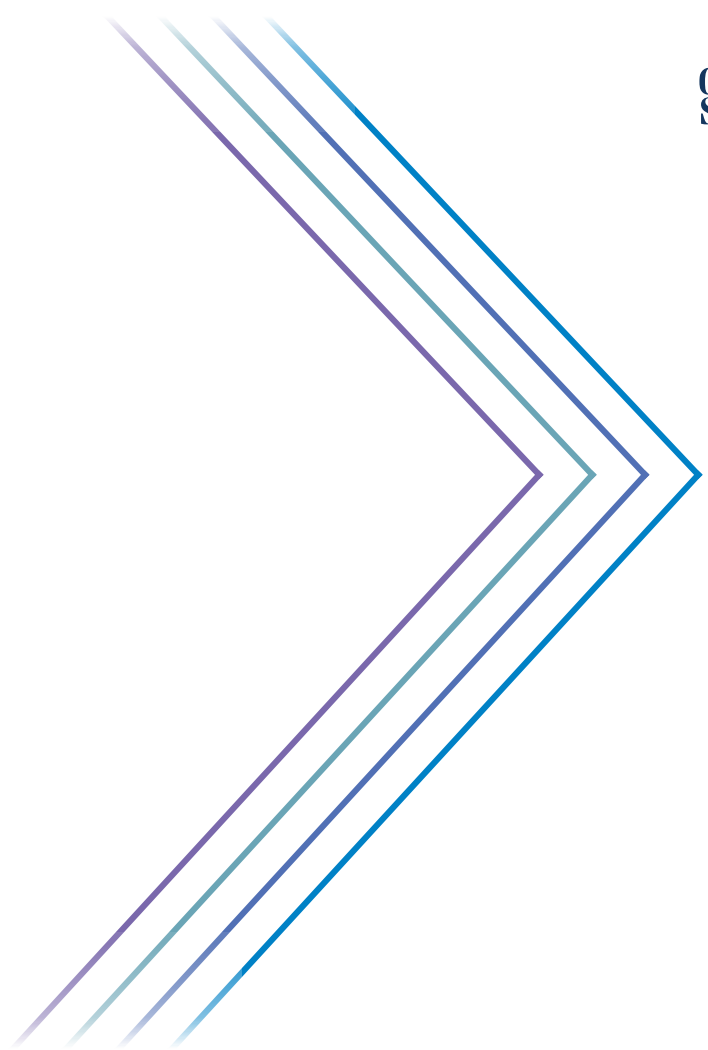


# **Fixed Income Investor Presentation**

**Brian Lee, Chief Risk Officer**

**Philip Berlinski, Global Treasurer**

May 10, 2022

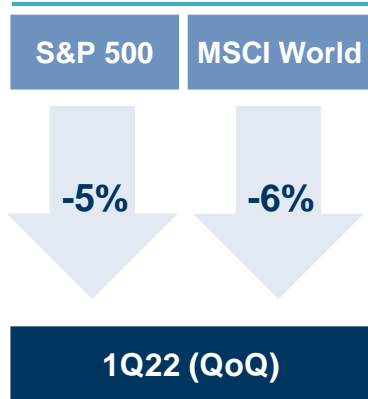


# Macro Backdrop

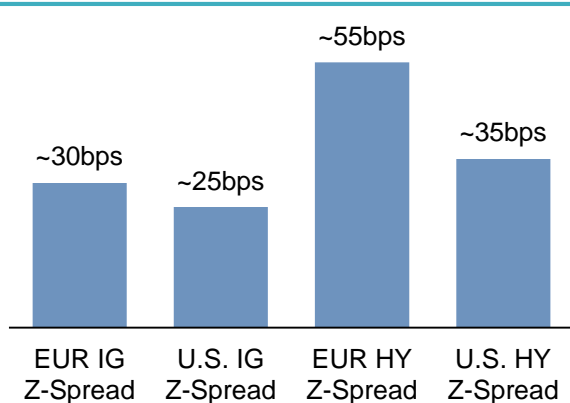
## Recent Developments

- ✓ Russia's invasion of Ukraine and its broader geopolitical implications
- ✓ Rising inflation alongside commodity prices and stress on supply chains
- ✓ Shift in interest rate environment

### Equity Markets



### 1Q22 Credit Spreads (QoQ)



### Global 10-Year Government Bond Yields

	U.S.	U.K.	Japan	Germany
1Q22	2.3%	1.6%	0.2%	0.5%
YE22 (GIR <sup>1</sup> est.)	2.7%	2.0%	0.3%	0.8%

# Committed to our Strategy

**Grow and Strengthen  
Existing Businesses**

**Diversify Our Products  
and Services**

**Operate More  
Efficiently**

**Driving Credit Positives**

**More Stable, Durable  
Revenues and Earnings**

**Increased  
Diversification**

**Enhanced Franchise  
Strength**

**Improved Capital and  
Funding Efficiency**

# Strong Risk Management Oversight



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**Robust risk management culture and process with continuous enhancements to address evolving risks**

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# Key Risks in Current Environment

**Inflation**

**Consumer Disposable Income**

**Rising Rates**

**Funding Risks**

**Russia – Ukraine Impact**

**Elevated Commodity Prices**

**Operational Resilience**

**Elevated Valuations**

**Cyber**

**Recession**

**Climate**

**Ongoing Market Volatility**

**Employee Retention**

**Integration Risks**

**China – US Relations**

**Syndication Market**

# Select Risk Events

	Russia-Ukraine War	Commodity Price Volatility
Counterparty Risk	<ul style="list-style-type: none"><li>■ Key risk management actions taken well before crisis unfolded</li><li>■ Strong coordination across organization allowed for timely closeouts</li></ul>	<ul style="list-style-type: none"><li>■ Credit exposure focused on strong investment-grade clients and right-way exposure with producers</li></ul>
Market Risk	<ul style="list-style-type: none"><li>■ Currency and other hedges mitigated markdowns on investment portfolio</li><li>■ Inventory management across Global Markets</li></ul>	<ul style="list-style-type: none"><li>■ Focused on maintaining exposure in most liquid products, while supporting clients</li></ul>
Liquidity / Capital Risks	<ul style="list-style-type: none"><li>■ Created RWA capacity to support clients in volatile market</li></ul>	<ul style="list-style-type: none"><li>■ Stress testing and prefunding for run-up in energy prices</li><li>■ Continued management of funding limits</li></ul>
Other	<ul style="list-style-type: none"><li>■ Ongoing evaluation of second &amp; third order impacts</li><li>■ Management of non-financial risks (e.g. people, vendor and cyber)</li></ul>	<ul style="list-style-type: none"><li>■ Managed nickel volatility with minimal impact</li></ul>

# Climate Risk Integration

**Physical Risk**

**Transition Risk**

**GHG Emission Targets**

## Integration of Climate Risk

- We have developed physical and transition risk quantification methodologies which consider a variety of climate risk factors and pathways
- Transition and physical risks are now evaluated as part of transaction due diligence for select loan commitments, and we consider climate risk factors and mitigants in the loan approval process

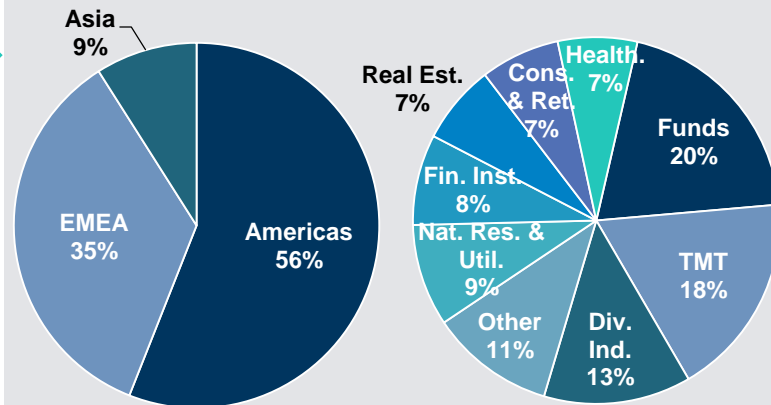
# Loan Portfolio and Credit Overview

## Loan Portfolio Breakdown (\$bn)

	1Q22	4Q21	1Q21
Corporate	58	56	48
Wealth management	45	44	36
Commercial real estate	29	26	21
Residential real estate	15	16	9
Installment	4	4	3
Credit cards	11	8	4
Other	8	8	4
<b>Total Gross Loans</b>	<b>\$170</b>	<b>\$162</b>	<b>\$125</b>
Allowance for loan losses	(4)	(4)	(4)
<b>Total Net Loans</b>	<b>\$166</b>	<b>\$158</b>	<b>\$121</b>



## 1Q22 Corporate Loans by Geography & Industry<sup>1</sup>



## 1Q22 Key Credit Metrics

2.7%	ALLL to Total Gross Loans <sup>2</sup>	1.7%	0.4%	Annualized Net Charge-off Rate	0.3%	Wholesale Annualized Net Charge-off Rate
		ALLL to Gross Wholesale Loans <sup>2</sup>			12.2%	

**80%+ of our gross loans are secured**

## Consumer Credit Risk

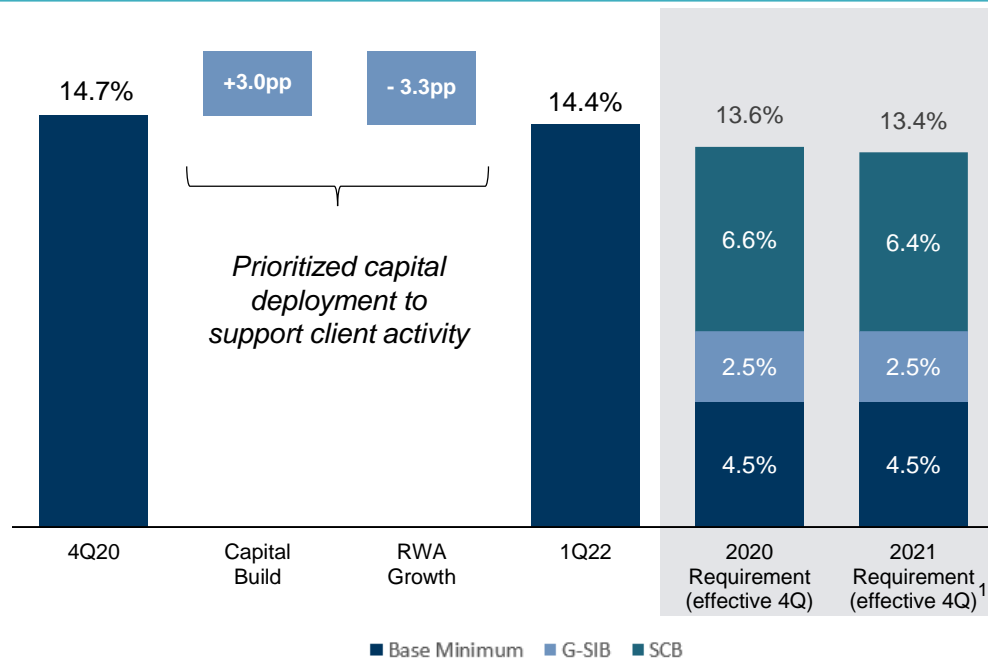
**80%**  
Consumer loans  
with FICO  $\geq$ 660  
as of 1Q22

**~780**  
GreenSky Average  
Consumer Credit  
Score<sup>3</sup>



# Strong Capital Position

## Standardized CET1 Ratio



## Strategic Progress

- ✓ Dynamically allocating capital, sustainably growing our dividend and returning capital to shareholders
- ✓ Reduction in SCB reflects progress in Asset Management harvesting
- ✓ Active management of balance sheet and RWA growth as client opportunities arise

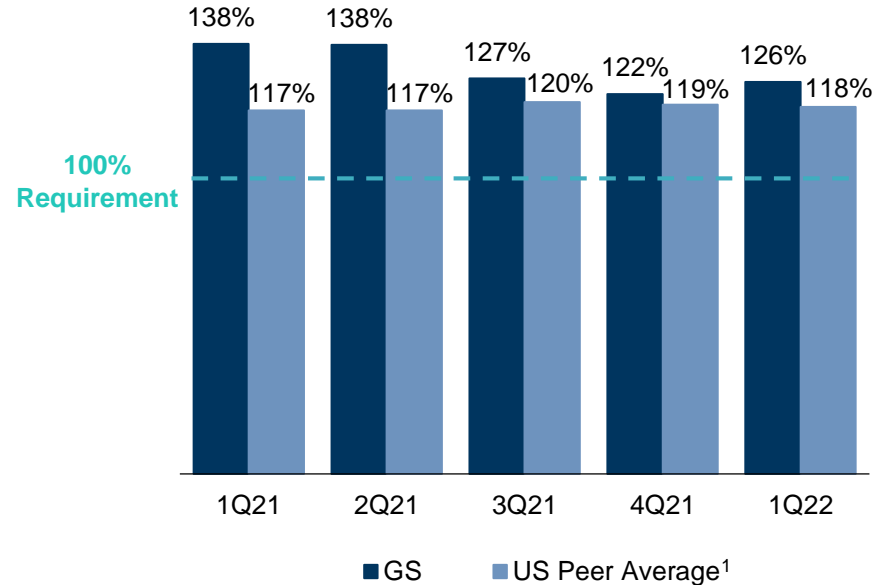
Meaningful capital build to support growth in our client franchise and strategic acquisitions

# Liquidity Risk Management

## Solid Liquidity Positioning

- Dynamically manage liquidity risk and continuously refine methodologies to reflect changes in the markets and our business mix
- Well in excess of LCR requirements and more in line with peers vs. 1Q21
- Eligible HQLA composed almost entirely of Level 1 assets, including cash
- Highly liquid balance sheet with average GCLA of \$375bn for 1Q22, ~25% of average total assets
- Exceeded NSFR requirements as of 1Q22

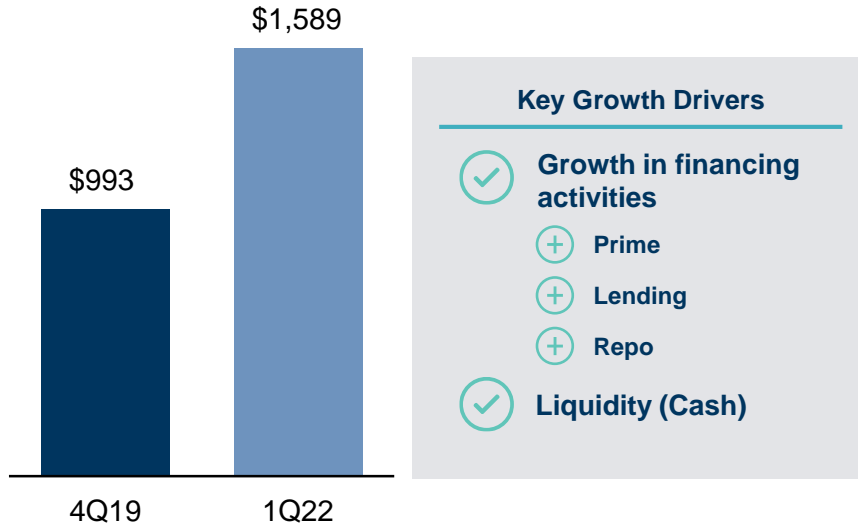
## Average Liquidity Coverage Ratio Trend



**Robust liquidity position with comfortable buffers above regulatory minimums**

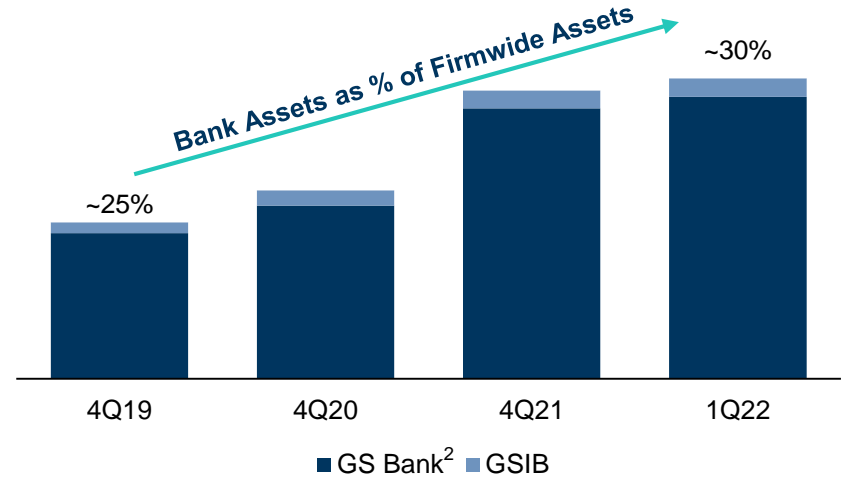
# Balance Sheet Dynamics and Bank Entities

## Asset Growth (\$bn)



Deployed our balance sheet to support client activity

## Assets in Bank Entities<sup>1</sup>



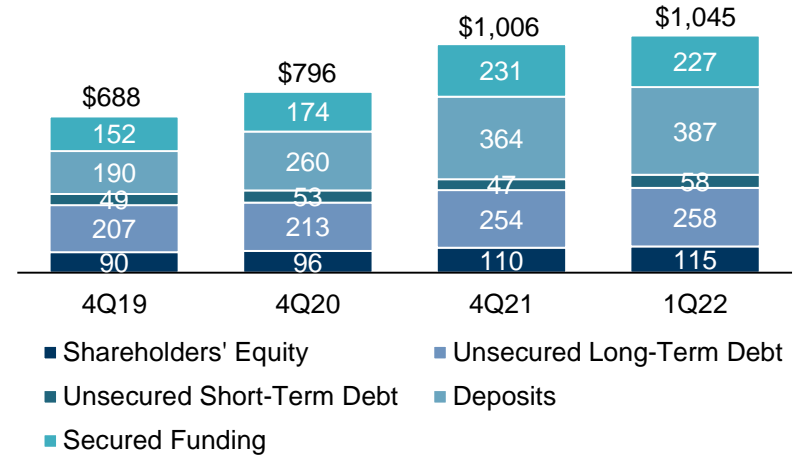
Utilizing our bank entities through strategic asset growth/placement

# Funding Sources

## Firmwide Sources of Funding

- **Deposits:** Have become a larger source of funding given our focus on growing across strategic channels
- **Unsecured Long-Term Debt:** Well diversified across tenor, currency, investors and geography
- **Unsecured Short-Term Debt:** Includes \$24bn of the current portion of long-term debt
- **Secured Funding:** Diversified across counterparties, tenor and geography
- **Shareholders' Equity:** Stable and perpetual source of funding

## Funding Sources by Type (\$bn)



## Deposits As % of Unsecured Funding<sup>1</sup>

**43%**  
As of 4Q19

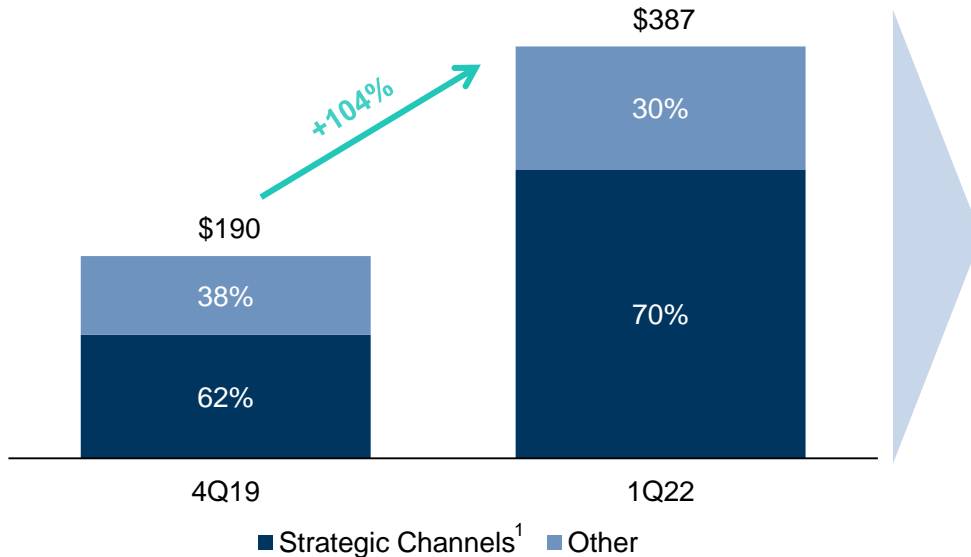


**55%**  
As of 1Q22

We strive for a diversified funding mix across various products, issuing entities, currencies, tenors and investor types

# Deposit Growth

## Deposits by Channels (\$bn)



**Strong inflows in strategic channels**

## Deposit Targets

**>\$150bn**  
Consumer Deposit Balances  
2024 Target

**>\$100bn**  
Transaction Banking Deposit  
Balances  
2024 Target

**~80% Marcus deposit beta through the Fed's last reduction cycle and 10bps passed through of the Fed's recent increases so far<sup>2</sup>**

# Unsecured Debt

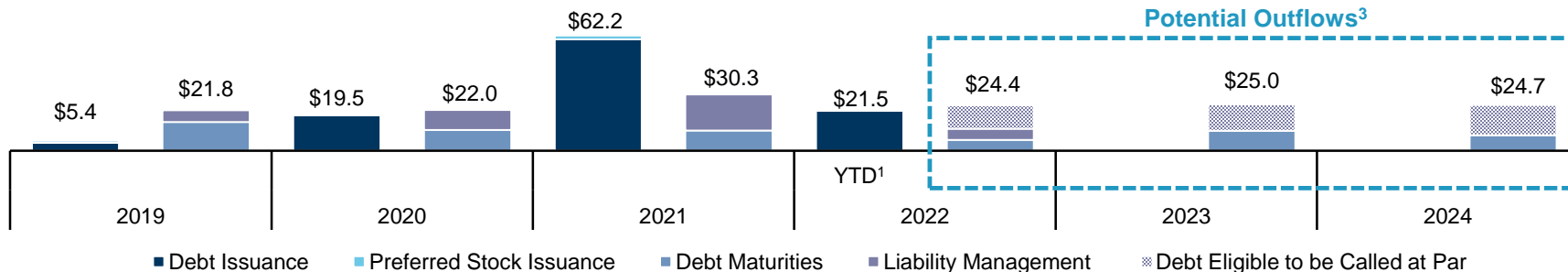
## Benchmark Issuance and Guidance

- ✓ Expect FY22 benchmark issuance to outpace maturities and redemptions, but net benchmark issuance to be significantly lower relative to FY21
- ✓ In 2022YTD<sup>1</sup>, we have issued \$21.5bn of benchmark debt
  - Diversified across tenor, channel, and structure
  - ~7 year WAM
  - 85% USD, 11% EUR and 4% GBP

## Unsecured Non-Benchmark Funding

- ~\$123bn of unsecured non-benchmark debt outstanding<sup>1</sup>
  - Includes structured debt, CP and private placements
  - Issue across various entities
  - Provides access to institutional and retail channels

## Benchmark Debt and Preferred Stock Issuance vs. Maturities<sup>2</sup> and Liability Management Actions (\$bn)

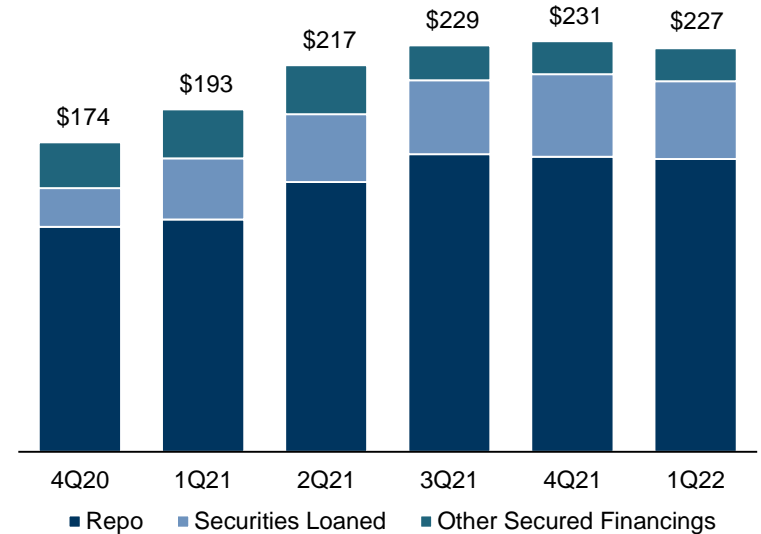


# Secured Funding

## Secured Funding Characteristics

- ✓ Diversified across counterparties, tenor, and geography
- ✓ Term dictated by composition of fundable assets
  - Target longer tenors for less liquid assets
- ✓ Stress testing to ensure sufficient liquidity

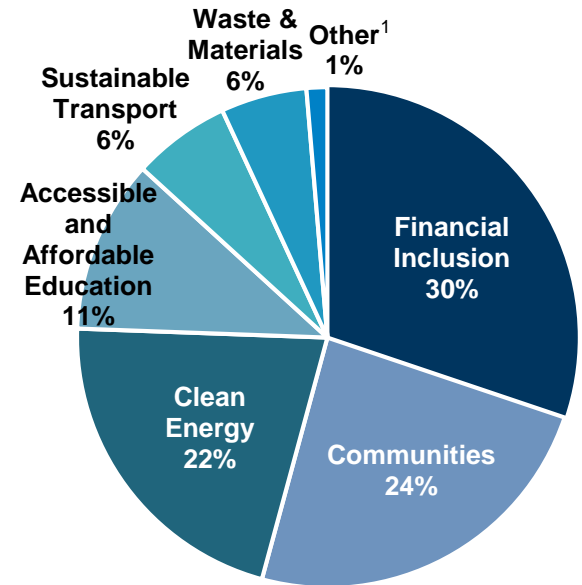
## Total Collateralized Financings (\$bn)



# Sustainability / Green Bond Issuance

<b>Issuance Framework</b>	✓ Reviewed by Sustainalytics and aligned with key ICMA guidelines
<b>Scope</b>	✓ Fully aligned with nine existing Climate Transition and Inclusive Growth themes
<b>Use of Proceeds</b>	✓ New projects prioritized with one-year lookback period; aim to allocate all proceeds within two years
<b>Project Evaluation and Selection</b>	✓ Integrated into business framework and dedicated oversight by cross-divisional group
<b>Reporting</b>	✓ Annual impact reporting with PwC assurance; leverages framework developed for sustainable finance commitment
<b>Forward Strategy</b>	✓ Planned programmatic issuance

2021 Allocations by Impact Theme



Throughout 2021, Goldman Sachs issued ~\$1bn of sustainability debt (including our inaugural ~\$800mm benchmark bond), with all proceeds fully allocated to new or existing investments and loans



# Conclusion: Credit-Positive Strategic Direction

**Grow and Strengthen  
Existing Businesses**

**Diversify Our Products  
and Services**

**Operate More  
Efficiently**

**Driving Credit Positives**

**More Stable, Durable  
Revenues and Earnings**

**Increased  
Diversification**

**Enhanced Franchise  
Strength**

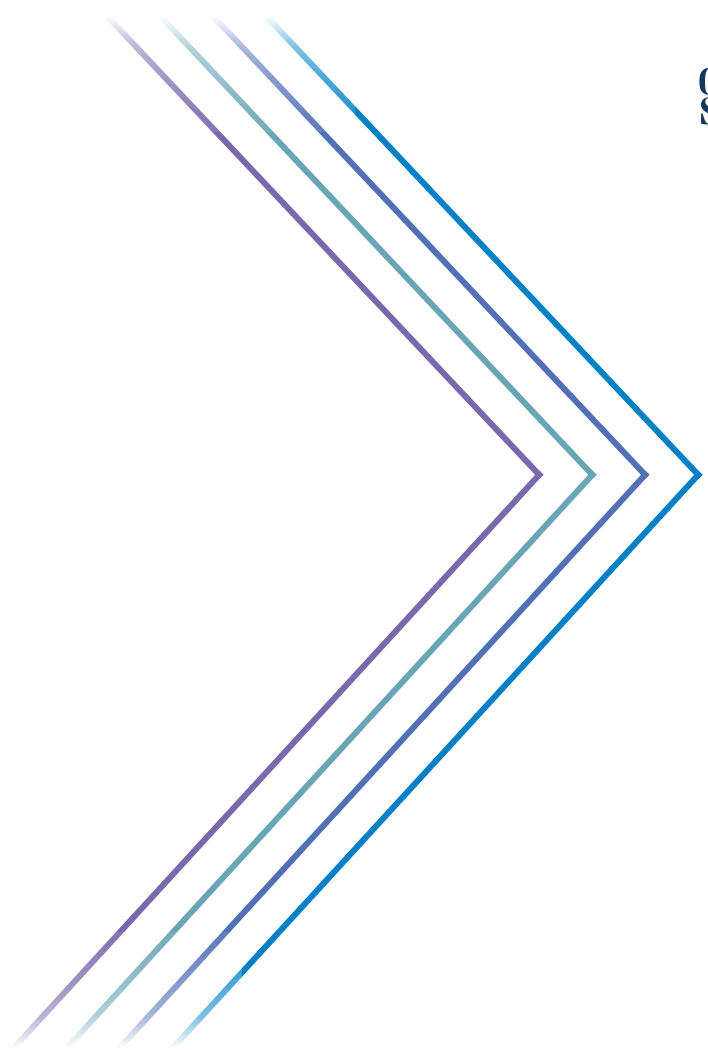
**Improved Capital and  
Funding Efficiency**

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May 10, 2022



# End Notes

Note: All data as of the end of 1Q22, unless otherwise indicated.

These notes refer to the financial metrics and/or defined term presented on:

Slide 1:

1. As of 5/4/22. GIR represents Goldman Sachs Global Investment Research

Slide 7:

1. Industry names shortened for pie chart: Technology, Media & Telecommunications (TMT), Diversified Industrials, Natural Resources & Utilities, Financial Institutions, Real Estate, Consumer & Retail, Healthcare
2. At amortized cost
3. For loans originated during 2021, per GSKY 2021 10-K

Slide 8:

1. Effective for the period from October 1, 2021 through September 30, 2022

Slide 9:

1. U.S. peers include JPM, MS, C, and BAC

Slide 10:

1. Excludes affiliated assets
2. Goldman Sachs Bank USA amounts prior to 2021 reflect the acquisition of Goldman Sachs Bank Europe, which was completed in 2021

Slide 11:

1. Unsecured funding includes Deposits, Unsecured short-term borrowings, and Unsecured long-term borrowings

Slide 12:

1. Strategic channels include Consumer, Private Bank, and Transaction Banking deposits
2. Deposit beta calculated as the change in the Marcus U.S. Online Savings Account Rate divided by the change in the Federal Funds Rate (Upper Bound)

Slide 13:

1. 2022YTD defined as January 1, 2022, through April 30, 2022. Unsecured non-benchmark debt outstanding as of April month end
2. Debt Issuances and Maturities include both senior and subordinated debt
3. Potential outflows for 2022, 2023 and 2024 as of April 30, 2022. Potential outflows for 2022 include \$5.9bn of contractual maturities (of which \$4.5bn occurred YTD), \$5.9bn of debt eligible to be called at par redeemed, and \$12.6bn of additional debt outstanding eligible to be called at par during the year. Maturities for 2022, 2023, and 2024 include contractual maturities less amounts eligible to be par called in periods prior to contractual maturity date

Slide 15:

1. Other includes Accessible and Innovative Healthcare and Ecosystem Services

# Cautionary Note on Forward-Looking Statements

Statements about GDP growth, unemployment expectations, future bond yields and inflation, the firm's target metrics, including its target ROE, ROTE, efficiency ratio, CET1 capital ratios, and statements about its other future regulatory capital metrics, and how they can be achieved (including dividends and share repurchases), and statements about future operating expense (including future litigation expense), the impact of both the COVID-19 pandemic and Russia's invasion of Ukraine and related sanctions and other developments on its business, results, financial position and liquidity, the amount and composition of future Assets under Supervision, planned debt issuances, growth of deposits and other funding, asset liability management (including expected NII growth) and liquidity pool strategies and associated interest expense savings, future geographic location of its employees, and the timing and profitability of its business initiatives, including its launch of new businesses or new activities, its ability to increase its market share in incumbent businesses and its ability to achieve more durable revenues, lower costs and higher returns from these initiatives, are forward-looking statements, and it is possible that the firm's actual results may differ, possibly materially, from the targeted results indicated in these statements.

Forward-looking statements, including those about the firm's target ROE, ROTE, efficiency ratio, and expense savings, and how they can be achieved, are based on the firm's current expectations regarding its business prospects and are subject to the risk that the firm may be unable to achieve its targets due to, among other things, changes in the firm's business mix, lower profitability of new business initiatives, increases in technology and other costs to launch and bring new business initiatives to scale, and increases in liquidity requirements. Statements regarding estimated GDP growth, unemployment expectations, future bond yields and inflation are subject to the risk that actual GDP growth, unemployment, bond yields and inflation may differ, possibly materially, due to, among other things, changes in general economic conditions. Statements about the firm's target ROE, ROTE, CET1 capital ratios, and statements about its other future regulatory capital metrics, and how they can be achieved, are based on the firm's current expectations regarding the capital requirements applicable to the firm and are subject to the risk that the firm's actual capital requirements may be higher than currently anticipated because of, among other factors, changes in the regulatory capital requirements applicable to the firm resulting from changes in regulations or the interpretation or application of existing regulations or changes in the nature and composition of the firm's activities. Statements about the timing and benefits of business and expense savings initiatives, funding (including planned debt issuances and growth of deposits), asset liability management (including expected NII growth) and liquidity pool strategies, the level and composition of more durable revenues, lower costs and increases in market share are based on the firm's current expectations regarding its ability to implement these initiatives and may change, possibly materially, from what is currently expected. Statements about the effects of the COVID-19 pandemic on the firm's business results, financial position and liquidity are subject to the risk that the actual impact may differ, possibly materially, from what is currently expected. Statements about the impact of Russia's invasion of Ukraine and related sanctions and other developments on our business, results and financial position are subject to the risks that hostilities may escalate and expand, that sanctions may increase and that the actual impact may differ, possibly materially, from what is currently expected. Due to the inherent uncertainty in these forward-looking statements, investors should not place undue reliance on the firm's ability to achieve these results.

For a discussion of some of the risks and important factors that could affect the firm's future business, results and financial condition, see "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2021. You should also read the cautionary notes on forward-looking statements in our Form 10-Q for the quarter ended March 31, 2022 and Earnings Results Presentation for the quarter ended March 31, 2022. For more information regarding non-GAAP financial measures such as ROTE, refer to the information on the calculation of non-GAAP financial measures that is posted on the Investor Relations portion of our website: [www.goldmansachs.com](http://www.goldmansachs.com).

The statements in the presentation are current only as of May 10, 2022 and the firm does not undertake to update forward-looking statements to reflect the impact of subsequent events or circumstances.