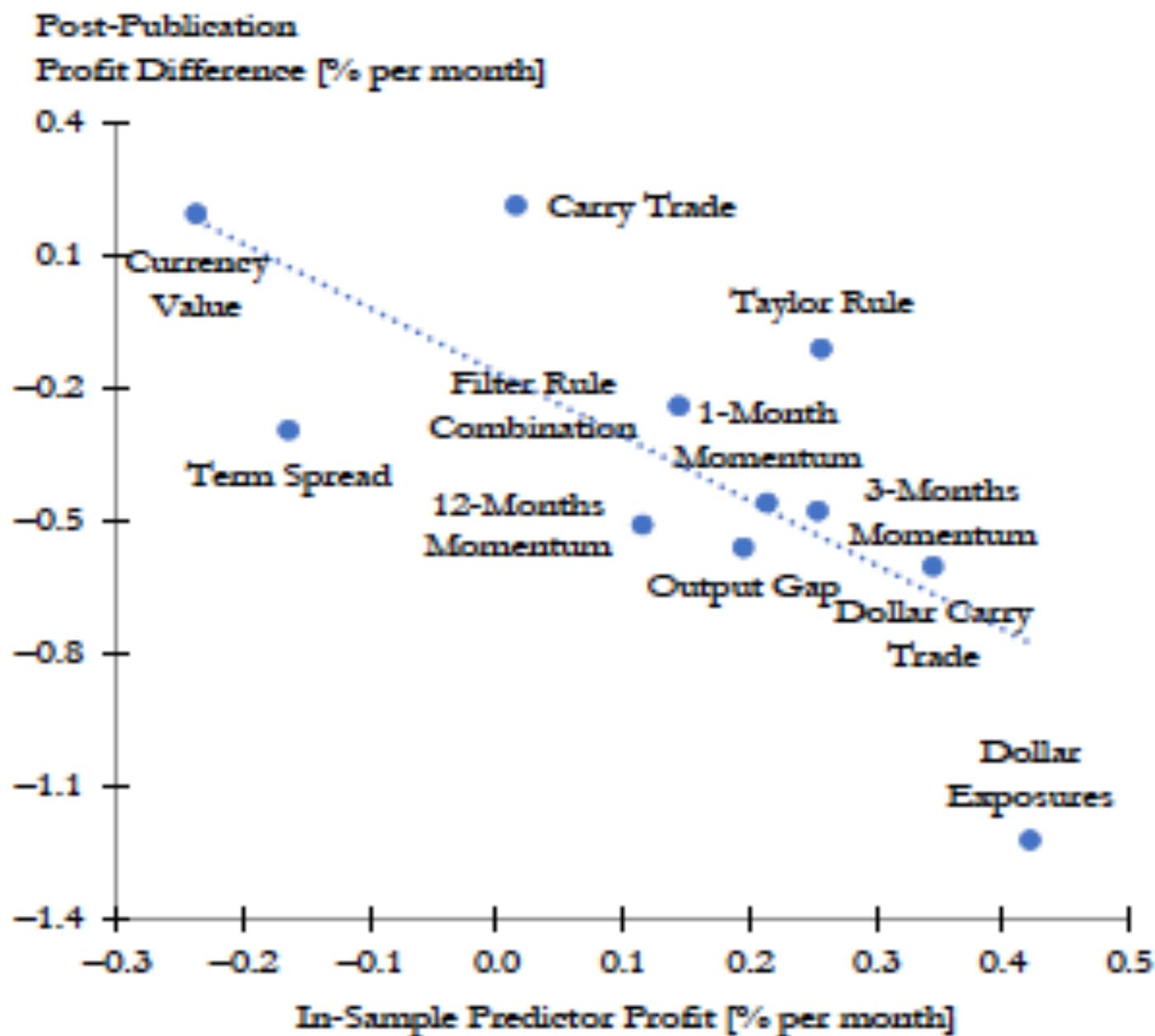
Bartram, Djuranovik, Garratt

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Summary

- **Finding 1**: Various currency anomalies, e.g. carry trade and momentum, seem to reflect **mispricing** rather than risk premium or data mining.
 - Profits exist in the same sample periods used in the publications that uncover or popularize them, and remain robust even out of sample.
 - **Profits significantly diminish or disappear post publication!**
 - The post publication effects are stronger for anomalies that are more profitable in-sample and involve currencies with strong limit to arbitrage.
- **Finding 2**: **Analyst forecasts are negatively related to the anomalies**, suggesting they may contribute to the mispricing.
 - However, analysts do adjust their forecasts in the direction of lagged mispricing, and analyst forecasts contain additional useful information.



My View

- Careful comprehensive analysis of various currency anomalies.
 - Real time information in constructing the predictors.
 - Lots of useful robustness checks.
 - New analyst data from three alternative sources.
 - **Overall, I learned a lot!**
- However, the paper looks like the currency version of McLean and Pontiff (2016) and Engelberg, McLean, and Pontiff (2020), which may not fly in the “macro oriented” currency literature.
 - **Economic framework and story?**
 - Valid tests? Unclear when the anomalies are uncovered or popularized.
 - Unlikely that analysts are unaware of the anomalies.

Economic Story

- How might the anomalies, e.g. carry trades, reflect mispricing? Here's a story from Brunnermeier, Nagel, and Pedersen (2008):

In the currency setting, we can envision a country suddenly increasing its interest rate and thereby attracting foreign capital—possibly worsening the current account.² In a frictionless and risk-neutral economy, this should lead to an immediate appreciation of the currency—associated with an inflow of capital—and a future depreciation of the exchange rate such that UIP holds. In the presence of liquidity constraints, however, capital only arrives slowly such that the exchange rate only appreciates gradually, occasionally disrupted by sudden depreciations as

[1] Anomalies arise because of slow adjustments to fundamentals.

Economic Story -- *cont'd*

In contrast, a crash after a “currency bubble,” which can emerge when each investor holds on to his carry trade position too long since he does not know when others unwind their position, can be price correcting (Abreu and Brunnermeier 2003). Plantin and Shin (2007) show in a dynamic global games framework that carry trades can be destabilizing when strategic complementarities arise, which is the case if (i) speculators’

[2] Anomalies reflect movements away from fundamentals due to strategic complementarities and feedback effects.

- **If [1], or [1] plus [2] as the continuation, is true**, then when more traders trade on the anomalies, exchange rates will converge to fundamentals more quickly → **post-publication effects**.

Economic Story -- *cont'd*

- **If [2] alone is true** (see Shleifer and Summers (1990) and others, for example), then when more traders trade on the anomalies, exchange rates will diverge even more from fundamentals. → **Stronger feedback induced profits post-publication.**
- Important to note that the 10-11 anomalies in the paper can be grouped into just 2-3 groups – (i) momentum (1M, 3M, 12M, Filter rules); (ii) carry (as Taylor rule and output gaps drive interest rates); (iii) value or violation of PPP.
 - Above stories can apply to (i) and (ii) while value strategy already has a clear economic foundation consistent with story [1].

Post Publication?

- For currencies, it is not clear which piece of publication popularizes the anomalies. These anomalies have been known for a long time. For example, carry trade ... (way before 2005)

**The
Economist**

The yen has been pushed down in recent months by the highly profitable "carry trade". At its simplest this involves borrowing in yen at very low interest rates to buy higher-yielding assets, such as

In fact, the main trigger for an unwinding of carry trades is likely to be not Japanese interest rates, but an upsurge in currency volatility. That is what happened in 1998, when enormous yen carry trades had built up. After Russia's default in August and the subsequent near collapse of Long-Term Capital Management, hedge funds reduced their leveraged positions and the yen started to rise. Then in October the Japanese

Post Publication? -- *cont'd*

- Similarly for momentum. Again, way before 2009-2011.

The
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Buttonwood

Soros on the cheap

Building a better currency model

Apr 4th 2007 | From the print edition

The second factor is momentum. Currencies seem to fall in and out of favour: the yen is as out of fashion now as it was popular in the 1990s. As a result, once a currency has begun to rise, it may keep going for some time. Investors can jump on the bandwagon.

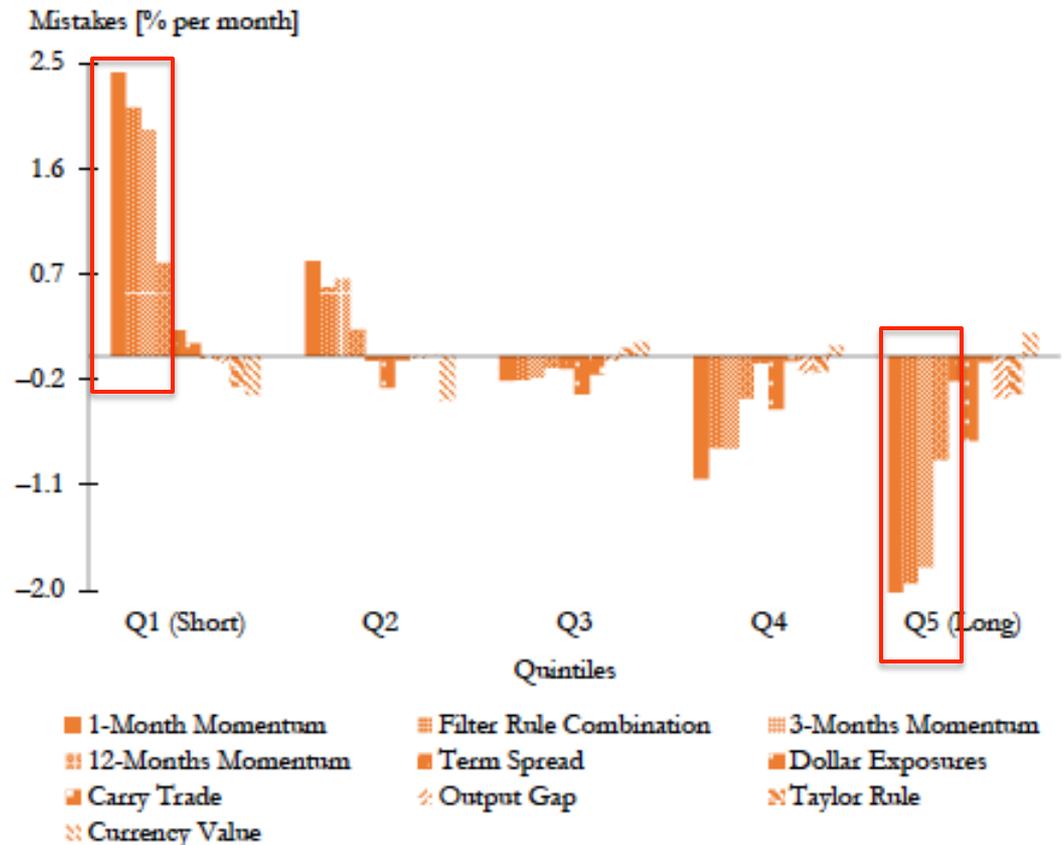
Both Deutsche and Merrill include carry and momentum in their models. Deutsche says that, since 1980, a carry strategy has earned an average annual excess return of 4.9%, whereas momentum has earned 3% (based on buying the top three currencies from the G10 leading industrial countries and selling the bottom three). However, each strategy has had its bad moments. Both suffered horribly in the early 1990s, when the ERM broke down.

Post Publication? -- *cont'd*

- Even among academic papers, **many had been written before the papers used to define post publication period**. Moreover, the older papers have many more citations (e.g., Hansen and Hodrick (1980) has over 2,500 citations, and over 1,000 came before Lustig and Verdelhan (2007). LV has 703 citations.)
- Controlling for these other events is not the right way to test mispricing. **If the post publication effects exist, they should have materialized way before these later papers**. The fact that they didn't raises lots of questions.
 - Given the popularity of carry trade in the 90s and several practitioner articles about it, why was carry trade still profitable in early-mid 2000s?

Analyst Forecasts and Mispricing

- Unlikely that analysts are unaware of carry trade, momentum, etc.
- Most analyses are done on aggregate mispricing but individual signals reveal that most of the systematic errors come from signals in momentum family.
- Are analysts predicting corrections that come at longer horizons? Check other forecast horizons?



To Conclude ...

- Learned a lot. **Very important paper with a new perspective**
→ if successful, can transform the currency literature.

My wish list:

- Infuse more economics into the analysis.
- Sharpen the tests to distinguish mispricing from risk premium (not just following McLean and Pontiff (2016)).
- Dig deeper into why we observe the negative relation between analyst forecasts and mispricing signals.