

# Interest Rate Risk in an Inflationary Environment

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Q1 2023

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# Agenda

1. A Macroeconomic Recap
2. Impacts on Balance Sheets
3. Implications
  - 3.1 Internal implications for banks
  - 3.2 Will regulations change?
4. Looking forward
5. Main take-aways
6. Q&A

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**Post a word which summarizes the past year in terms of the interest rate and inflationary environment.....**

① Start presenting to display the poll results on this slide.

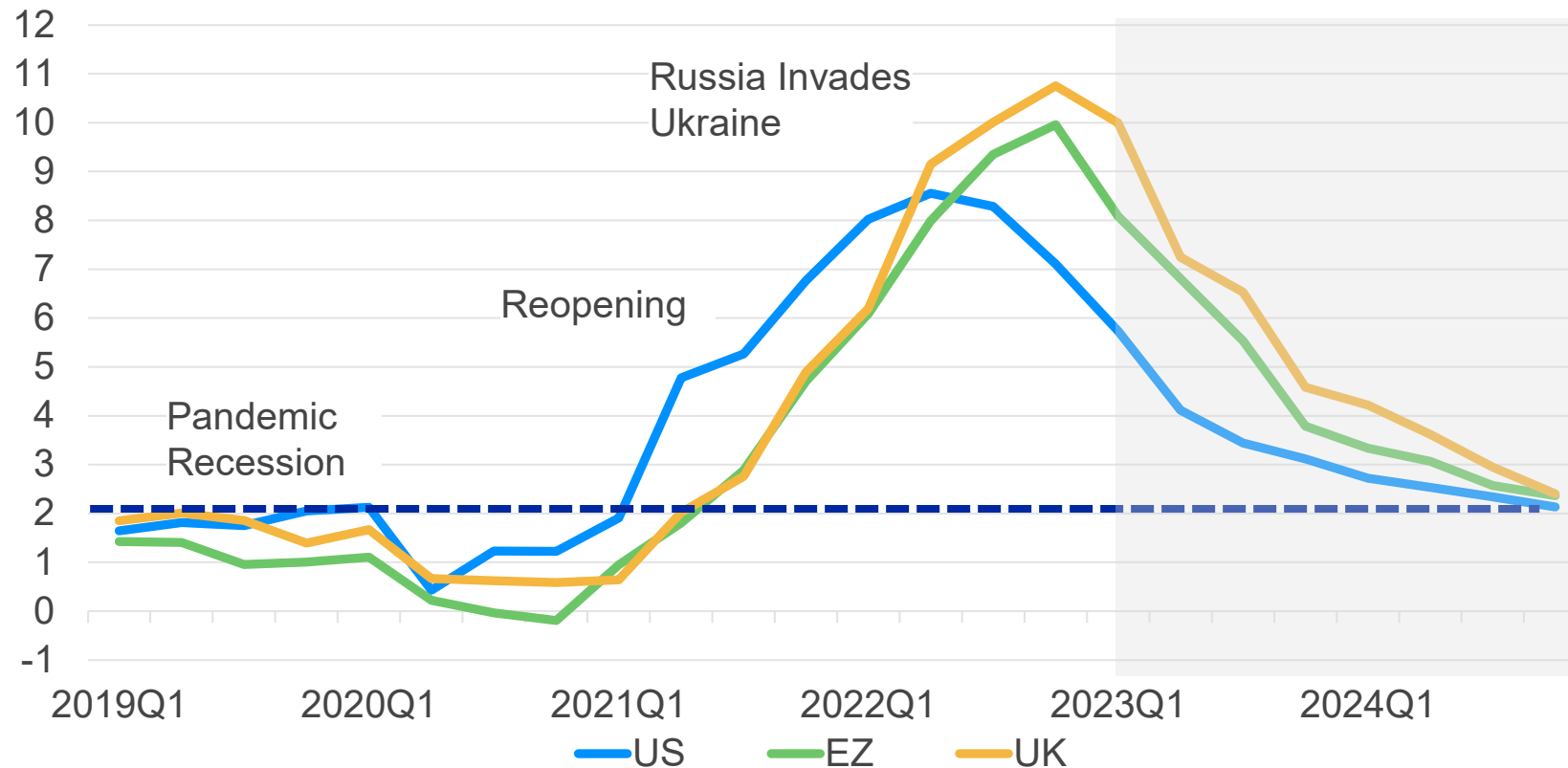
1

A macroeconomic recap

# Macroeconomic recap

Rapidly climbing inflation took it way above central bank targets...

Consumer Price Inflation year-on-year %



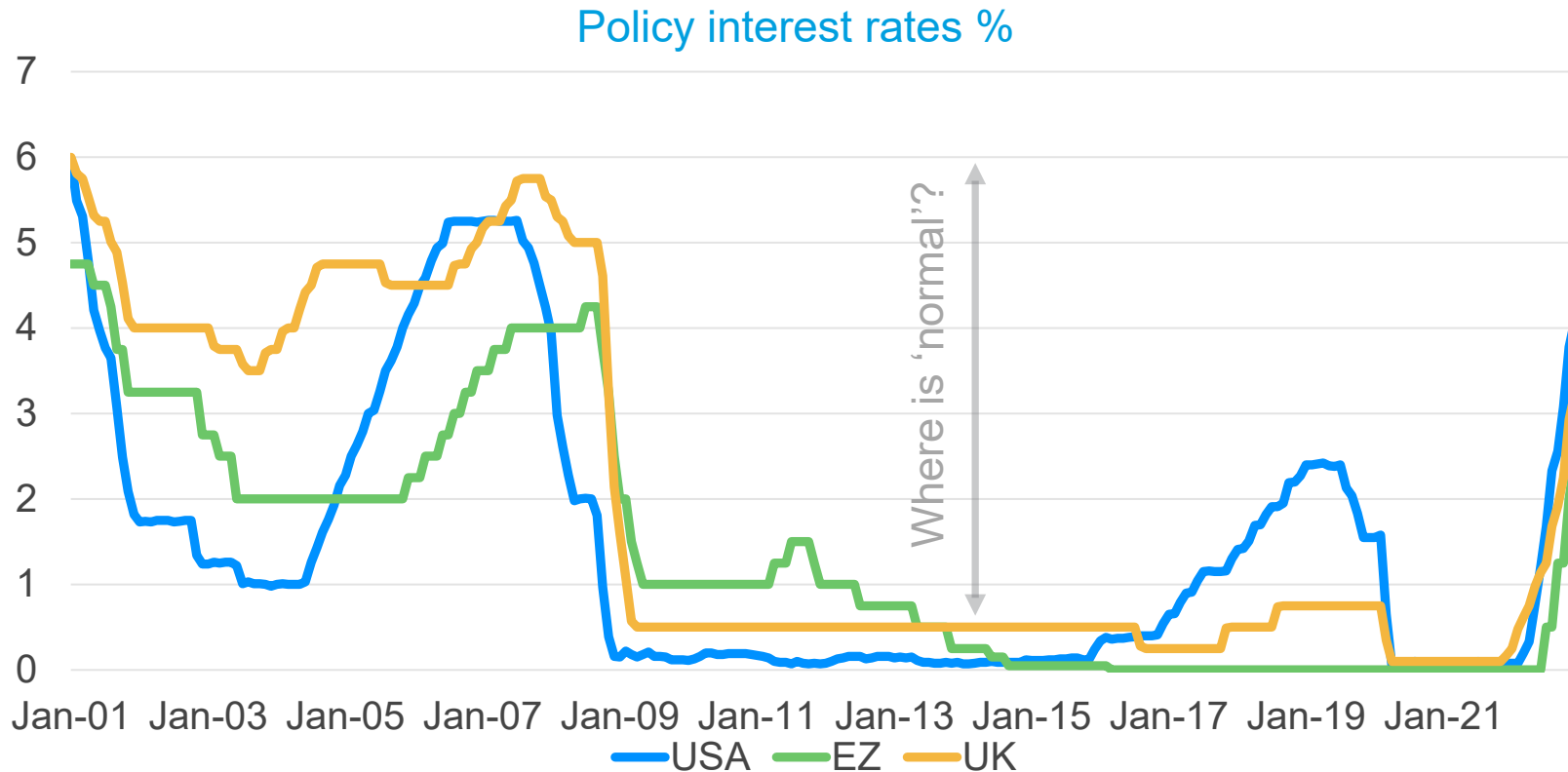
## Inflation is above target

- » A major policy tool is the central bank rate
- » Inflation climbing combined with other factors meant central banks were forced to act quickly

Sources: Moody's Analytics

# Macroeconomic recap

Causing central banks to hike interest rates fast...



## Rate Cycle

- » Rate levels are **not** unprecedented
- » Worth emphasizing:

When rates are rising this is generally  
GOOD for commercial & retail banks  
NIM!!

As they can often re-margin assets faster than liabilities

- » But the magnitude and speed of change **did** take banks by surprise

Sources: US Federal Reserve, Bank of England, ECB, Moody's Analytics

# Macroeconomic recap

The magnitude exceeded regulatory rate shocks...

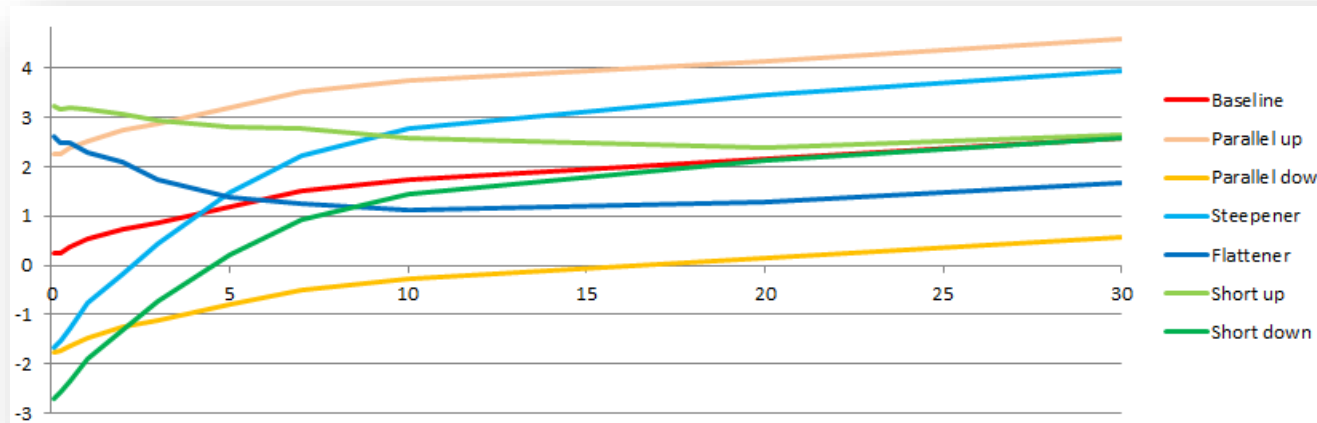


Table 1. Specified size of interest rate shocks  $\bar{R}_{shocktype,c}$

	ARS	AUD	BRL	CAD	CHF	CNY	EUR	GBP	HKD	IDR	INR
Parallel	400	300	400	200	100	250	200	250	200	400	400
Short	500	450	500	300	150	300	250	300	250	500	500
Long	300	200	300	150	100	150	100	150	100	350	300

	JPY	KRW	MXN	RUB	SAR	SEK	SGD	TRY	USD	ZAR
Parallel	100	300	400	400	200	200	150	400	200	400
Short	100	400	500	500	300	300	200	500	300	500
Long	100	200	300	300	150	150	100	300	150	300

## Rate Cycle

- » Parallel shock set at 2-2.5% for major currencies
- » Note that Regulatory rate shocks are assumed instantaneous

Source: BCBS IRRBB Standards April 2016



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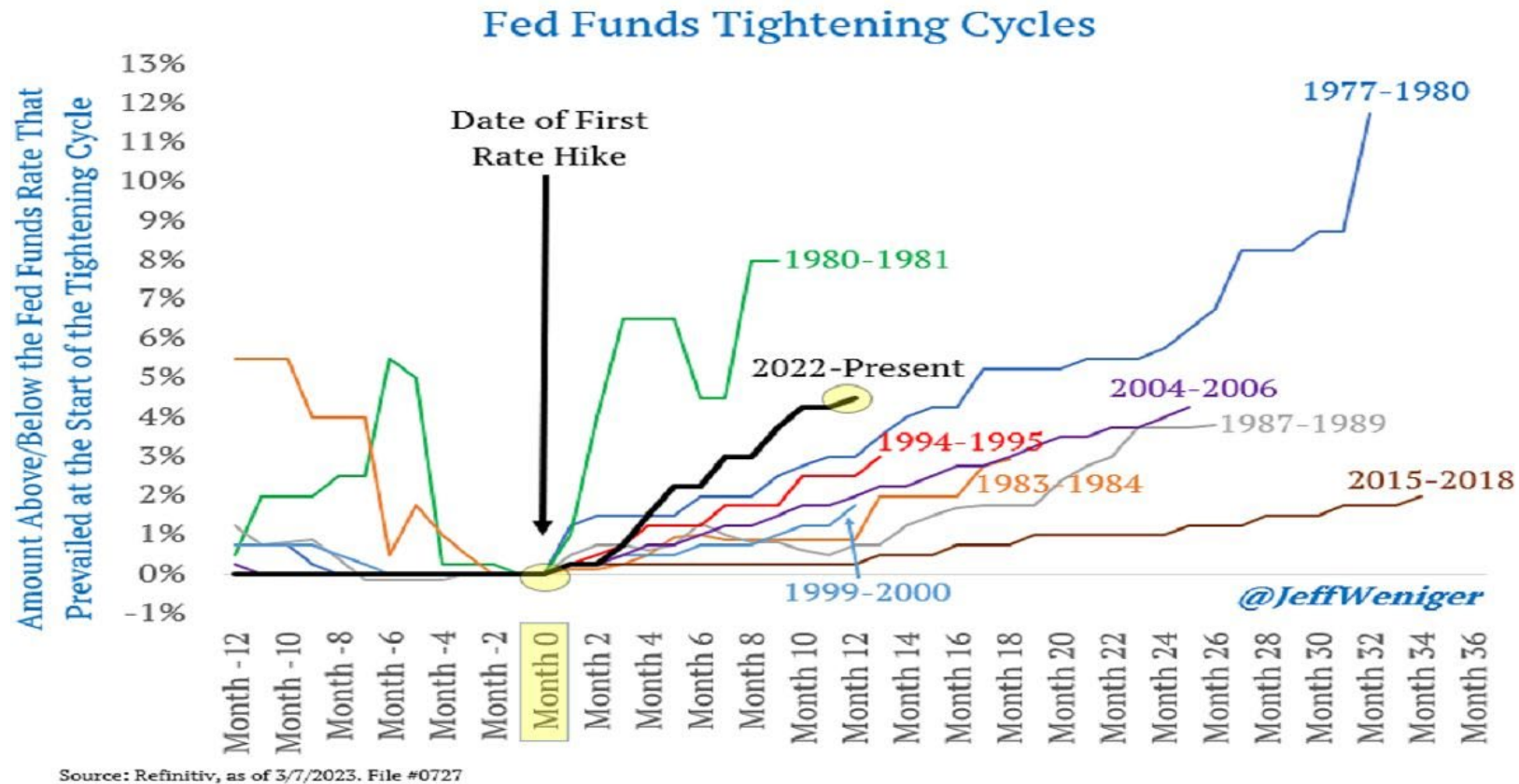
**When was the last time policy rates rose this quickly in a 6-month period?**

**(Which statement do you most agree with?)**

① Start presenting to display the poll results on this slide.

# Macroeconomic recap

Infact it's the fastest hike since the Savings and Loans crisis...



## Savings and Loan crisis

- » The S&L crisis took place in the US in the 1980s

Source: Jeff Weniger, Wisdom Tree Asset Manangement

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How has this been  
impacting balance sheets?

# Impact on Balance Sheets

## Surprise! IRR and Funding are connected!

- » Internal and regulatory IR stress tests were unsuitable
- » Balance sheets started moving and banks re-margining; there will be winners and losers
- » Models can't be based on 'averages' of the last 10 years





# Impact on Balance Sheets

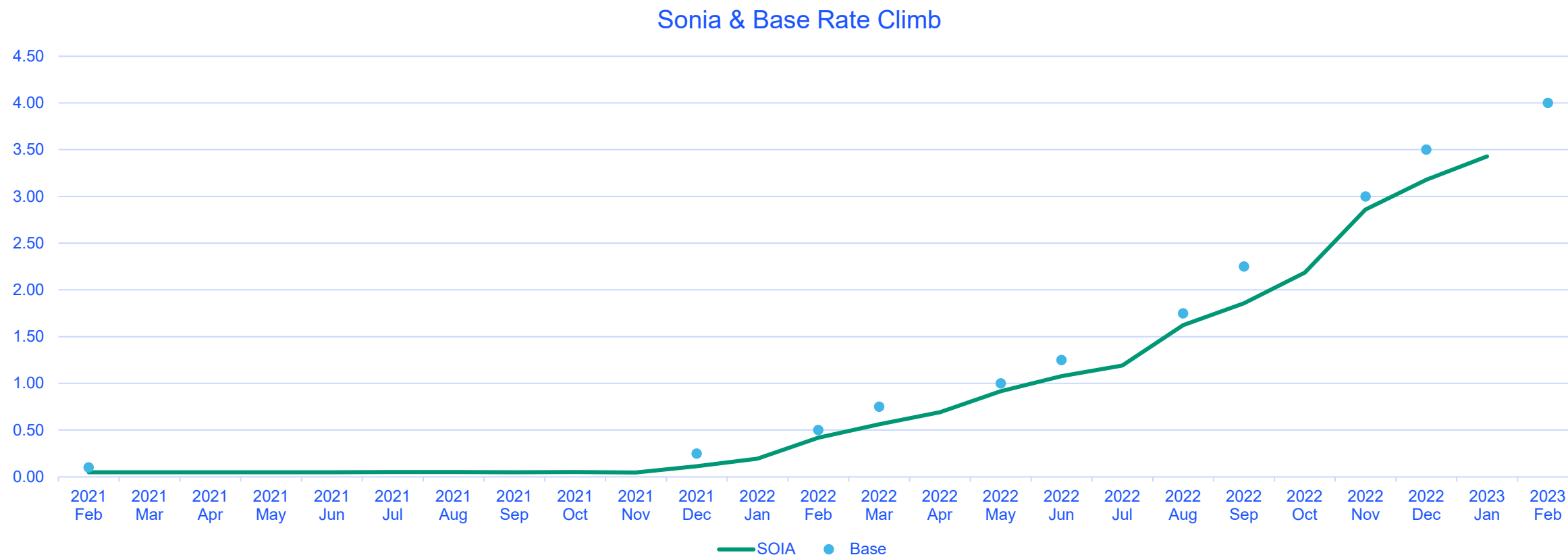
## Major B/S Items Impacted

- » CASA – balance movements and ‘switching’ into FR deposits
- » Loans (and products with loans underlying) – prepayments and credit deterioration
- » Off balance sheet assets- drawdowns and utilisation on LOCs, mortgage pipelines, revolvers, credit cards etc
- » FR bonds – price movements and haircuts
- » Derivatives



# Policy rate climb

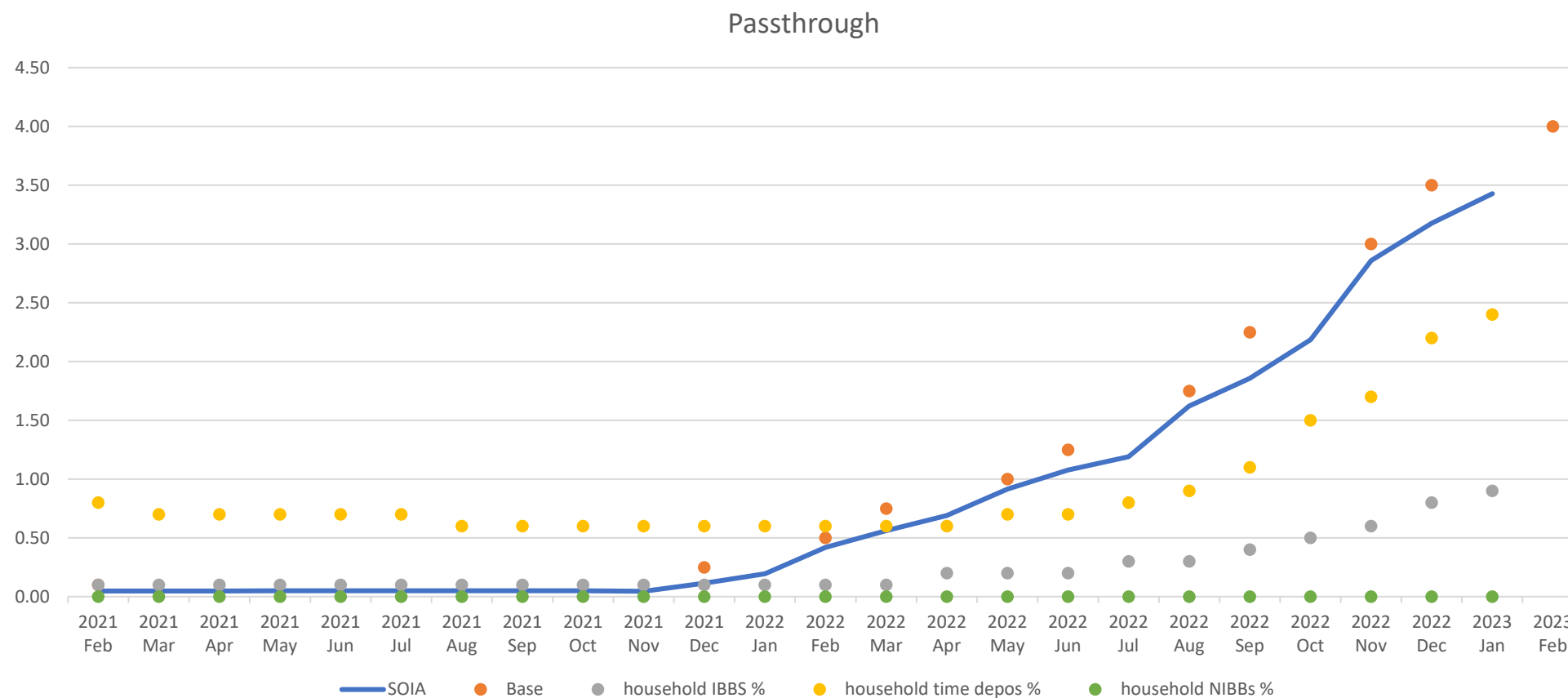
After a 15 year hiatus...



Source: [www.bankofengland.co.uk/statistics/tables](http://www.bankofengland.co.uk/statistics/tables)

# Policy rate climb

Is followed by banking deposit product rate rises...



Source: [www.bankofengland.co.uk/statistics/tables](http://www.bankofengland.co.uk/statistics/tables)



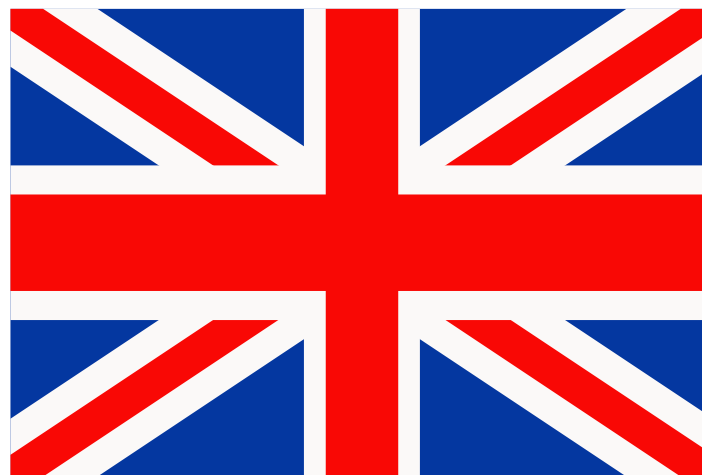
**The Bank of England increased base rate by 250 bps in the year to Dec 2023.**

**How much of this rate change was passed to UK sight deposits?**



# Policy rate climb

Is followed by banking deposit product rate rises...



2022 Beta: 0.22

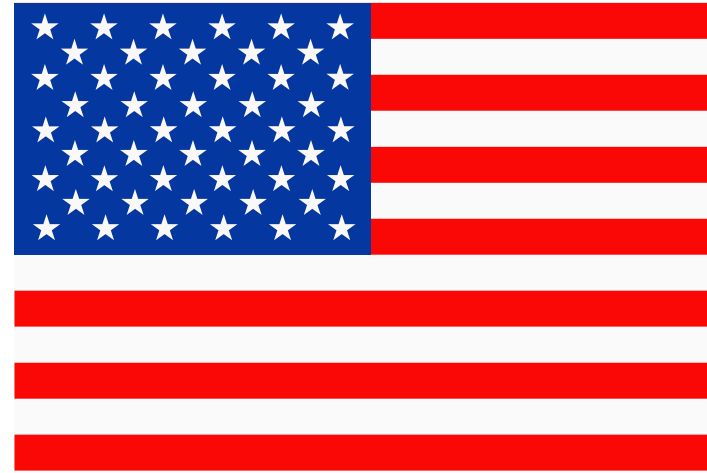
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# Policy rate climb

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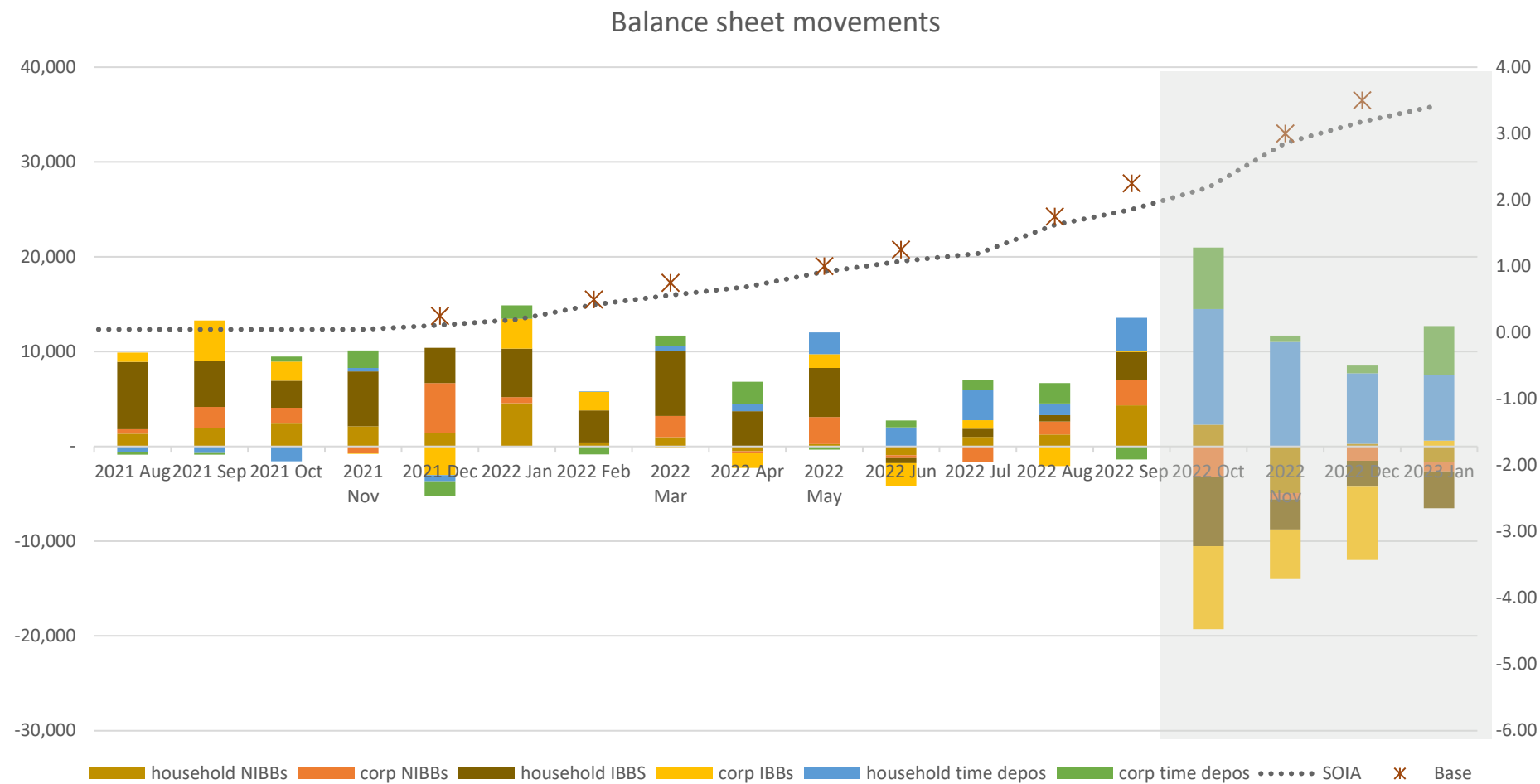


2022 Beta: 0.16

Sources: [www.bankofengland.co.uk/statistics/tables](https://www.bankofengland.co.uk/statistics/tables), MIS

# Policy rate climb

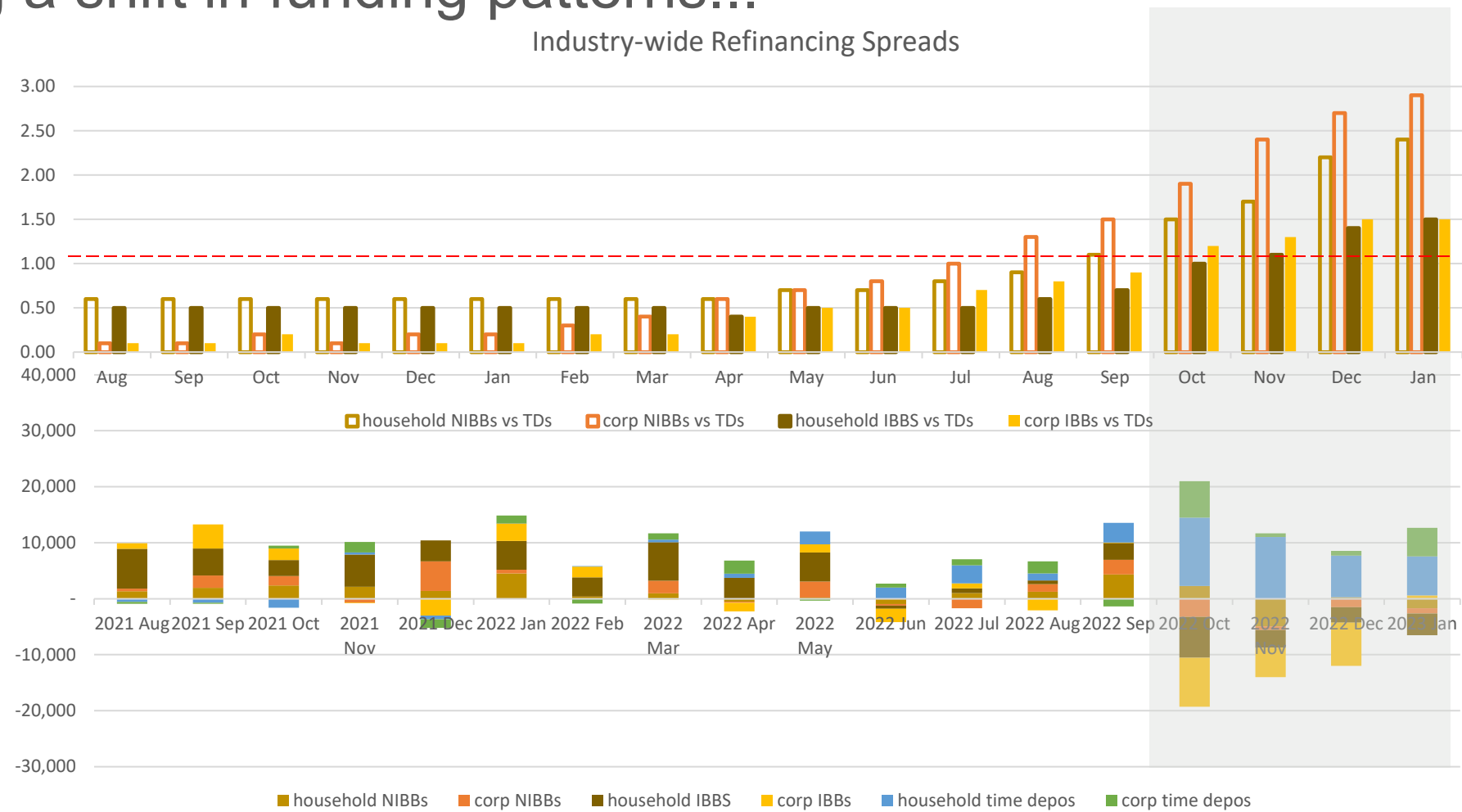
Causing a shift in funding patterns...



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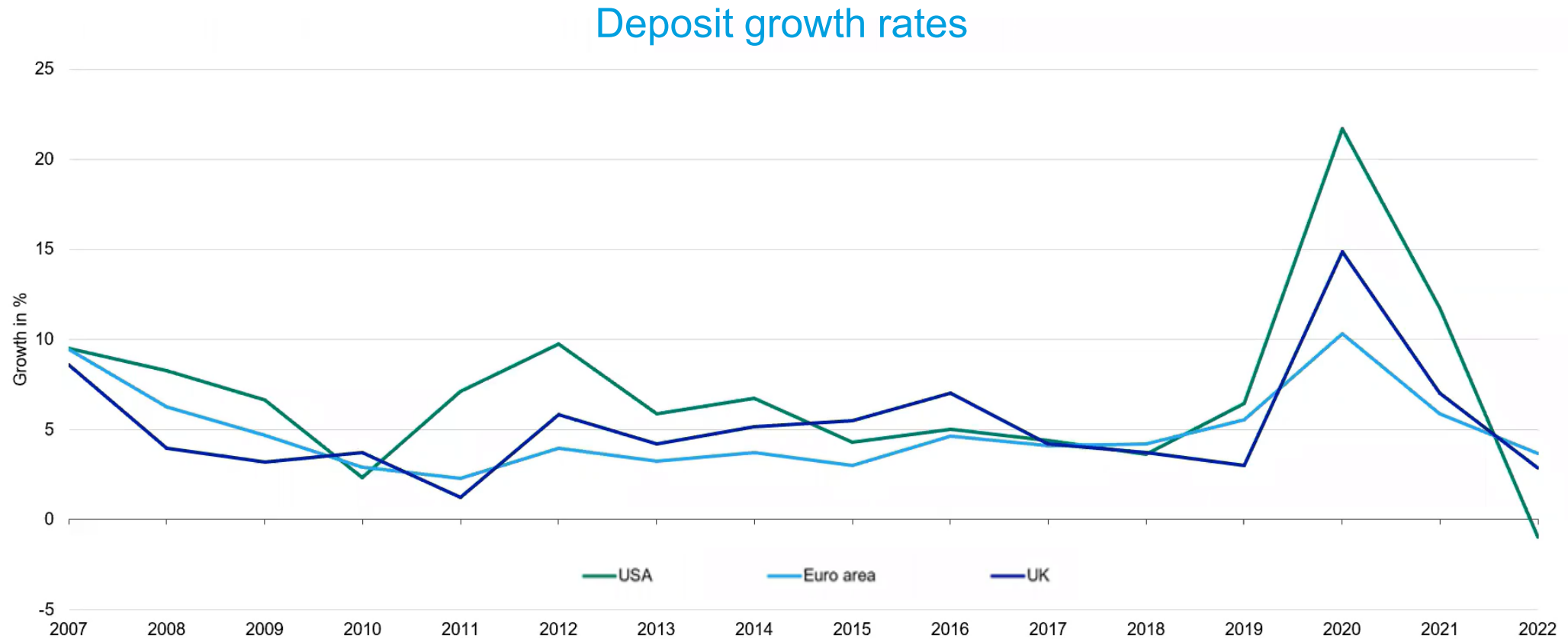
# Base rate climb

Causing a shift in funding patterns...



Source: [www.bankofengland.co.uk/statistics/tables](http://www.bankofengland.co.uk/statistics/tables)

# Impact on Balance Sheets



Source: MIS

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Implications

# 3.1

Internal Implications

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**Prior to last year, policy rates remained less than 1.5% across the UK and Eurozone for nearly 15 years.**

**How useful is historical data for assessing customer behaviour?**

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# Internal Implications- Modelling

## Historical data is the only data we have...

- » Compare recent data to historical to demonstrate changes in patterns
- » Beware of technology changes and other recent innovations
- » Test assumption sensitivity!



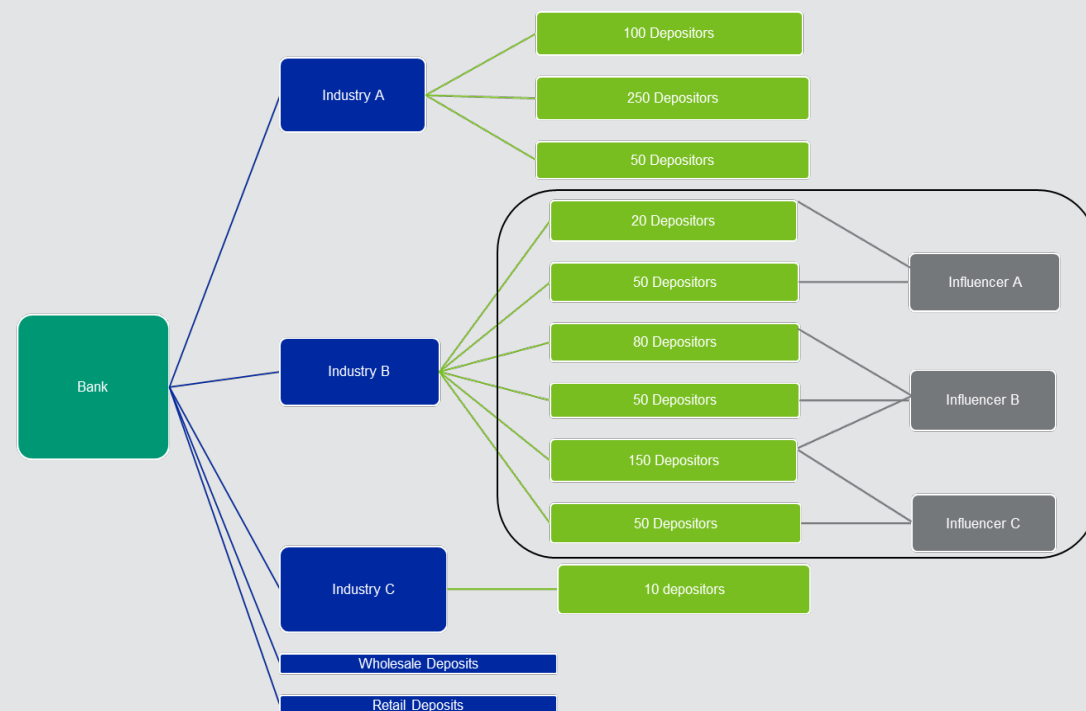
# Internal Implications- Policies and Procedures

## A test for internal procedures...

- » Pricing strategies
- » FTP
- » Hedging and hedge accounting
- » IRR, Funding & Liquidity and capital plans, policies and metrics
- » Stress testing practices
- » Recovery & resolution (and contingency funding) plans

### E.g.: Deposit Concentration Metrics

- » Do banks need to look for vulnerabilities a step behind their own depositor base?



# 3.2

Regulatory implications

# More possible reg changes

## Rate shocks

- » Parallel shock set at 2-2.5% for major currencies

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Source: BCBS IRRBB Standards  
April 2016



**Policy rate moves in the US, UK and EU exceeded the Basel standard shocks.**

**Should local regulators change rate shock parameters?**

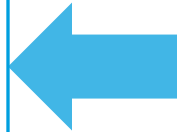
# More possible reg changes

## Standard Outlier Test(s)

» For EVE: 15% of Tier 1 Capital

» For NII: 2.5% of Tier 1 capital

Primarily  
relevant to the  
European  
Banking Union



EBA Draft RTS, 20 OCT 2022

[https://www.eba.europa.eu/sites/default/documents/files/document\\_library/Publications/Draft%20Technical%20Standards/2022/EBA-RTS-2022-10%20RTS%20on%20SOTs/1041756/Final%20draft%20RTS%20on%20SOTs.pdf](https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Draft%20Technical%20Standards/2022/EBA-RTS-2022-10%20RTS%20on%20SOTs/1041756/Final%20draft%20RTS%20on%20SOTs.pdf)

# More possible reg changes

## LCR/NSFR

- » For the US: possibility that regulators may bow to pressure and expand the requirement to report these metrics to smaller banks
- » For the UK: the PRA is introducing a new regulatory format for 'non-systemic' banks – the latest Consultation Paper suggests:
  - some wholesale liquidity reporting will be removed
  - The NSFR will be replaced by an 'RDR'
  - but the LCR will remain.

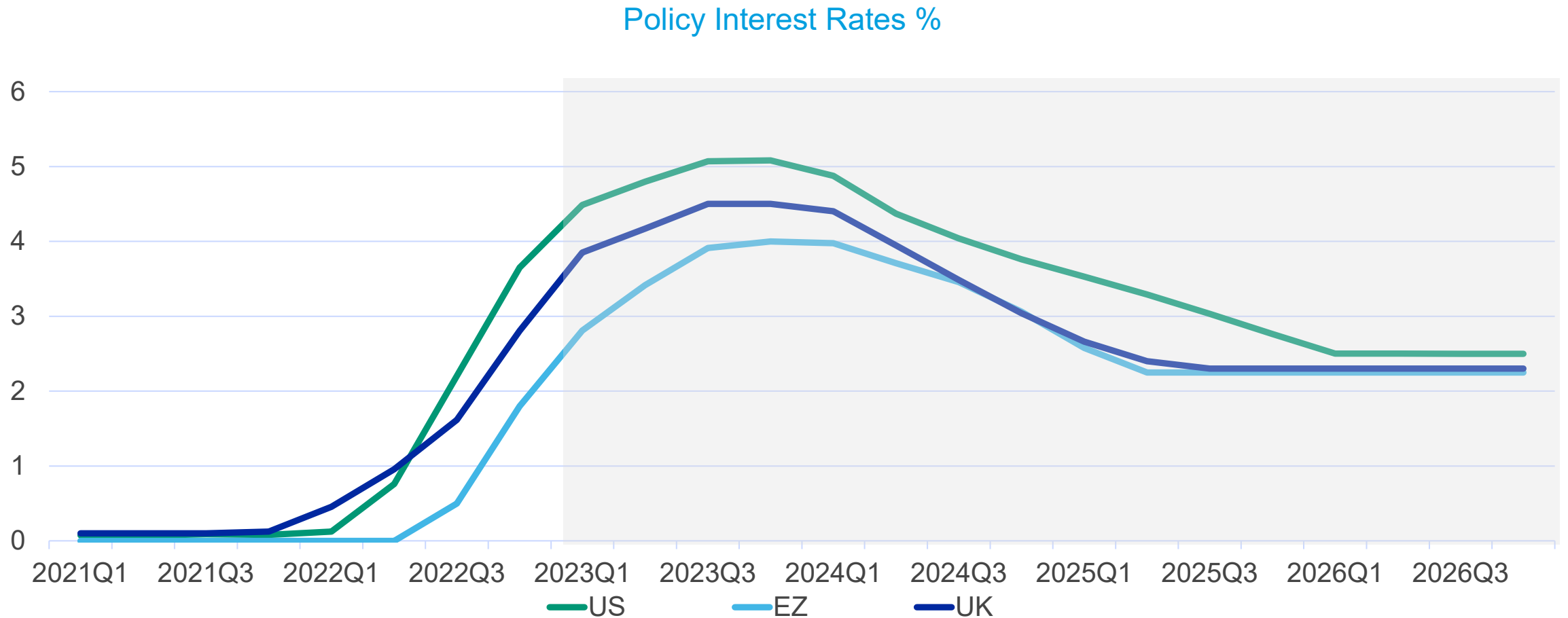
Source: PRA CP

4

Looking forward



# Looking forward



Sources: Moody's Analytics

# Main take-aways

- » Banks balance sheets have been shifting since mid last year
- » The effects of rising rates will cause winners as well as losers
- » Internal procedures are being tested severely and more regulatory changes are likely
- » The volatility isn't over



# Q & A



# Refreshment Break





MOODY'S  
ANALYTICS

