

Osler & Turnbull: Dealer Trading at the Fix Discussion

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4pm Fix: Main FX benchmark price

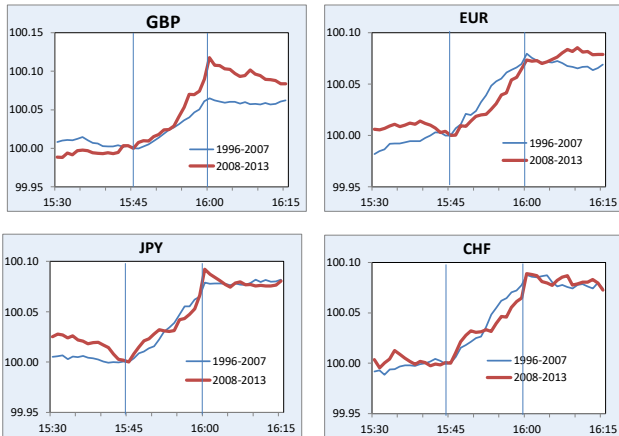
- Very nice paper on a very important topic
- New predictions on dealer-trading related to fix
- Benchmark prices are very useful
- Huge market: **Daily** spot volume (apr.16): USD tr 1.6
 - ▶ Financial customers: USD bn 930
- Usage of Fix?
 - ▶ Derivatives linked to Fix
 - ▶ Used for index-creation (MSCI)
 - ▶ Evaluation of international portfolios
 - ▶ etc.

Fix institutions

- Fix orders: No risk, no transaction cost, for customers
- Customers incentive: Minimize tracking errors in portfolios.
 - ▶ End-of month portfolio evaluations: Huge fix-orders
- **This paper:** Model trading behavior before the fix. “Free-riding” or “Banging”?
 - ▶ Free-riding: Trade early (and cheap)
 - ▶ Banging: Trade a lot “within the fix-window”
 - ▶ Concave vs. Convex price path before fix

Convex or Concave Price Path?

Figure: Prices around the fix

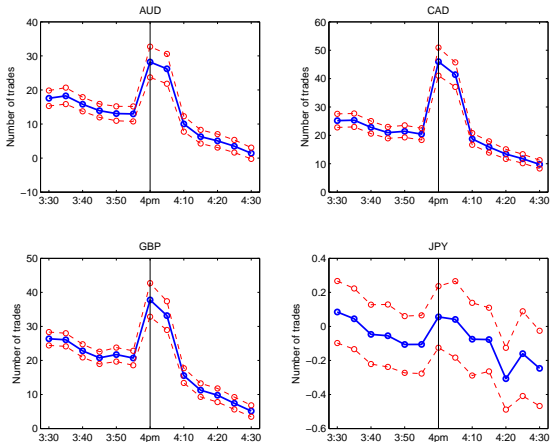


What do we know about the 4PM Fix I

4pm compared to other time-of-day.

(5min data)

Figure: Trading activity

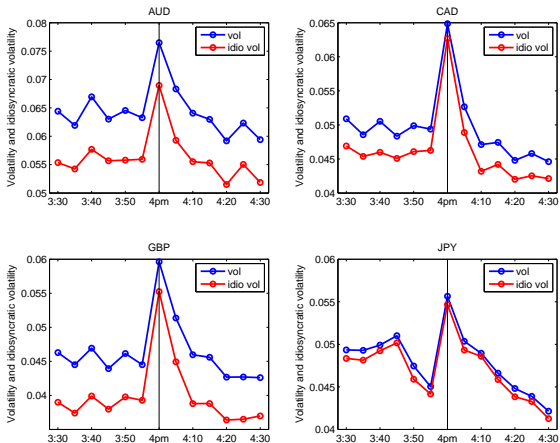


What do we know about the 4PM Fix II

4pm compared to other time-of-day.

(5min data)

Figure: Volatility and idiosyncratic volatility

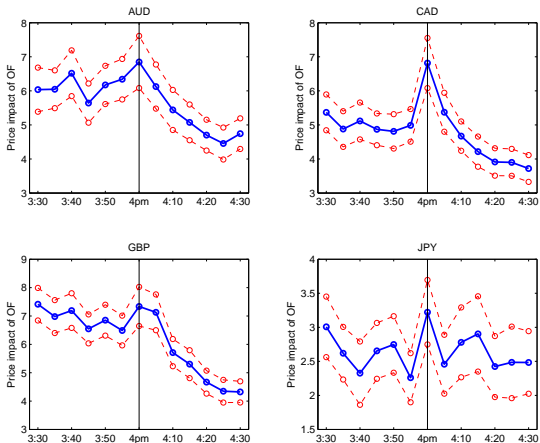


What do we know about the 4PM Fix III

4pm compared to other time-of-day.

(5min data)

Figure: Price impact of order flow

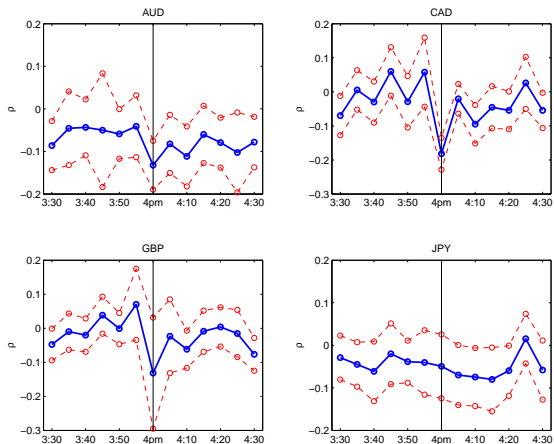


What do we know about the 4PM Fix IV

4pm compared to other time-of-day.

(5min data)

Figure: Autocorrelation of exchange rate changes

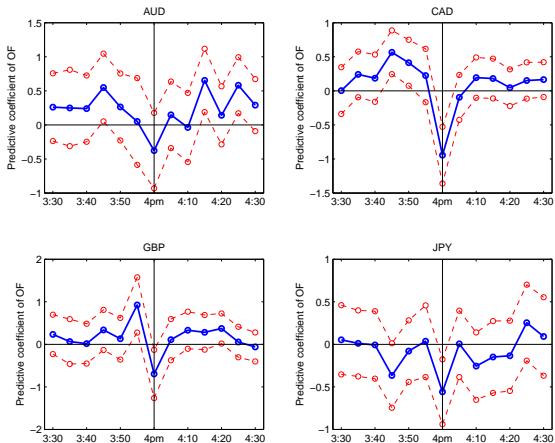


What do we know about the 4PM Fix V

4pm compared to other time-of-day.

(5min data)

Figure: Predictive power of order flow

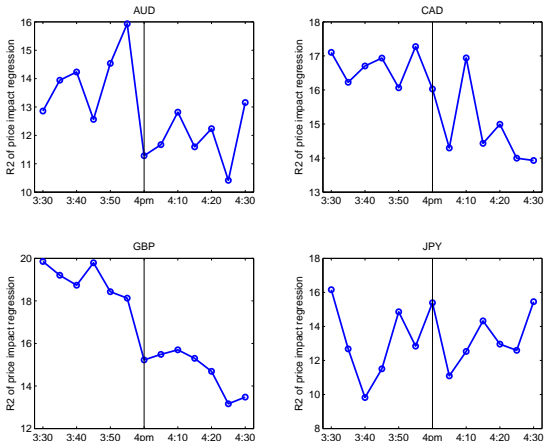


What do we know about the 4PM Fix VI

4pm compared to other time-of-day.

(5min data)

Figure: R^2 of order flow regression

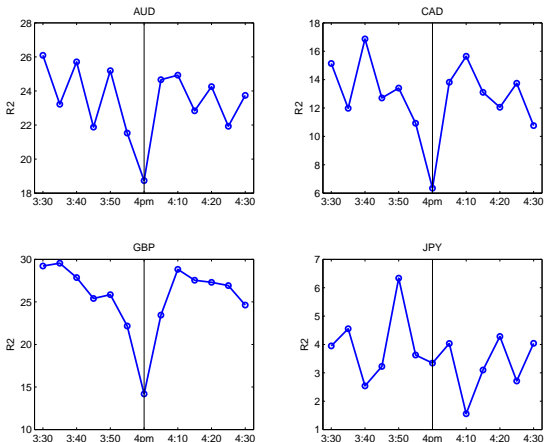


What do we know about the 4PM Fix VII

4pm compared to other time-of-day.

(5min data)

Figure: adj. R^2 from Factor Structure



Naïve perspectives

Fix orders are for free for customers, but imply risk for dealers: How to cover the cost?

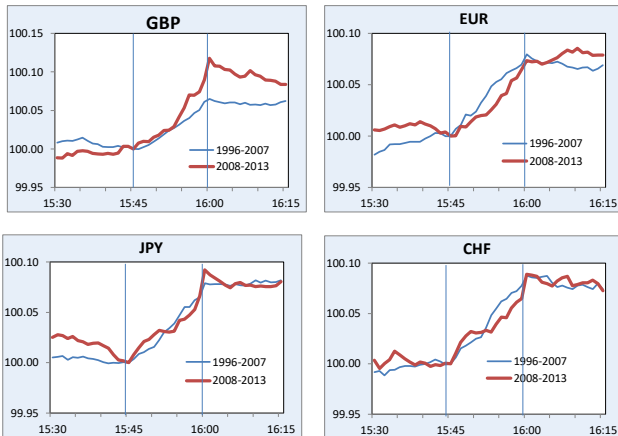
- No cost: trade all within fix-window! buy and sell at fix, but can't explain excess trading and post-fix reversal
- Trade sufficiently to move fix so that make a return (excess trading). Both pre-trading, volatility at fix, and reversal.
- **But what are the quantities?**
- **And: But who is on the other side!**

Is it a big problem?

- Size of fix-orders?
 - ▶ 1% of fin.volume end-of-month, 0.1% else?
- Overvaluation:
 - ▶ Say 2% end-of-month, 0.2% else?
- Cost: USD bn 1 in 2007!
- Fines so far? \$ bn7.5
(\$ bn1.7; bn2.5; mio850; bn1.2; 1bn.)

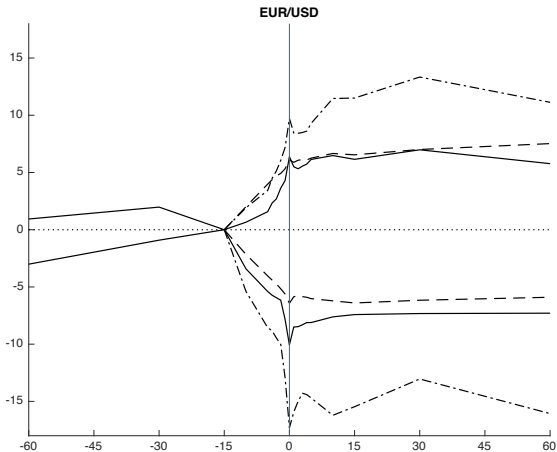
How much “excess” trading? I

Figure: Prices around the fix



How much “excess” trading? II

Figure: Prices around the fix



Modeling Fix is very hard!

Dealer behavior?

- Risk management vs. profit-seeking? Numbers are not clear

Price impact?

- Flow is (may be) predictable: Should it have price impact at all?
- Who is on the other side of the trades? Why any? Apparently many, but Price Impact high as well

Collusion:

- Difficult: Credible? How to punish deviations?
- Did “**Bandits Club**” accomplish anything?

Summary: Main contributions

- A very thorough discussion on dealer incentives
- Special focus on pre-trading:
 - ▶ Free-riding vs. Banging the close
 - ▶ Excess trading
- Concavity vs. Convexity in pre-trade price path
 - ▶ Interesting, but would better with Trading data
 - ▶ I would like to see more on the post-fix price evolution
- I learned a lot. Recommend reading.