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NAVIGATING THE NEW MONETARY ORDER

IIF and Oliver Wyman Joint Roundtable

April 12th, 2023

A business of Marsh McLennan

CONTEXT

The financial sector was transformed between 2008 and 2021, primarily by a major shift in monetary policy and tightened banking regulations

“Low for Long” rates and abundant liquidity shaped not only the financial sector’s structure and business models, but also the mindset and behavior of broader stakeholders. Low for Long has ended, giving rise to a "New Monetary Order" and the sector is slowly adapting

The collapse of Silicon Valley Bank powerfully demonstrates that business models that may have worked well under the old conditions can implode under the new monetary order

We have convened this roundtable to facilitate a constructive dialogue on the likely evolution of the sector in the new environment and the implications of that transformation

WHY IS THE PARADIGM SHIFT CRITICALLY IMPORTANT?

The financial sector is a key determinant of economic growth, innovation, and productivity due to its role in credit provision and the optimal allocation of capital

The new public policy environment is likely to trigger another evolution of the financial sector

This shift will alter the sector’s size, composition, profitability, risk, and the nature of winning and losing business models

For the broader economy, changes in credit availability, price, and financial stability will impact multiple societal goals, such as financial inclusion and the green transition

Backward-looking historical analysis (2008–2021) | US-focused view

Forward-looking scenario analysis (Medium to long term)

1 Key financial system drivers

Monetary policy

- Low for Long interest rate environment
- Expanding Fed balance sheet
- Central bank interventions to provide market liquidity

Financial regulation

- Tougher banking regulations transformed balance sheet, resulting in lower bank profitability

Other structural trends

- Broader trends such as rapid expansion of digitization, ESG, and evolving geopolitical landscape also impacted the structure of the financial system

2 Financial system evolution

Financial intermediary evolution

- Banks remain the largest intermediary with 32% share of private sector credit in 2021
- Bank share declined modestly after 2008, with share losses in residential partly offset by share gains in consumer and CRE (excl. MF) debt
- GSIBs lost substantial market share to smaller banks
- Non-banks expanded into business debt, and gained share, especially in riskier segments
- GSEs gained further share in residential mortgages, supported by non-bank originations

3 Scenarios and expected impact

Key drivers and implications

- Scenario analysis to understand potential implications on the broader economy and financial system
- Monetary policy and financial regulation will continue to drive further evolution of the sector
- We may also see a major shift in depositor & investor trust and reaction functions that would affect the sectors' structure

Open discussion on potential scenarios and expected implications

WE WILL FOCUS TODAY ON THE U.S., BUT FINANCIAL SYSTEM DRIVERS APPEAR BROADLY CONSISTENT ON A GLOBAL BASIS

Global trends across key financial system drivers
2008 Q3–2021 Q4

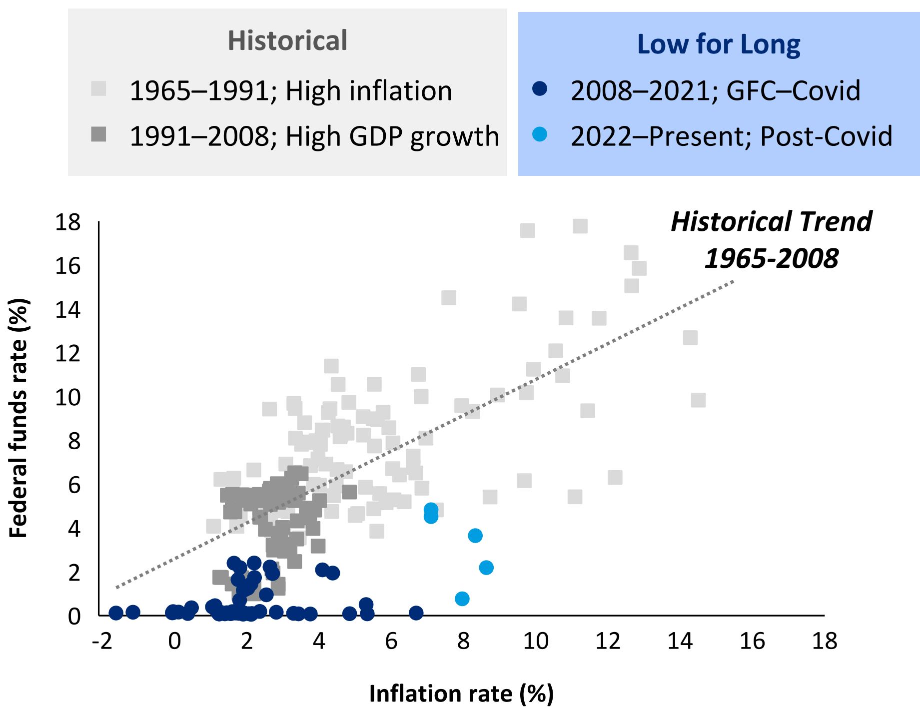
Focus of presentation

Monetary policy	% of quarters with rates less than or equal to 0.5%	71%	64%	84%	100%
	Central bank B/S expansion	10x	6x	11x	7x
	Central bank interventions *(Select examples only)*	Repo markets 2019	Security Markets Programme 2010	Gilts market 2022	FX intervention 2022
Financial regulation	Enhanced bank capital	✓	✓	✓	✓
	Enhanced bank liquidity	✓	✓	✓	✓

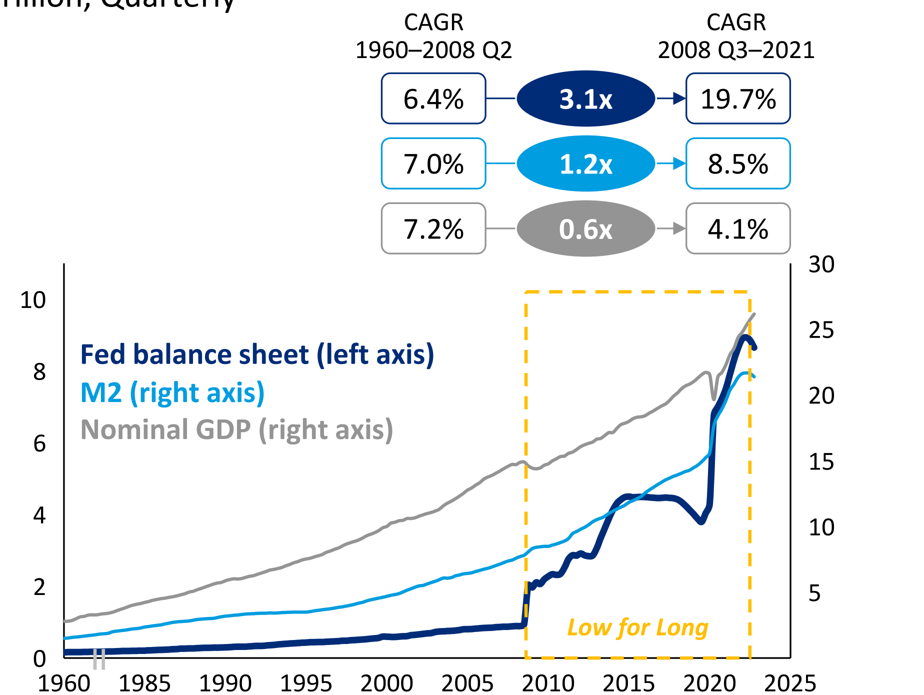
Source: Federal Reserve, FRED, ECB, BoE, Bank of Japan, BIS, Bloomberg, OW Analysis

POST-GFC, RATES WERE HISTORICALLY LOW AND DEVIATED FROM THEIR RELATIONSHIP WITH INFLATION, COUPLED WITH A LARGE INCREASE IN THE FED'S BALANCE SHEET

Effective federal funds rate vs. inflation
%, Quarterly



Federal Reserve balance sheet, money supply (M2), and nominal GDP
$ Trillion, Quarterly



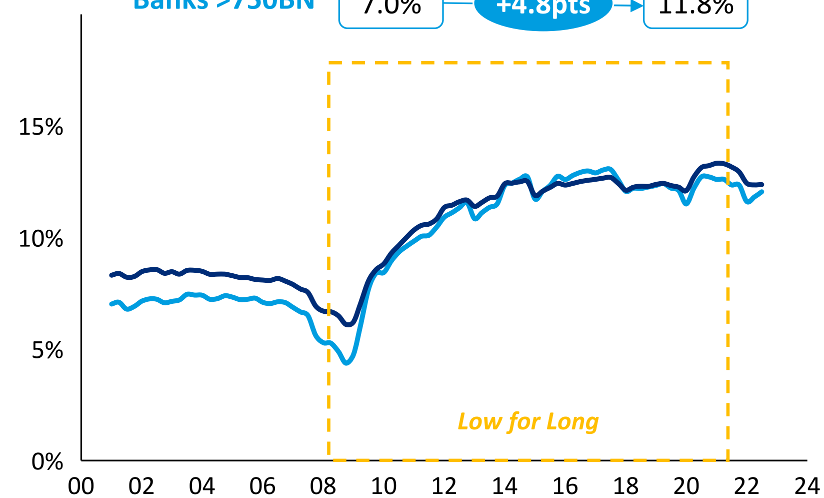
Note: EFFR increase on 3/22/23 paired with latest inflation period available (Feb 2023); EFFR values are quarterly averages
Source: FRED, OECD, OW Analysis

DURING THE SAME PERIOD, NEW BANK REGULATIONS HAVE RESULTED IN SIGNIFICANTLY HIGHER CAPITAL AND LIQUIDITY POSITIONS…

CET1 ratio for banks

%, Common Equity Tier 1 as a percent of risk weighted assets

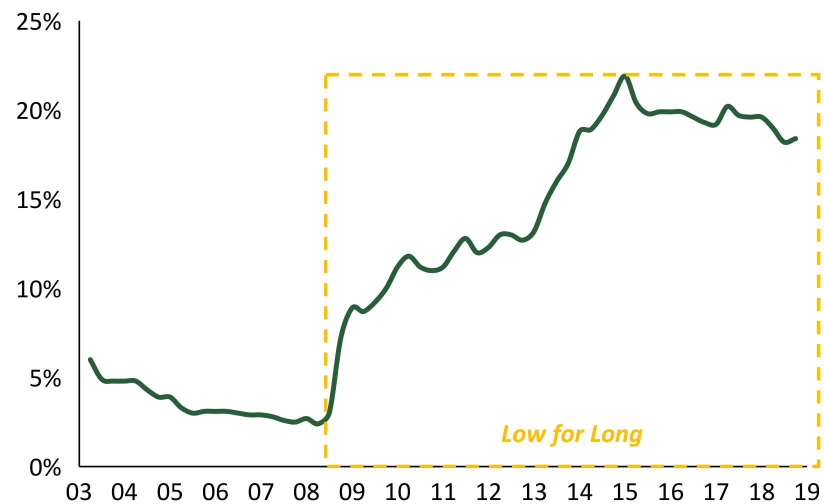
	Average 2001–2007		Average 2010–2021
All banks	8.2%	+3.8pts	12.0%
Banks >750BN[1]	7.0%	+4.8pts	11.8%



High-Quality Liquid Assets (HQLA)-to-assets ratio

% of assets, banks with total consolidated assets >$250 billion

	Average 2003–2007		Average 2010–2018
Banks >250BN	3.6%	+13.2pts	16.8%

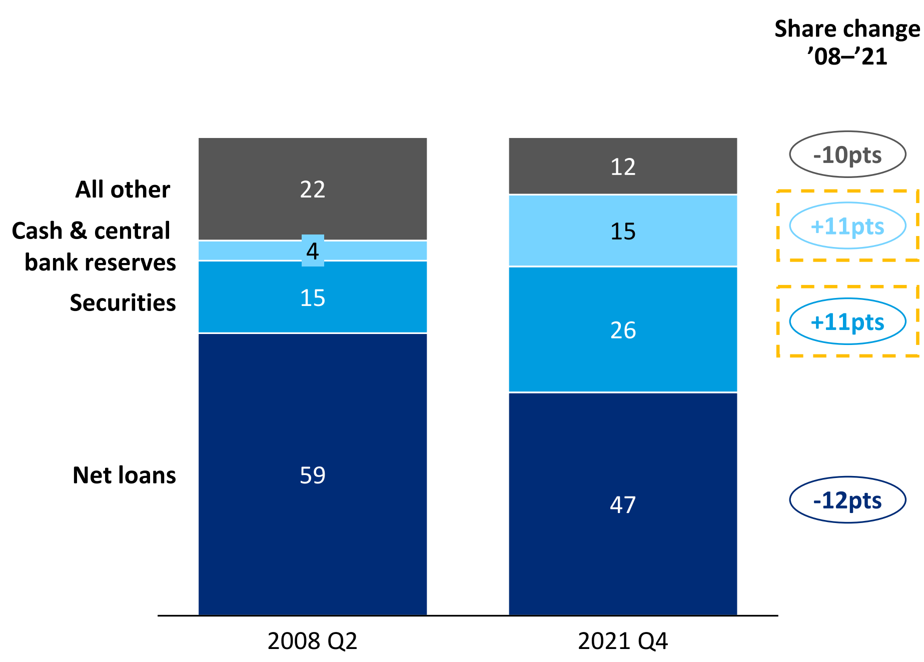


1. Bank Holding Company with assets greater than $750 billion

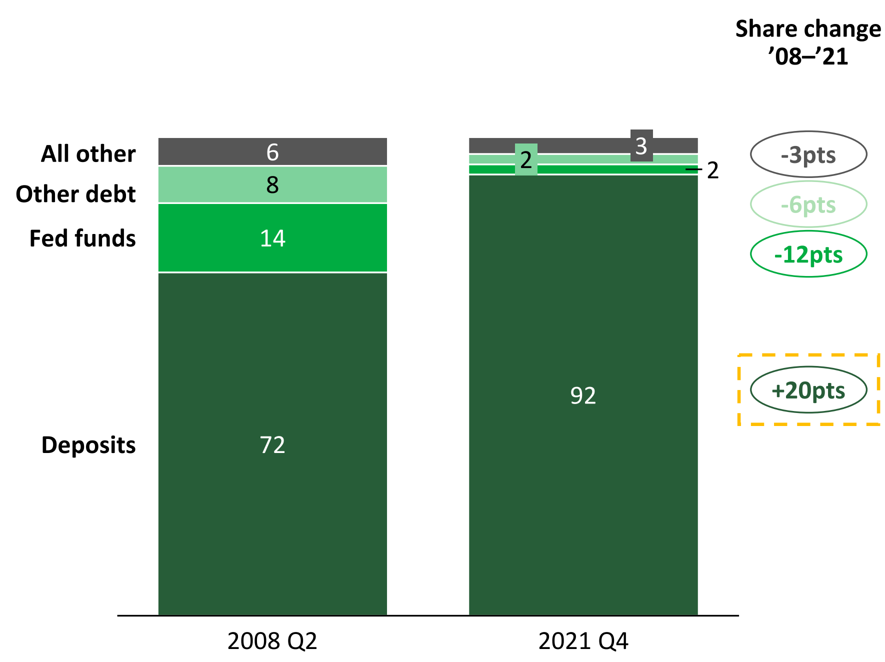
Source: Federal Reserve, OW Analysis

…TRANSFORMING BANK BALANCE SHEETS TO HOLD MORE SECURITIES & CASH ON THE ASSET SIDE AND AN INCREASED RELIANCE ON CHEAP DEPOSIT FUNDING

Total bank assets
% of total



Total bank liabilities
% of total

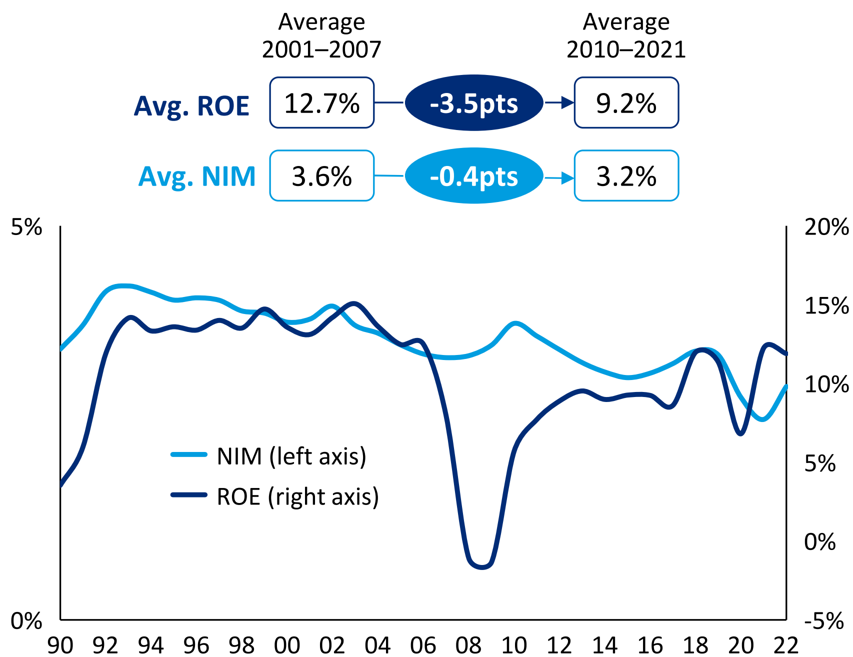


Source: FDIC, OW Analysis

THE LOW-RATE ENVIRONMENT AND INCREASED REGULATION LOWERED BANK PROFITABILITY – RECENT RAPID RISE IN RATES EXPOSED SIGNIFICANT INTEREST RATE RISK AT BANKS

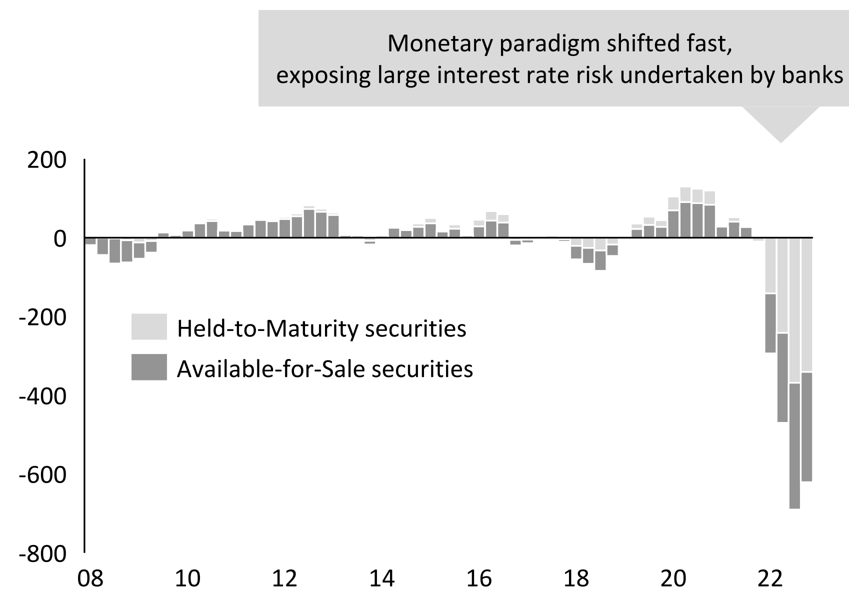
Bank ROE vs. NIM

%, Quarterly data annualized



Unrealized gains/losses on investment securities

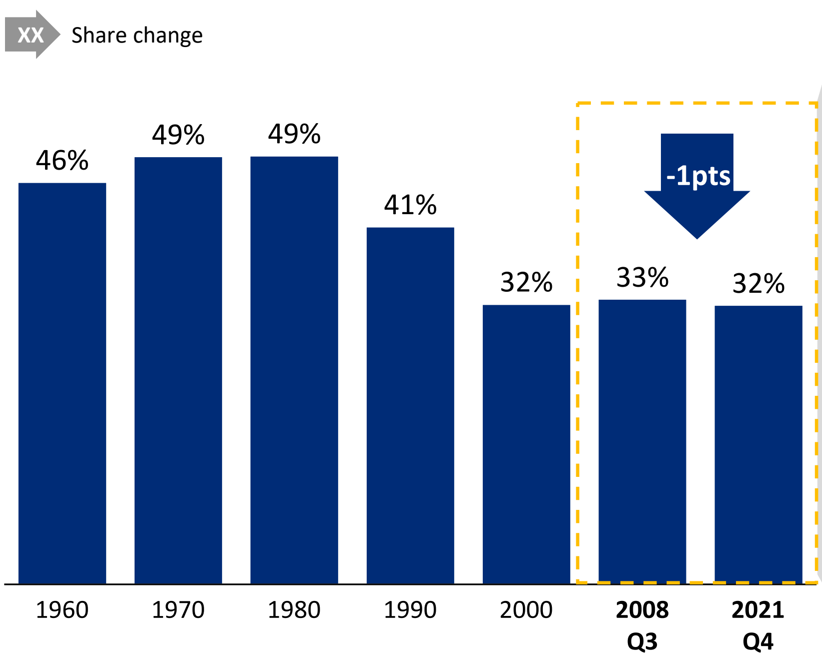
$ Billion



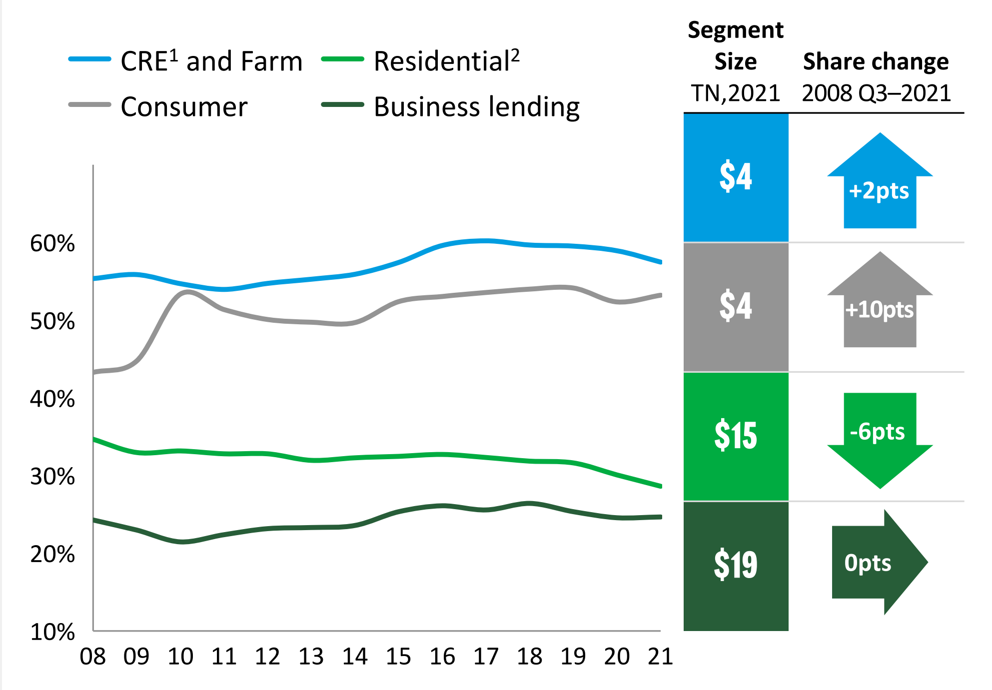
Source: FRED, Federal Reserve, FDIC, OW Analysis

BANK SHARE DECLINED MODESTLY POST-GFC; DECLINE IN RESIDENTIAL SHARE WAS PARTLY OFFSET BY CONSUMER AND CRE SHARE GAINS

Bank share of private sector credit
% of total, excluding loans to non-financial business



Bank share of private sector credit by segment
% of segment total

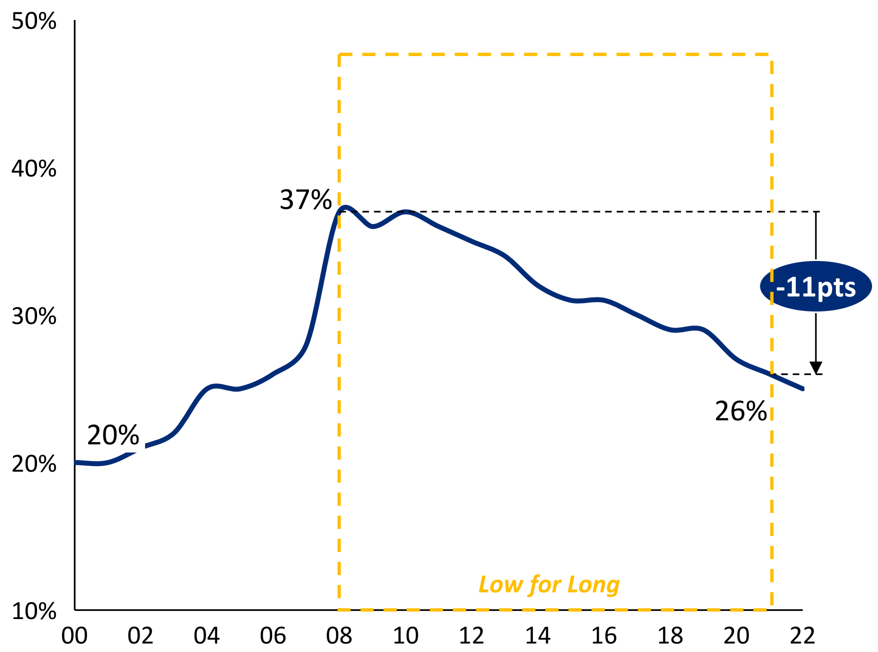


1. Excludes multifamily; 2. Residential loans include single-family and multifamily
Source: FRB Z1 Table, FDIC, OW Analysis

DIFFERENTIAL REGULATORY IMPACT CONTRIBUTED TO GSIBS LOSING SHARE OF TOTAL BANKING PRIVATE SECTOR CREDIT ACROSS ALL SEGMENTS POST-2008

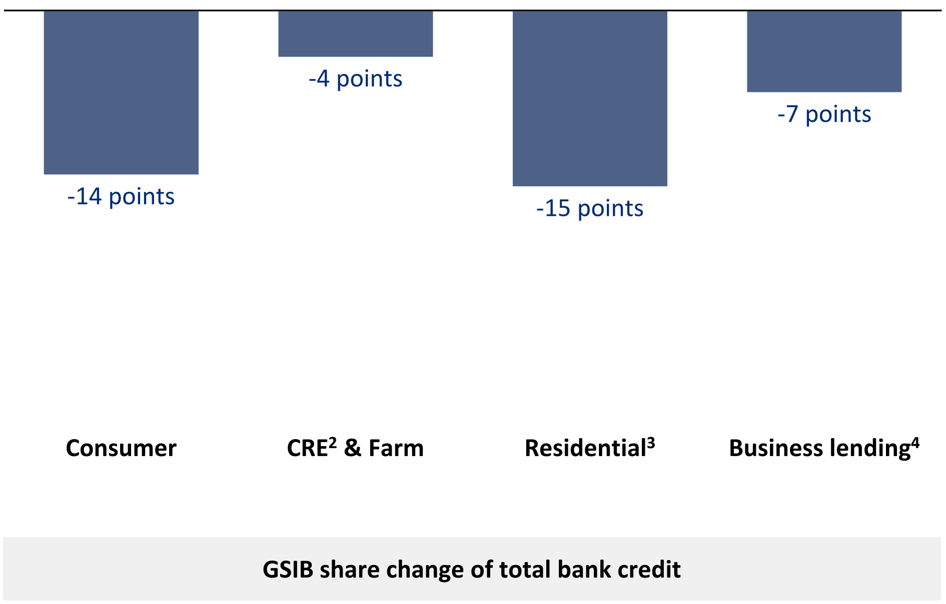
GSIB[1] share of total bank private sector credit

% of total bank credit, excluding loans to all financial businesses



GSIB[1] share change post-GFC by credit segment

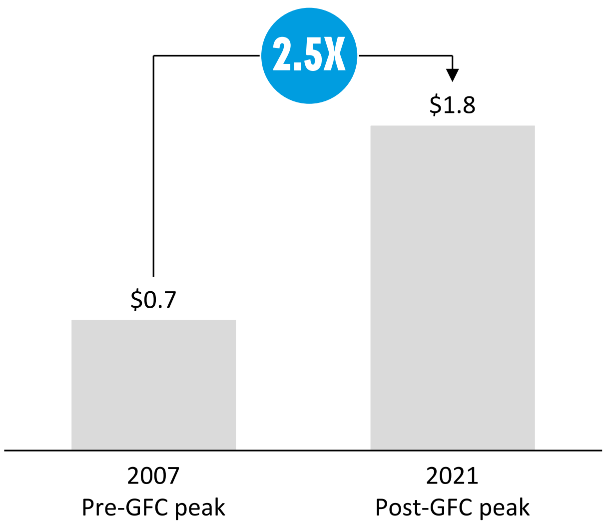
Share change, points, 2008–2021



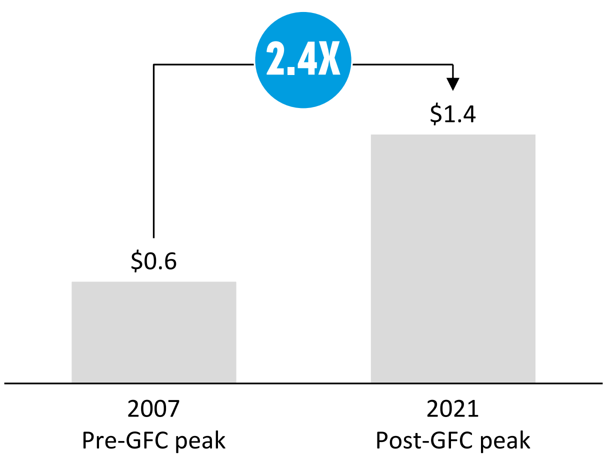
Note: GSIB share calculated by dividing aggregate GSIB domestic private sector credit bank loans, from Cap IQ call reports, by total private sector credit loans of insured commercial banks and savings institutions from FDIC
1. Includes JP Morgan, Bank of America, Wells Fargo, Citi Bank, State Street, BNY Mellon; 2. excludes multifamily segment; 3. Includes single-family and multifamily; 4. Excludes Corporate Bonds and Open Paper
Source: FDIC, S&P Capital IQ, OW Analysis

RISKIER SEGMENTS OF BUSINESS DEBT GREW RAPIDLY DURING THIS PERIOD, LARGELY DRIVEN BY NON-BANK EXPANSION

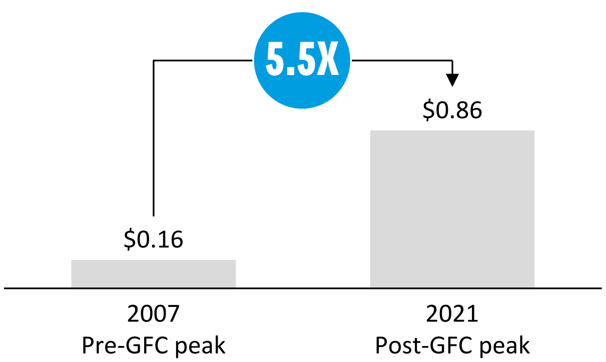
High-yield bonds outstanding
$ Trillion



Leveraged loans outstanding
$ Trillion



Non-bank "private credit"[1] AUM
$ Trillion



Bank lending to non-banks increased by $650 billion from 2008 to 2021

1. Private credit refers to debt finance to companies from alternative asset manager funds, rather than banks, bank-led syndicates, or public markets
Source: LCD, Preqin, S&P Global Intelligence, FDIC, OW Analysis

TRANSITION INTO THE NEW MONETARY ORDER WILL HAVE REAL IMPACT ON THE BROADER ECONOMY AND FINANCIAL SECTOR IN MANY WAYS

Transition to the new monetary order…

There is substantial uncertainty around which path the financial sector will take

Many key drivers that will influence the outcome are fluid and can be contradictory

Scenario analysis is a technique conducive to evaluating a broad range of futures with depth on each scenario

Scenarios will differ in their impacts on key outcomes…

Broader economy

Credit pricing and availability, with effects on economic growth	Consumer and investor protection
Quality and innovation in financial products	Financial inclusion
Financial stability	Contribution to other societal goals (climate, fighting inequality, etc.)

Financial sector

Size	Profitability levels
Composition within and across financial sector intermediaries	Risk levels and mitigation approaches
Characteristics of winning and losing business models	Regulation and policy

Source: OW Analysis

KEY FINANCIAL SYSTEM DRIVERS WILL LARGELY DETERMINE THE FORM OF THE NEW MONETARY ORDER

Policy rates and interest rate environment

Policy rates and the resulting interest rate environment will have a significant impact on total borrowing and credit performance of exiting and new debt

Central bank balance sheet and money supply

Central banks are key direct players in parts of the financial markets and heavily influence overall liquidity for banks and non-banks

Financial regulation

Regulatory requirements for GSIBs, regional banks, and non-banks may change the total size of the financial sector and share of key players

Depositor and investor confidence

Changing market confidence may result in significant shifts in depositor and investor behaviors

Broader structural trends

Other broader structural trends such as changes in globalization, climate, and digitization may impact the structure of the financial sector

Selected drivers for scenario analysis

Source: OW Analysis

WE INVITE YOUR VIEWS ON THE EVOLUTION DURING THE LOW FOR LONG ENVIRONMENT, ITS IMPACT ON THE FINANCIAL SECTOR, AND YOUR THOUGHTS ON THE FUTURE OF FINANCE

Historical analysis and framing

- Is the story we presented consistent with your historical views?
- Is it consistent with the experience of other countries?
- Were there drivers within the private sector that were as important as central bank actions and/or regulatory changes?
- How did key risks develop throughout this period?

Scenario design

- What are the key determinants of the future of the financial sector?
- Is there a better approach than scenario analysis to analyze potential future outcomes?
- What outcomes would you focus on with respect to the financial sector? What about the broader economy?

Anticipating the future

- What are the most plausible paths going forward?
- What are the key risks for the future?
- How has the turmoil in March impacted the sector's future?
- Are some outcomes which have received broad public attention unlikely to occur?
- How would "private credit" evolve under higher funding costs and higher yields in traditional instruments?

Source: OW Analysis

APPENDIX

BIOS

DOUGLAS J. ELLIOTT

Partner
Financial Services

Mr. Elliott is a Partner at Oliver Wyman. He focuses on public policy and its implications for the financial sector, globally. His recent paper, *Key Policy Issues in Finance for 2023,* shows the breadth of the topics he analyzes and introduces the concept of the New Monetary Order that he will discuss further at the roundtable.

Doug frequently appears on panels or as a speaker for the Bank of England, Fed, IMF, World Bank, ECB, ESRB, European Commission, Basel Committee, JFSA, Asian Development Bank, US Treasury, OCC, and others. In 2020, he co-authored a report for the Group of Thirty on corporate solvency problems stemming from the pandemic. The project co-chairs were Mario Draghi and Raghuram Rajan.

Prior to Oliver Wyman, he was a scholar at The Brookings Institution for seven years, where he wrote and spoke extensively on financial regulation. He has twice been a Visiting Scholar at the International Monetary Fund, as well as a consultant for the IMF, the World Bank, and the Asian Development Bank. While at Brookings, he wrote *Uncle Sam in Pinstripes: Evaluating US Federal Credit Programs*, a comprehensive book on the topic.

Prior to Brookings, he was a financial institutions investment banker for two decades, principally at J.P. Morgan. He worked across the range of financial institutions clients, including banks, insurers, and asset managers. He was primarily an M&A investment banker, but also worked as an equities analyst and in capital markets.

He has testified multiple times before both houses of Congress and participated in numerous speaking engagements, as well as appearing widely in the major media outlets. The New York Times has described his analyses as “refreshingly understandable” and “without a hint of dogma or advocacy”.

Mr. Elliott graduated from Harvard College *magna cum laude* with an A.B. in Sociology and graduated from Duke University with an M.A. in Computer Science.

UMIT KAYA

Partner
Financial Services

Mr. Kaya is a Partner at Oliver Wyman's New York office, and a member of the Finance and Risk practice, primarily working on risk management and financial management issues

Umit's clients include almost all types of financial institutions: universal banks, commercial banks of all sizes, custodian banks, monolines, investment banks, insurers, specialty lenders including consumer lenders, payday lenders, multilateral/governmental financial institutions, private equity companies and industry associations.

His expertise covers the full spectrum of risk management and financial management topics including credit risk, market risk, treasury and balance sheet management, enterprise risk management, risk governance, model risk management, capital planning and stress testing, liquidity risk management, interest rate risk management, among others.

Umit also founded and leads an internal group at Oliver Wyman to build analytical tools to increase the efficiency project work, including using advanced techniques and tools.

He has published on various topics, including model governance/validation, LIBOR transition, liquidity risk management, ALM and interest rate risk management.

Umit graduated in 2004 with a Ph.D. in Economics from Princeton University. Umit has a B.A. in Economics from Koç University in Istanbul, Turkey.

QUALIFICATIONS, ASSUMPTIONS, AND LIMITING CONDITIONS

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