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Discussion of

Monetary Policy Shocks and Stock Returns: Identification Through Impossible Trinity

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Summary

The paper:

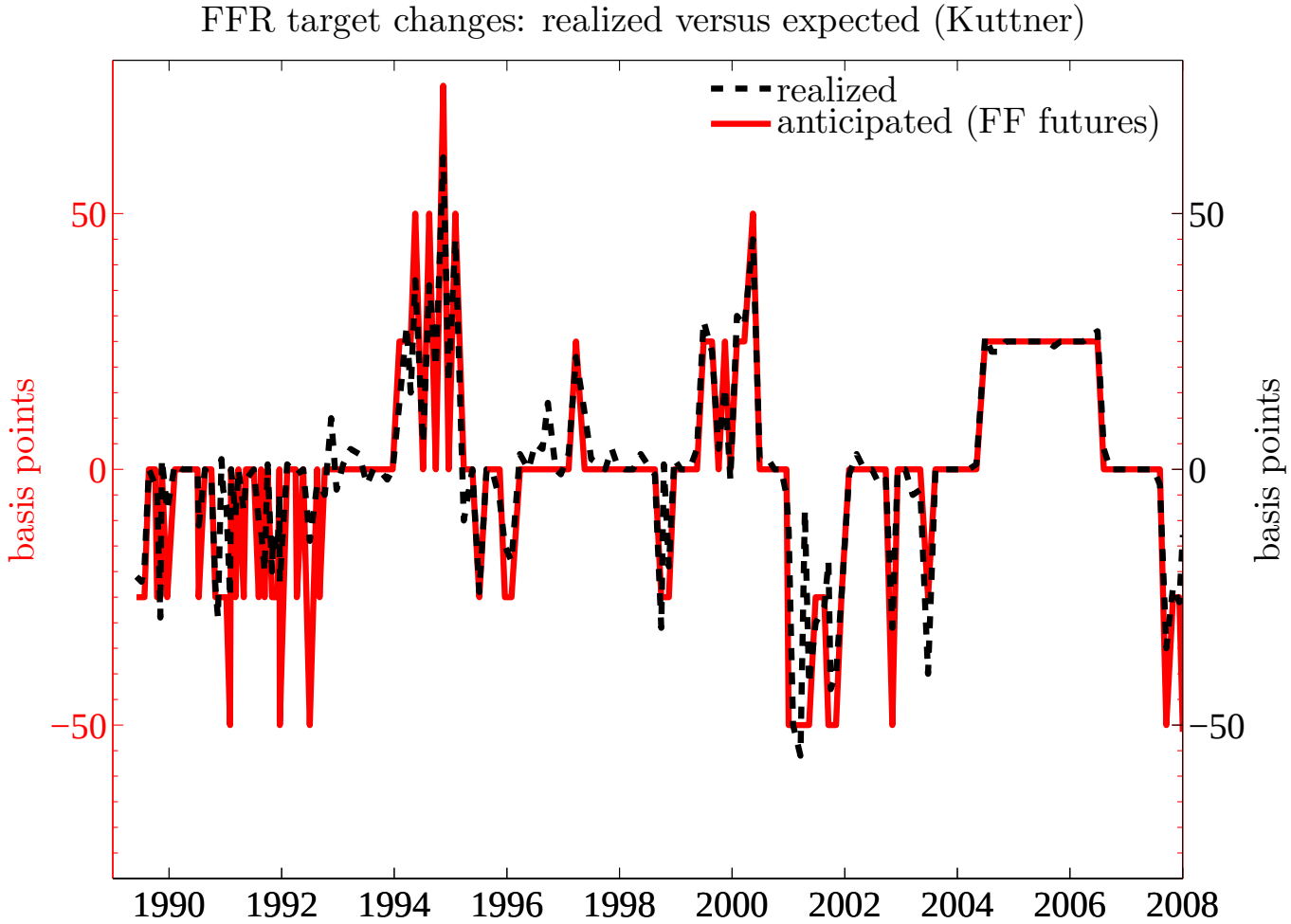
- Study the impact of MP on stock returns
- HK equity returns react strongly to surprise changes in federal funds rate
- Test and reject the credit channel of MP (BGG financial accelerator)
- Components:
  1. IV (turned OLS) setup exploiting the **trilemma**: fixed HKD/USD exchange rate + free capital flows $\Longrightarrow$ MP in Hong Kong follows the Fed
  2. **Local** interest rate channel

My discussion:

- Measuring MP surprises
- What is the economic mechanism for MP $\Longrightarrow$ equity returns?

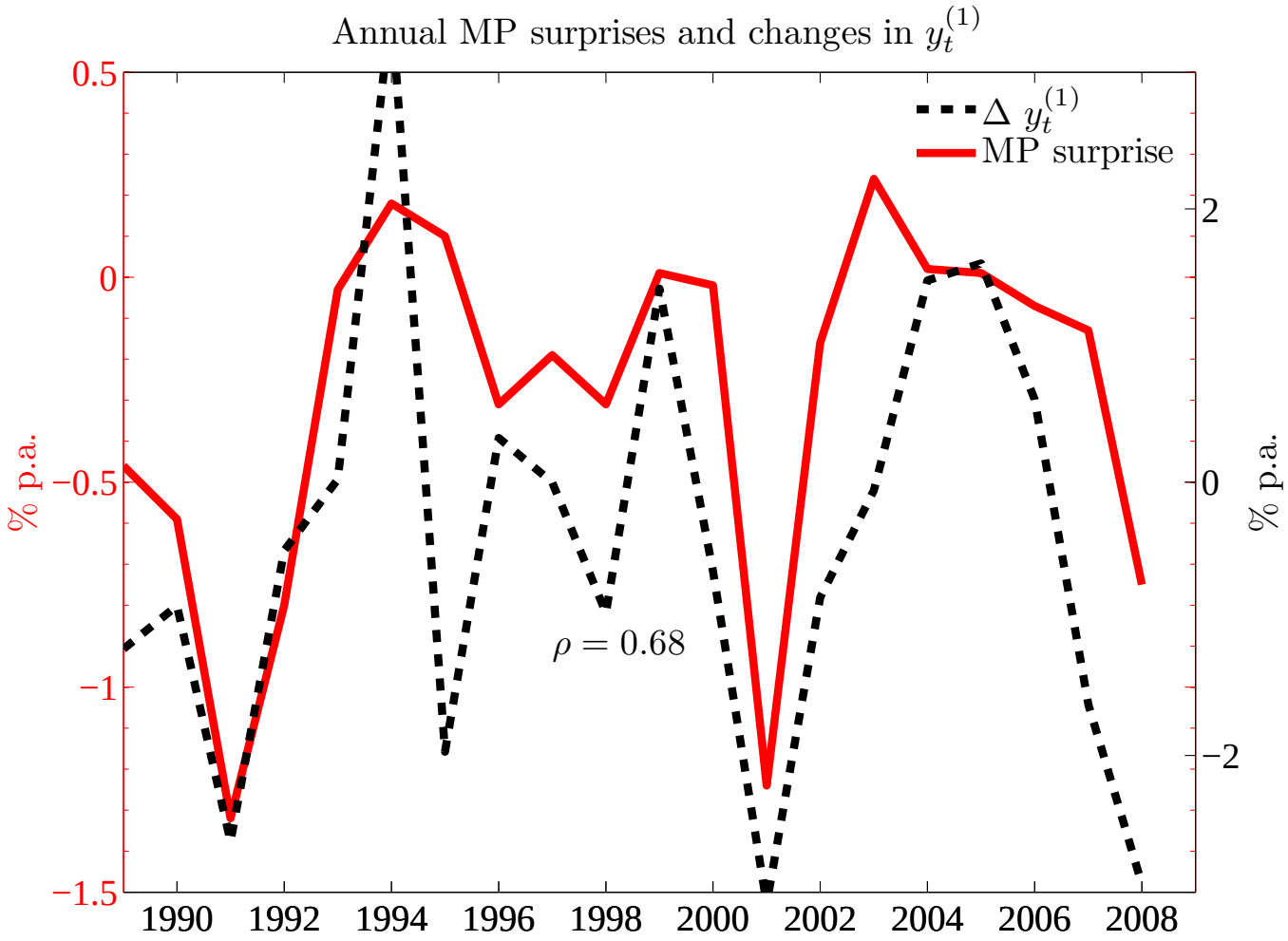
What is a surprise?

Most of the Fed moves are anticipated at the short horizon, average abs. surprise is 6 basis points



Alternative measures of MP surprises

Lower frequency measures of MP needed to tell apart the channels (e.g. financial constraints) $\Longrightarrow$ aggregate the FF surprises to annual freq. and compare to changes in one-year yield:



Alternative measures of MP surprises (cont'd)

★ corr $\left(\sum_{\text{year}} \Delta i^e, \sum_{\text{year}} \Delta i^u\right) = 0.77$ at annual freq. and 0.14 on FOMC days
$\Longrightarrow$ directional surprises (forecast errors)

★ Yield curve provides precise information for measuring MP, **Why?**

1. Variation in risk premia at the short end is negligible
2. Yield curve is largely backward-looking (information rigidities)

★ MP have sizable effect on credit supply (quantities versus prices)

★ Use yield curve-based surprises $\Longrightarrow$ lower freq. and longer sample

★ Informational frictions $\Longrightarrow$ distinction anticipated vs. surprises less important

Local interest rate channel?

- The setup **includes** the **local interest rate channel**: $\Delta i_{US} = \Delta i_{HK}$ and implicitly **excludes** the direct link: $\Delta i_{US} \rightarrow \Delta y^{HK}$ (e.g. portfolio balance channel)
- Local interest rate channel **a** and portfolio balance **p**:

$$\Delta y = (a + p)\, \Delta i + b \Delta s + w \tag{1}$$

- Only $(a + p)$ identified in a two-country setup $\Longrightarrow$ need more variation

Local interest rate channel? (cont'd)

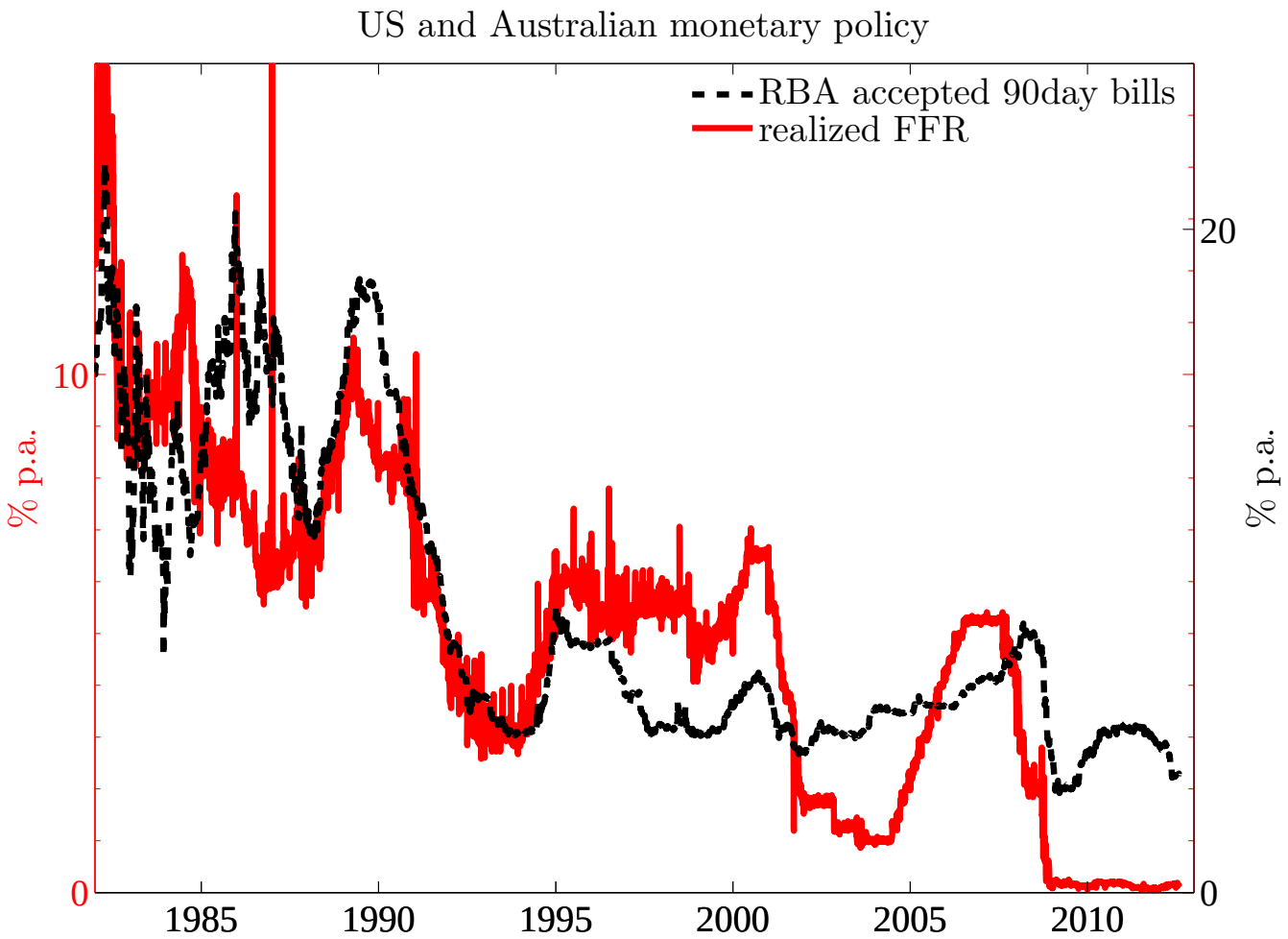
- Check with Australia: free capital flows & independent MP $\Longrightarrow$ no local interest rate channel
- Test the direct link $H_0 : (a + p) = 0$ **[a=0 by assumption, testing p=0]**:

$$\Delta y^{AU} = \underbrace{\textbf{(a+p)}}_{\textbf{-2.55 [-2.11]}} \Delta i^{US}_{surp} + \underbrace{b}_{-0.02\ [-0.22]} \Delta i^{AU}_{surp} + \underbrace{c}_{0.26\ [2.59]} \Delta y^{US} + \varepsilon^{AU}$$

$$\bar{R}^2 = 0.21$$

- Sample 1989-2008 (FOMC days), AU MP surprises are from the yield curve, adj. t-stats in parentheses
- Significant direct effect of US MP (p goes the same direction as a) $\Longrightarrow$ identification through currency board overstates the MP effect on stock returns

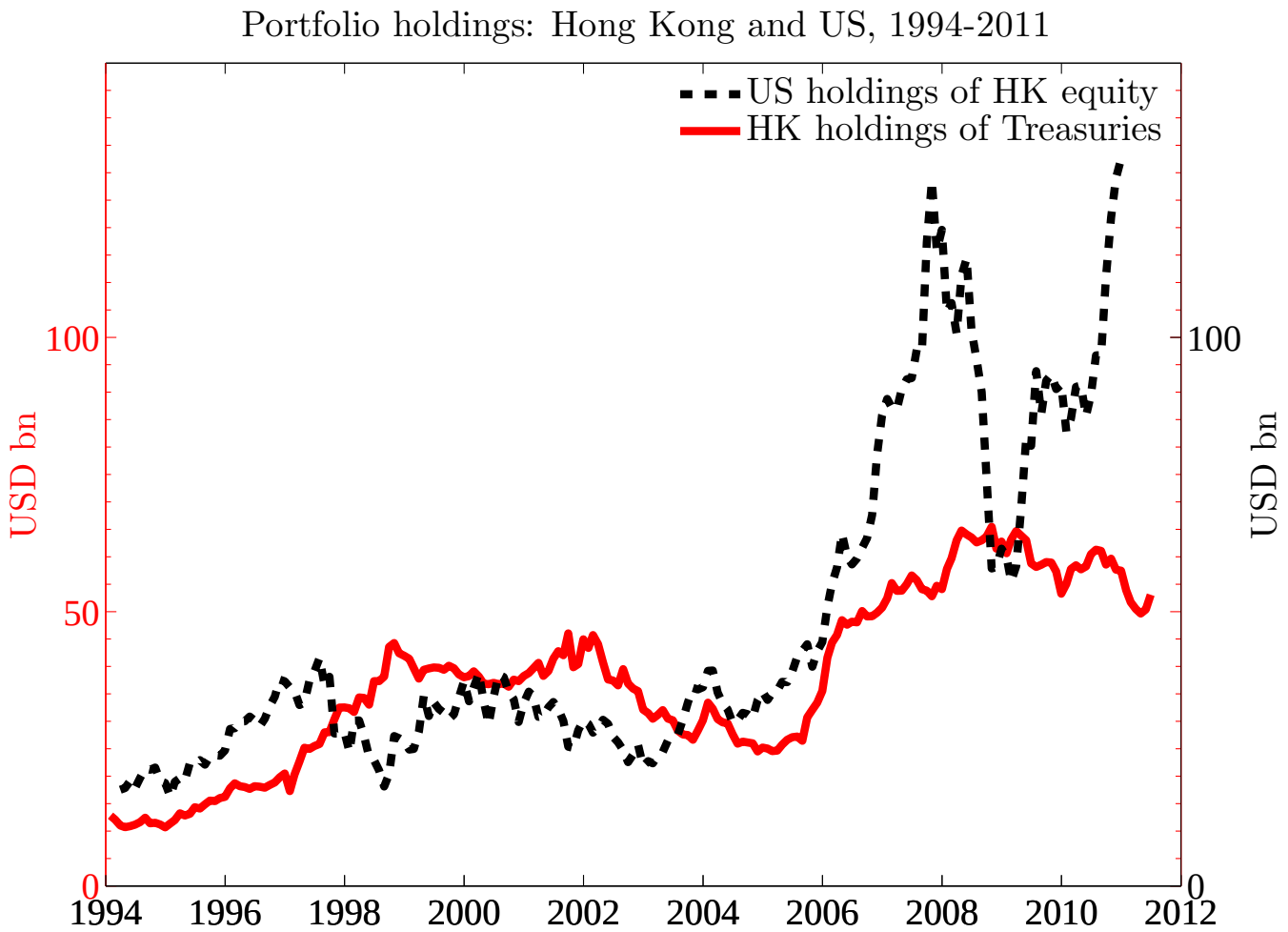
Australian and US monetary policy



Portfolio flows induced by MP?

- (Unconventional) MP in the US influences asset prices around the world: Fratzscher, Duca, and Straub (2012)
- Measure the exposure of emerging market equities to fund flows: Jotikasthira, Lundblad, and Ramadorai (2012) construct "Flow-Implied Fund Allocation Changes" (FIFA):
  1. FIFA has **price effects**
  2. Hong Kong has sizable exposure to fund flows from developed markets (high FIFA score)
- Panel regression with controls for different degrees of interest rate/currency pegs and flows?

Portfolio holdings



Source: Bertaut and Tryon (2007), TIC

Stock behavior on FOMC days

We have a collection of empirical facts:

- ★ **Anticipated MP:** US stock excess returns are 30 times higher on FOMC days than otherwise & returns accrue before the announcement
- ★ **Small caps:** Stocks in the 1st decile portfolio sorted by size do not react to anticipated MP
- ★ **CAPM:** CAPM is a good description of stock returns on FOMC days

but still need to link them.

Some recent literature

- **Event studies:** Lucca and Moench (2012) **[stocks earn high premium ahead of FOMC announcements]**, Savor and Wilson (2010), **[60% of of ERP earned on macro announcement days]**
- **Portfolio flows:** Fratzscher, Duca, and Straub (2012) **[Unconventional US monetary policy influences asset prices globally]**, Jotikasthira, Lundblad, and Ramadorai (2012) **[shock transmission through fund flows]**
- **MP and financial constraints:** Laeven and Tong (2012) **[global stock response to US MP, financial dependence]**, Ehrmann and Fratzscher (2004) **[separate credit and interest rate channel]**, Ammer, Vega, and Wongswan (2010) **[separate credit and interest rate channel, international data]**

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