Financial Roadmap

Stephen Scherr
Chief Financial Officer

January 29, 2020
Agenda

1. Targets

2. Drivers of Improved Profitability
   - Revenue expansion opportunities
   - Funding optimization
   - Expense management
   - Dynamic capital management

3. Key Takeaways
A Commitment to Driving Value

Medium-term\(^1\) Financial Targets

- **ROE / ROTE**: >13% / >14%
- **Efficiency Ratio**: ~60%
- **CET1 Ratio**: 13-13.5%

New business growth positions Goldman Sachs to generate mid-teens or higher returns over longer-term\(^2\)
Drivers of Improved Profitability

2019 ROE  

10.0%  10.6%  ROTE \(^1\)

Litigation and Tax  Business Activity  Funding Optimization  Expense Efficiencies  Medium-term ROE

~75bps  ~50bps  ~75bps  ~125bps

13.3% 13-13.5%  10.0%

CET1 Ratio  Efficiency Ratio

13.3%  68.1%  60%

>13%  >14% ROTE
Clear Strategic Direction Will Drive Business Growth

**Grow and Strengthen Existing Businesses**
- Expand our global footprint: Investment Banking, Global Markets, Ultra High Net Worth
- Increase financing activities
- Grow asset management

**Diversify Our Products and Services**
- Build Transaction Banking
- Grow third party Alternatives
- Scale digital Consumer Banking, High Net Worth and Mass Affluent

**Operate More Efficiently**
- Increase organizational and process efficiency
- Remix to lower cost deposit funding
- Optimize capital footprint

**Incumbent Business Growth**
$2-3bn

**New Initiatives**
$1-2bn

**Funding Optimization**
$1.0bn

**Expense Efficiency**
$1.3bn
Growth Initiatives to Generate Positive Returns

Forward Estimates: Pre-tax Income

Transaction Banking + Consumer (ex-reserve build)

Transaction Banking + Consumer

Year-end

2018 2019 2020 2021 2022 2023 2024

$1bn of pre-tax loss including reserve build
### Disciplined Return on Investment Framework

**Investment Philosophy**

- Addresses a client need
- Capitalizes on our foundational advantages
- Leverages adjacencies to incumbent businesses
- Produces more durable revenues
- Enhances our funding profile
- Improves capital efficiency

**Initiative Type** | **Select Initiatives** | **Time Horizon** | **Financial Evaluation**
--- | --- | --- | ---
**Existing Business** | Growth in Investment Banking coverage | Up to 3 years | Return on risk-adjusted capital
| Expansion of Private Wealth Management coverage | | | Cumulative and steady state PTI

**Adjacent / New Business** | Transaction Banking | 3 to 5+ years | NPV analysis
| Consumer Banking | | |
Funding Optimization to Drive Improved Returns

Increasing high-quality deposits to improve funding diversification and generate $1.0bn in revenues through lower interest expense

Key Tenets of our Strategy

1. Further diversify funding mix via deposits
2. Enhance Asset-Liability Management
3. Optimize liquidity pool

Target State

Legend
- Current State
- Future State

Lowering net interest expense
Embracing the Bank Model

Increase Utilization of Bank Entities

- Capture lower cost funding
- Continue migration of businesses into bank entities
- Grow diversifying businesses with more durable revenues
- Facilitate increase in firmwide lending

Significant Asset Growth Opportunity

Percent of Total Assets in Bank Entities¹

- GS: ~25%
- U.S. Peer Average: ~65%+
- Held-for-Investment loans booked in GS bank entities: >80%

~$250bn in total assets across all Goldman Sachs’ bank entities
Optimizing our Unsecured Funding Mix via Deposit Growth

Improvement in unsecured funding mix to drive higher returns

<table>
<thead>
<tr>
<th>Year</th>
<th>Deposits</th>
<th>Wholesale Unsecured</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>2019</td>
<td>43%</td>
<td>57%</td>
</tr>
<tr>
<td>Medium-term</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Interest expense savings reflected in revenue growth

$100bn
Growth in deposits across channels

~30bps
Expected improvement in cost of funds
Expense Savings Creating Capacity to Fund Future Growth

$1.3bn
Run-rate Expense Savings

Key Drivers

- Streamlined organization
- Investment in automation and infrastructure
- Centralized expense management
- Real estate strategy

3-year Expense Plan

Efficiency Ratio

- 2019 Ratio: 68.1%
- Business Growth (Revenues): ~600 bps
- Funding Optimization: ~125 bps
- Business Growth (Expenses): ~450 bps
- Expense Efficiencies: ~350 bps
- Litigation: ~250 bps
- Medium-term Ratio: ~60%
Dynamic Expense Management Drives Earnings Stability

Alignment of expenses with revenues through pay-for-performance discipline results in low earnings volatility

Revenue Volatility\(^1\)

- 2009-2019: GS 12%, U.S. Peer Average 10%
- 2014-2019: GS 7%, U.S. Peer Average 6%

Earnings Volatility\(^1\)

- 2009-2019: GS 37%, U.S. Peer Average 81%
- 2014-2019: GS 31%, U.S. Peer Average 49%
Proven History of Prudent Capital Management

In the last 5 years, Goldman Sachs returned over $30bn of capital, 90%+ of the firm’s net income and grew BVPS more than peers.

Capital Management Philosophy

- Prudent capital management with evolving regulatory landscape
- Prioritize deploying capital to support client activity and grow our businesses
- Return excess capital in the form of dividends and buybacks

BVPS Growth vs. Peers

- In the last 5 years, Goldman Sachs returned over $30bn of capital, 90%+ of the firm’s net income and grew BVPS more than peers.
Disciplined and Dynamic Capital Management

Key Forward Drivers

- **Stress Capital Buffer**
  Improvement due to capital efficiencies of 50bps across Alternatives in Asset Management

- **G-SIB**
  Expected surcharge of 3% as we continue to grow balance sheet to support client financing activity

- **Management Buffer**
  Estimated buffer of 50-100bps to account for uncertainties, including potential volatility in the Stress Capital Buffer

### CET1 Ratio

Target: **13-13.5%**

- Stress Capital Buffer: 5.0%
- G-SIB: 3.0%
- Minimum: 4.5%
Capital Attribution and Segment Returns

Capital Framework

- Governed by regulatory constraints and internal risk measures
- Dynamically managed and responsive to changing binding constraints
- Active reallocation of capital towards higher-returning growth opportunities
- Fully cost-out businesses; no corporate center

Capital Attribution and Returns

<table>
<thead>
<tr>
<th>Capital Attribution ($bn)</th>
<th>2019 Returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. 2019</td>
<td>∆ vs. 2017</td>
</tr>
<tr>
<td>Investment Banking</td>
<td>$11</td>
</tr>
<tr>
<td>Global Markets</td>
<td>$40</td>
</tr>
<tr>
<td>Asset Management</td>
<td>$22</td>
</tr>
<tr>
<td>Consumer &amp; Wealth Management</td>
<td>$6</td>
</tr>
<tr>
<td>Total</td>
<td>$79</td>
</tr>
</tbody>
</table>
Capital Deployment Opportunities for Global Markets

Global Markets Returns

Higher returns over the medium-term driven by:

- Resource optimization including funding, expense and capital efficiencies
- Redeployment of capital into ROE accretive activities including client financing

Cost of Capital

- 2019 ROE: ~7%
- Medium-term ROE: >10%

Resource optimization and growth in client financing: ~3%

Global Markets and Investment Banking 2019 ROE

- Synergies with Investment Banking in delivering integrated execution solutions for clients
- Goldman Sachs’ ROE was burdened in 2019 by elevated litigation expenses

- GS: 9.2%
- MS: 8.7%
- JPM: 11.6%
- C: 10.6%
- BAC: 8.7%

Including pro-rata allocation of parent/corporate capital
Prudently Managing Risk

Comprehensive Risk Management Infrastructure

- Disciplined risk-reward approach
- Deep bench of risk managers
- Consensus-driven decision making

Culture of Risk Management

- Independent controls and governance
- Comprehensive stress testing
- Mark-to-market discipline

Process and Structural Oversight

- Cycle preparedness
- Reputational risk and compliance
- Cyber risk

Continuous Improvement

Evolving Risk Profile

- Market RWAs
  - 2015: $104bn
  - 2019: $65bn

- Credit RWAs
  - 2015: $430bn
  - 2019: $499bn
Evolving Risk Profile

Continuous investment in risk management to address evolving business mix

Key Areas of Risk:
- Credit
- Fraud
- Increased cyber footprint
- Operational resiliency
- Privacy

Mitigation:
- Robust credit underwriting framework and processes
- Strong talent pool augmented by select hiring
- Best-in-class technology infrastructure and analytics
- Modern tools with no legacy platforms and streamlined processes
- Continuous innovation and investments to mitigate cyber risk
Key Takeaways

Committed to Delivering on Our Financial Targets

Leading Businesses with Multiple Opportunities for Revenue Growth Across the Franchise

Optimizing Expenses and Capital

Prudently Managing Risk

Providing Investors Tools to Hold us Accountable
Financial Roadmap

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Chief Financial Officer

January 29, 2020
These notes refer to the financial metrics and/or defined term presented on:

Slide 2:
1. Medium-term refers to 3 year time horizon
2. Longer-term refers to 5+ year time horizon

Slide 3, 14:
1. Return on average common shareholders’ equity (ROE) is calculated by dividing net earnings applicable to common shareholders by average monthly common shareholders’ equity. Return on average tangible common shareholders’ equity (ROTE) is calculated by dividing net earnings applicable to common shareholders by average monthly tangible common shareholders’ equity (tangible common shareholders’ equity is calculated as total shareholders’ equity less preferred stock, goodwill and identifiable intangible assets). Management believes that ROTE is meaningful because it measures the performance of businesses consistently, whether they were acquired or developed internally, and that tangible common shareholders’ equity is meaningful because it is a measure that the firm and investors use to assess capital adequacy. ROTE and tangible common shareholders’ equity are non-GAAP measures and may not be comparable to similar non-GAAP measures used by other companies.

The table below presents average equity and a reconciliation of average common shareholders’ equity to average tangible common shareholders’ equity:

<table>
<thead>
<tr>
<th>Unaudited, $ in millions</th>
<th>AVERAGE FOR THE YEAR ENDED DECEMBER 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total shareholders’ equity</td>
<td>$ 90,297</td>
</tr>
<tr>
<td>Preferred stock</td>
<td>(11,203)</td>
</tr>
<tr>
<td>Common shareholders’ equity</td>
<td>79,094</td>
</tr>
<tr>
<td>Goodwill and identifiable intangible assets</td>
<td>(4,464)</td>
</tr>
<tr>
<td>Tangible common shareholders’ equity</td>
<td>$ 74,630</td>
</tr>
</tbody>
</table>

Slide 6: 1. PTI refers to pre-tax income; NPV refers to Net Present Value

Slide 8:
1. Source: SNL; includes U.S. bank entities for peers BAC, C, JPM, MS as of 3Q19; GS as of 4Q19, excludes affiliate assets

Slide 9:
1. Relative value of shift to deposits will change as credit spreads and overnight/term interest rates change
End Notes

Slide 11:
1. Annual revenue volatility calculated by dividing standard deviation of reported revenues by the average revenues over the period. Annual earnings volatility calculated by dividing standard deviation of reported net income to common by the average net income to common over the period. U.S. peers include BAC, C, JPM, MS

Slide 12:
1. Compares 3-year, 5-year, 10-year BVPS growth vs. 2019 BVPS; data per SNL

Slide 13:
1. Targets may change as regulatory landscape and firm business mix evolve; SCB reflects current proposal

Slide 15:
1. Compiled using publicly available information from peer filings

Slide 16:
1. As of December 31, 2015, the firm’s risk-weighted assets in accordance with the Standardized capital rules on a fully phased-in basis was a non-GAAP measure and may not be comparable to similar non-GAAP measures used by other companies. Management believes that the firm’s risk-weighted assets in accordance with the Standardized capital rules on a fully phased-in basis is meaningful because it is a measure that the firm and investors use when assessing capital adequacy. The table below presents reconciliations for the firm’s market and credit risk-weighted assets in accordance with the Standardized capital rules on a transitional basis to a fully phased-in basis as of December 31, 2015 (unaudited, $ in billions):

<table>
<thead>
<tr>
<th>Unaudited, $ in billions</th>
<th>As of December 31, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market risk-weighted assets, transitional and fully phased-in basis</td>
<td>$104</td>
</tr>
<tr>
<td>Credit risk-weighted assets, transitional basis</td>
<td>$420</td>
</tr>
<tr>
<td>Credit risk transitional adjustments</td>
<td>$10</td>
</tr>
<tr>
<td>Credit risk-weighted assets, fully phased-in basis</td>
<td>$430</td>
</tr>
</tbody>
</table>
Cautionary Note on Forward-Looking Statements

Statements about the firm’s target metrics, including its target ROE, ROTE, efficiency ratio and CET1 capital ratios, and how they can be achieved, and statements about future operating expense (including future litigation expense), amount and composition of future Assets under Supervision, planned debt issuances, growth of deposits 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 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 about the firm’s target ROE, ROTE and CET1 capital ratios, 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, the level and composition of more durable revenues 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. 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, 2018. You should also read the cautionary notes on forward-looking statements in our Form 10-Q for the period ended September 30, 2019 and Earnings Results Presentation for the Full Year and Fourth Quarter 2019. For more information regarding non-GAAP financial measures such as ROTE, refer to the footnotes in the Earnings Release and Earnings Presentation for the Full Year and Fourth Quarter 2019 and 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 January 29, 2020 and the firm does not undertake to update forward-looking statements to reflect the impact of subsequent events or circumstances.