Goldman Sachs

Fixed Income Investor Presentation

Brian Lee, Chief Risk Officer
Philip Berlinski, Global Treasurer

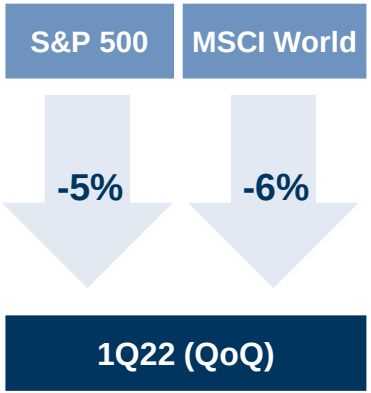
May 10, 2022

Macro Backdrop

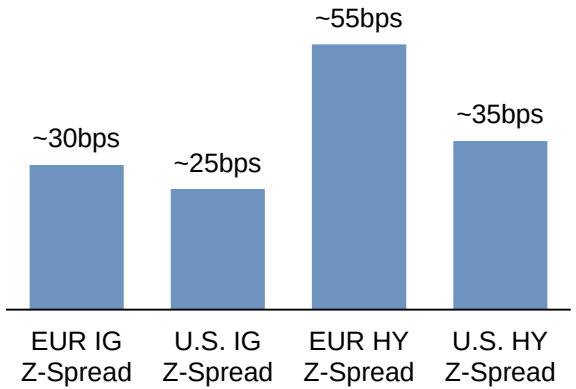
Recent Developments

- 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[1] est.)	2.7%	2.0%	0.3%	0.8%

Committed to our Strategy

Grow and Strengthen Existing Businesses

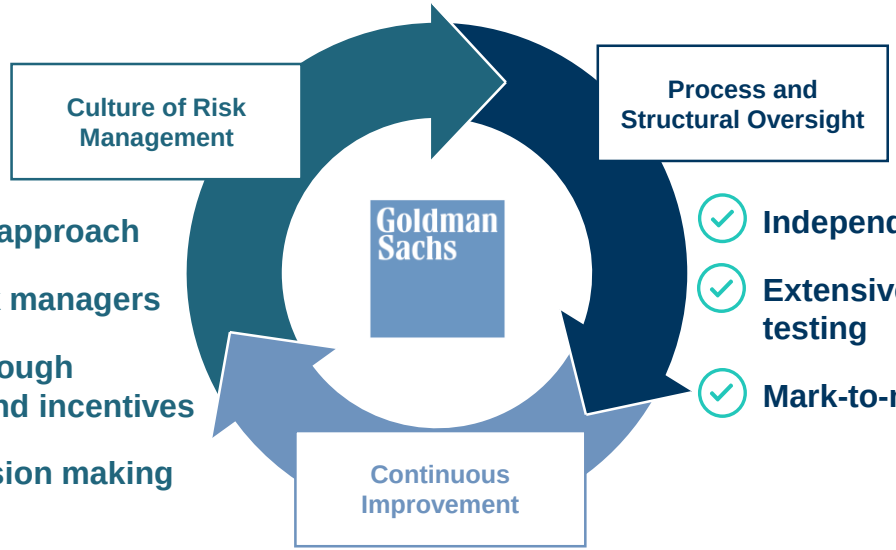
Diversify Our Products and Services

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



- Disciplined risk-reward approach
- Deeply experienced risk managers
- Expertise reinforced through training, performance and incentives
- Consensus-driven decision making

- Independent controls and governance
- Extensive scenario analysis and stress testing
- Mark-to-market discipline

- Reputational risk and compliance
- Cycle preparedness
- Cyber risk

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

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	■ Key risk management actions taken well before crisis unfolded ■ Strong coordination across organization allowed for timely closeouts	■ Credit exposure focused on strong investment-grade clients and right-way exposure with producers
Market Risk	■ Currency and other hedges mitigated markdowns on investment portfolio ■ Inventory management across Global Markets	■ Focused on maintaining exposure in most liquid products, while supporting clients
Liquidity / Capital Risks	■ Created RWA capacity to support clients in volatile market	■ Stress testing and prefunding for run-up in energy prices ■ Continued management of funding limits
Other	■ Ongoing evaluation of second & third order impacts ■ Management of non-financial risks (e.g. people, vendor and cyber)	■ Managed nickel volatility with minimal impact

Climate Risk Integration

Physical Risk

Transition Risk

GHG Emission Targets

Integration of Climate Risk

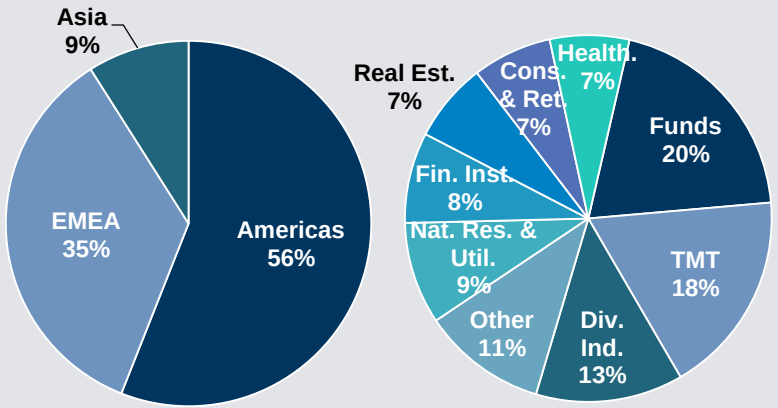
- We have developed physical and transition risk quantification methodologies which consider a variety of climate risk factors and pathways
- Transition and physical risks are now evaluated as part of transaction due diligence for select loan commitments, and we consider climate risk factors and mitigants 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
Total Gross Loans	**$170**	$162	$125
Allowance for loan losses	**(4)**	(4)	(4)
Total Net Loans	**$166**	$158	$121

1Q22 Corporate Loans by Geography & Industry[1]



1Q22 Key Credit Metrics

2.7% ALLL to Total Gross Loans[2]

- **1.7%** ALLL to Gross Wholesale Loans[2]
- **12.2%** ALLL to Gross Consumer Loans[2]

0.4% Annualized Net Charge-off Rate

- **0.3%** Wholesale Annualized Net Charge-off Rate
- **2.1%** Consumer Annualized Net Charge-off Rate

80%+ of our gross loans are secured

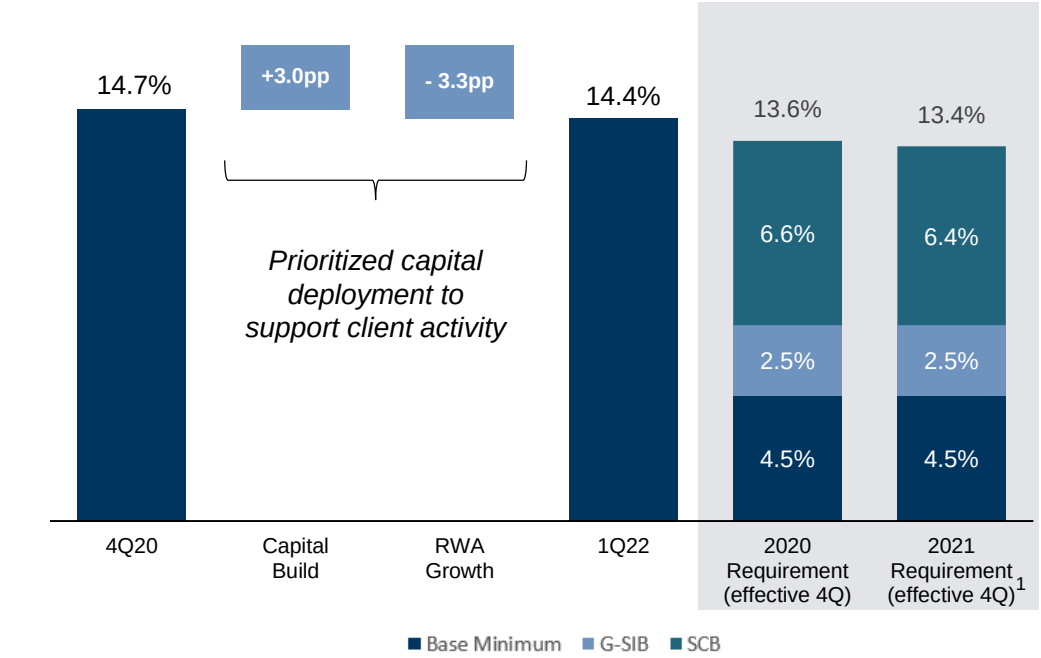
Consumer Credit Risk

80%
Consumer loans with FICO >=660 as of 1Q22

~780
GreenSky Average Consumer Credit Score[3]

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**

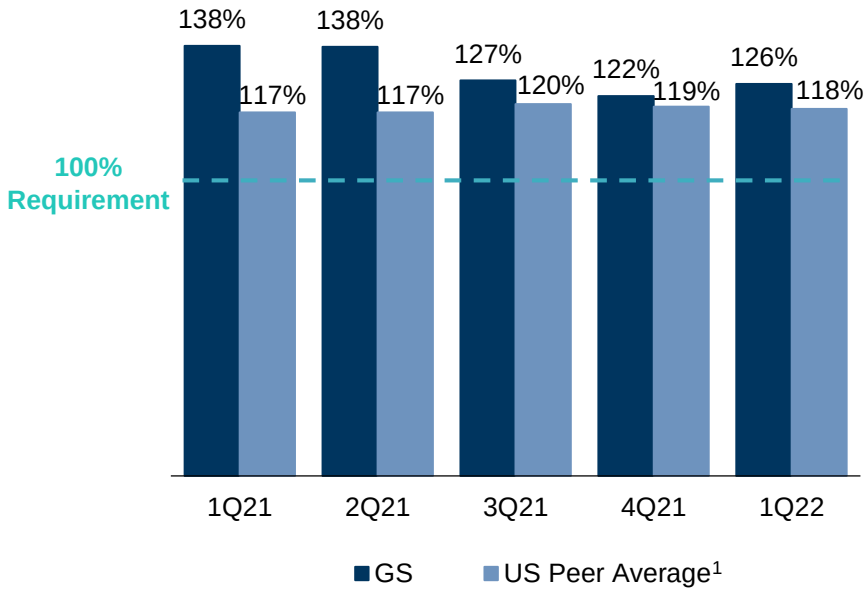
Meaningful capital build to support growth in our client franchise and strategic acquisitions

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

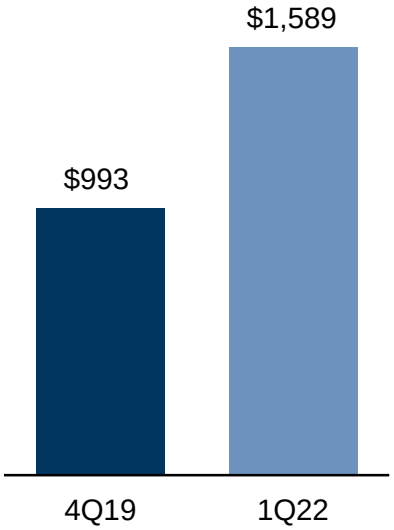
Average Liquidity Coverage Ratio Trend



Robust liquidity position with comfortable buffers above regulatory minimums

Balance Sheet Dynamics and Bank Entities

Asset Growth ($bn)

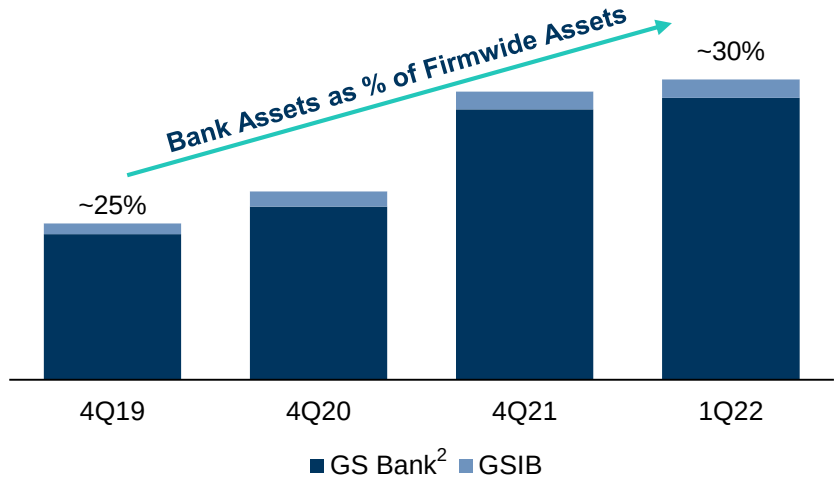


Key Growth Drivers

- **Growth in financing activities**
  - **Prime**
  - **Lending**
  - **Repo**
- **Liquidity (Cash)**

Deployed our balance sheet to support client activity

Assets in Bank Entities[1]



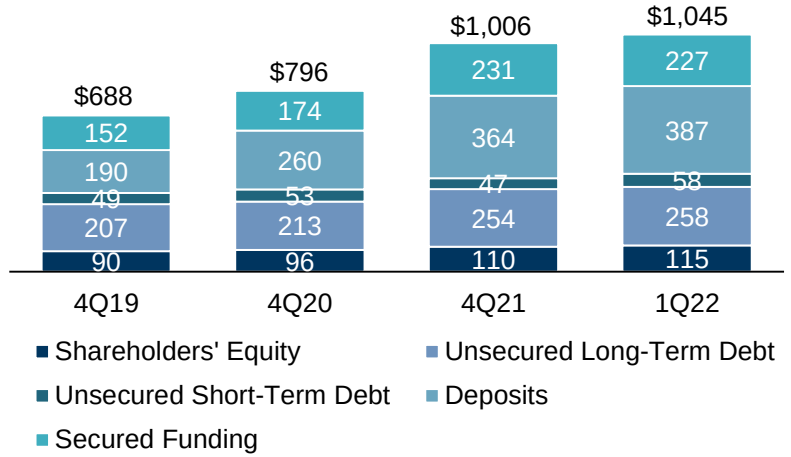
Utilizing our bank entities through strategic asset growth/placement

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)



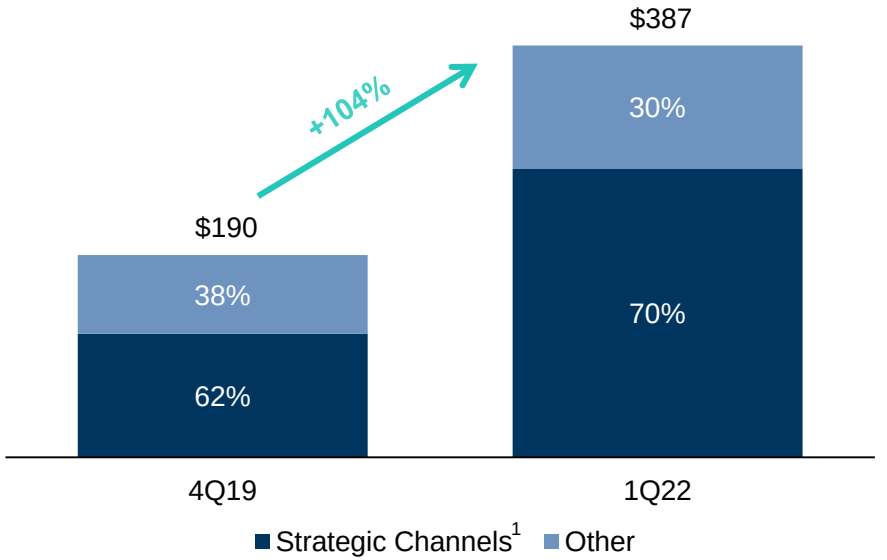
Deposits As % of Unsecured Funding[1]

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[2]

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

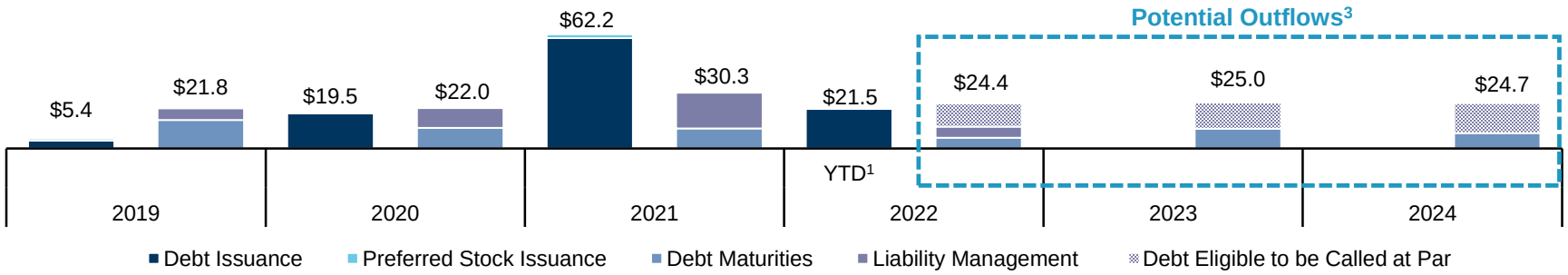
In 2022YTD[1], we have issued $21.5bn of benchmark debt

- 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[1]**
  - 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[2] and Liability Management Actions ($bn)

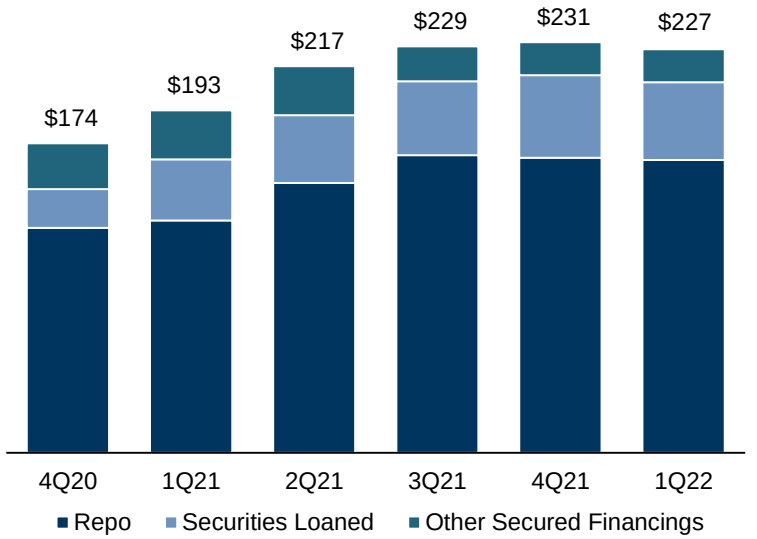


Secured Funding

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**

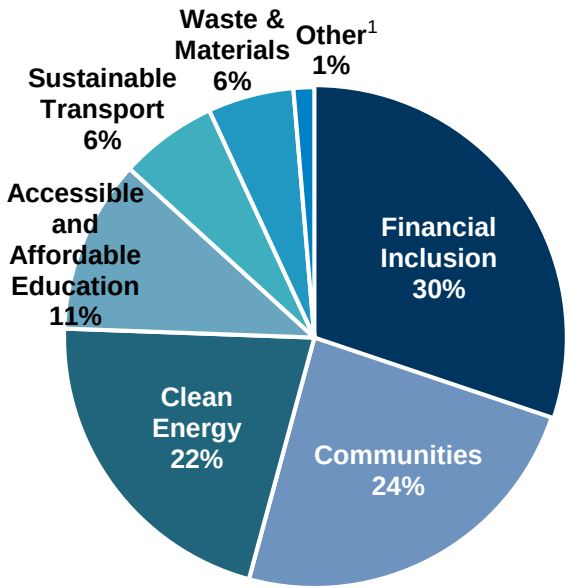
Total Collateralized Financings ($bn)



Sustainability / Green Bond Issuance

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

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.