Presentation
„The ECB and Its Watchers Conference 2024“

Monetary policy transmission and the banking system

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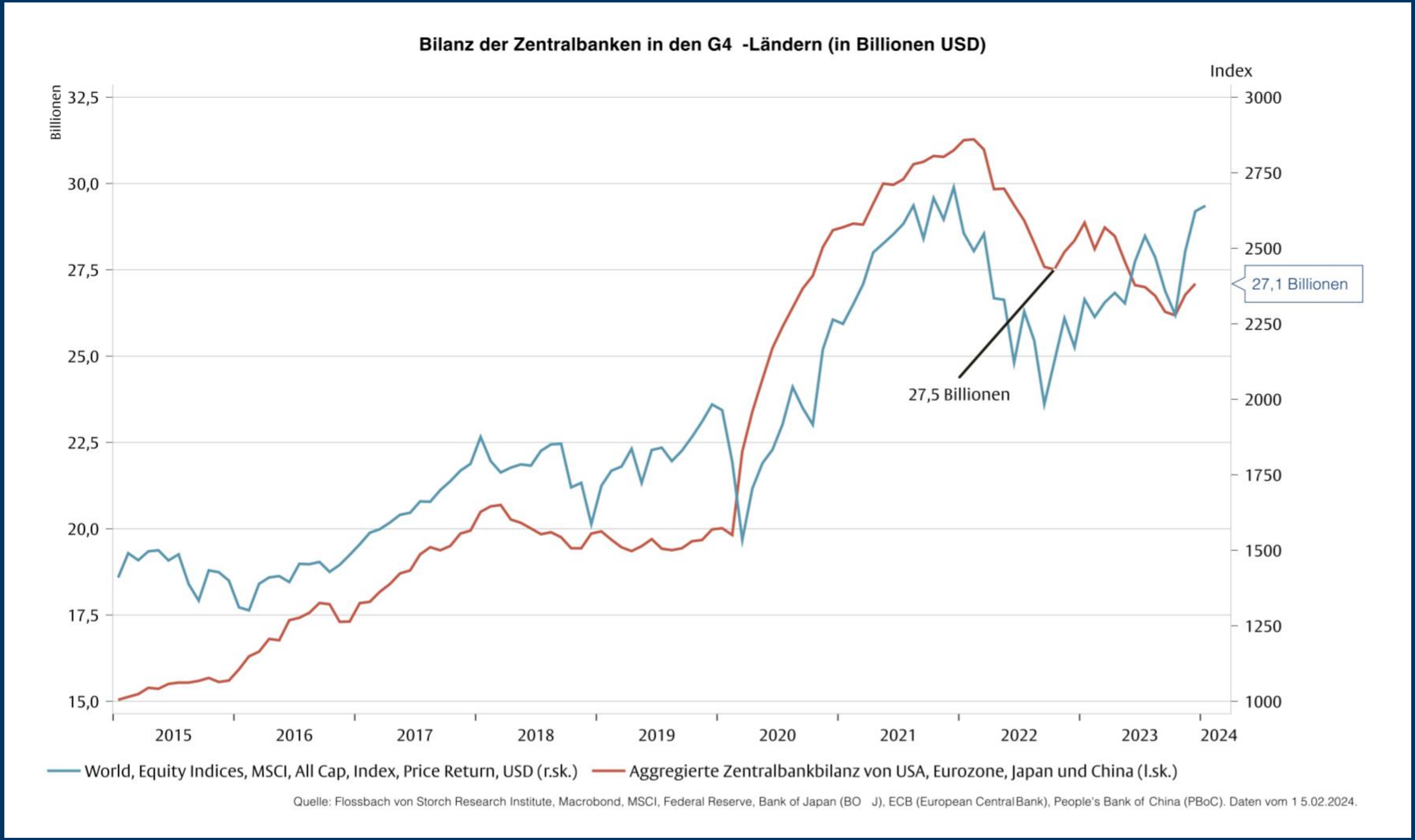
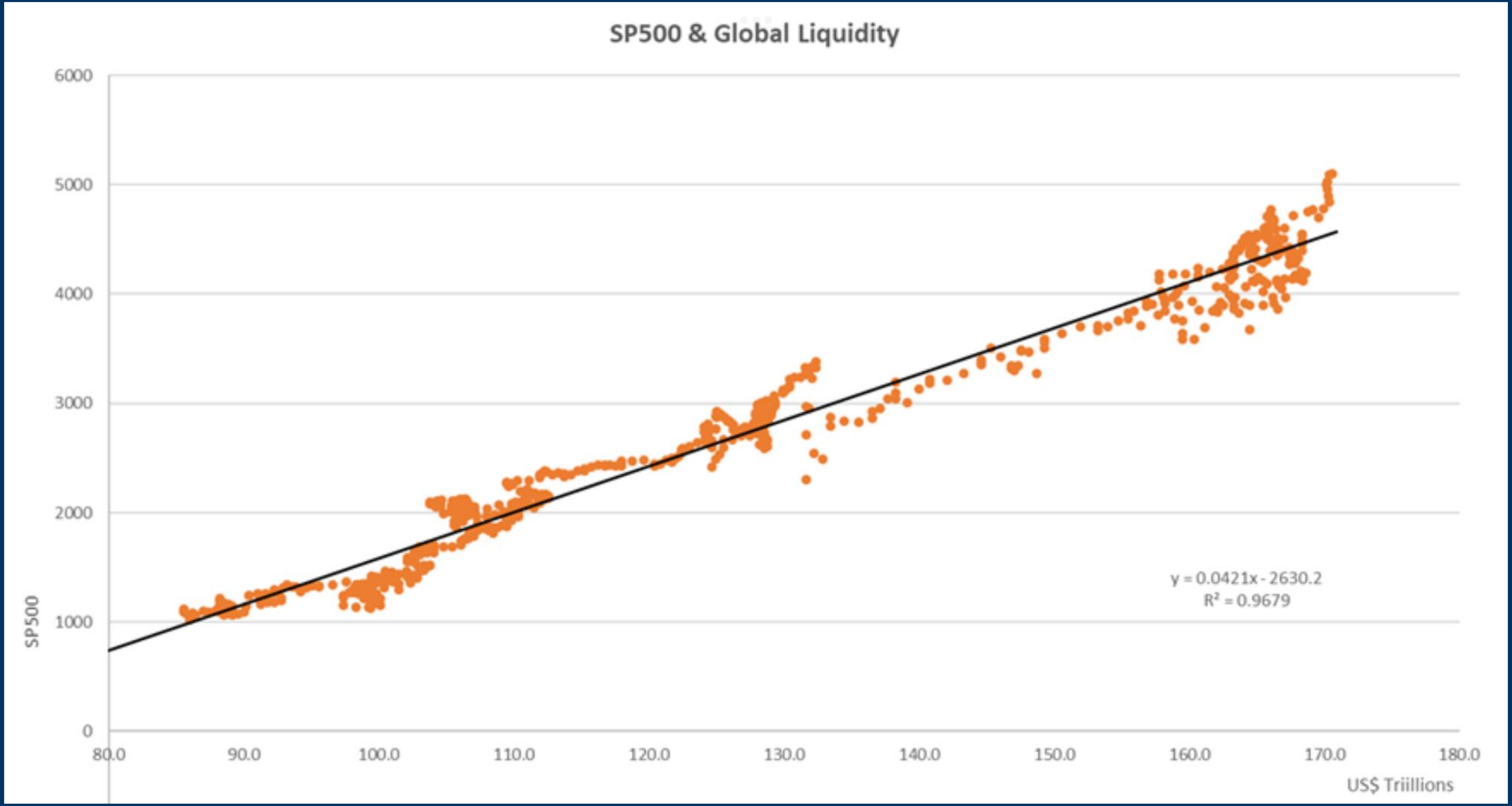
Monetary Policy:

liquidity matters for banks & financial markets

Booming Stock Markets were driven by Ultra-Loose Monetary Policy
- Tailwinds from the past, headwinds for the future -

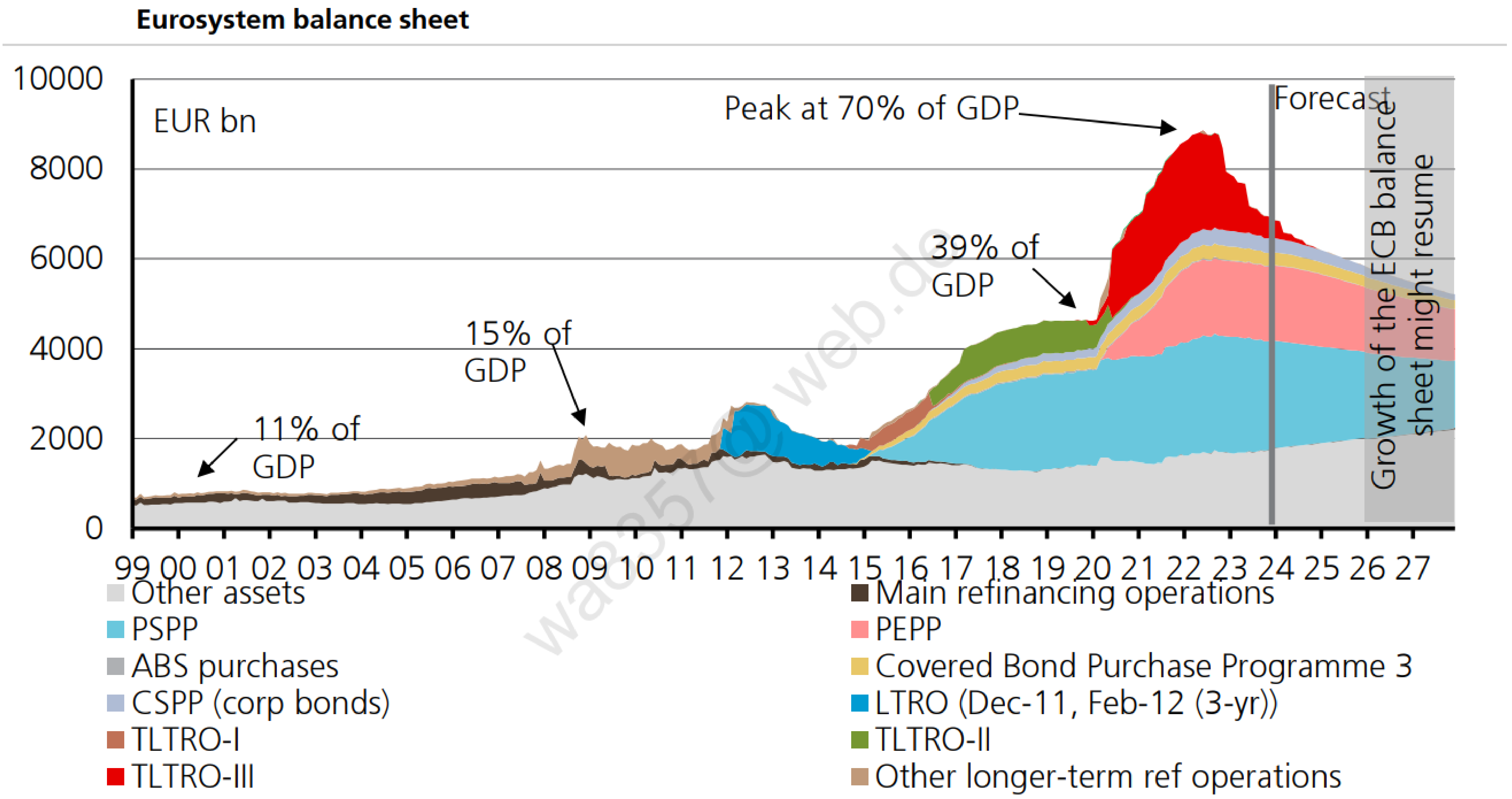


Booming Stock Markets are Driven by Ultra-Loose Monetary Policy

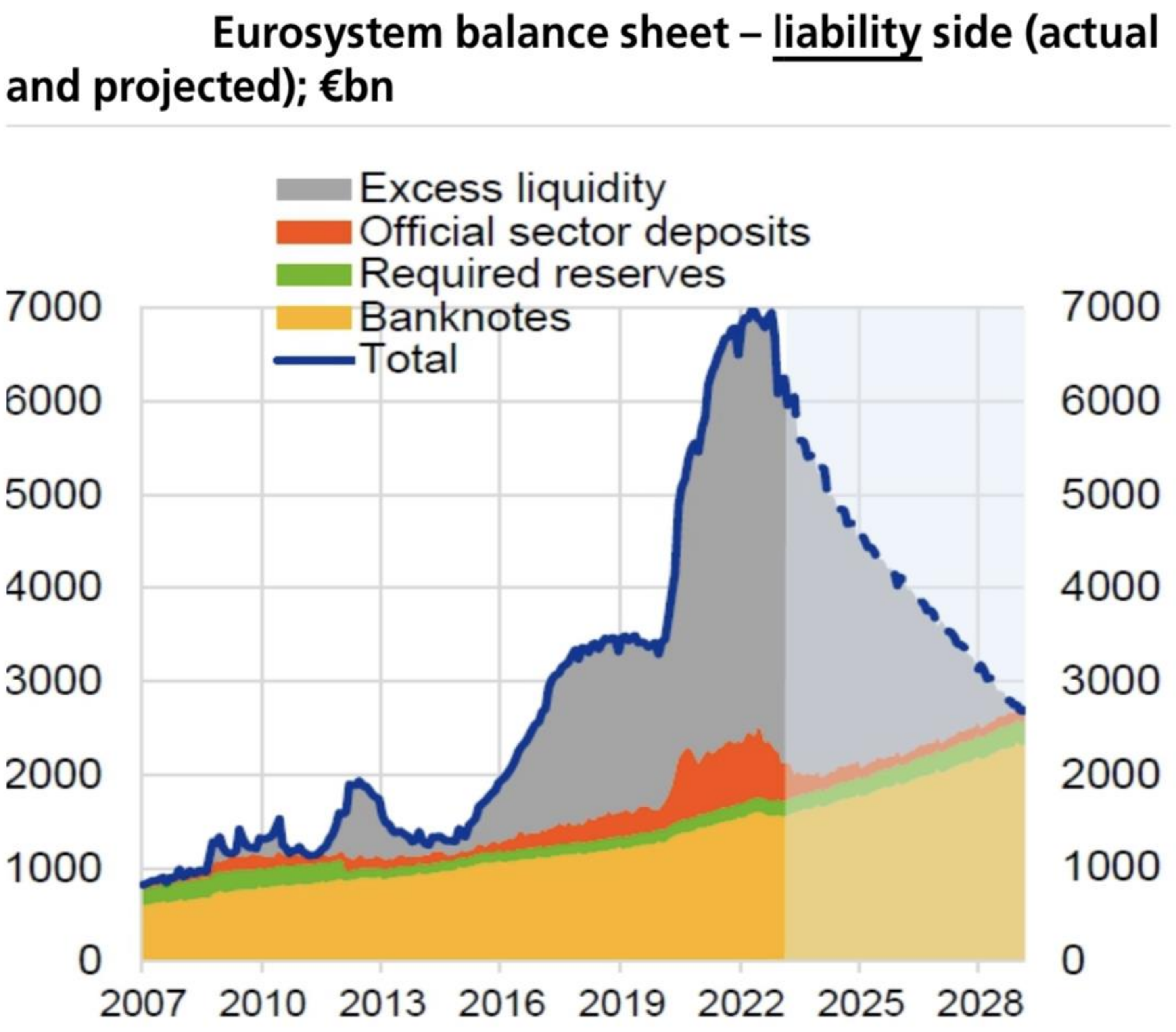


Balance Sheet Projections for major central banks – Headwinds Ahead

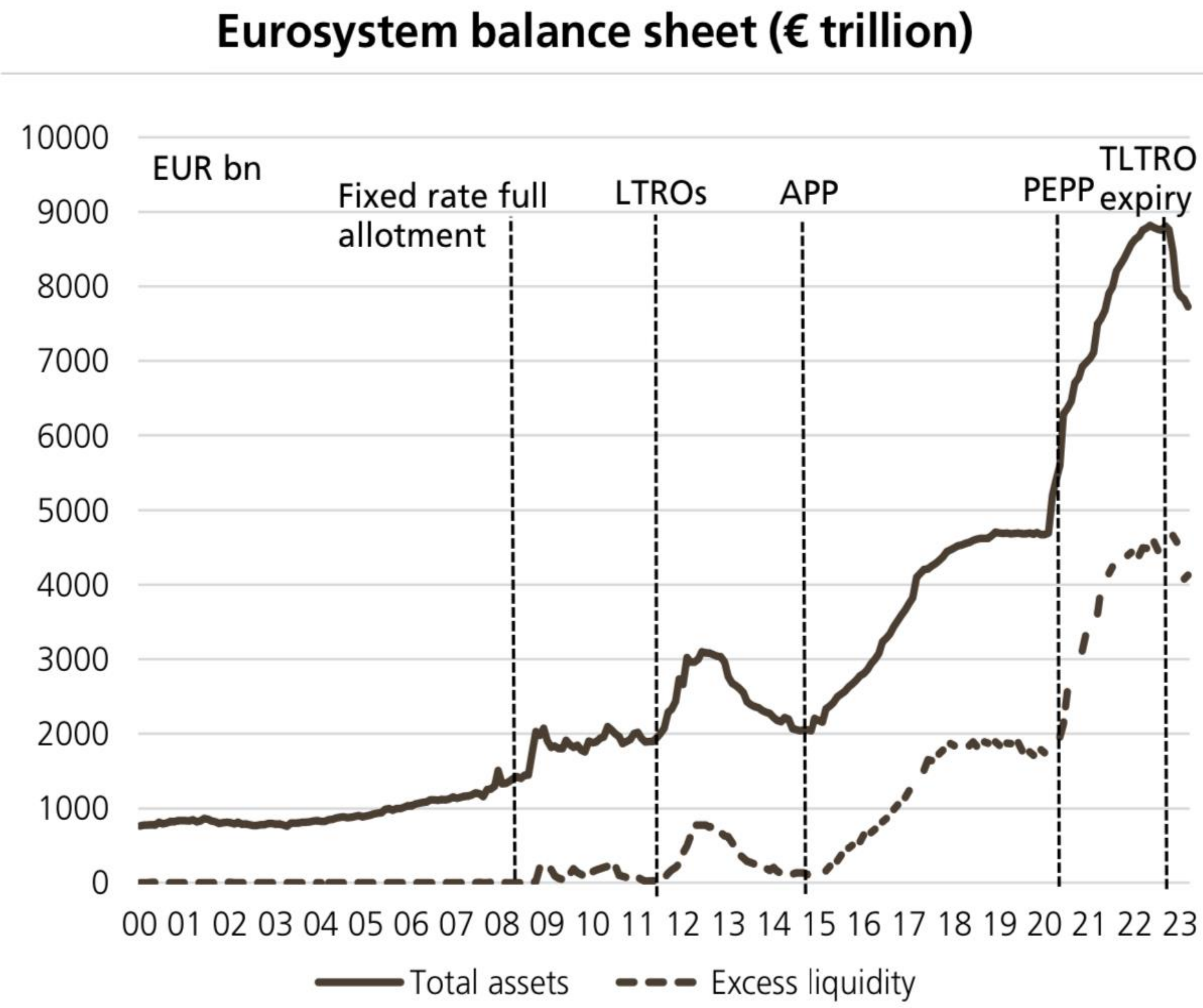
Balance Sheet Projections for the ECB – Headwinds Ahead



Balance Sheet Projections for the ECB – Headwinds Ahead



Source: ECB/ Isabel Schnabel: Back to normal? Balance sheet size and interest rate control, 27 March 2023.



Liquidity matters for financial markets…

- **Central banks underestimated the impact of quantitative easing on financial markets, in particular on credit and equity markets.**
- **They overestimated the transmission of ultra-loose monetary policy on output and on inflation.**
- **Massive liquidity injections by central banks globally and additional massive global fiscal and monetary stimulus during the pandemic drove equity markets to ever new highs (TINA)**
- **Global liquidity was primarily attracted to the deep and liquid US capital markets, benefitting US stock market indices like the S&P500 or the MSCI, also benefitting US banks and US firms more than their European or Asian peers.**
  - Interest rates at the zero lower bound made high-grade bonds an unattractive investment (degrading the quality of investments).
  - Credit markets boomed, particularly in commercial real estate or new market segments like private credit (increasing leverage).
  - Search for yield led to favouring riskier investments over safer investments (increasing the riskiness of investments even for investors with low risk-bearing capacity).

… its reversal therefore carries substantial risks for financial markets…

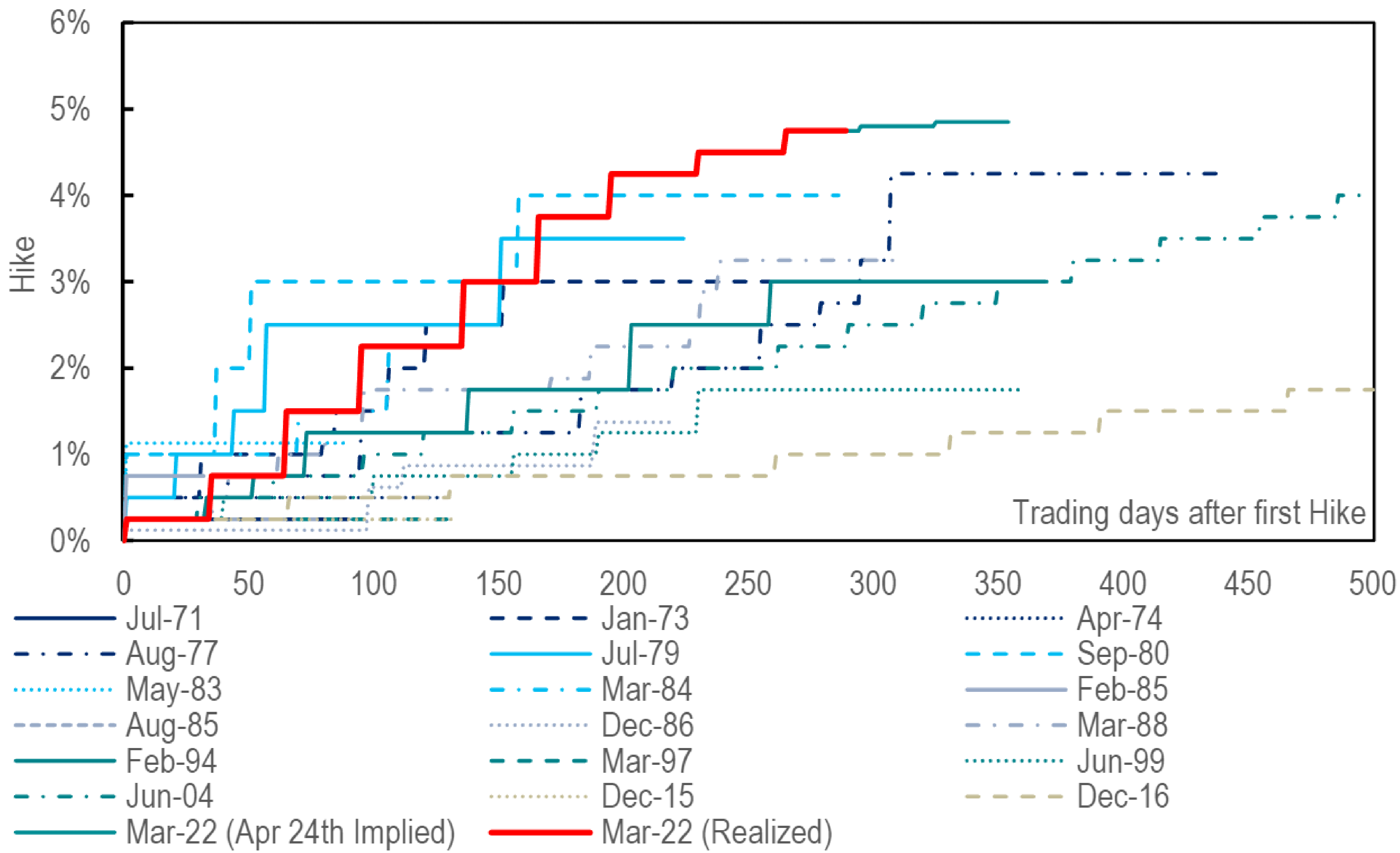
Monetary Policy:

financial conditions matter for banks & markets

We have seen the shortest, sharpest and globally most synchronized rate hike cycle in post-WW2-history

- Interest rates have peaked only half a year ago, most of the impact of central bank tightening is still ahead of us, not behind us -

3. US hiking cycle the most aggressive since 1980s



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Source: Citi Research, Bloomberg

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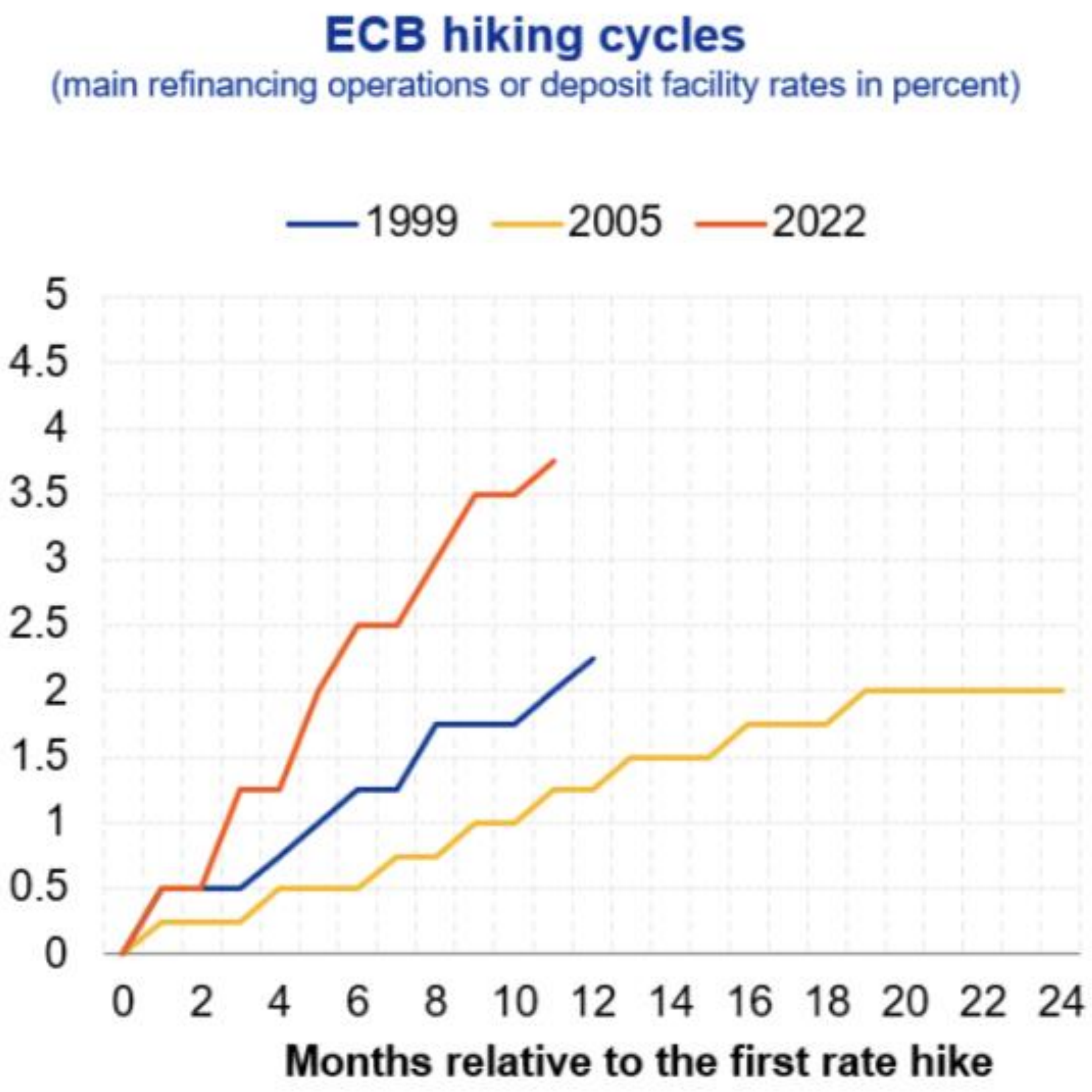

Sources: ECB.
Notes: On the x-axis, 0 denotes the month before the first rate hike. Rates refer to the main refinancing operations rate for 1999 and 2005, and to the deposit facility rate for 2022.

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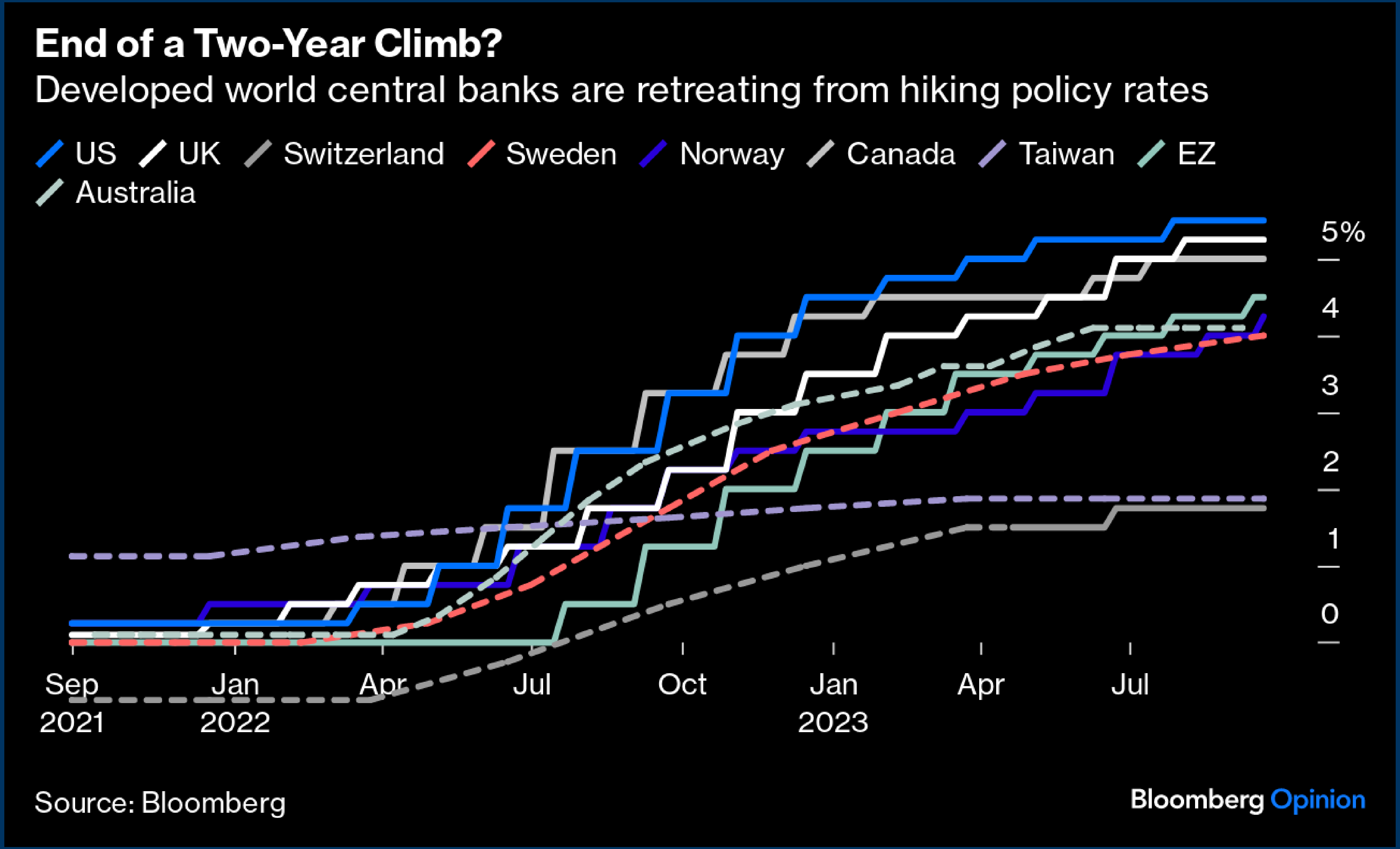
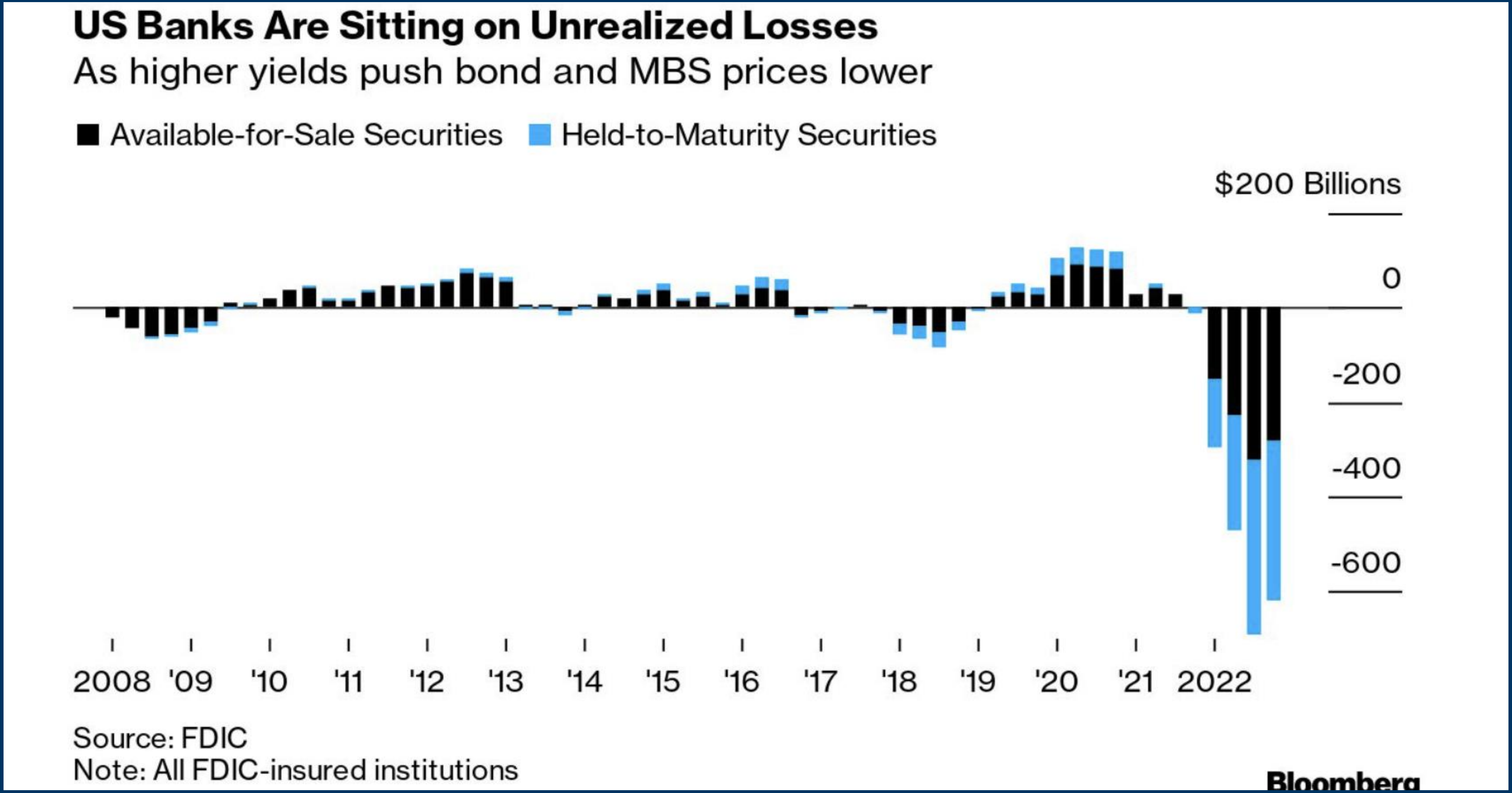


High interest rates matters for financial markets…

- **Central banks may underestimate again the medium-term impact of quantitative tightening and sharply higher interest rates on financial markets, in particular on credit and housing markets (which are the most cyclical segments).**
  - Interest rates at new highs make high-grade bonds more attractive, over-proportionally driving up the returns of riskier assets and driving down bond prices for lower yielding previously issued bonds, thereby causing **mark-to-market losses**.
  - To avoid these losses, banks are moving these assets from **available-for-sale** in the trading book to **hold-to-maturity** in the banking book.
  - Credit markets are now correcting, particularly in previous boom segments like commercial real estate or private credit (increasing exposures where leveraged.
  - If credit risks and defaults materialize, investors with low risk-bearing capacity face losses.

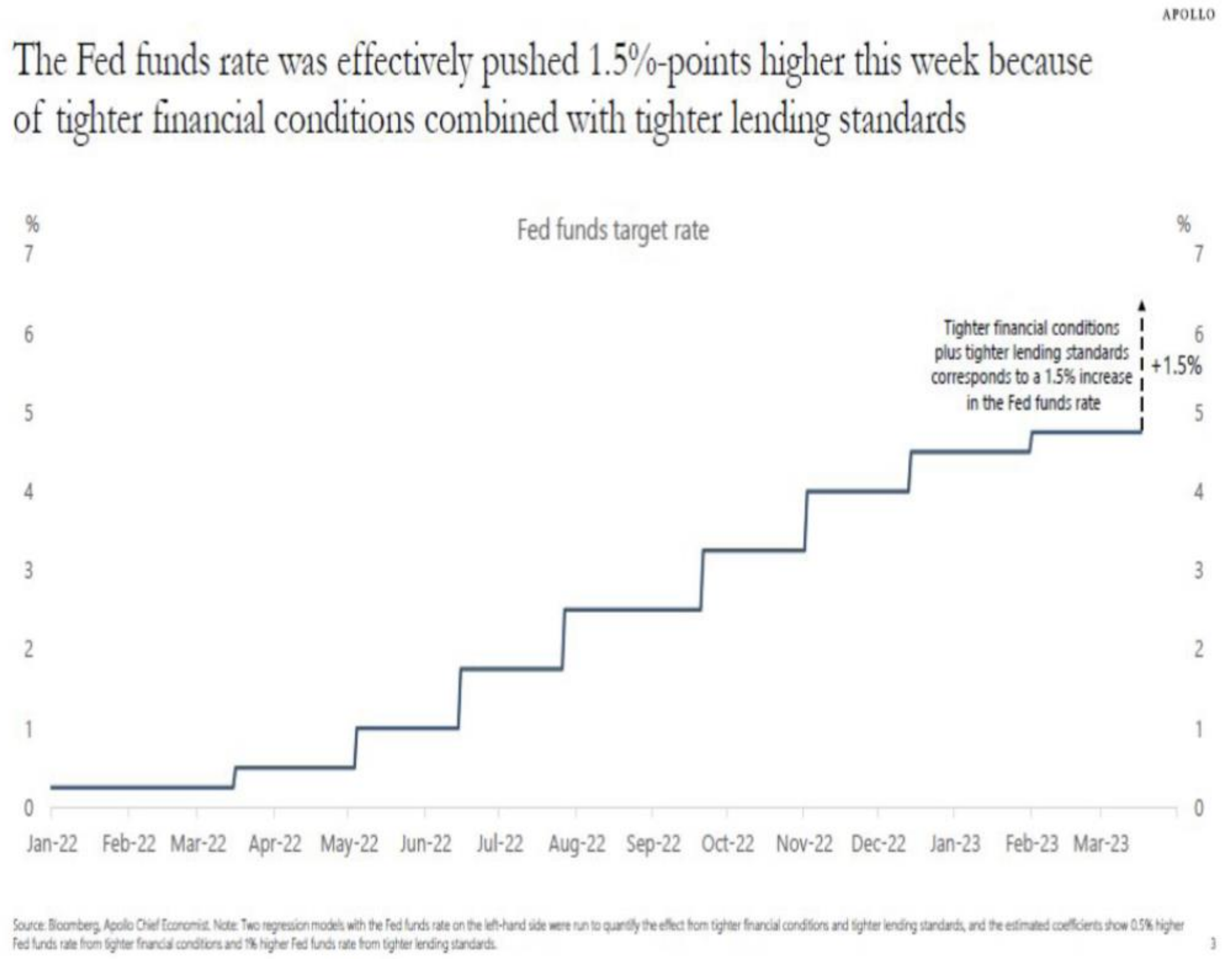
… so look for pockets of weakness in banks and financial markets…

Higher interest rates and falling bond prices matters for financial markets

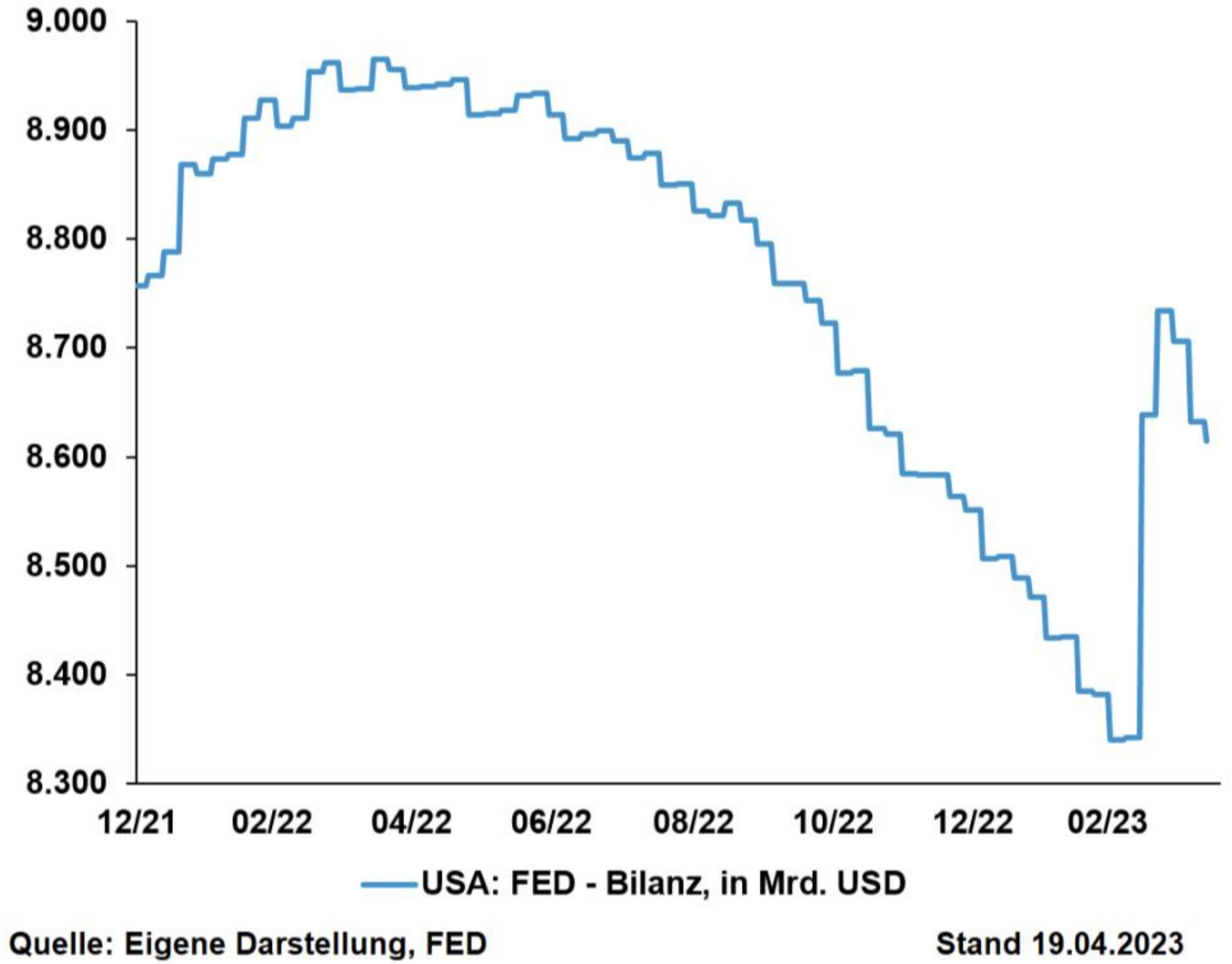


US Banking Problems in March 2023:
tighter financial conditions and new emergency liquidity as a result of banking stress

De facto tighter financial conditions through tighter lending standards and spread widening

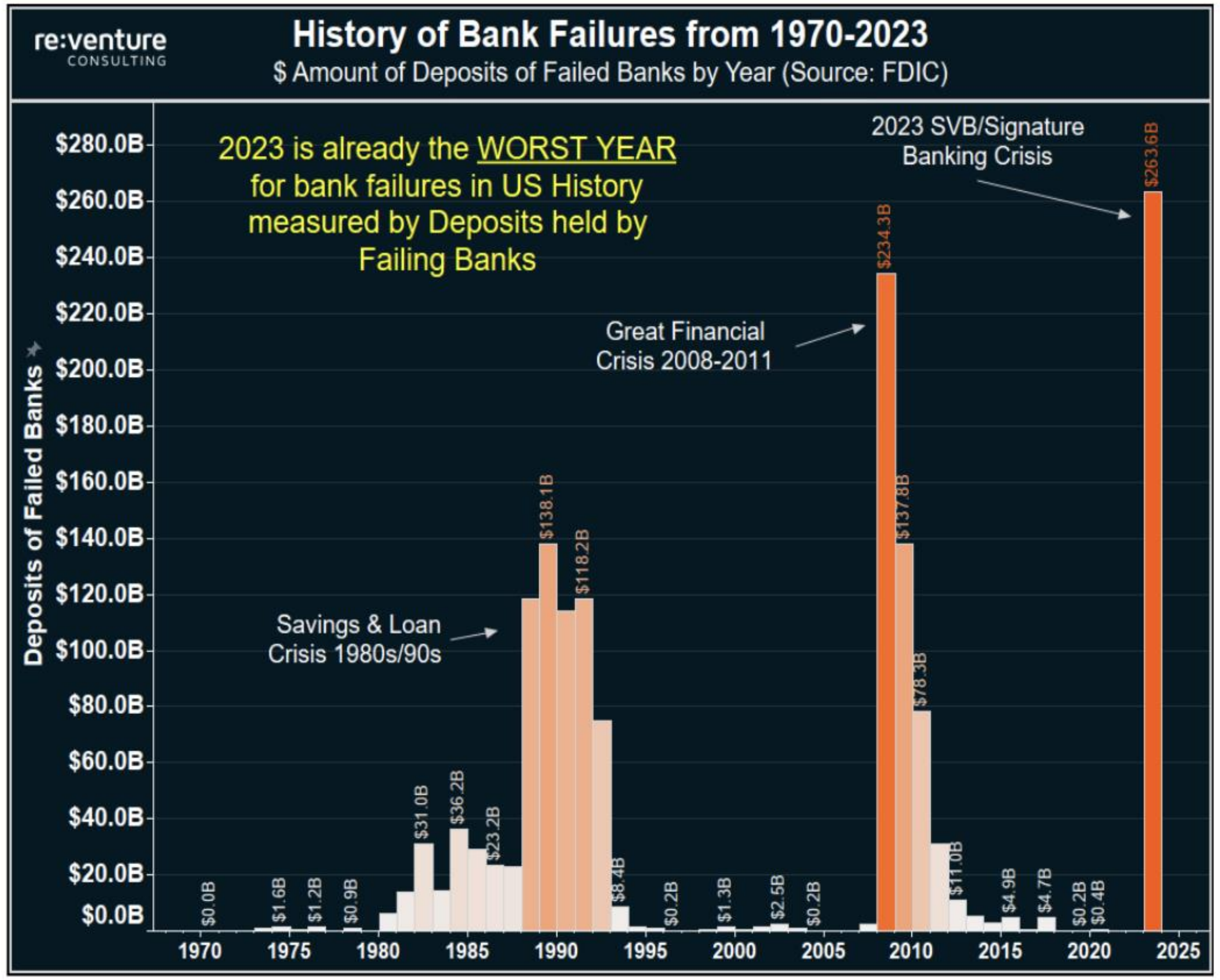


US Federal Reserve balance sheet: an initial reversal of QT by 50% through emergency liquidity

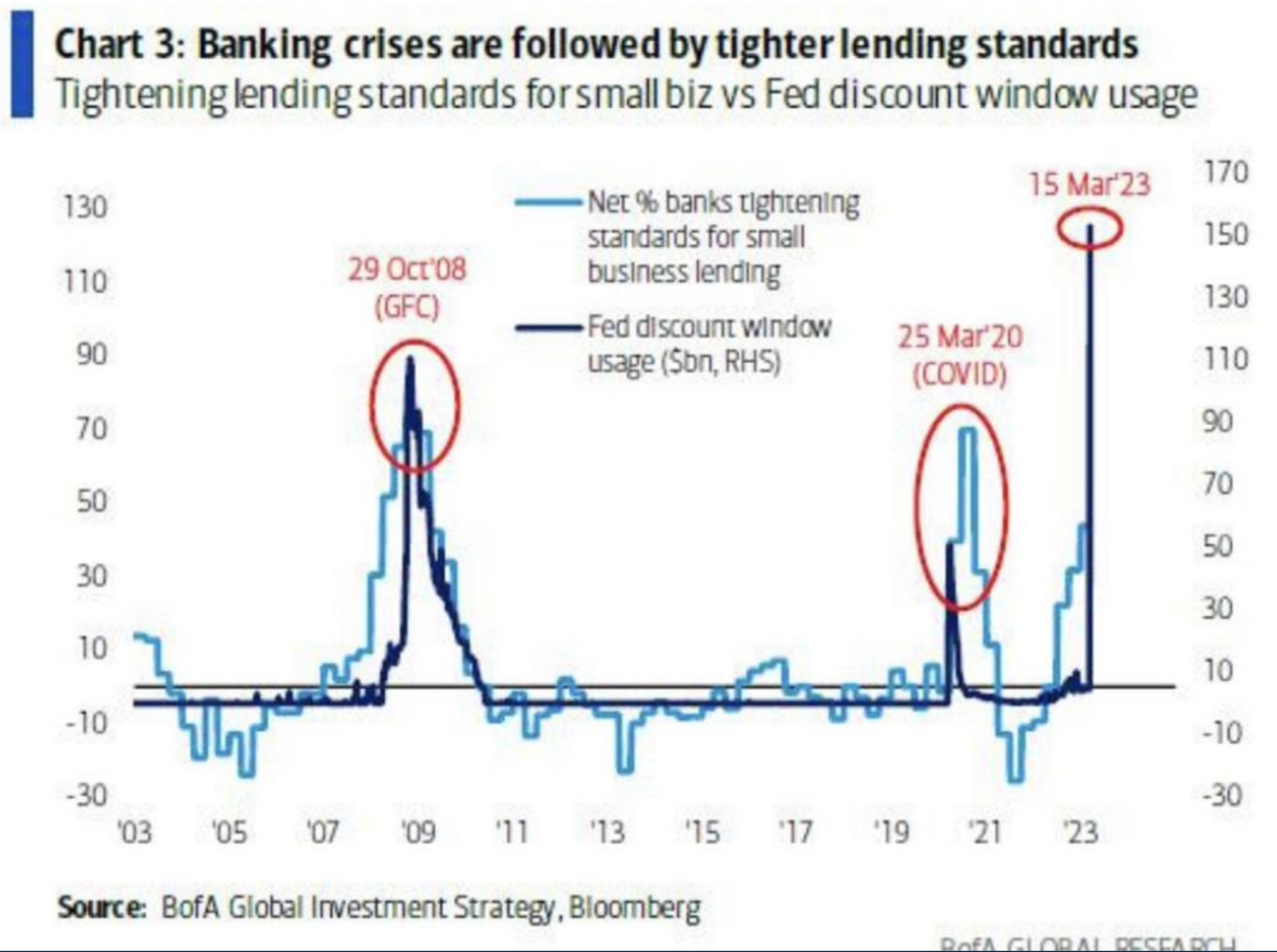


US Banking Problems in March 2023: massive deposit runs and new emergency liquidity as a result of banking stress

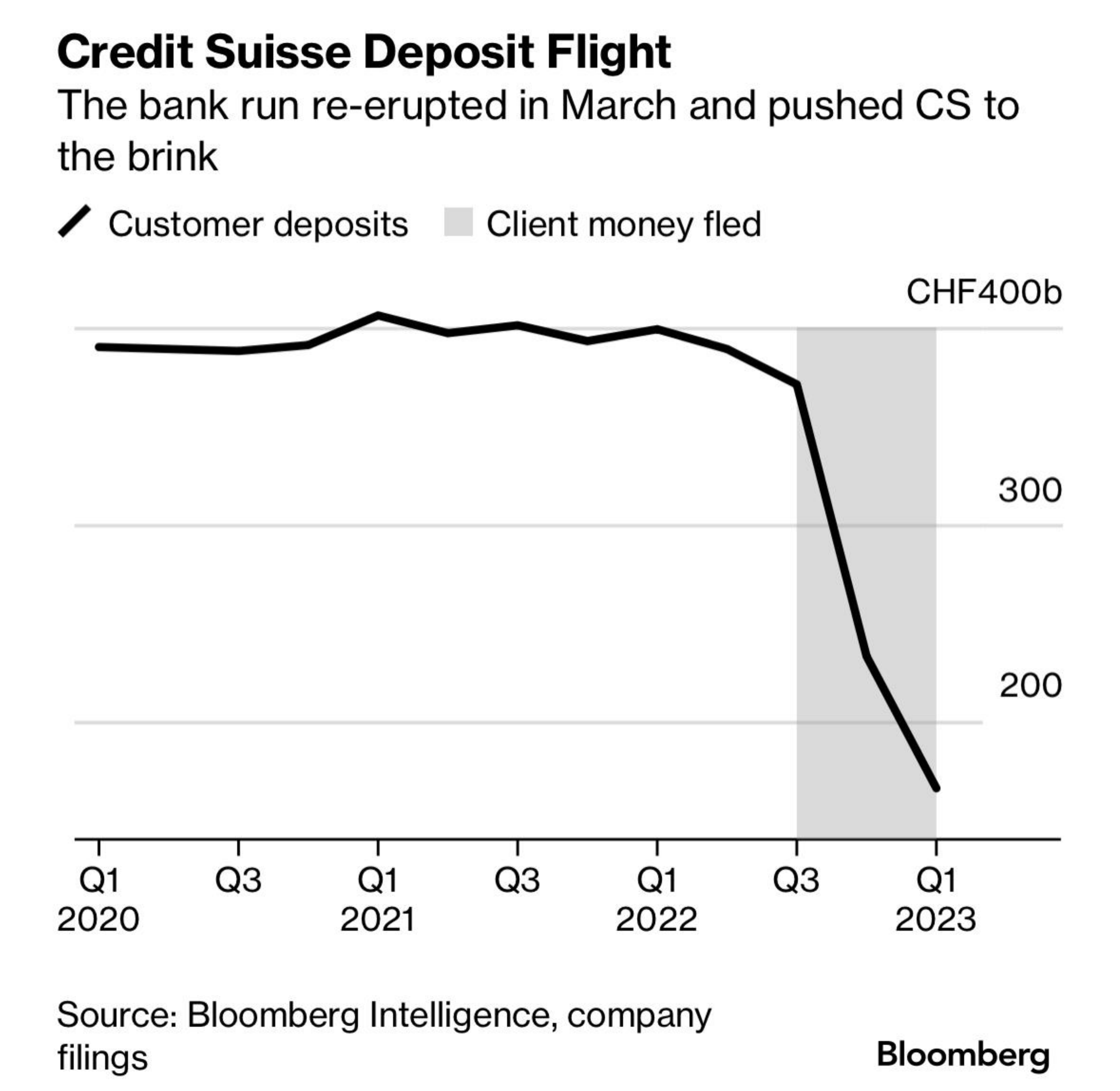
Massive exposure of deposits at risk in financial institutions under stress

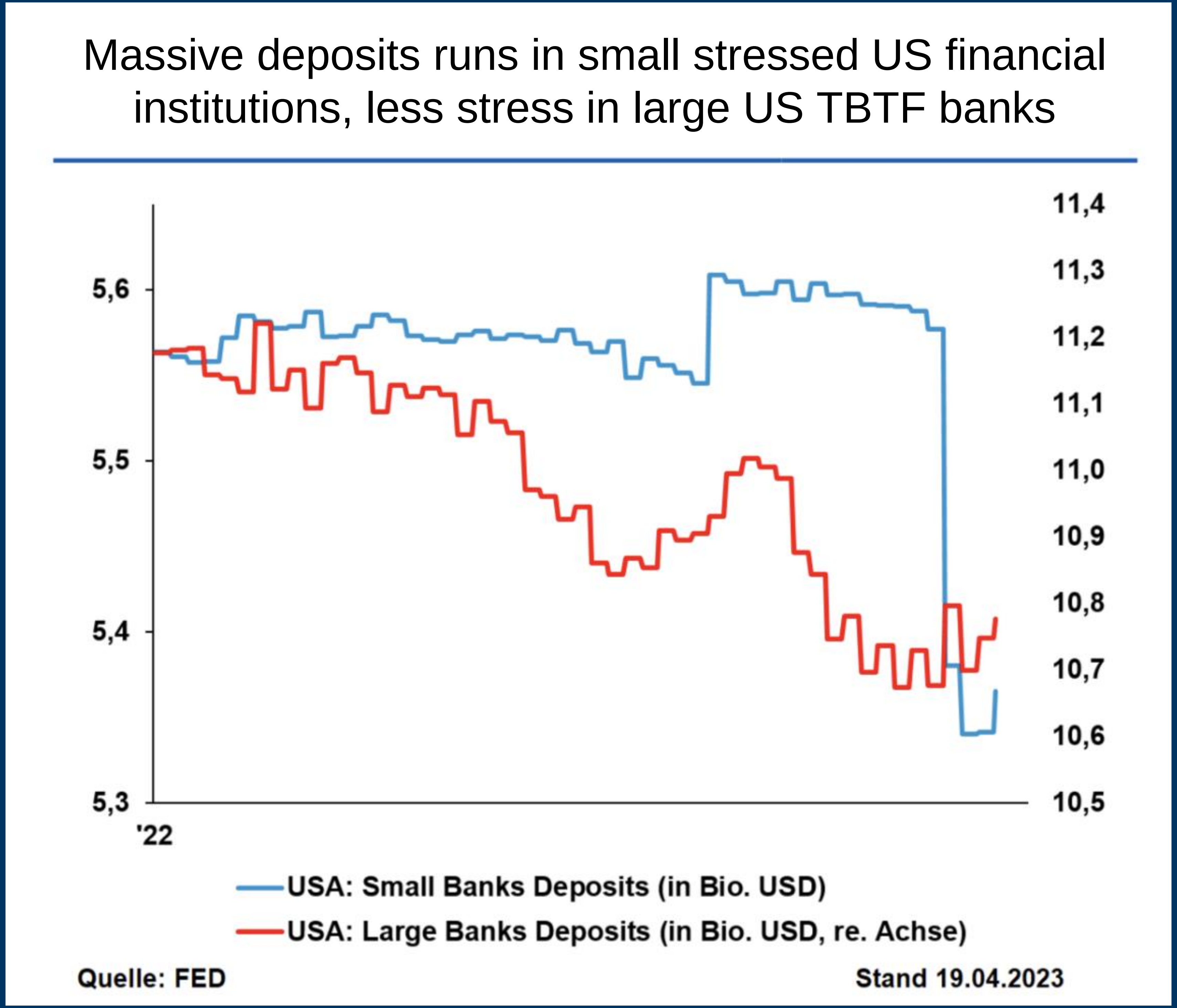


Banks tighten credit and lending standards for SMEs and borrow from the FED to avoid liquidity stress



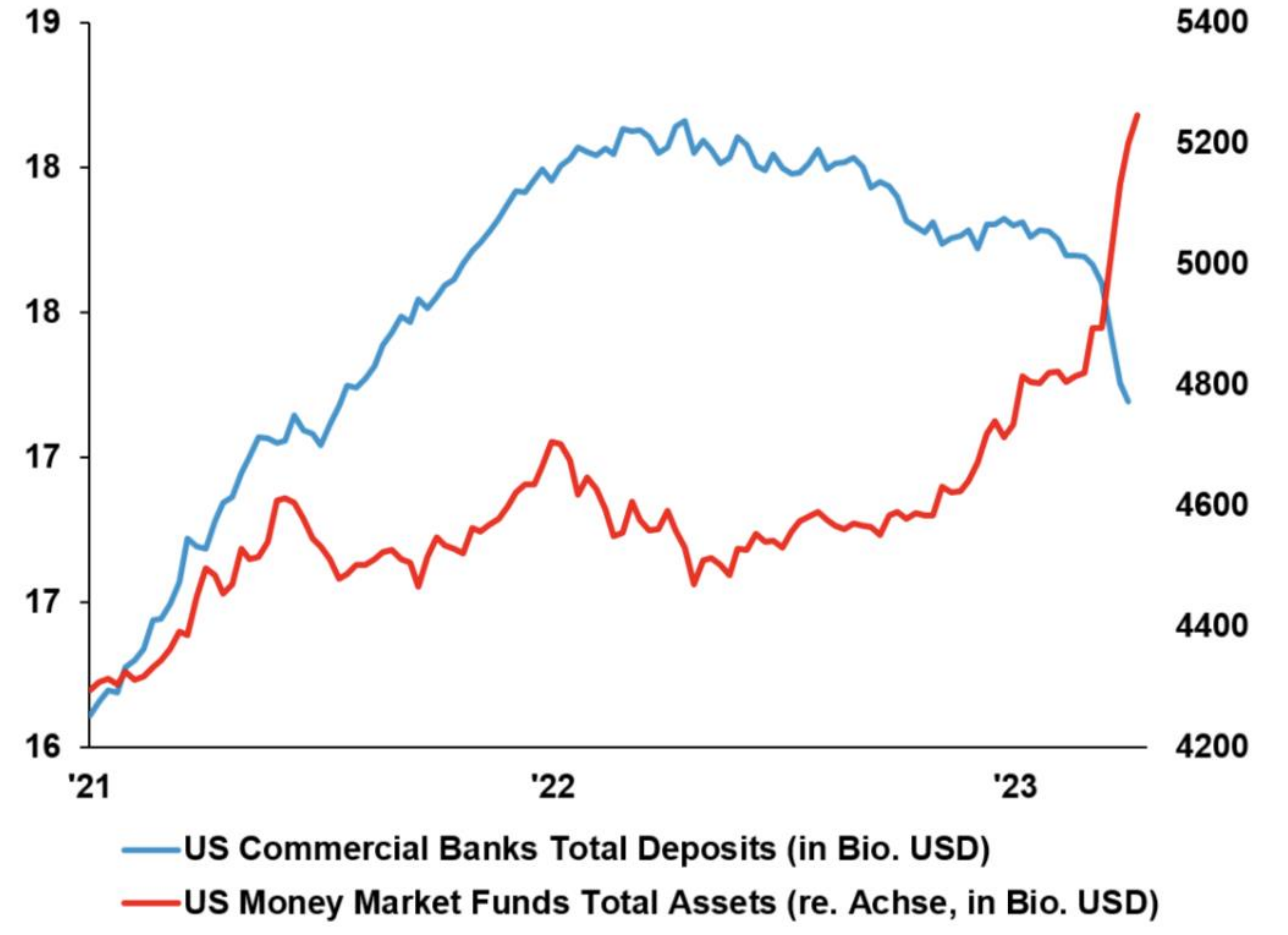
US and Swiss Banking Problems in March 2023: massive deposit runs and new emergency measures as a result of banking stress





US Banking Problems in March 2023: Massive deposit runs and inflows into money market funds due to more attractive interest rate conditions

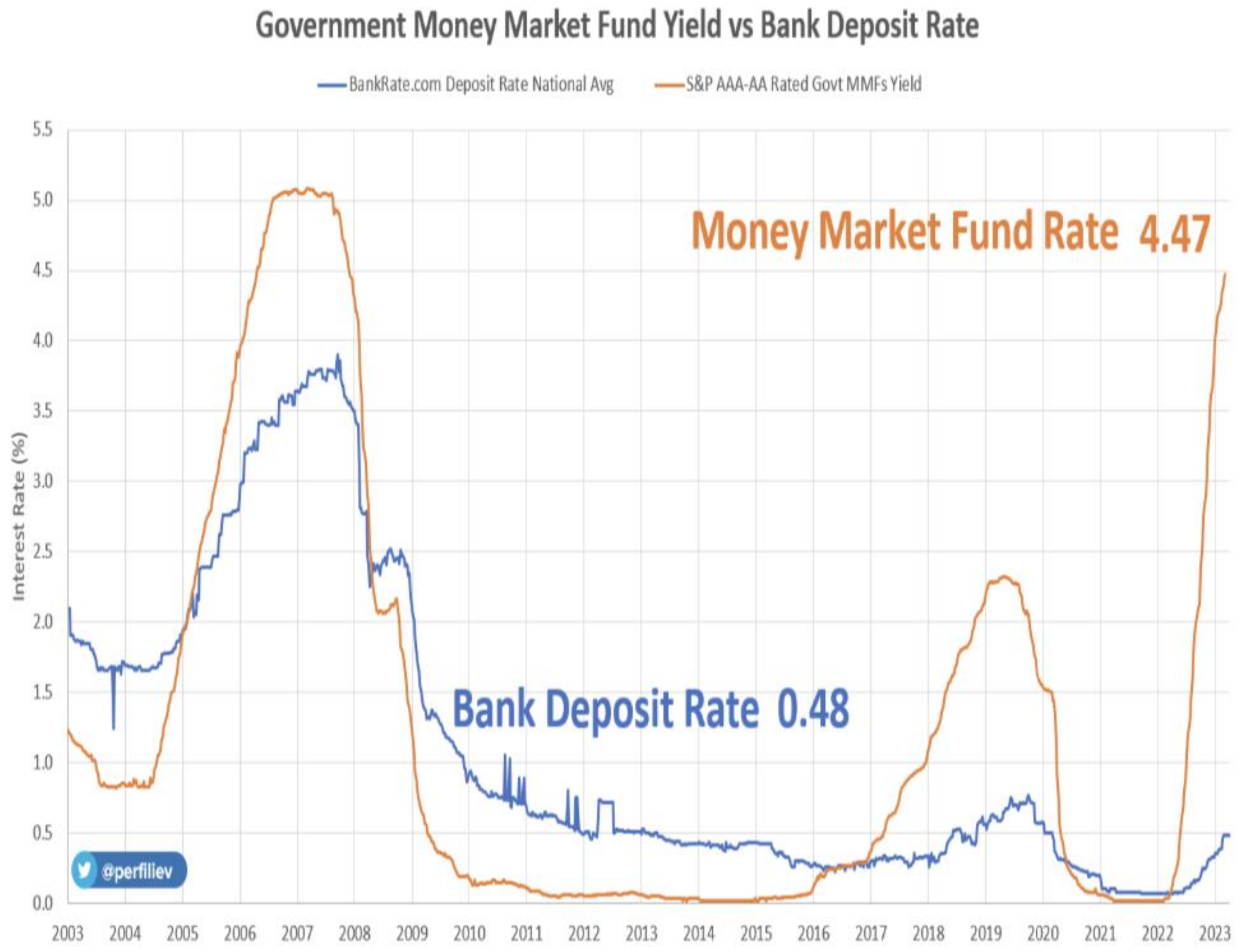
Massive deposits runs and shifts into money market funds during US banking stress



Quelle: Federal Reserve, ICI

Stand 19.04.2023

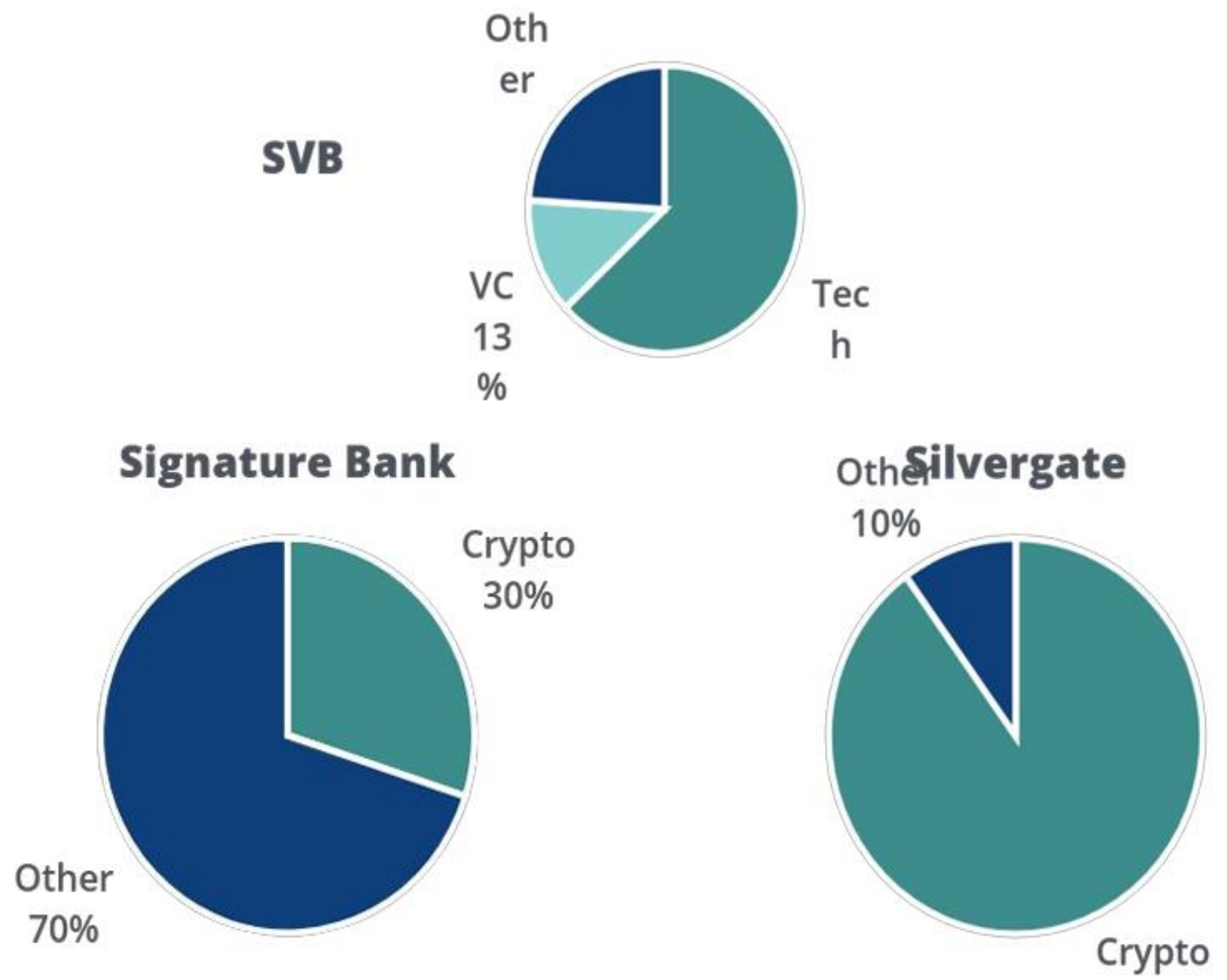
Massive deposits runs and shifts into money market funds are driven by lack of interest rate pass-through



Crisis banks showed weaknesses in deposit management and had strong concentration risks in individual customer segments

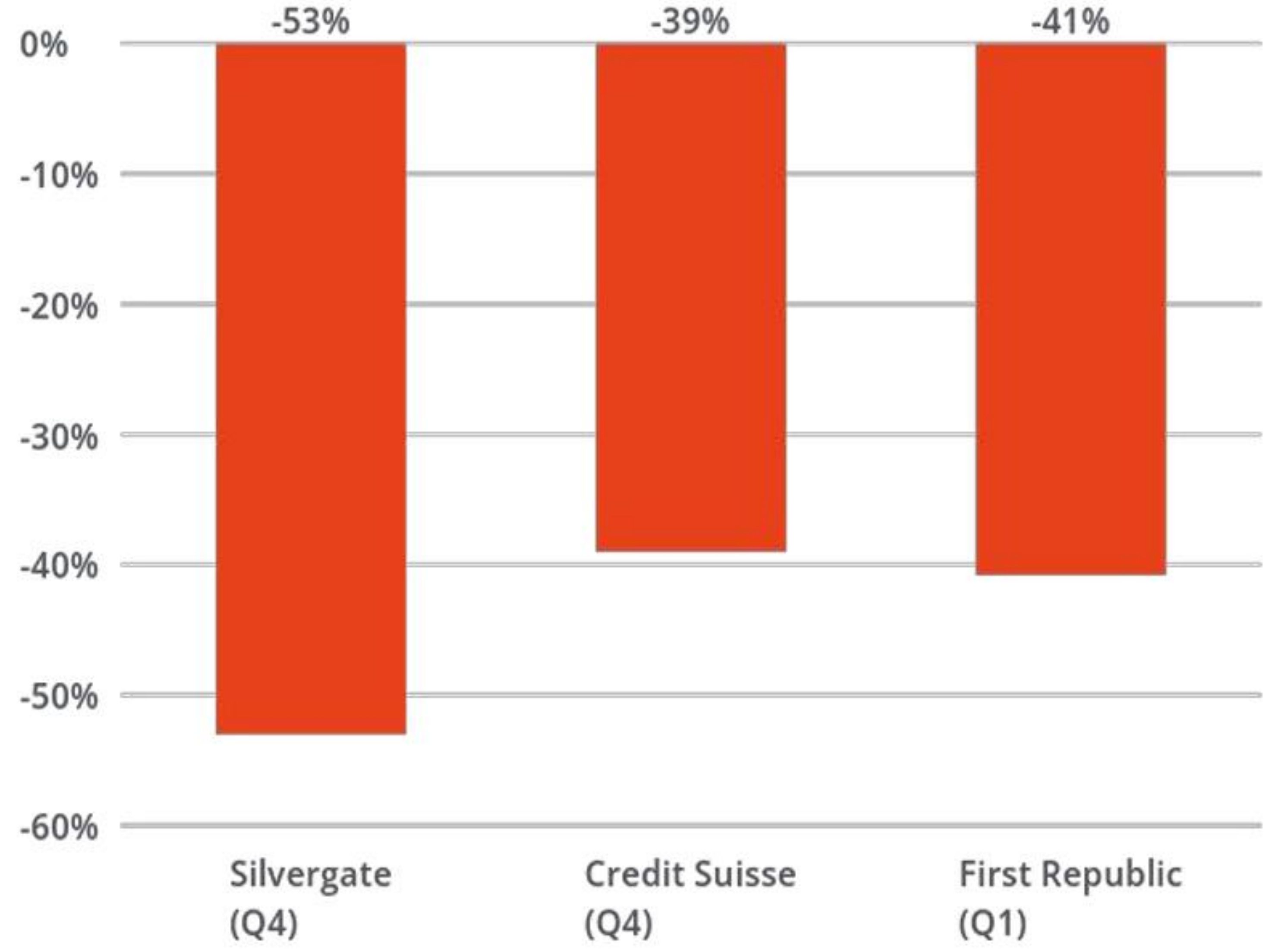
SVB was the house bank for VCs and startups – Other US crisis banks also relied on very narrow depositor segments

Deposit concentration by customer segment, 12/31/2022



...when trust evaporated, this led to strong outflows: Credit Suisse and FRB were also strongly affected because of their primary reliance on UHNWI.

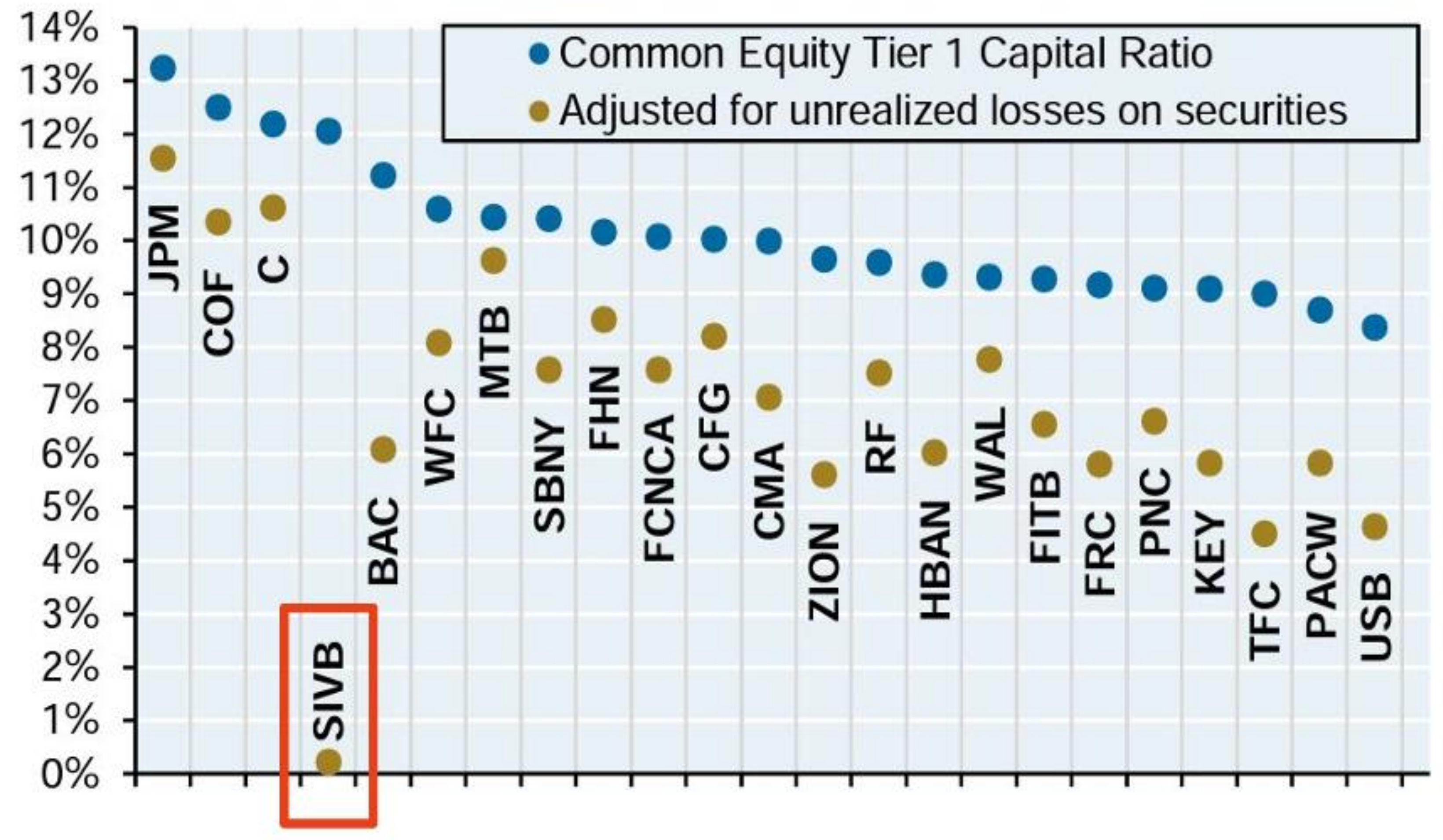
Deposit outflows (% QoQ) in the quarter before the bacrupcy



Deficiencies in risk management further increased the vulnerability of crisis banks to deposit outflows

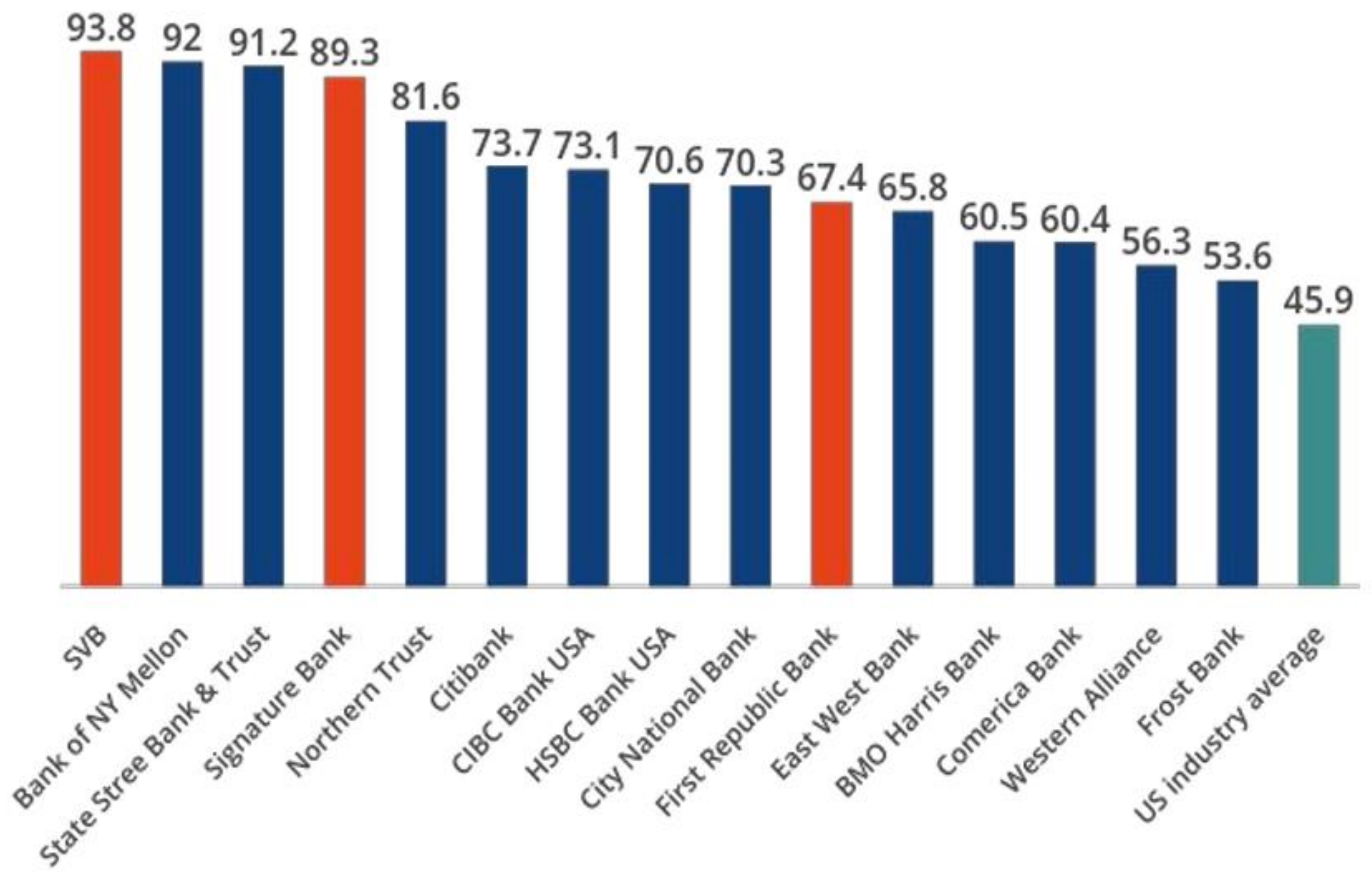
Silicon Valley Bank already had strong unrealized losses in the investment book in the year 2022

Impact of unrealized value adjustments on capital ratios selected US banks, December 2022



Crisis banks also accounted for a high proportion unsecured deposits

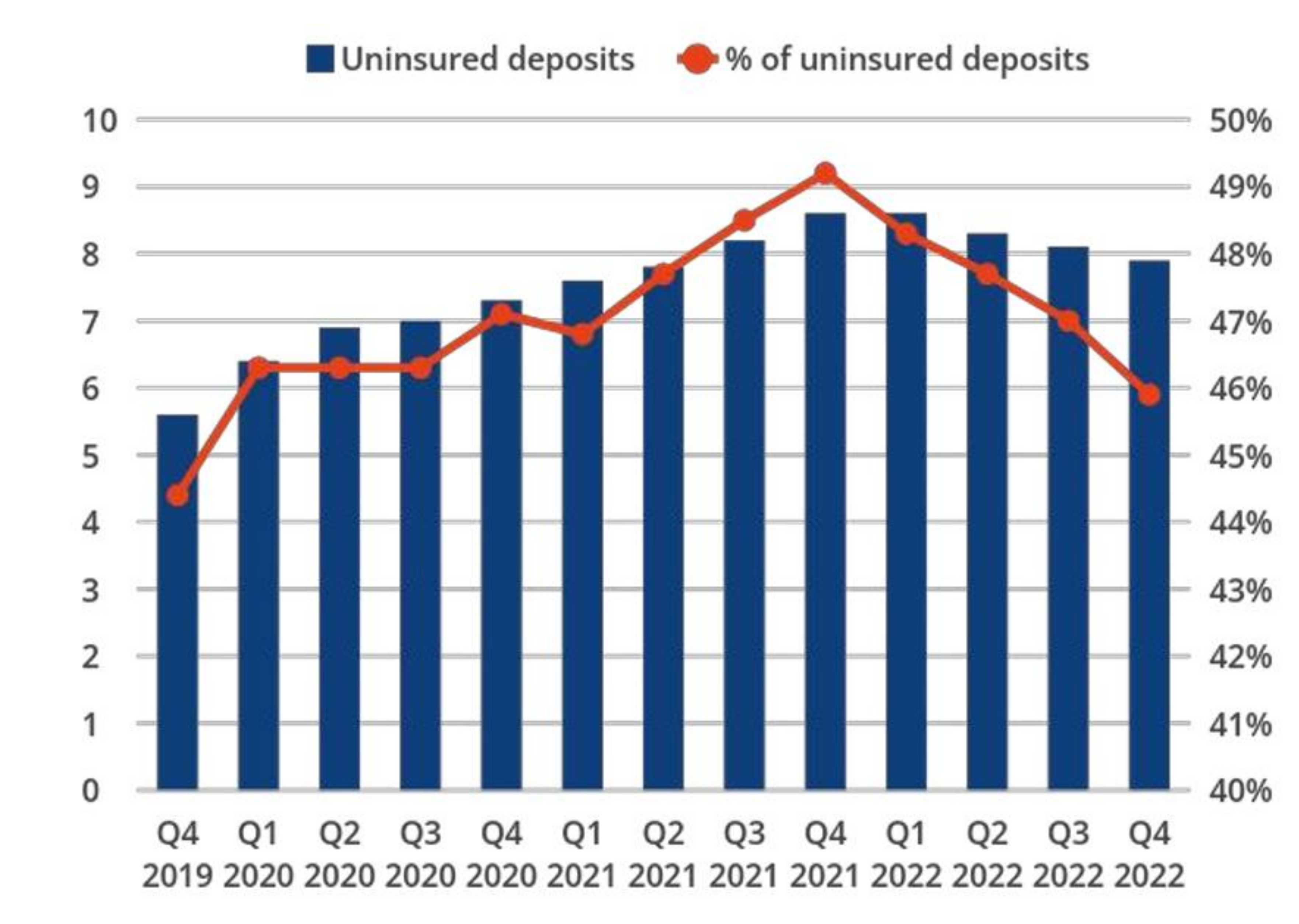
Top 15 US banks by share of unsecured deposits in their portfolio, December 2022



US banks subsequently focused on insured deposits covered by the federal deposit insurance scheme (FDIC)

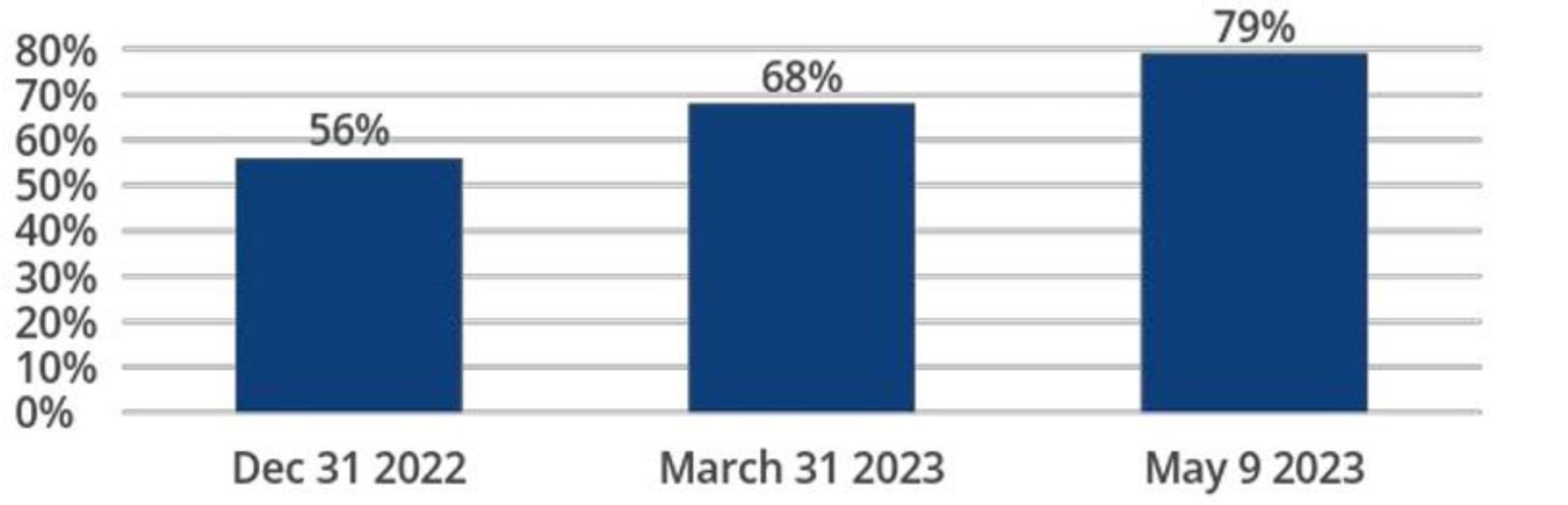
The share of uninsured deposits reached an all-time high before interest rates increased

Unsecured deposits ($ trillion) and % share held by US banks (Source: S&P, Fed.)

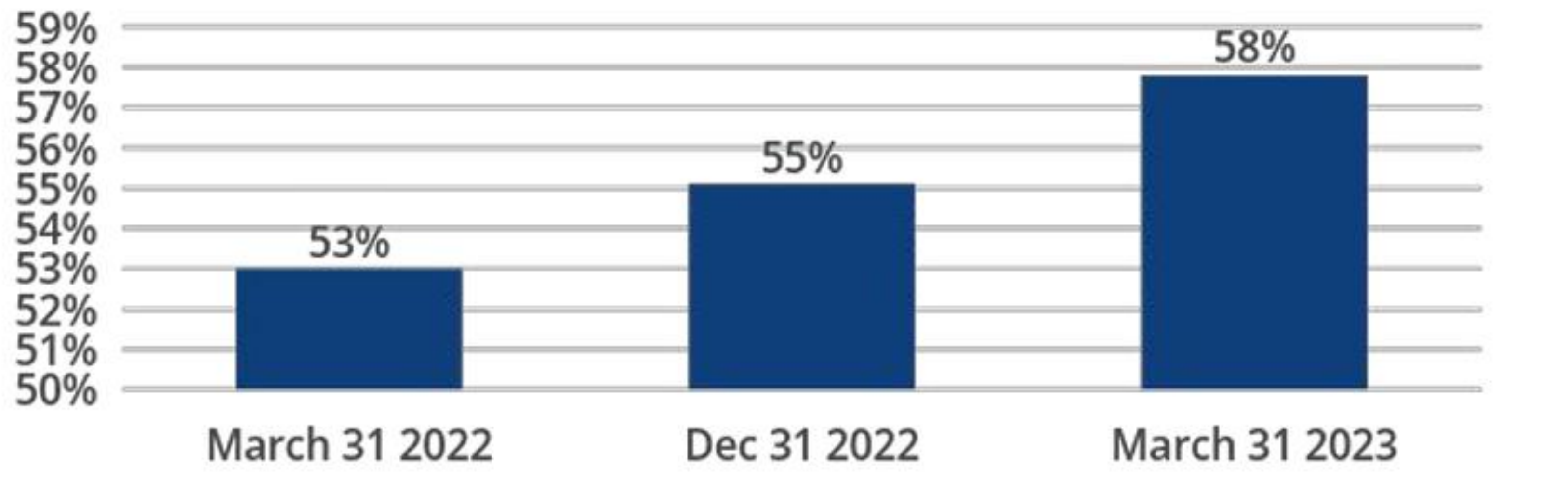


Banks are now trying to maintain their stability by strengthening their deposit books

Western Alliance, share of secured deposits in the portfolio



Anteil gesicherter Einlagen am Bestand von US-Banken



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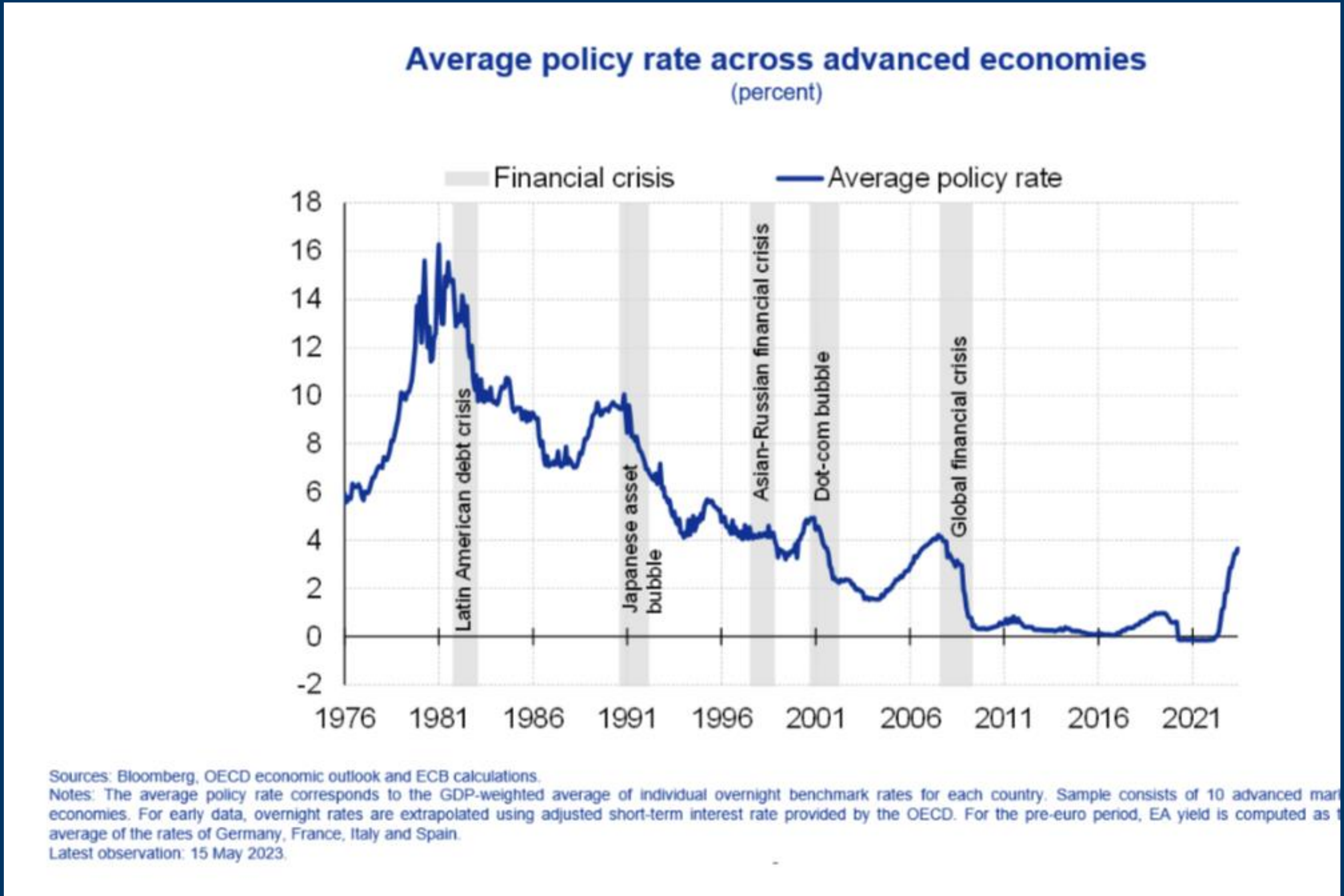


What really matters for financial markets…

Looking ahead, where is the next source of instability hitting the banking system or the financial system as a whole?

The risks in banking are allways and everywhere the same:

- High concentration risks and an undiversified business model
- High leverage and excessive risk taking
- Insufficient risk culture and inadequate risk management capabilities
- Insufficient liqiuidity buffers and inadequate capital buffers
- Sudden loss of confidence in financial institutions and contagion to similar institutions
- Lag of an effective regulatory framework
- Lag of supervisory scrutiny

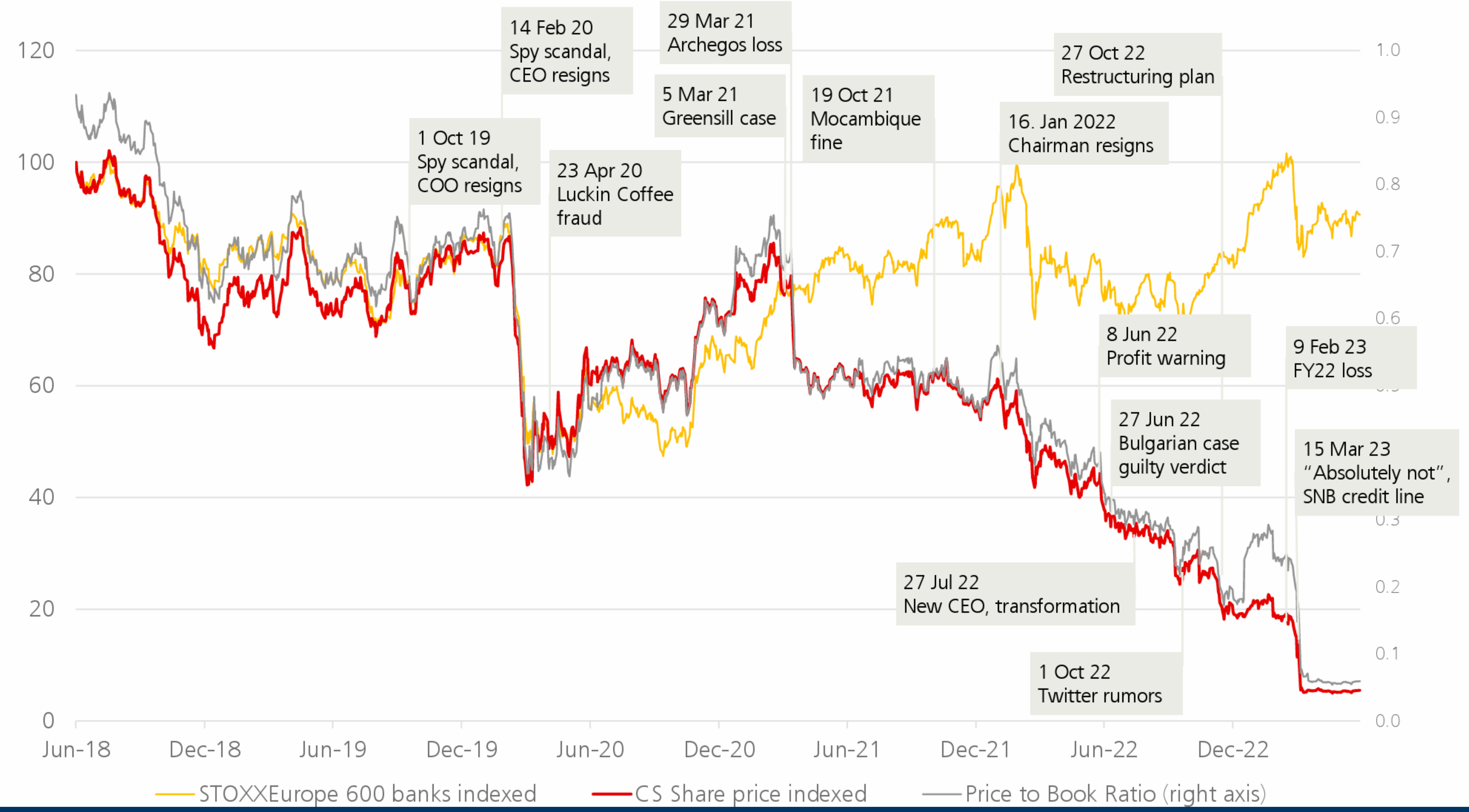
… so look for pockets of weakness in banks and financial markets…

End of Presentation

The Credit Suisse crisis was an idiosyncratic event

Credit Suisse – an idiosyncratic crisis evolving over many years

Loss of confidence in Credit Suisse due to repeated major incidents / failures and questioning of viability of business model; significant capital increases did not result in improved investor confidence



Credit Suisse capital increases since 2008:

- 2022: CHF 4bn capital increase
- 2021: CHF 1.8bn MCN[1] issuance
- 2015: CHF 4.7bn capital increase
- 2013: CHF 3.8bn MACCS[2] issuance
- 2011: CHF 350m MCS[3] issuance
- 2008: CHF 1.7bn MCS issuance

Total: CHF 16.35bn

1 Mandatory Convertible Notes (MCN);
2 Mandatory and Contingent Convertible Securities (MACCS);
3 Mandatory Convertible Securities (MCS)

The Credit Suisse crisis was an idiosyncratic event

The total loss of confidence in CS stemmed from a combination of significant idiosyncratic issues

Business Model	- Weak / volatile quality of earnings across divisions - Excessive reliance on capital allocation to the Investment Bank
Financial resource management	- Aggressive financial resource management, facilitated by regulatory rulings - Substantial litigation backlog
Risk Management / Culture	- Repeated severe risk events reflect lack of effective risk culture - CS was known to take more risk, but failed to mitigate this with strong risk management and control - Lack of rigor in addressing regulatory issues
Governance	- Fast turnover of Board and management leadership (e.g., 3 different Chairmen in 3 years and 4 CEOs in 7 years) - Roles and responsibilities seemed not clearly defined and strong reliance on committees rather than individual accountability

Weaknesses in Credit Suisse’s business model, financial resource management, governance and the lack of profitability exposed the bank and seriously eroded client trust

The Credit Suisse crisis was an idiosyncratic event

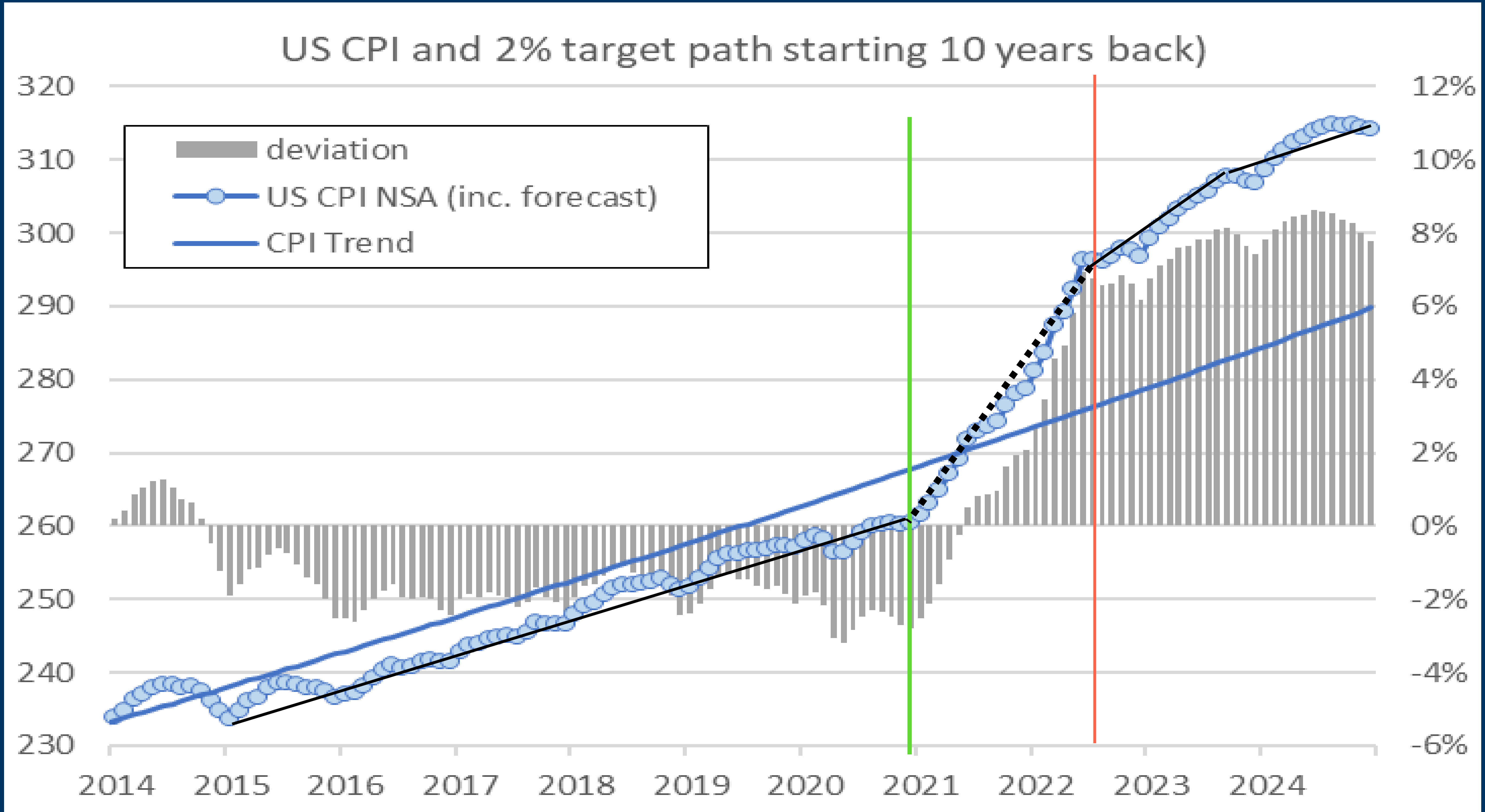
The regulatory framework and supervisory toolbox should be adjusted based on learnings from the CS failure

Strategy / Risk Management / Governance	– Explore targeted early intervention measures based on an objective set of quantitative and qualitative indicators – Clarify responsibilities and strengthen accountability, including senior manager accountability regime in Switzerland
Capital requirements	– Stronger focus on stress-based capital – Greater transparency and limitations on supervisory rulings and bank-specific capital add-ons (in Pillar 2) for firms that show deficiencies
Liquidity Framework	– Strengthen stress-based liquidity models to ensure banks take appropriate action to adjust their term-structure – Strengthen the basis for both market-based and central bank funding sources to help diversify the banks' funding structures, making them more resilient against sudden changes in deposit flows
Recovery & Resolution Planning	– Improve crisis preparedness, i.e. ensure supervisors can require actions by relevant parties to comprehensively prepare for potential private transactions as a possible rescue mechanism, while expanding the set of state-led crisis response options.

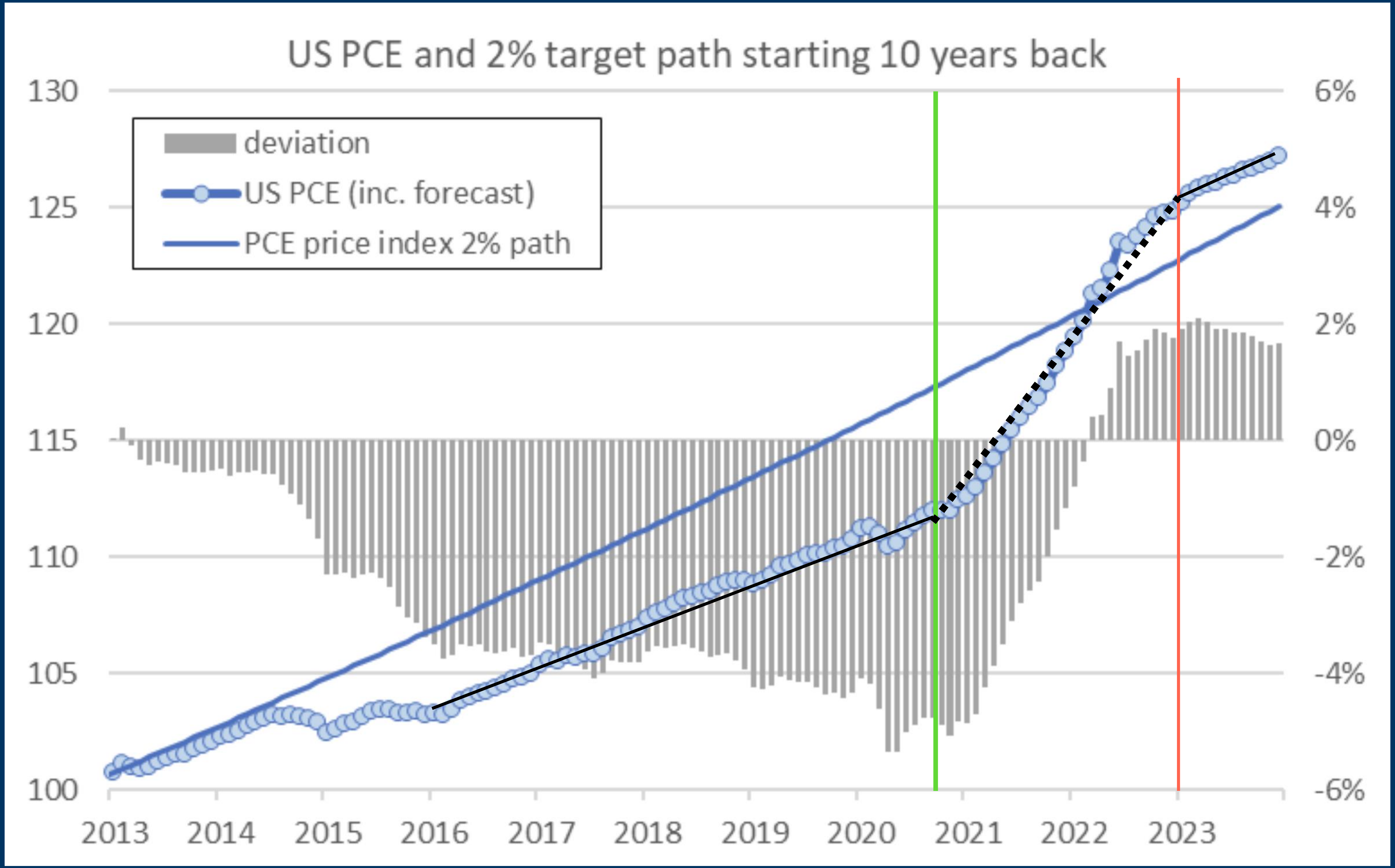
Monetary Policy:

prices matter,
wage-price dynamics will be key!

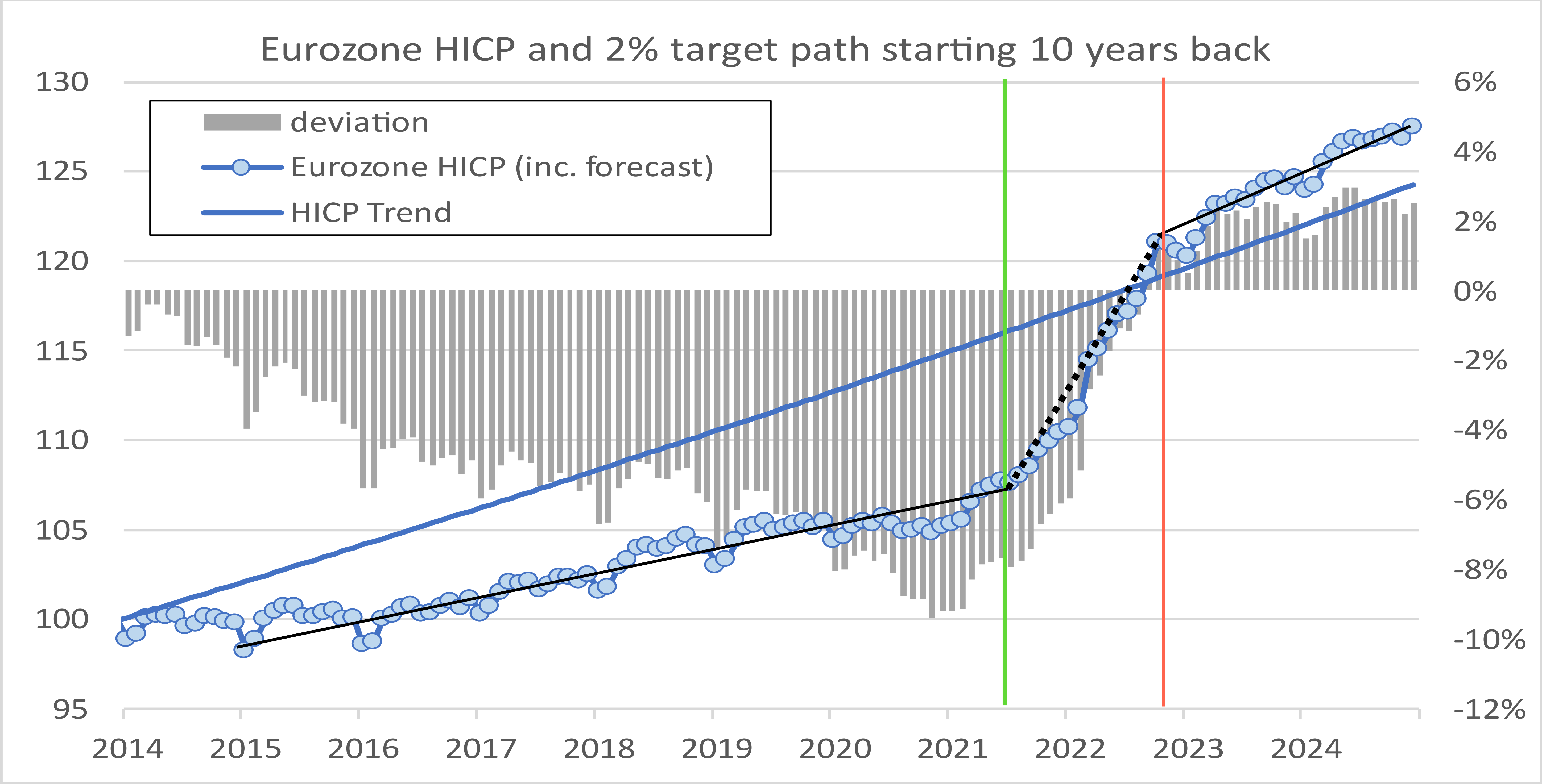
Average Inflation Targeting and other policy mistakes – FED



Average Inflation Targeting and other policy mistakes – FED

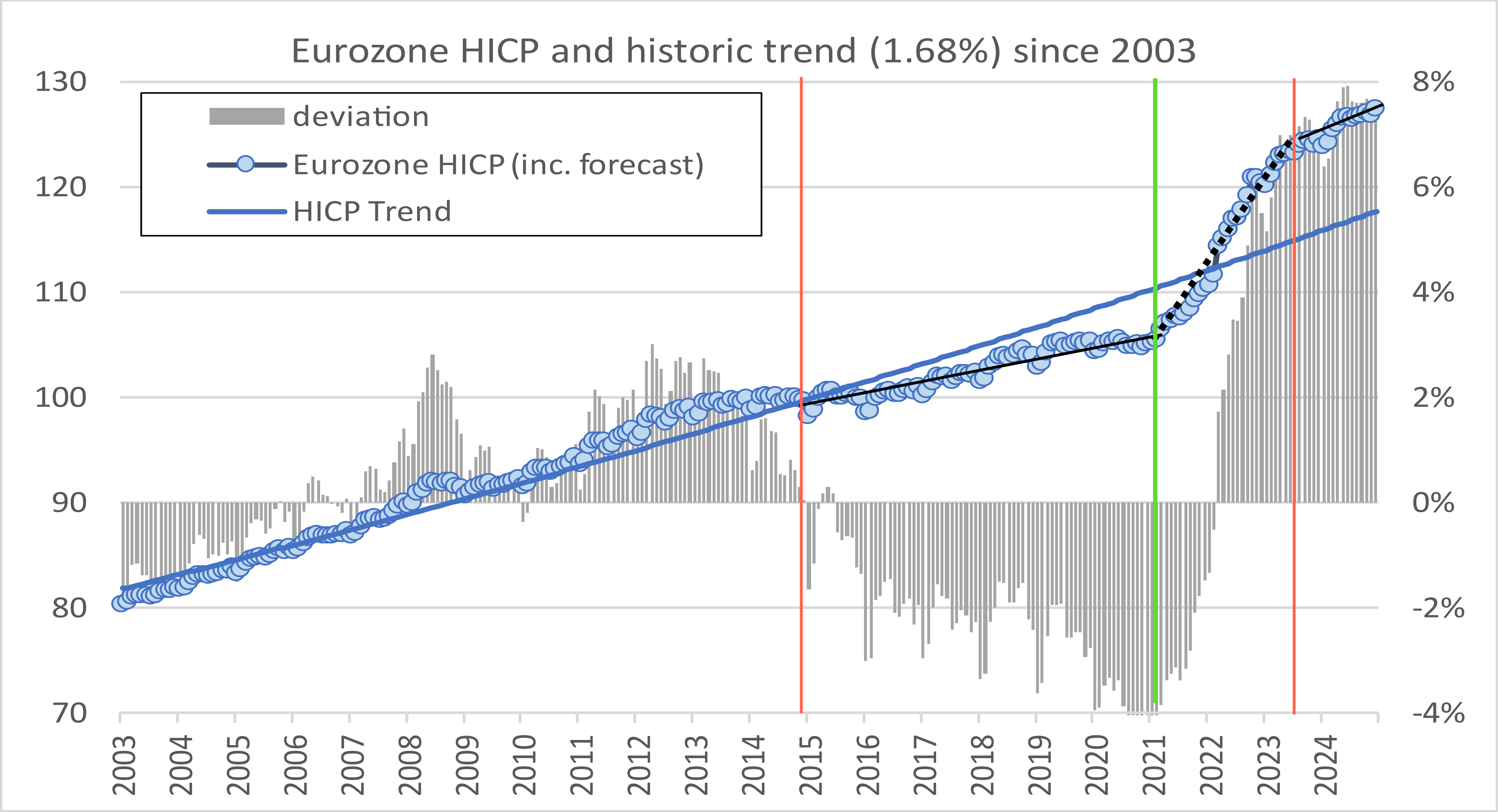


Average Inflation Targeting and other policy mistakes – ECB



Average Inflation Targeting and other policy mistakes – ECB

- How price stability lost you 50 percent of purchasing power during the Euro era -



Pipeline Risks for Moderating Inflation – Wages are catching up

Pipeline Risks for Moderating Inflation – Wages are catching up