Order flow and the real: Comments

Eric Girardin Aix-Marseille school of Economics

Topicality

- Several rounds of quantitative easing in the northern hemisphere
- Carry trades targeting southern-emisphere emerging economies
- Legitimate attempt by their governments to prevent the associated appreciation of their domestic currency

The paper

• Test of an indirect channel of effectiveness of sterilized intervention:

Damping the price impact of private trades

- Unique data det for emerging economy:
 - Exhaustive daily order flow for financial and nonfinancial customers over a decade for the real/\$ from 2002 onwards.

The paper

- Results:
 - Damping channel works: The price impact of private trades is lower on days of intervention than on days without intervention
 - Price impact of non financial customers much larger than for financial ones
 - Intervention is sterilized: Brazilian interest rate does not deviate from its target.
 - Size of intervention matters for damping.

Effectiveness of indirect intervention

- Effectiveness:
 - Weak:
 - Price impact of private trade is zero on days of intervention
 - Strong:
 - Price impact of private trade is zero even on days of no intervention
 - Semi weak? (This paper's result)
 - Price impact of private trade is lower on days of intervention than on days of no intervention

Strong not semi-weak?

- Financial customers' price impact
 - Never significant on its own (Tables 2,3, 4 col.IV)
 - Full sample as well as on day with/without intervention => strong effectiveness?
 - Significant only when non-financial flows included (Tables 2,3, 4 col.II and VI)
 - Multicolinearity?
 - » Full sample correlation between the two flows: '- 0.213'
 - Lack of price impact
 - Leveraged vs. unleveraged financial customers
 - Opposite price-impact coefficients may cancel out?
 - Were they on the same side of the market as the BCB?
 - Need of disaggregation of financial customers' flows?

Break 2005?

Net Banco Central interventions (\$ million)



BCB intervention and the Real (Monthly 2000-2012)



Issues (I) before 2005

- Validation with other data?
 - Yen-dollar 2002-2004, Citybank daily data
 - Financial customers' price impact
 - No price impact of unleveraged customers during the Great Intervention on the yen in 2003
 - Significant price impact of leveraged customers during the same period (Girardin and Lyons, 2008) but they were buying dollar!
- Missing variable in the real/dollar estimates?

– Quantitative easing by the Bank of Japan

The real-dollar returns: daily Citi customer order flow (\$ purchase against yen) and Japanese QE

 Rise in Jap. Banks' Excess reserves appreciates the real Non financial customer' order flow significant Dollar purchase appreciates dollar vs. Real Same sign as in Kohlscheen's paper 	Oct 2002- May 2004	∆Banks' Excess reserves with BOJ	Non financial order flow (-2)	Financial order flow	Unleve- raged order flow	Levera- ged order flow
	ΔL Real/\$	-0.0015	0.0012		0.0005	0.0007
	[P-value]	[0.04]	[0.00]		[0.19]	[0.02]
 Aggregate financial customer order flow significant 						
	$\Delta LReal/$$	-0.0018	0.0012	0.0006		
 but smaller effect than nonfinancial as in Kohlscheen's paper But unleveraged 	[P-value]	[0.04]	[0.00]	[0.01]		
	Citi	bank	Daily	data	Garch (1,1)	
insignificant						

•while leveraged significant

Issues (II) from 2005 onwards

- Missing variables?
 - Direct effects of BCB intervention
 - Left out in the paper's specification
 - Because insignificant in preliminary tests?
 - Or too highly correlated with customer order flow?
 - Effects of US quantitative easing
 - driving some (financial) customer order flow?

US Quantitative easing, BCB intervention and the real (Weekly data)

 Rise in US banks' Excess 				
reserves with Fedappreciates the real	5 May 2009 27 Dec 2010	∆bank reserves	BCB intervention	∆VIX (-1)
•After 2 weeks		(-2)	(-1)	
 Direct effect of BCB intervention 	DL(Real/\$)	-0.007	0.0005	0.127
 Dollar purchase appreciates dollar after 1 week 	[P-value]	[0.05]	[0.06]	[0.00]
 Same size of impact as for customers in Kohlscheen's 	R2Adj: 0.15			
paper.	Weekly	data	(85 obs.)	
 Global uncertainty Rise in VIX 				

•depreciates the real after 1 week

Issues (III) before and after 2005

- Missing variables?
 - Long-run relationship between Fx rate and nonfinancial customer order stock (Wu, 2010)
 - Documented for the 2002-2010 period for non-financial customers
 - but left out in the paper's specification