

# Overview of Goldman Sachs

February 2022

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# Cautionary Note on Forward-Looking Statements

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This presentation includes forward-looking statements. These statements are not historical facts, but instead represent only the firm's beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside of the firm's control. It is possible that the firm's actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements.

For a discussion of some of the risks and important factors that could affect the firm's future results and financial condition, see "Risk Factors" in the firm's Annual Report on Form 10-K ("Form 10-K") for the year ended December 31, 2021. You should also read the forward looking disclaimers in the firm's Form 10-K for the year ended December 31, 2021, and information on non-GAAP financial measures that is posted on the Investor Relations portion of our website: [www.gs.com](http://www.gs.com). See the appendix for more information about non-GAAP financial measures in this presentation.

The financial and other information provided herein is provided for the periods ended, or the dates, indicated on the relevant slide. No information is provided for a date more recent than February 24, 2022.

# Key Credit Strengths

## Regulatory Capital Ratios and Leverage

- 4Q21 Common Equity Tier 1 (“CET1”) capital ratios were 14.2% as calculated in accordance with the Standardized Capital Rules and 14.9% as calculated in accordance with the Advanced Capital Rules
- Our gross leverage was 13.3x as of 4Q21

## Best in Class Liquidity Risk Management

- We have in place a comprehensive and conservative set of liquidity and funding policies that allows us to maintain significant flexibility to address both GS-specific and broader industry or market liquidity stress events
- Our major liquidity and funding policies are based on the core principles of:
  - **Excess liquidity** – having sufficient cash or highly liquid instruments on hand to meet contractual, contingent and intraday outflows in a stressed environment
  - **Asset-liability management** – having a liability profile that has sufficient term and diversification based upon the liquidity profile of our assets
- Our average daily liquidity coverage ratio (“LCR”) was 122% for the three months ended December 2021
- In addition, our U.S. bank subsidiary, GS Bank USA, has access to funding through the Federal Reserve Bank discount window. While we do not rely on this funding in our liquidity planning and stress testing, we maintain policies and procedures necessary to access this funding and test discount window borrowing procedures

## Global Core Liquid Assets

- We hold sufficient excess liquidity in the form of Global Core Liquid Assets (“GCLA”) to cover potential outflows during a stressed period
  - GCLA averaged \$335 billion during 2021
  - GCLA consists of cash, high quality, and narrowly defined unencumbered assets, including U.S. Treasuries and German, French, Japanese and United Kingdom government obligations

## Key Credit Strengths (cont'd)

### Conservative Asset-Liability Management

- Our principal objective is to fund our balance sheet and run the firm with the ability to weather stressed market conditions without dependence on government support
- Balance sheet includes a large amount of highly liquid assets, and mark to market remains critical to the firm's risk management processes
  - ~90% of the balance sheet consisted of more liquid assets<sup>1</sup> (e.g., cash, reverses/borrows, U.S. government/agency and other financial instruments) as of 4Q21
  - Businesses subject to conservative balance sheet limits that are reviewed regularly and monitored daily
- Liability term structure – we seek to have long-dated liabilities to reduce our refinancing risk
  - Weighted Average Maturity (WAM) of approximately 7 years as of 4Q21 for unsecured long-term borrowings
- We maintain broad and diversified funding sources globally
- Counterparties are well distributed throughout the U.S., Europe and Asia

### Strong Asset Quality

- The balance sheet stands at \$1.46 trillion as of 4Q21, up ~31% vs. 4Q07
- Our asset quality has substantially improved since 4Q07 as we targeted reductions in less liquid, legacy exposures such as Level 3 assets
  - Level 3 assets<sup>2</sup> are down by more than 50% since 4Q07 to \$24 billion and represent 1.6% of our balance sheet as of 4Q21

### Diversified Global Business with Profitable Track Record

- From 1999-2021, net revenues have grown at a compound annual growth rate of ~7%
- Average ROE from 1999-2021 of ~15%
- Our diversified business model allows us to outperform over cycles

<sup>1</sup> Excludes Level 3, other assets, investments in funds at NAV and certain loans accounted for at amortized cost and held for sale that would have been classified as Level 3 if carried at fair value <sup>2</sup> 4Q07 Level 3 assets included investments in funds at NAV, 4Q21 excludes these funds

# Goldman Sachs' Credit Profile

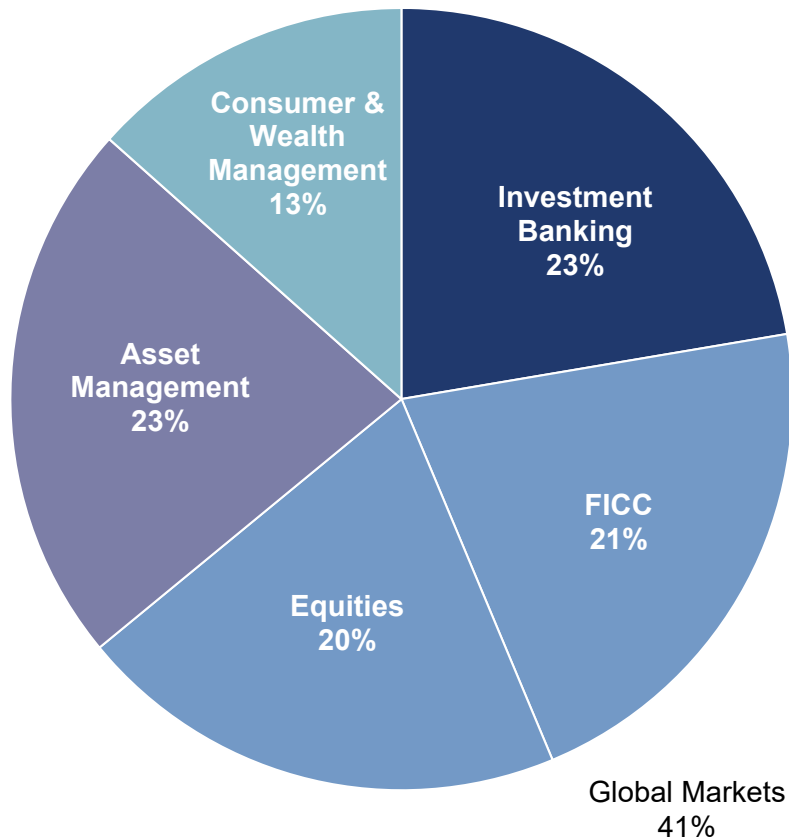
Credit Ratings as of February 24, 2022

	<u>Fitch</u>	<u>Moody's</u>	<u>S&amp;P</u>
<b>The Goldman Sachs Group, Inc.</b>			
Short-term Debt	F1	P-1	A-2
Long-term Debt	A	A2	BBB+
Subordinated Debt	BBB+	Baa2	BBB
Preferred Stock <sup>1</sup>	BBB-	Ba1	BB+
Ratings Outlook	Stable	Stable	Stable
<b>Goldman Sachs Bank USA</b>			
Short-term Debt	F1	P-1	A-1
Long-term Debt	A+	A1	A+
Short-term Bank Deposits	F1+	P-1	—
Long-term Bank Deposits	AA-	A1	—
Ratings Outlook	Stable	Stable	Stable
<b>Goldman Sachs International Bank</b>			
Short-term Debt	F1	P-1	A-1
Long-term Debt	A+	A1	A+
Short-term Bank Deposits	F1	P-1	—
Long-term Bank Deposits	A+	A1	—
Ratings Outlook	Stable	Stable	Stable
<b>Goldman Sachs Bank Europe SE</b>			
Short-term Debt	F1	P-1	A-1
Long-term Debt	A	A1	A+
Short-term Bank Deposits	—	P-1	—
Long-term Bank Deposits	—	A1	—
Ratings Outlook	Stable	Stable	Stable
<b>Goldman Sachs &amp; Co. LLC</b>			
Short-term Debt	F1	—	A-1
Long-term Debt	A+	—	A+
Ratings Outlook	Stable	—	Stable
<b>Goldman Sachs International</b>			
Short-term Debt	F1	P-1	A-1
Long-term Debt	A+	A1	A+
Ratings Outlook	Stable	Stable	Stable

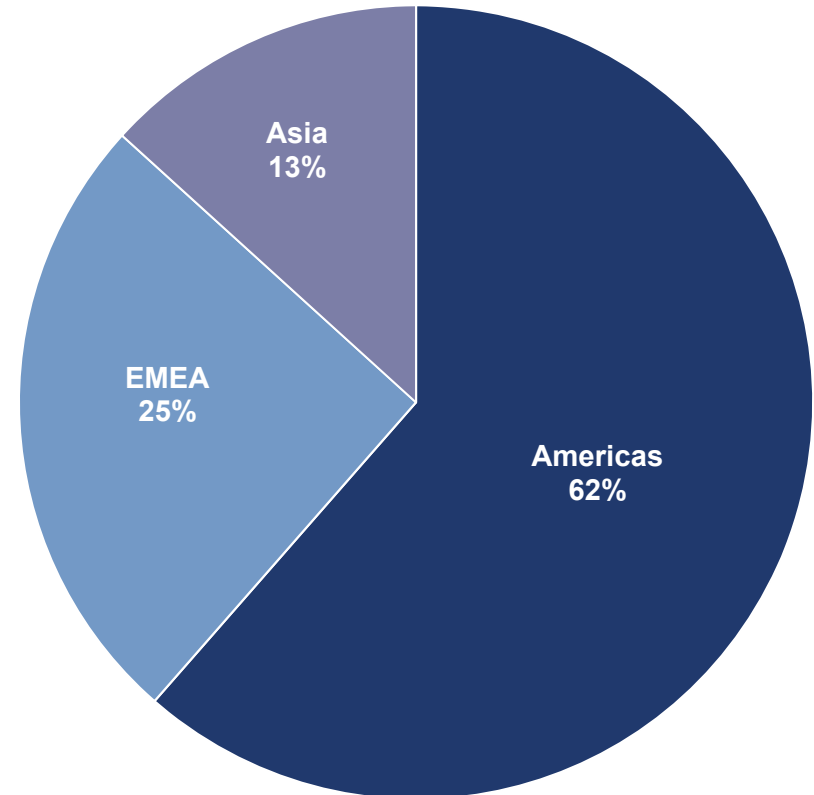
<sup>1</sup> Preferred Stock includes Group Inc.'s preferred stock and the Normal Automatic Preferred Enhanced Capital Securities (APEX) issued by Goldman Sachs Capital II and Goldman Sachs Capital III

# Diversified Net Revenue Mix

Diversified by Business  
2019 – 2021



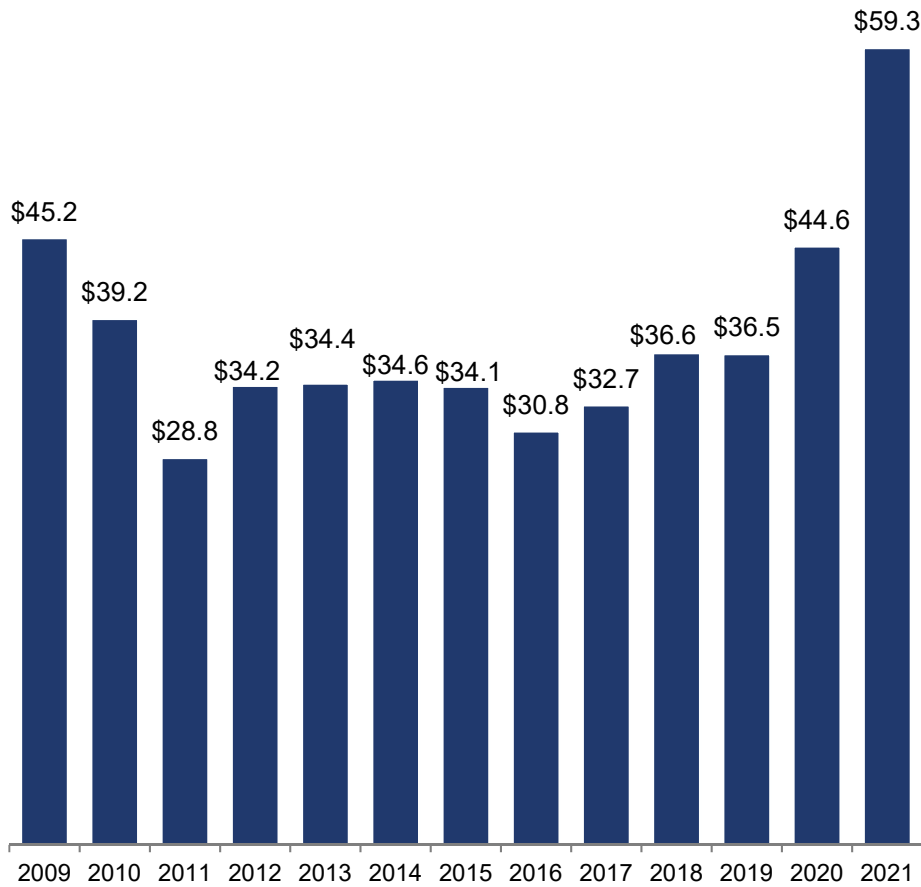
Diversified by Geography  
2019 – 2021



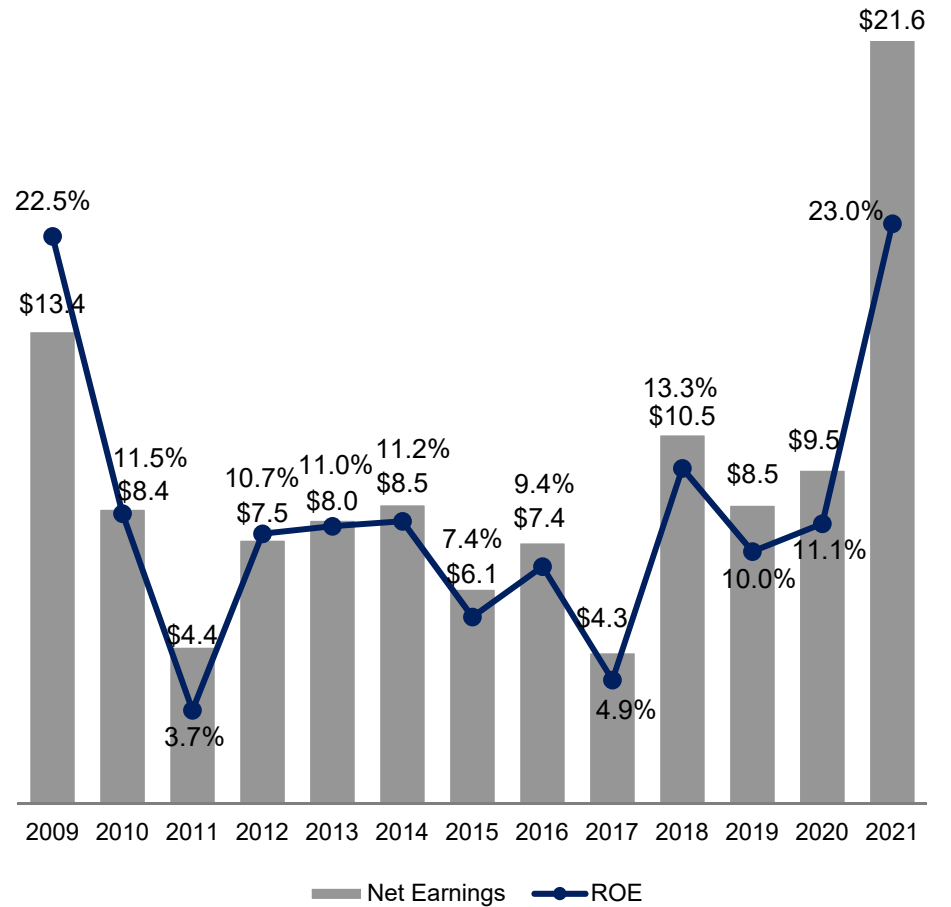
Our goal is to strengthen our leading, diverse franchise businesses and invest for growth in new businesses

# Financial Performance

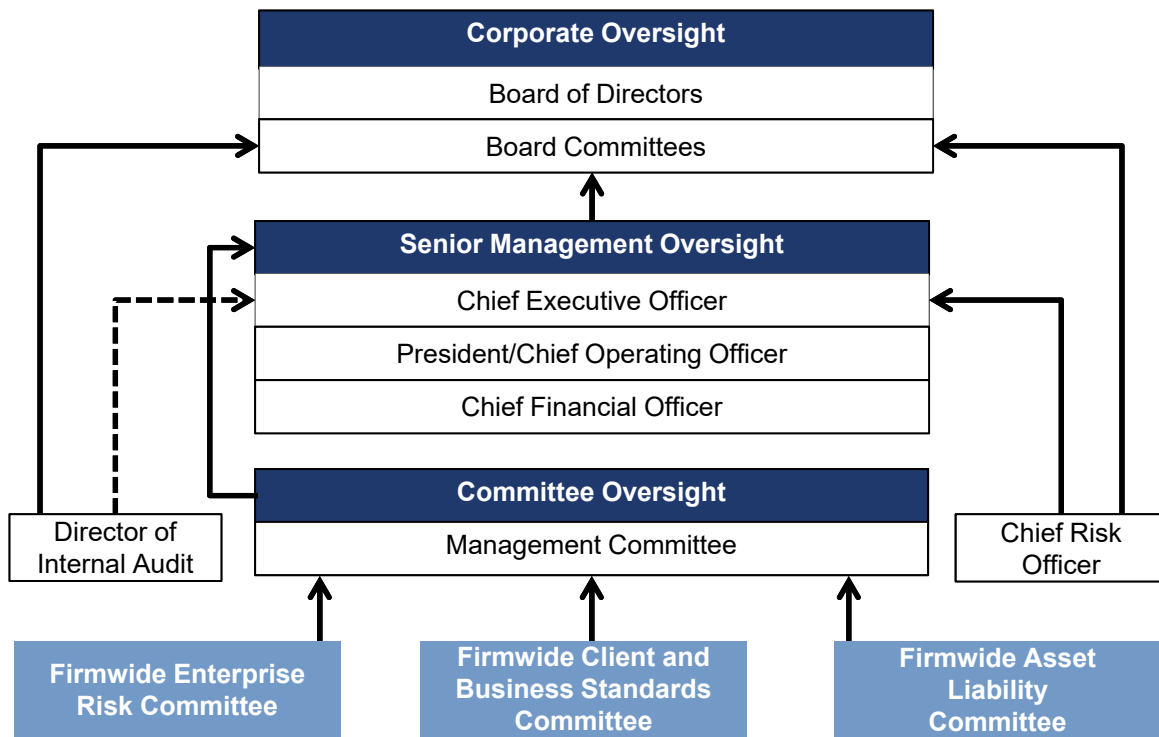
Net Revenues (\$bn)



Net Earnings (\$bn) & ROE (%)



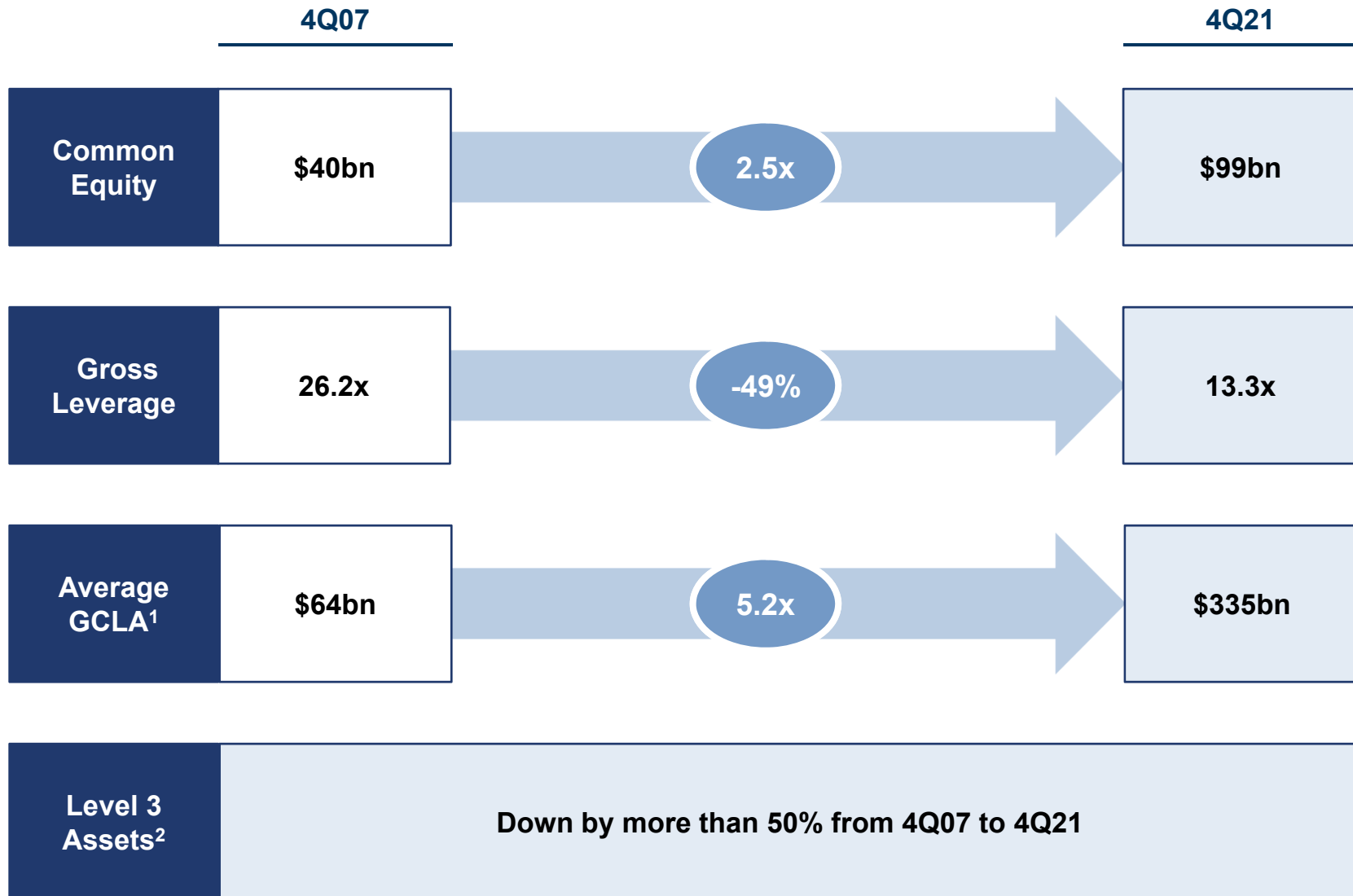
# Our Risk Philosophy



- Enterprise Risk Management framework employs a comprehensive, integrated approach to risk management
- Senior management awareness of nature and amount of risk incurred
- Fair value accounting is a critical risk mitigant and is supported by a robust price verification process
- Minimize losses and manage risk through:
  - Active management
  - Risk mitigation, where possible using collateral
  - Diversification
  - Return hurdles matched to underlying risks
- Risk tolerance is governed through the firm's risk appetite statement
  - Describes the levels and types of risk we are willing to accept or to avoid
- Effective risk systems, which are thorough, timely and flexible
- While we manage risk conservatively, we are in a risk-taking business and will incur losses



# Managing Our Risk



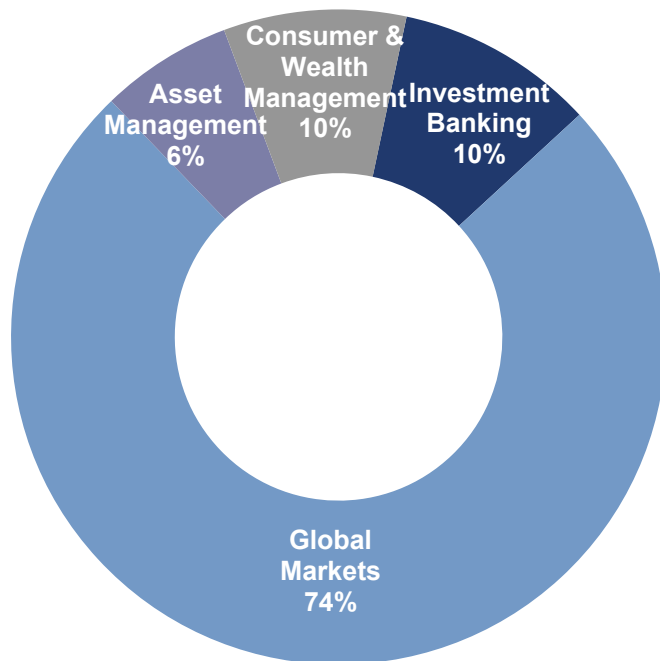
<sup>1</sup> Prior to 4Q09, GCLA reflects loan value and subsequent periods reflect fair value; 4Q07 and 4Q21 average GCLA presented on a full-year basis

<sup>2</sup> 4Q07 Level 3 assets included investments in funds at NAV, 4Q21 excludes these funds

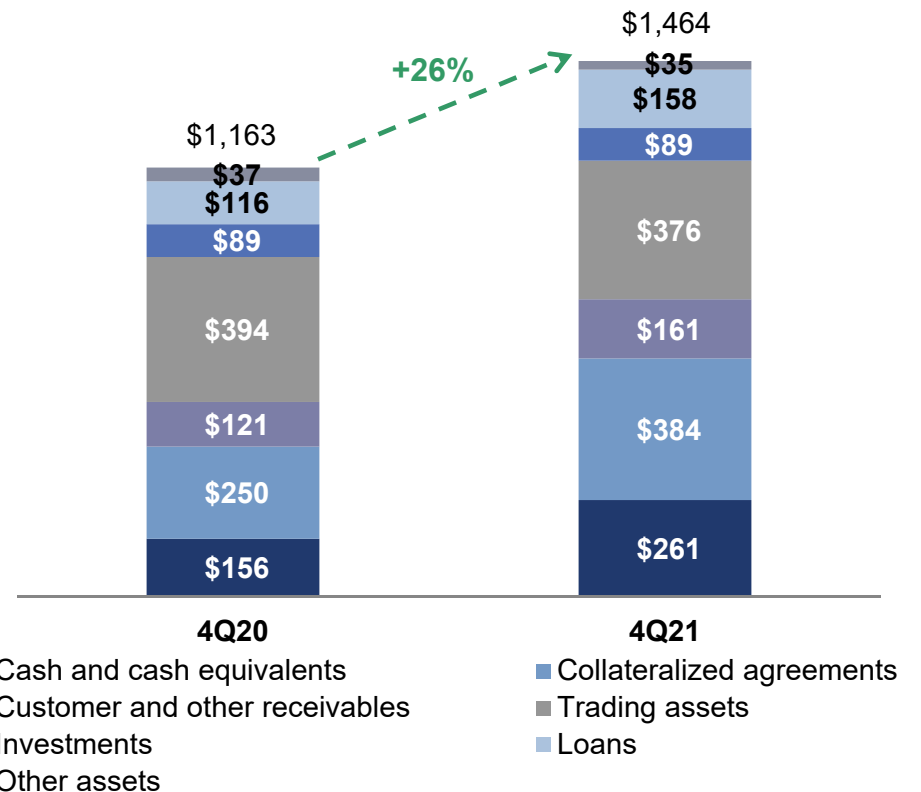
# Balance Sheet Overview

- As of 4Q21, ~90% of the balance sheet was comprised of more liquid assets<sup>1</sup> (e.g., cash, reverses/borrows, U.S. government/agency and other financial instruments)
- Despite strategic efforts to grow lending, loans still represent a small portion of our balance sheet at ~11% as of 4Q21
- Businesses are subject to conservative balance sheet limits that are reviewed and monitored. In addition, aged inventory limits are set for certain financial instruments

4Q21 Balance Sheet by Segment



Balance Sheet Mix Change: 4Q20 to 4Q21 (\$bn)

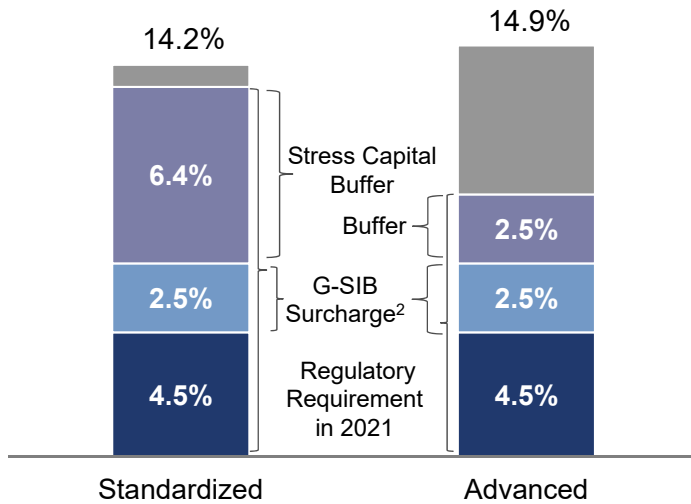


<sup>1</sup> Excludes Level 3, other assets, investments in funds at NAV, certain loans accounted for at amortized cost and held for sale loans that would have been classified as Level 3 if carried at fair value

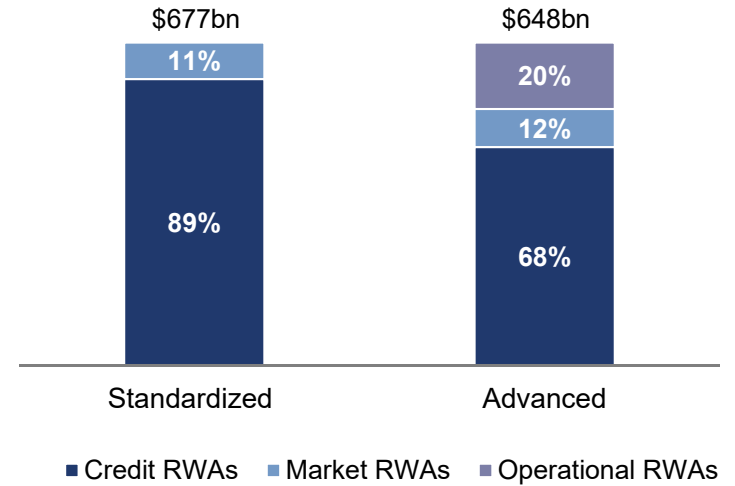
# Capital Ratios

## 4Q21 CET1 Capital Ratios<sup>1</sup>

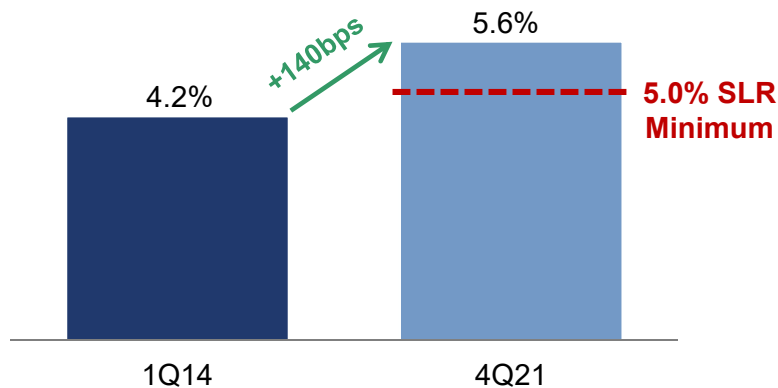
- As of Oct. 1, 2021, our Standardized CET1 capital ratio requirement changed to 13.4%, reflecting our latest applicable SCB of 6.4%



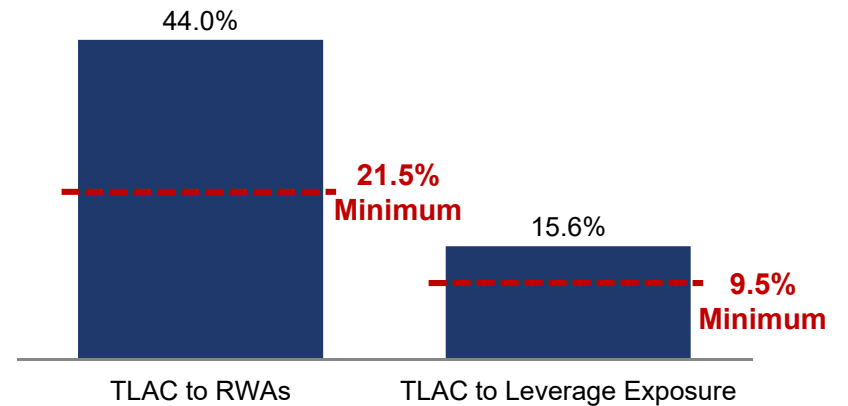
## 4Q21 Risk-Weighted Assets



## Supplementary Leverage Ratio<sup>3</sup>



## 4Q21 Total Loss-Absorbing Capacity



<sup>1</sup> In December 2021, the firm early adopted the U.S. federal bank regulatory agencies' final rule that implements the new standardized approach for counterparty credit risk (SA-CCR). SA-CCR replaced the current exposure method for calculating the exposure amount of derivative contracts for determining Standardized RWAs and supplementary leverage exposure. Adoption of SA-CCR resulted in a decrease to the firm's Standardized CET1 capital ratio by approximately 0.3 percentage points as of December 2021. <sup>2</sup> The buffer in the future may differ due to additional guidance from our regulators and/or positional changes. Our G-SIB surcharge is 2.5% for 2021 and 2022 and 3.0% for 2023. Based on financial data for 2021, we are above the threshold for the 3.5% G-SIB surcharge. The earliest this surcharge could be effective is January 2024. <sup>3</sup> 1Q14 SLR is a non-GAAP measure which reflects our best estimate based on the U.S. federal bank regulatory agencies' April 2014 proposal. See the appendix for more information about this non-GAAP measure

# Conservative and Comprehensive Liquidity Risk Management

## Excess Liquidity

- A primary liquidity principle is to pre-fund our estimated potential cash and collateral needs
- Our GCLA consists of cash and highly-liquid government and agency securities that would be readily convertible to cash in a matter of days
- GCLA size is based on:
  - Modeled assessment of the firm's liquidity risks, including contractual, behavioral and market-driven outflows and intraday demands
  - Applicable regulatory requirements
  - Qualitative assessment of the conditions of the financial markets and the firm
  - Long-term stress tests, which take a forward view on our liquidity positions through a prolonged stress period

## Asset-Liability Management

- Conservative asset and liability management designed to ensure stability of financing requirements
- Focus on size and composition of assets to determine appropriate funding strategy
- Secured and unsecured financing with long tenor relative to the liquidity profile of our assets in order to withstand a stressed environment
- Consistently manage overall characteristics of liabilities, including term, diversification and excess capacity

**Rigorous and conservative stress tests underpin our liquidity and asset-liability management frameworks**

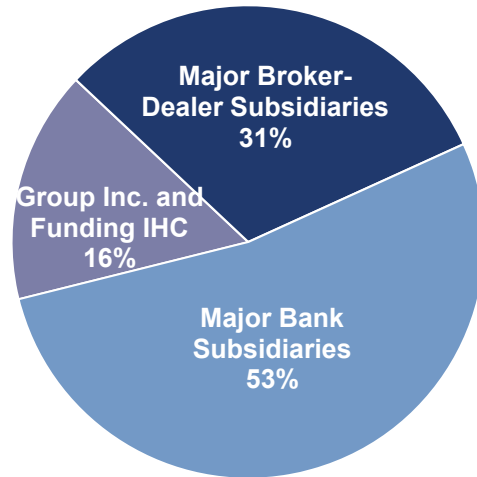
## We are focused on maintaining excess liquidity

- GCLA averaged \$335 billion during 2021
- During 2021, ~85% of our average GCLA was made up of overnight cash deposits (which are mainly at the Federal Reserve), U.S. government obligations, and U.S. agency obligations, with the balance in high quality non-U.S. government obligations
- Our GCLA is held at The Goldman Sachs Group, Inc. (Group Inc.) and Goldman Sachs Funding LLC (Funding IHC) and each of our major broker-dealer and bank subsidiaries to ensure that liquidity is available to meet entity liquidity requirements

## We regularly refine our liquidity models to reflect changes in market or economic conditions and our business mix

- Our Modeled Liquidity Outflow reflects potential contractual and contingent outflows of cash or collateral
- Our Intraday Liquidity Model measures our intraday liquidity needs
- Our long-term stress tests take a forward view on our liquidity positions through a prolonged stress period

## 2021 Average GCLA by Entity



## Average Daily Liquidity Coverage Ratio, for the Three Months Ended December 2021

Eligible High-Quality Liquid Assets

**\$248.6bn**

**\$203.6bn**

Net Cash Outflows

=

**122%**

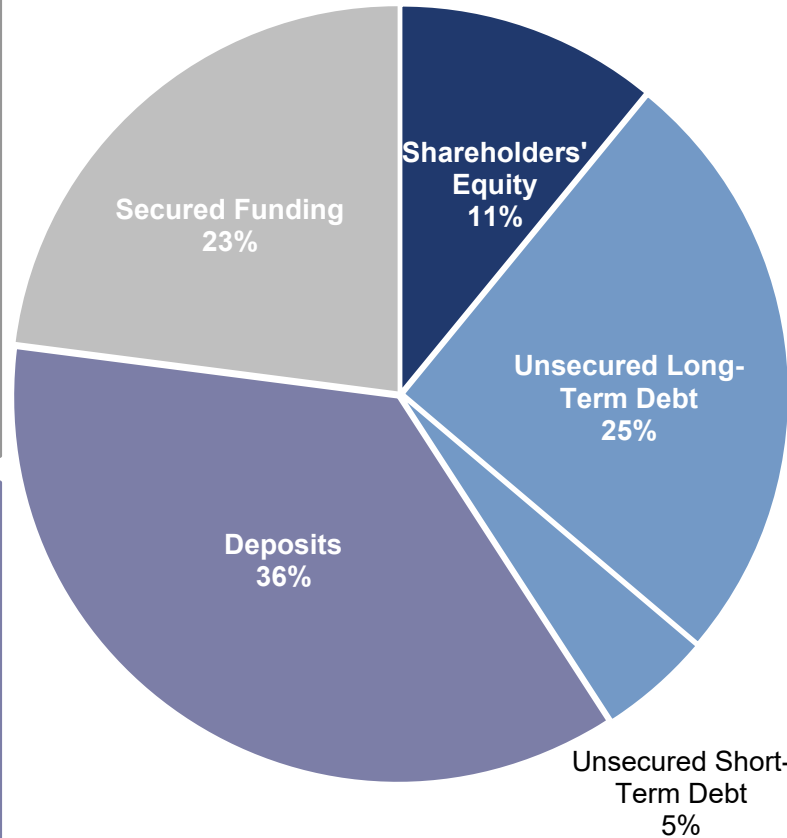
- We are required to maintain a minimum LCR of 100%

# Diversification of Funding Sources

## As of 4Q21

- Our **secured funding<sup>1</sup> (\$231bn)** book is diversified across:
  - Counterparties
  - Tenor
  - Geography
- Term is dictated by the composition of our fundable assets with longer maturities executed for less liquid assets

- **Deposits (\$364bn)** have become a larger source of funding given our focus on growing deposits across strategic channels including Consumer and Transaction Banking
- Our time deposits had a WAM of ~0.9 years as of December 2021



- **Shareholders' equity (\$110bn)** is a significant, stable and perpetual source of funding

- **Unsecured long-term debt (\$254bn)** is well diversified across the tenor spectrum, currency, investors and geography
- WAM of ~7 years

- **Unsecured short-term debt (\$47bn)** including \$18.1bn of the current portion of our unsecured long-term debt

<sup>1</sup> Comprised of collateralized financings in the Consolidated Balance Sheets

# Secured Funding Principles

We manage our secured funding liquidity risk by:

1

Term

- Managing maturity concentration
- Pre-rolling and negotiating tenor extensions with clients
- Targeting longer tenors for less liquid assets

2

Diversity

- Raising secured funding from a diverse set of funding counterparties

3

Excess Capacity

- Raising excess secured funding to protect against rollover risk or growth in assets to finance

4

GCLA

- Raising excess unsecured funding and holding as GCLA to mitigate any 30-day modeled liquidity needs

5

Stress Tests

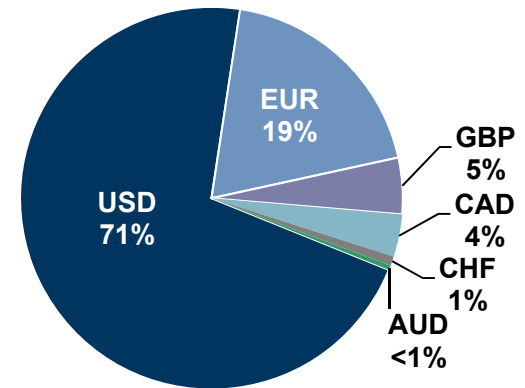
- Imposing stress test limits to ensure we do not have excessive liquidity risk even in a severe scenario
  - “Funding-at-Risk” (FaR) uses a number of metrics over various time periods to evaluate the risks in the secured funding book
  - Matched book (cash gap)

# Unsecured Benchmark Funding

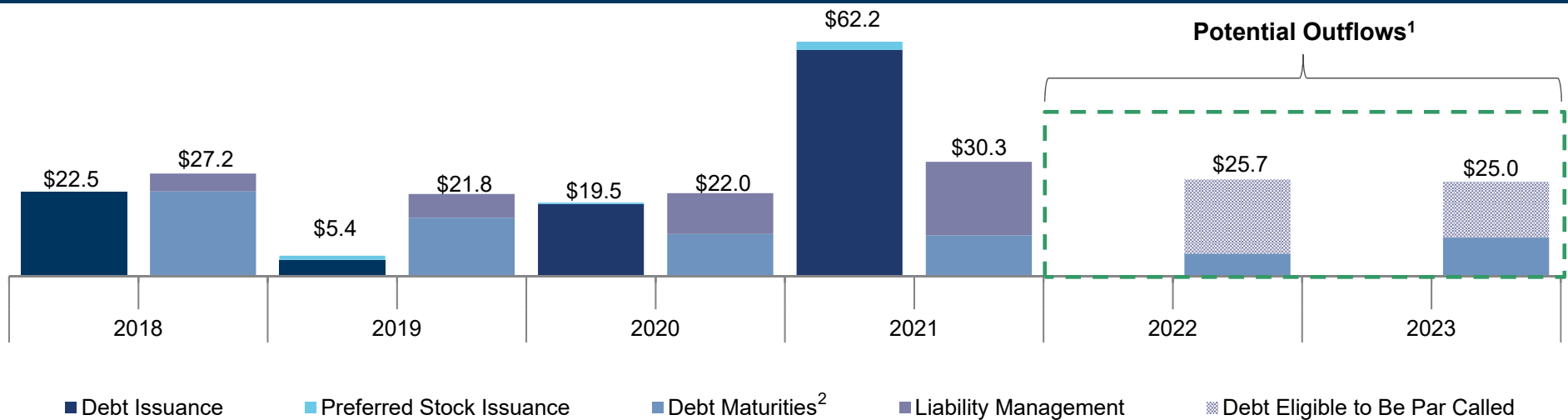
We continue to emphasize diversification across tenor, currency, channel and structure

- In 2021, we raised \$62.2bn of benchmark debt and preferred stock; preferred stock redemptions were \$2.7bn
- ~7 year WAM of benchmark debt issuance
- \$2.2bn of perpetual preferred stock issued in 2021

## 2021 Benchmark Debt and Preferred Stock Issuance by Currency



## Benchmark Debt and Preferred Stock Issuance vs. Maturities and Liability Management Actions (\$bn)

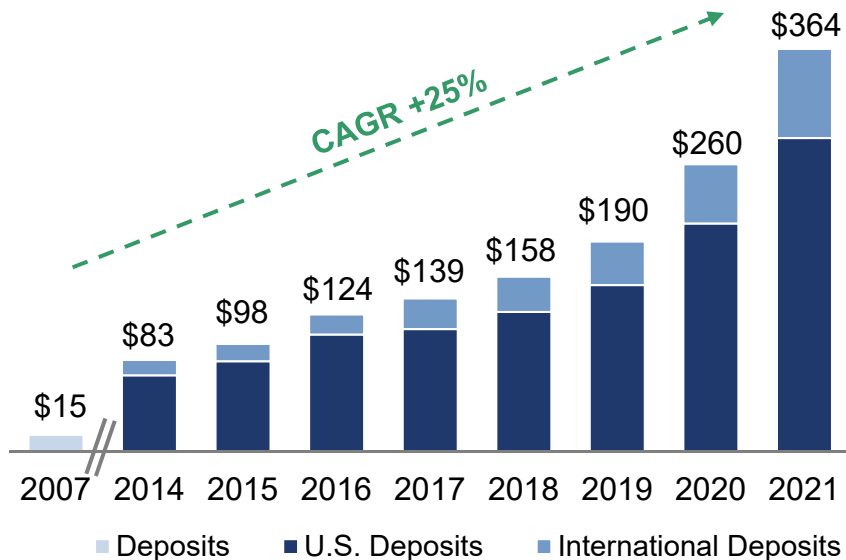


<sup>1</sup> Potential outflows for 2022 and 2023 are as of December 31, 2021. Potential outflows for 2022 include \$6.0bn of contractual maturities and \$19.7bn of par calls. Potential outflows for 2023 include \$10.2bn of contractual maturities and \$14.8bn of par calls <sup>2</sup> Debt maturities for 2022 and 2023 include contractual maturities less amounts eligible to be called or that were called in periods prior to contractual maturity dates

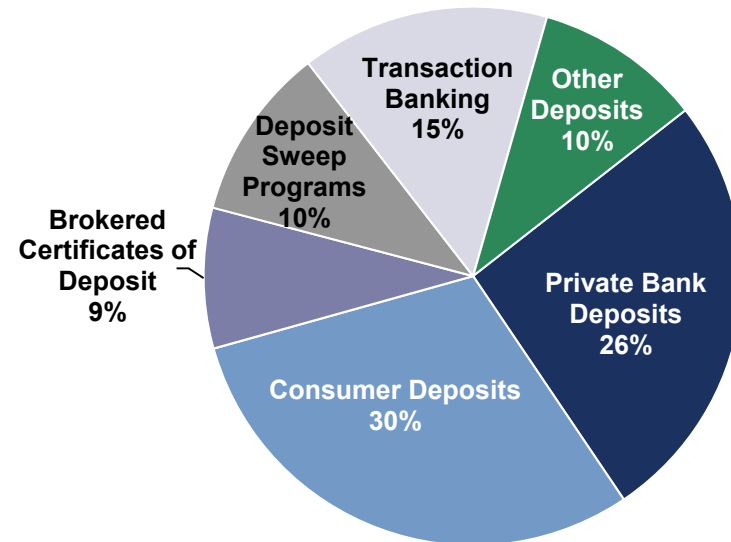


# Deposit Growth

Deposit Growth Trends (\$bn)



4Q21 Deposit Mix



- Deposits have become a larger source of funding and provide a diversified source of liquidity
- We have raised deposits with an emphasis on consumer deposit growth through our digital platform, *Marcus by Goldman Sachs*, in both the U.S. and U.K., and a majority of our consumer deposits benefit from deposit insurance. In addition, GS Bank USA continues to focus on long-term CDs, private bank deposits and long-term relationships with broker-dealer aggregators that sweep their client cash to an FDIC-insured deposit at GS Bank USA. The firm also had deposit growth from its transaction banking business
- ~55% of our total U.S. deposits are FDIC insured and ~40% of non-U.S. deposits are insured by non-U.S. programs as of 4Q21

**We have continued to optimize our unsecured funding mix via deposit growth**

# Risk Management

- Policies, limits and exposures reviewed regularly
- Multiple risk metrics used to monitor and manage exposures
- Extensive investment in our risk management groups
- Frequent reporting to / communication with the Board and senior management

	Risk Overview	Committee Oversight	Controls & Active Management
Market Risk	<ul style="list-style-type: none"> <li>■ Risk of loss due to changes in market conditions</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Firmwide Enterprise Risk Committee</b> is responsible for overseeing all of our financial and nonfinancial risks, and the ongoing review, approval and monitoring of our enterprise risk management framework, as well as our risk limits framework</li> <li>■ <b>Risk Governance Committee</b> (through delegated authority from the Firmwide Enterprise Risk Committee) is responsible for the ongoing approval and monitoring of market risk limits at firmwide, business and product levels</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Market Risk</b> has primary responsibility for assessing, monitoring, and managing our risks related to markets and market instruments</li> </ul>
Credit Risk	<ul style="list-style-type: none"> <li>■ Potential for loss due to the default or deterioration in credit quality of a counterparty or an issuer of securities or other instruments we hold</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Firmwide Enterprise Risk Committee</b> is responsible for overseeing all of our financial and nonfinancial risks, and the ongoing review, approval and monitoring of our enterprise risk management framework, as well as our risk limits framework</li> <li>■ <b>Risk Governance Committee</b> (through delegated authority from the Firmwide Enterprise Risk Committee) is responsible for the ongoing approval and monitoring of credit risk limits at firmwide, business and product levels</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Credit Risk</b> has primary responsibility for assessing risks associated with the creditworthiness of our clients and counterparties</li> </ul>

# Risk Management (cont'd)

	Risk Overview	Committee Oversight	Controls & Active Management
Liquidity Risk	<ul style="list-style-type: none"> <li>■ Risk that we will be unable to fund ourselves or meet our liquidity needs in the event of firm-specific, broader industry or market liquidity stress events</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Firmwide Asset Liability Committee</b> reviews and approves the strategic direction for our financial resources, including capital, liquidity, funding and balance sheet</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Liquidity Risk</b> has primary responsibility for identifying, monitoring, evaluating and overseeing our liquidity risk to ensure that we are appropriately positioned to meet our liquidity and funding needs</li> </ul>
Operational Risk	<ul style="list-style-type: none"> <li>■ Risk of an adverse outcome resulting from inadequate or failed internal processes, people, systems or from external events</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Firmwide Operational Risk and Resilience Committee</b> is responsible for overseeing operational risk and for ensuring our business and operational resilience</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Operational Risk</b> has primary responsibility for developing and implementing risk assessment and oversight frameworks designed to identify, monitor and manage non-financial risks, such as those associated with systems, people, processes and external events</li> </ul>
Model Risk	<ul style="list-style-type: none"> <li>■ Potential for adverse consequences from decisions made based on model outputs that may be incorrect or used inappropriately</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Firmwide Model Risk Control Committee</b> (which reports to the Risk Governance Committee) is responsible for the oversight of the development and implementation of model risk controls</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Model Risk</b> has primary responsibility for ensuring independent controls around the development, implementation and usage of models</li> </ul>

- Our risk management also includes the management of conflicts, climate risk, compliance risk and capital risk.

# Market Risk-Related Metrics

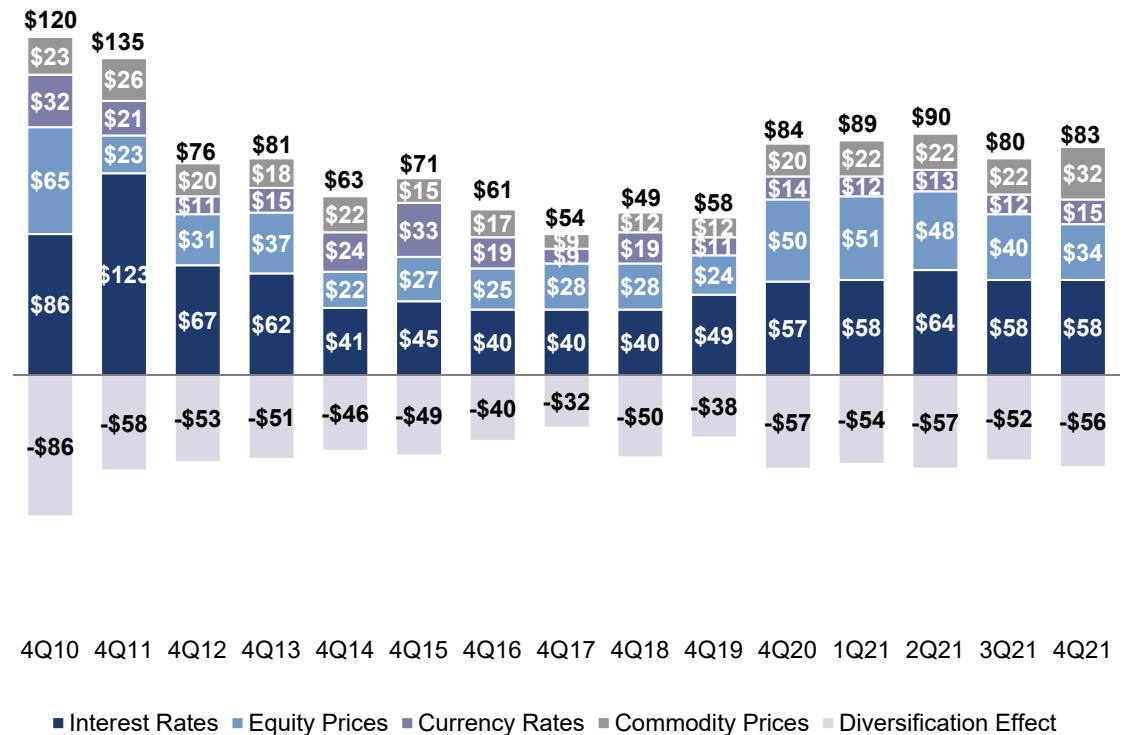
(\$ in millions)

## 10% Sensitivity Table

	December 2021	December 2020
<b>Asset Categories</b>		
Equity	\$1,953	\$1,854
Debt	\$2,244	\$2,516
<b>Total</b>	<b>\$4,197</b>	<b>\$4,370</b>

- 10% sensitivity measures market risk by asset category for positions at fair value, that are not included in Value at Risk (VaR), by estimating the potential reduction in net revenues of a 10% decline in the value of these positions

## Average Daily VaR



- VaR is the potential loss in value of inventory positions, as well as certain other financial assets and liabilities, due to adverse market movements over a defined time horizon with a specified confidence level. We typically employ a one-day time horizon with a 95% confidence level. We hold such positions primarily for market making for our clients and for our investing and financing activities

# Appendix

## Non-GAAP Measures

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- As of 1Q14, the supplementary leverage ratio was a non-GAAP measure as it was not a required regulatory disclosure at that time. We believe that this ratio is meaningful because it is a measure that we, our regulators and investors use to assess our ability to meet future regulatory capital requirements. This ratio was based on our interpretation, expectations and understanding of the revised risk-based capital and leverage regulations of the Federal Reserve Board, subject to certain transition provisions. This ratio is a non-GAAP measure and may not be comparable to similar non-GAAP measures used by other companies. For a further discussion of the methodology used to calculate the firm's regulatory ratios, see Note 20 "Regulation and Capital Adequacy" in Part II, Item 8 "Financial Statements and Supplementary Data" and "Capital Management and Regulatory Capital" in Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2021.