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# Tanzania: Exchange Rate Dynamics

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# Outline

- What's happening to the exchange rate in Tanzania?
- A focus on the capital account and market structure
- Looking forward – research approach and possible policy directions
- Relevance beyond Tanzania

Strong commitment to a floating regime but are we seeing a decisive change in real exchange rate dynamics?

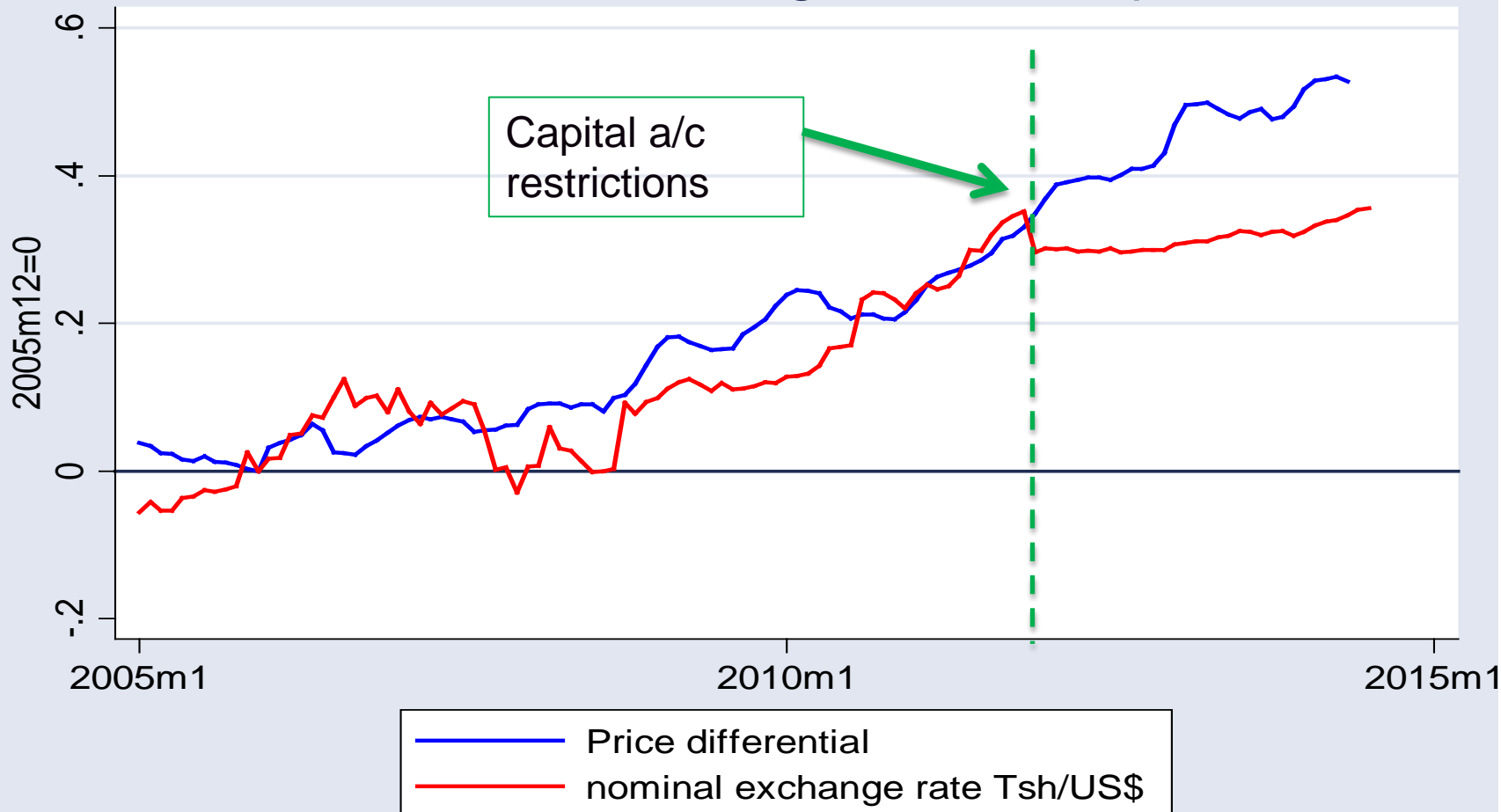
## Tanzania: Nominal and Real Effective Exchange Rate [increase implies depreciation]



— Log nominal effective exchange rate  
— Log real effective exchange rate

An informative episode: post 2011 'East African stabilization' episode, behaviour in IFEM (and money markets) changes.

Tanzania: real exchange rate decomposition



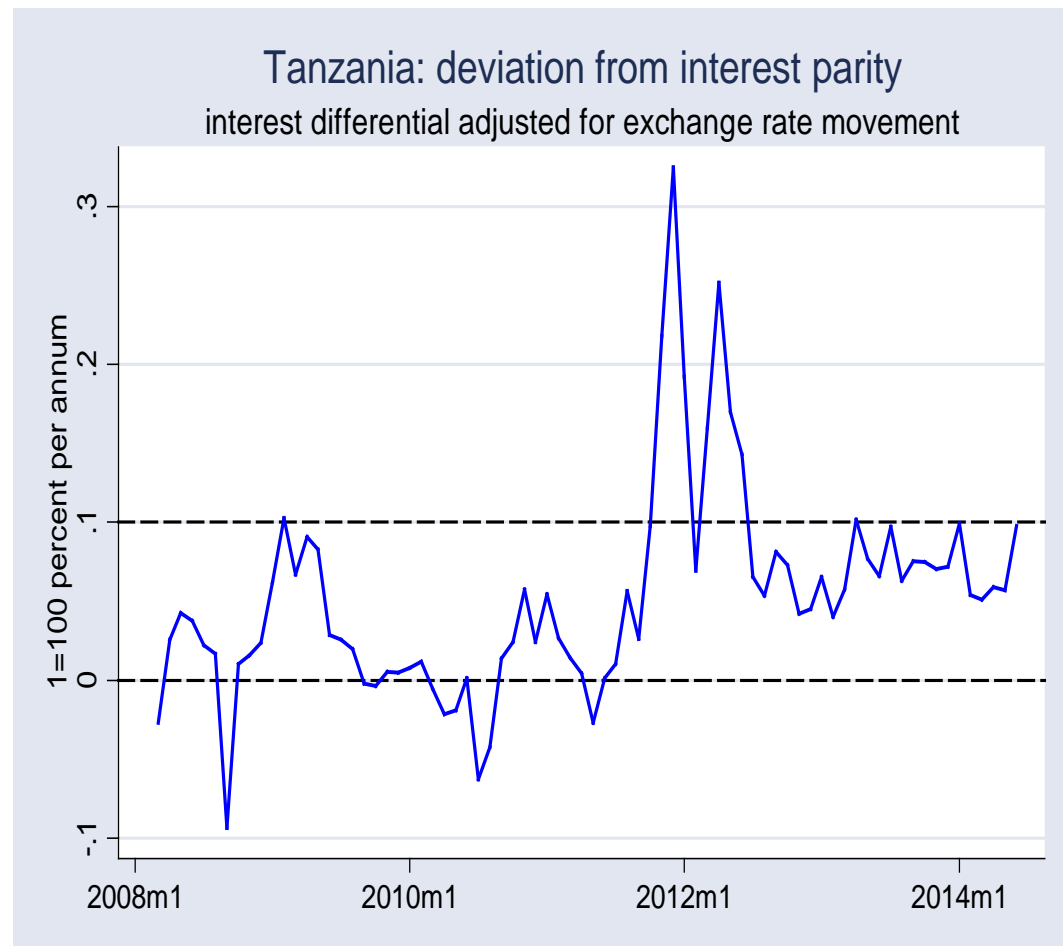
## Coordinated stabilization actions by central bank Governors of Kenya, Uganda and Tanzania in October 2011

- BoT tightens rates and:
  - reduces maximum net open position;
  - restricts T.Shilling funding to non-resident customers;
  - closes many derivative channels.

## Evidence suggests sharp and sustained jump in country risk premium / carry-trade gains...

Accompanied by:

- Increased interest rate volatility (absolute and relative to exchange rate)
- Increase in banks' excess liquidity.



## Policy choices and market structure?

- What does this episode tell us about the capital account and capital account liberalization in exchange rate determination in Tanzania?
- What role market structure (in forex and money markets)?
- What role BoT liquidity management / intervention play?
- Research approach: ‘conventional’ macro approaches to exchange rate determination combined with high-frequency transaction level data from 2010 to 2014.

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# Supplementary Slides

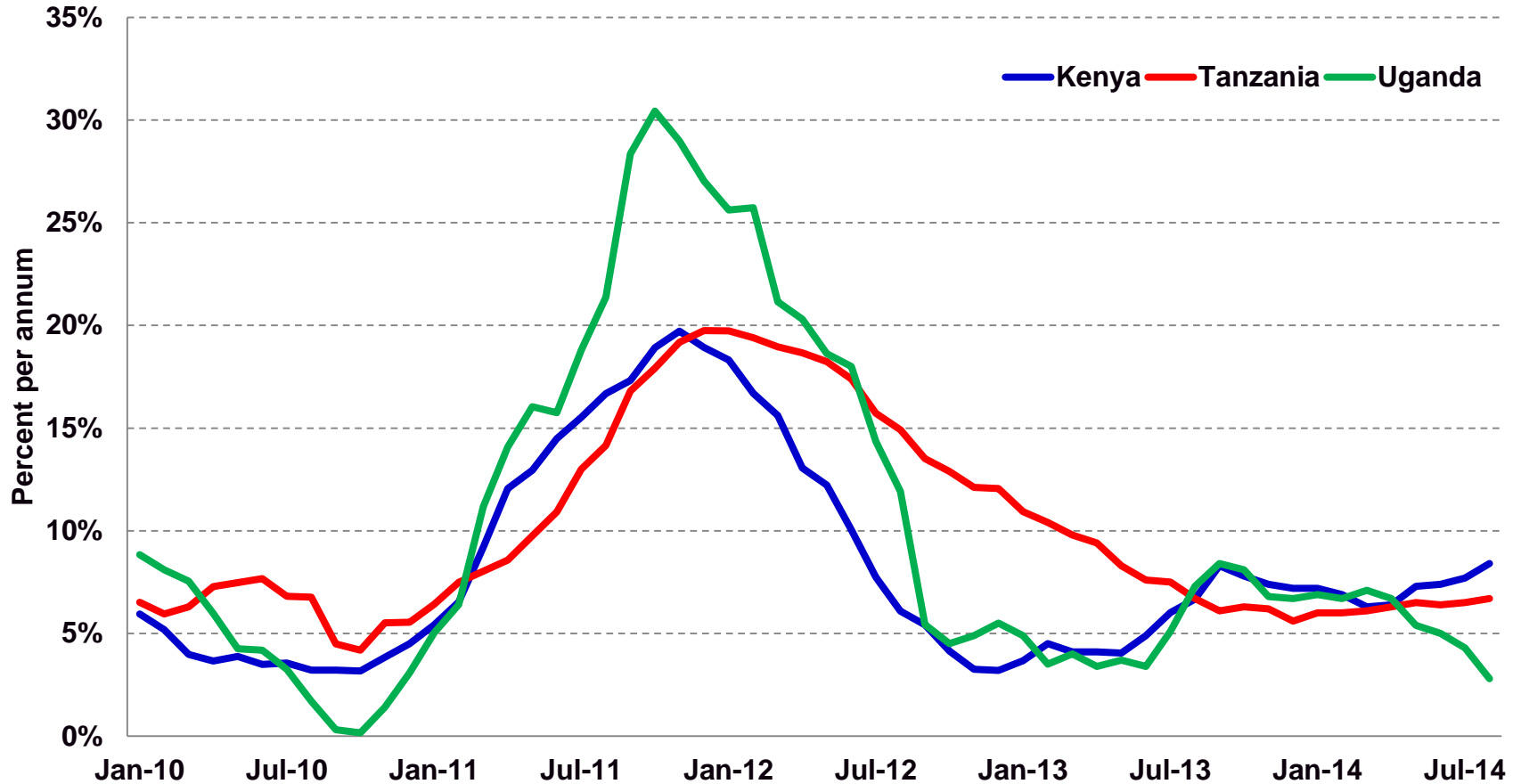
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## So, what does this episode tell us and how do we use this?

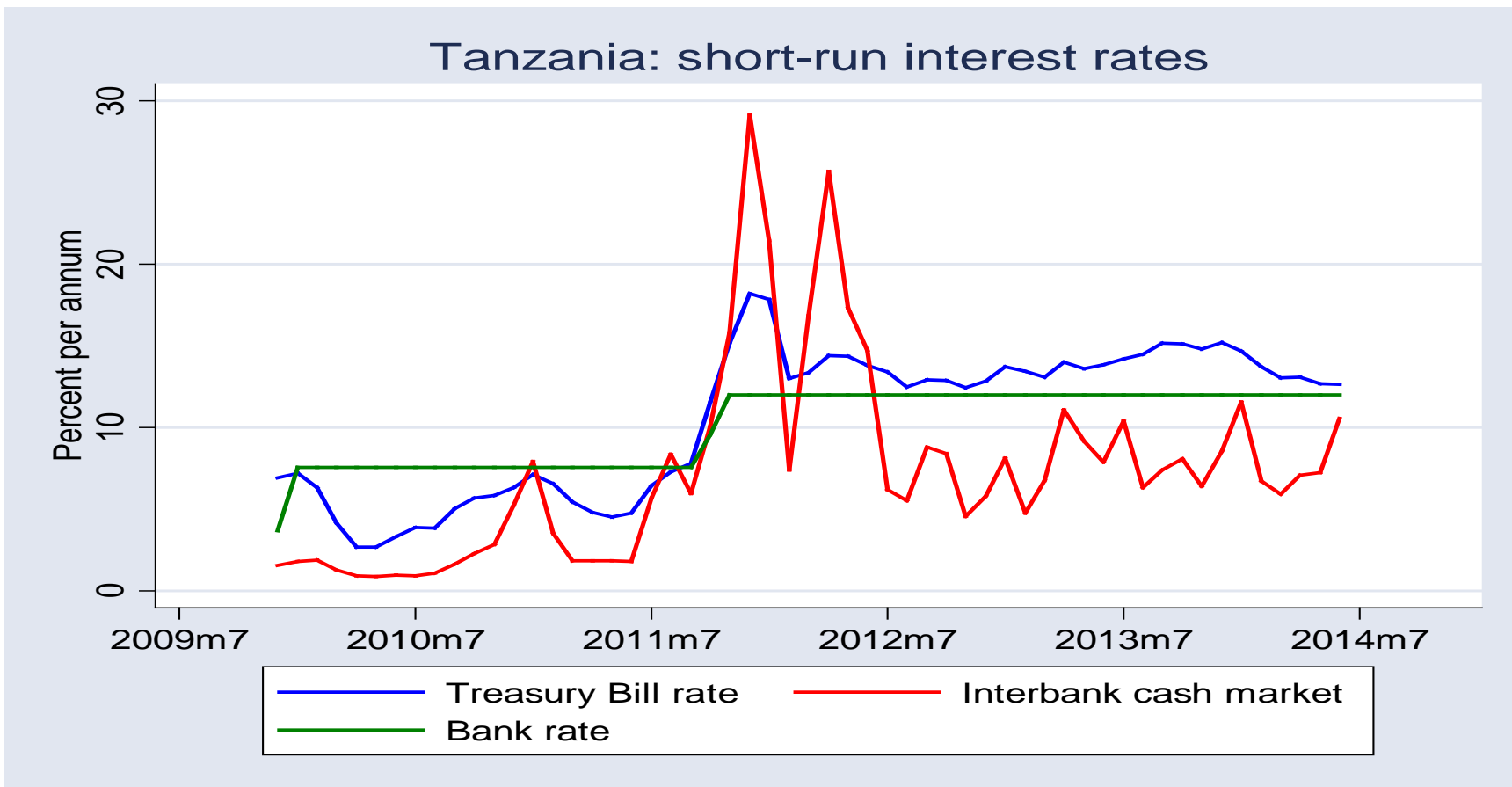
- Role of Float since 1993, first through auctions then creation of interbank foreign exchange market (IFEM) in mid-2000s.
- ‘Two-way’ pricing introduced from 2006.
- Government, through BoT, a structural net seller to IFEM for liquidity management purposes.
- Policy reforms vs micro-structural characteristics of the market?

# Coordinated stabilization actions by central bank Governors of Kenya, Uganda and Tanzania in October 2011

## EAC Headline Inflation 2010-14



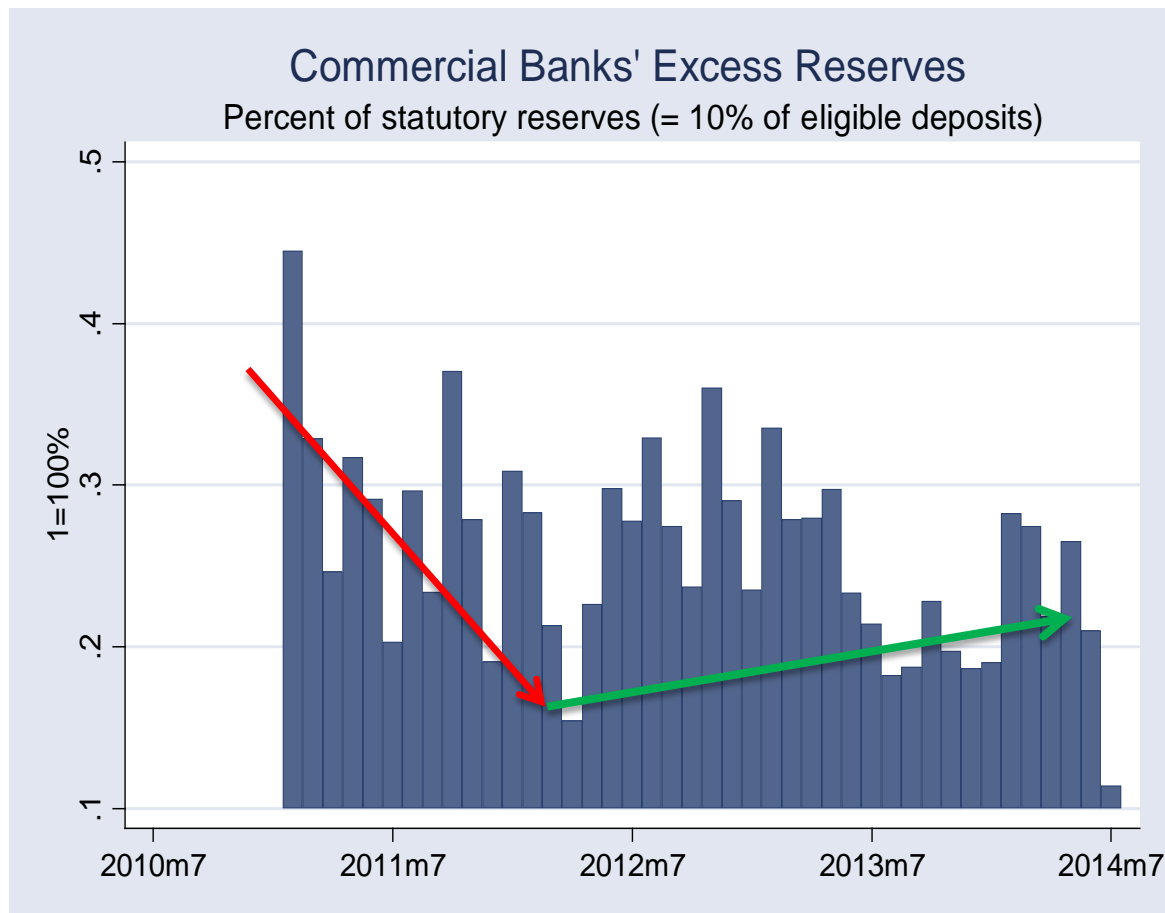
## Coordinated stabilization actions by central bank Governors of Kenya, Uganda and Tanzania in October 2011



...continued volatility in domestic interest rates and a reversal of the trend decline in excess reserves...

$\sigma^2(r)/\sigma^2(e)$

2009	75
2010	88
2011	28
2012	177
2013	125
2014	140



## Bank Concentration Ratios

	2005		2014	
	IFEM	IFEM	RETAIL All	Finance
CR(3)	53%	39%	38%	55%
CR(5)	68%	51%	55%	75%
H- Index	12.6%	7.6%	8.1%	14.2%

## Bank of Tanzania IFEM reaction functions

Dependent variable:  $\Delta\text{BoT\_net\_sales}(t)$

	Daily		Weekly		Monthly	
	[1]	[2]	[3]	[4]	[5]	[6]
Deviation from planned sales(t-1)	<b>-0.45***</b>		-		<b>-0.08</b>	
			<b>0.17**</b>			
			*			
positive		<b>-0.61***</b>		<b>-0.15***</b>		<b>-0.09</b>
negative		<b>-0.33**</b>		<b>-0.39</b>		<b>0.10</b>
Order flow(t)	<b>0.005</b>		<b>0.001</b>			
Interest rate differential (t)	<b>-0.008</b>		<b>-0.006</b>			
<b>R-square</b>	<b>0.19</b>	<b>0.21</b>	<b>0.07</b>	<b>0.08</b>	<b>0.12</b>	<b>0.13</b>