

# **Retail CBDC: Macroeconomic or Political Risks?**

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# Introduction

Risks of retail CBDC

Macroeconomic risks

Political risks

Based on 2018–2021 work, including with **M. Brunnermeier**

References at end; papers available at [www.niepelt.ch](http://www.niepelt.ch)

# Risks of Retail CBDC

Government stifles innovation

Government monitors all payments

Developed economy CBDCs lead to 'dollarization' elsewhere

Macroeconomic instability?

- Disintermediation, runs, credit crunch
- State banking

# Macroeconomic Risks

Status quo

Central bank	Commercial banks	Non-banks
	Res	
	Res	
		Dep
		Dep
		Cash

# Non-banks exchange deposits into CBDC

Central bank		Commercial banks		Non-banks	
	Res-	Res-			
			Dep-	Dep-	
	Cash			Cash	
	CBDC+			CBDC+	

# Non-banks exchange even more deposits into CBDC

Central bank		Commercial banks		Non-banks	
	—	—			
	Cash		Dep— —	Dep— —	
	CBDC++			Cash	
CB loan+			CB loan+	CBDC++	

## Conclusion from balance sheets

- Bank assets unchanged except for reserves

Credit, investment not affected

- Deposits (net of reserves) replaced by central bank loan

Central bank refinances Wall street—not Main street

## Result in fully specified dynamic models

- ▶ Central bank can insulate banks and macro economy from effects of retail CBDC introduction

## Caveats

Macroeconomic neutrality of retail CBDC requires

- Same 'liquidity' per resource costs of deposits and CBDC
- Interest on CBDC corresponds to interest on deposits
- Substitutability of deposits and loan as source of funding

Collateral for loan corresponds to collateral for deposits with implicit LOLR guarantee

Interest on loan corresponds to deposit financing costs



# Political Risks

## Funding Costs

What if central bank charges non-equivalent loan rate?

Equivalent loan rate,  $R^l$ , satisfies

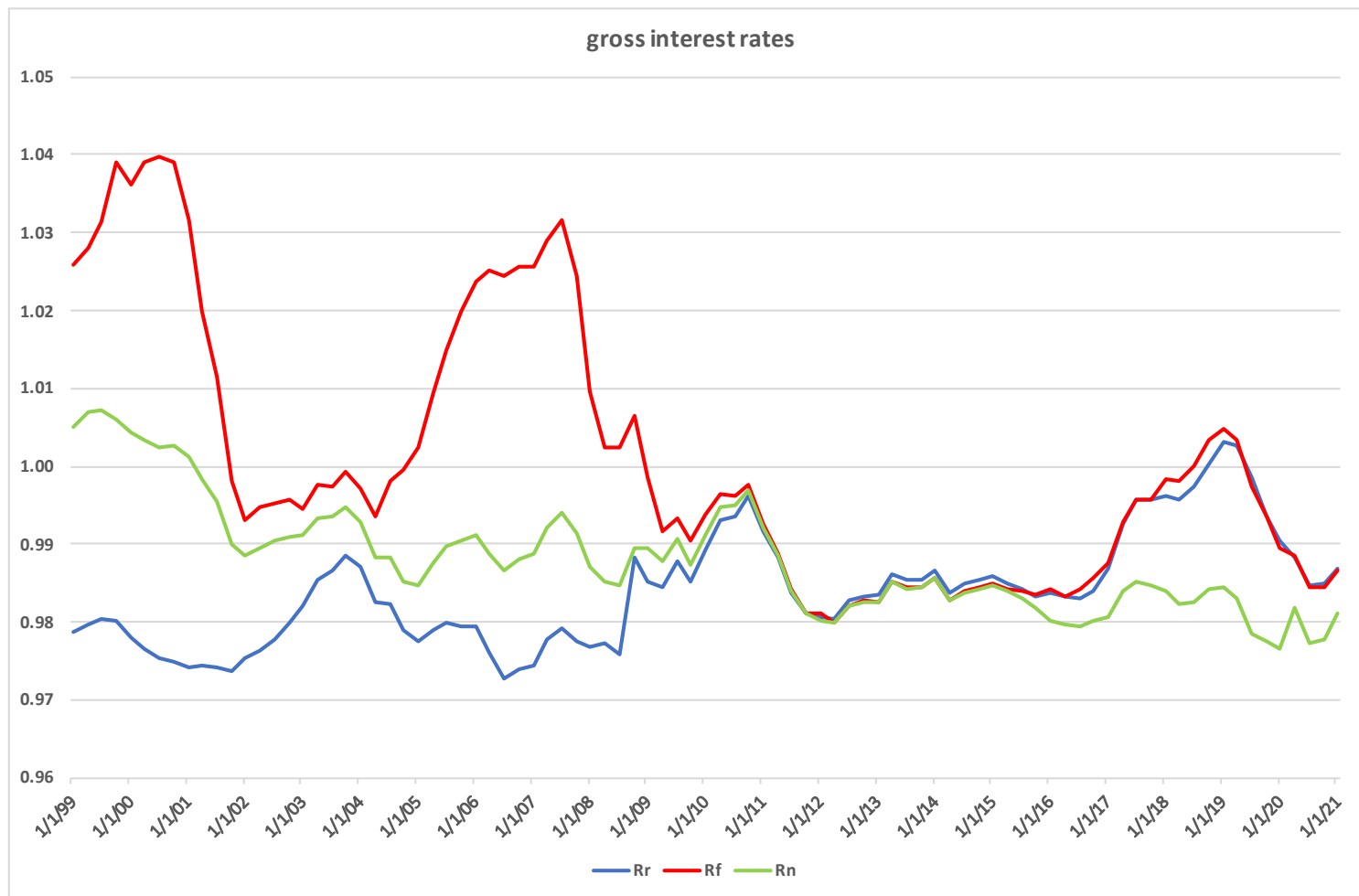
$$R^l(1 - \zeta) = R^n - \zeta R^r + \text{deposit mgt unit costs}$$

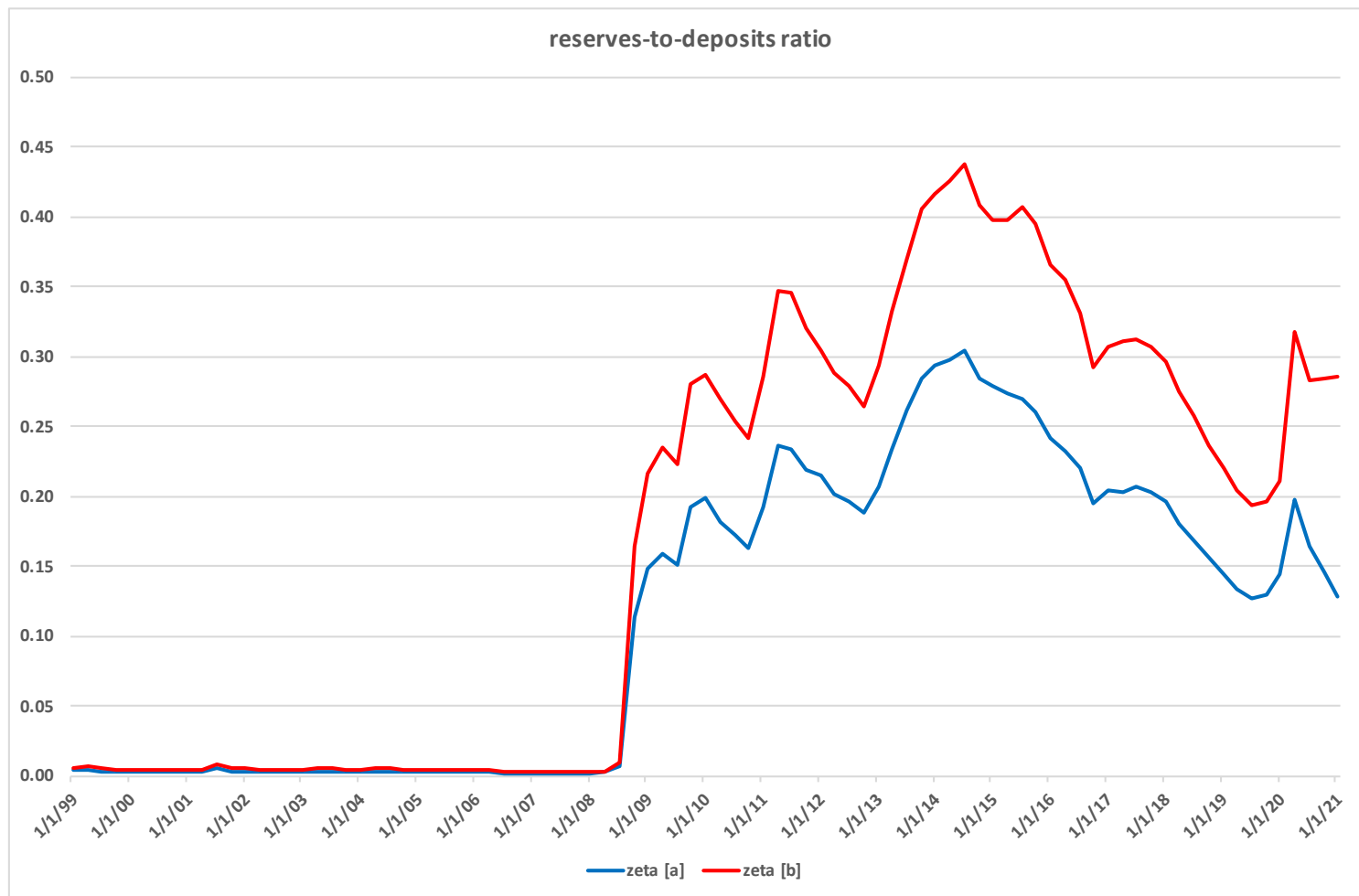
$R^l, R^n, R^r$  : (gross) interest rates on loan, deposits, reserves

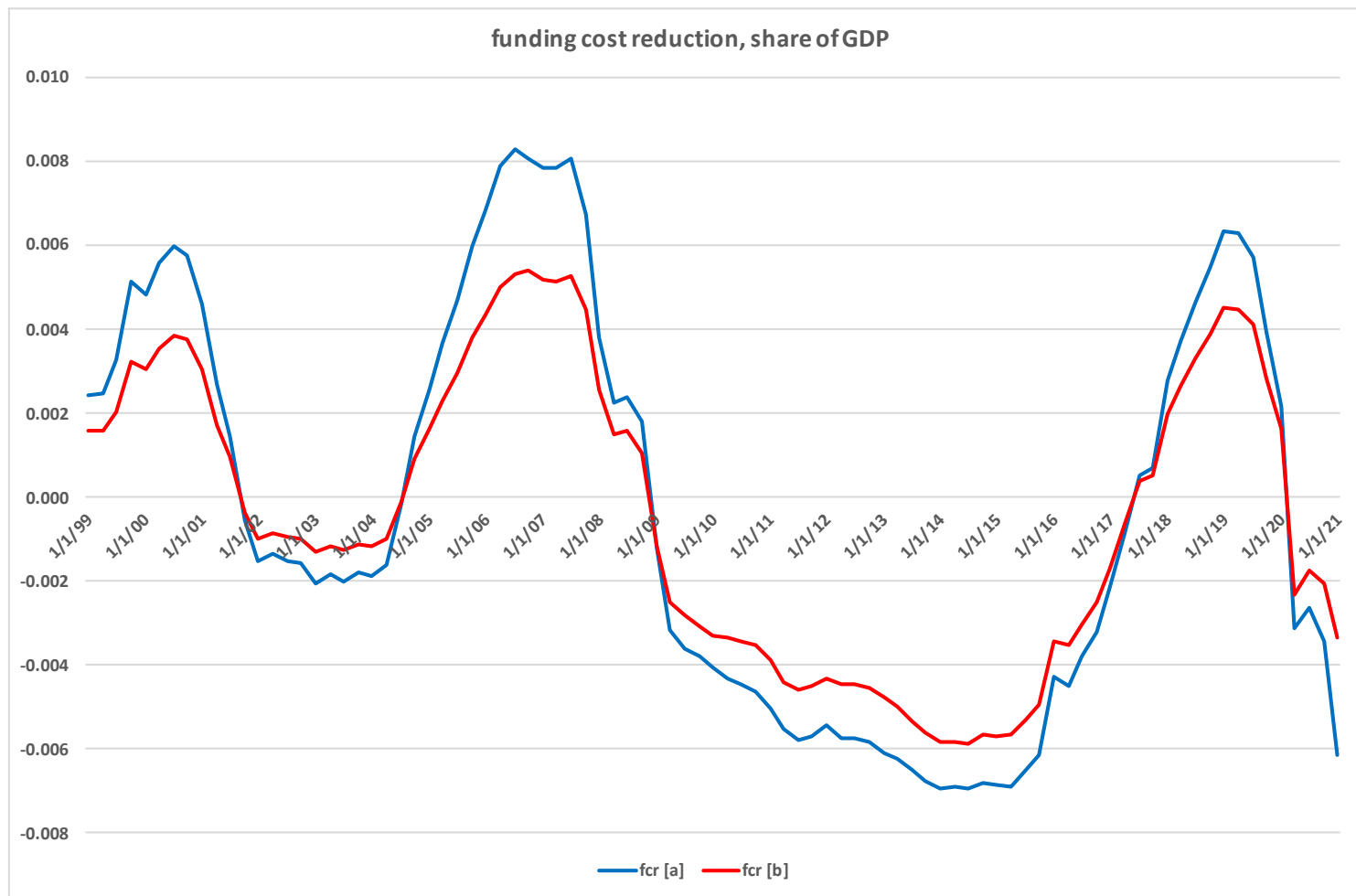
$\zeta$  : reserves to deposits ratio

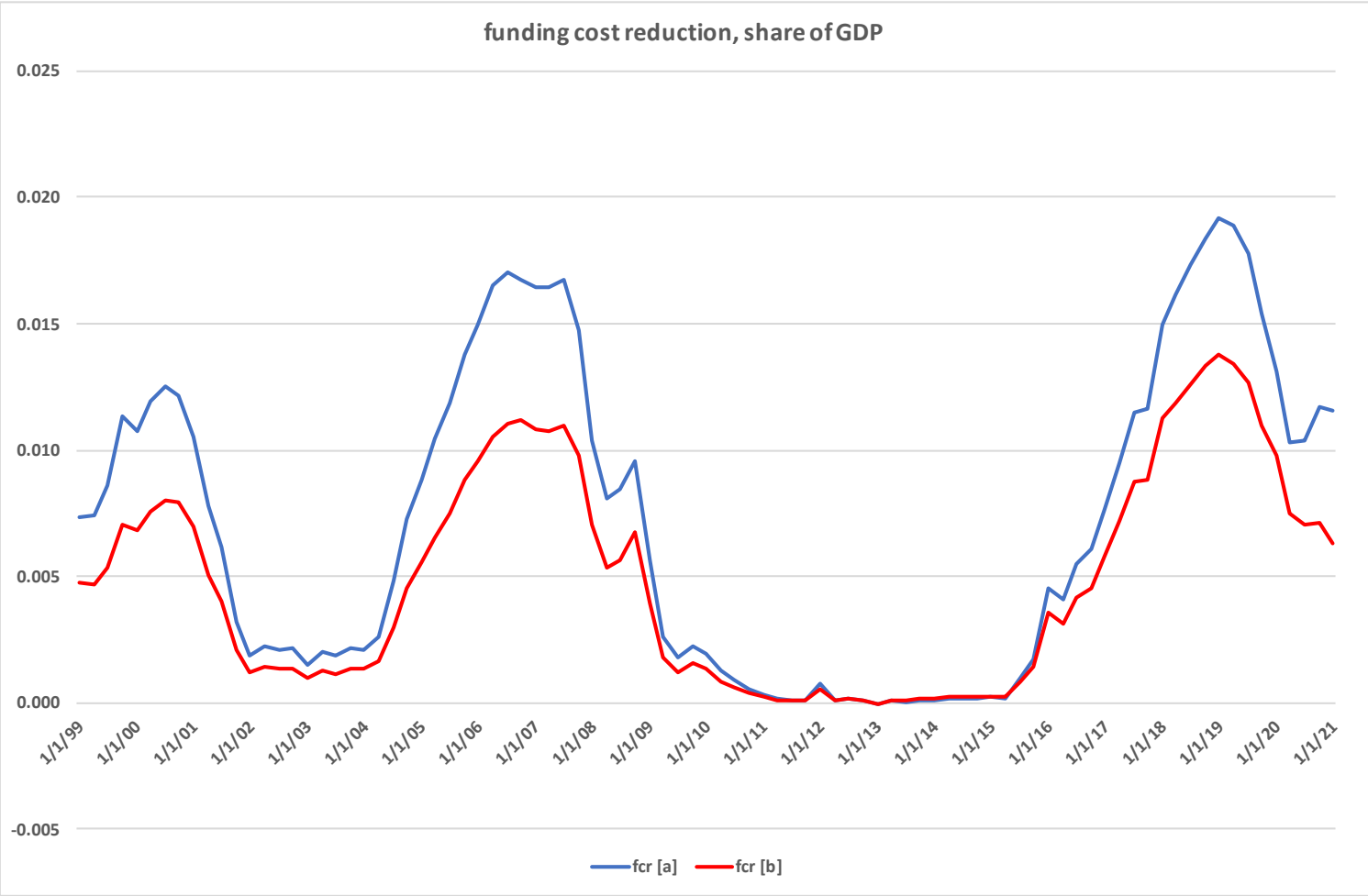
‘Funding cost reduction at risk’

$$\text{fcr} \equiv \frac{R^f - R^l n(1 - \zeta)}{R^f} \frac{1}{\text{GDP}}.$$









## Conclusion from funding cost analysis

- Banks would have time-varying and at times strong incentives to lobby central bank
- So would taxpayers
- More politicized (central) banking

## Other Political Risks

'Reserves for All' could trigger demands for more

- OMOs beyond select counter parties, assets (Cecchetti and Schoenholtz, 2018)

'Double standards for Main street vs. Wall street'

New credit risks on central bank balance sheet

- LOLR support for 'systemically important,' 'illiquid' firms (Tucker, 2017)

## Longer central bank balance sheet

- Expectation of high, stable seignorage revenue (CH)
- Demands for more
- Conflict between taxpayers, creditors, central bank debtors

## New powers for monetary authority

- Cash under political pressure because of network effects
- Lower privacy in payments, weaker effective-lower-bound constraint

More muscular and conflictual monetary policies



# Concluding Remarks

Retail CBDC with wide-ranging economic consequences

- Pilots, research in last years have improved understanding
- Parliaments and voters must decide, not central banks

Macroeconomic risks appear manageable

- Central bank can channel CBDC funds back to banks

What about political risks?

- Large 'funding cost reduction at risk,' risks of politicization
- Countries' political institutions determine CBDC risks

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