Discussion of “Foreign currency returns and systematic risks” by Victoria Galsband and Thomas Nitschka

Discussed version: SNB Working paper 2011-03

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The paper

Context

- Recently (2006-2009) forex and US equity have moved in tandem
- How far can (stock) market returns explain currency returns?

In a nutshell

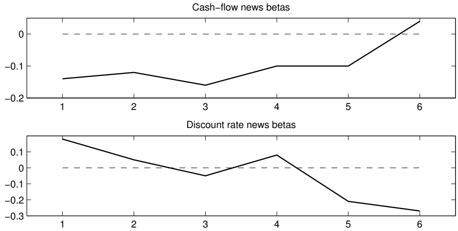
- Returns of currency portfolios vary widely when sorted by forward discount rate ($F1 - F6$) and recent returns ($M1 - M6$)
- Decompose market-betas of the *Forward*- and *Momentum*-portfolios into cash-flow news betas and discount-rate news betas using the approach of Campbell and Vuolteenaho (2004)
- Jointly price stock and currency returns in a two-beta CAPM
- Compare MPR for '95-'00 boom, '00-'02 bust, '02-'07 boom

Contribution:

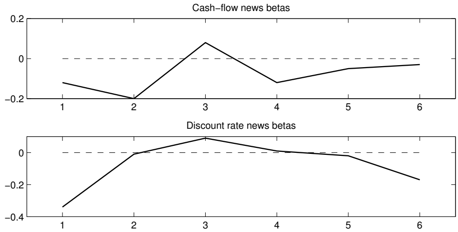
- Extension of Campbell and Vuolteenaho (2004) to a new asset class
- Decomposition of currency risk into (aggregate) cash-flow and discount rate news

Results (1)

- Low/high *Forward*-discount currencies load positively/negatively on ("good") discount-rate news.



- *Momentum*-sorted portfolios produce an inverse U-shaped pattern.



Results (2)

Fama-McBeth regression

- One beta CAPM has problems: large market price of risk or large pricing errors
- Two beta CAPM
  - *Forward*−sorted portfolios have significant discount-beta price of risk
    - Driven by cash-flow news in 1995-2000 boom
    - By discount-rate news in 2002-2007 boom
    - Insignificant for 2000-2002 bust (downturns are usually too short!)
  - *Momentum*-sorted portfolios insignificant
- Currency excess returns for *Forward*−sorted portfolios show linear pattern in booms and inverse U-shaped patterns in bust

Comments

Praise

- Interesting progression from Campbell/Vuolteenaho 2004
- Many insights from a difficult starting point
- Very good and detailed econometric work

My interpretation

- Surprising that *US* stock market data explain currency returns so well
- Significance of discount-rate news is obvious
- Significance of cash-flow news for 1995-2000 very surprising. Finally fundamentals? Investment inflows? (Campbell finds that stock market was driven by discount rate news)
- Significance of discount-rate news in 2002-2007 ... is this the 1% effect?
- Hints at time-varying correlations

Comments (2)

Which systematic risk?

- Exchange rate movements as *differences* in the news flow between countries
- Is US stock market a good proxy for "worldwide" systematic risk?
- Robustness check: world-wide index
- Dividend re-investment (van Binsbergen et al, 2010)

VAR specification

- Recent paper: Pitfalls in VAR based return decompositions: A clarification by Engsted/Pedersen/Tanggaard
- *"In order for VAR based decompositions to be valid, the asset price needs to be included in the state variable"*
- Although in practice P/E ratios may be a good proxy for P/D rations and the error may be small

Comments (2)

Small points

- EURO integration around 2000 peak structural break instead of boom/bust cycle?
- More information about the data (which currencies, summary statistics, how often do portfolios change actually?)

Alternative explanations for a co-movement of currency and equity markets

- Liquidity/funding constraints (especially in "tight" times)
- Differences in beliefs
- Monetary policy: Maybe deviation from a Taylor rule is a relevant state variable?

Comments (3)

Wish list

- Report results (e.g. Sharpe ratios) also for F6-F1 and M6-M1
- Robustness check with respect to definition of "market" return
- Carry trade is a hedge-fund strategy, therefore treat as such (higher return moments)
- Incorporate options information