Barclays Global Financial Services Conference

Tom Montag, Chief Operating Officer and President of Global Banking & Markets
September 9, 2019
BAC has a Diversified Business Model with Scale in Every Business

- Consumer Banking
- Global Wealth & Investment Management (GWIM)
- Global Banking
- Global Markets

Retail | Preferred & Small Business | Merrill Lynch | Bank of America Private Bank | Business Banking | Global Commercial Banking | Global Corporate & Investment Banking | Global Markets

- Connecting across business lines to deepen client relationships
- Delivering leading high-tech and high-touch capabilities
- Increasing relationship / sales coverage to better serve our clients’ goals and life priorities
- Investing in digital to improve efficiency and client experience; moving from paper to electronic
- Optimizing size (client/product) and footprint to adapt to changing environment and behaviors

1H19 Revenue by Business Segment ($B)¹

- Consumer Banking: $8.3 (18%)
- Global Wealth & Investment Management: $10.1 (21%)
- Global Banking: $9.7 (20%)
- Global Markets: $19.3 (41%)

1H19 Pre-tax Earnings by Segment ($B)

- Consumer Banking: $8.7
- Global Wealth & Investment Management: $2.8
- Global Banking: $5.4
- Global Markets: $2.9

¹ Presented on a fully taxable-equivalent basis. Year-to-date net losses from All Other of $1.1B not shown. BAC year-to-date revenue on FTE basis of $46.4B ($46.1B on a GAAP basis). For information on non-GAAP measures, see important presentation information on slide 18.
Leading Capabilities in Global Banking & Markets

**Global Market Leader**

- Global footprint serving large corporate, institutional, and middle market clients with operations in 35 countries
- A leading provider of sales, trading, and research services to clients in all major markets
  - 650+ research analysts across Equity, Credit, Rates & FX, Commodities, Economics, Global Emerging Markets, Fixed Income, and Equity Strategy Research
  - In-depth analysis on 3,000+ companies and 1,100+ corporate bond issuers
  - Economic forecasts for 54 economies and 25 industries
- Outstanding commercial and investment banking capabilities
  - Raised $353B in capital for clients globally in 1H19
- Over 30MM average trades per day
- Leading dealer in FX cash, derivatives, electronic trading, and payment services in 148 currencies
- Relationships with 77% of the Global Fortune 500 (2019)
- Relationships with 95% of the U.S. Fortune 1,000 (2019)

**Notable Accolades**

- World’s Best Bank for Diversity & Inclusion ¹
- North America’s Best Bank for Small to Medium-sized Enterprises ¹
- Institutional Investor’s Top Global Research Firm ²
  - #1 in 2011-2016
  - #2 in 2017-2018
- 2018 Quality, Share and Excellence Awards for U.S. Large Corporate Banking and Cash Management ³
- Best Transaction Bank in North America ⁴

**Global Coverage**

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¹ Euromoney, July 2019
³ Greenwich, 2018.
⁴ The Banker, 2018.
Strong Global Banking Financial Performance

Global Banking: 1H15 – 1H19

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Expenses</th>
<th>Op Leverage</th>
<th>Net Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>+16%</td>
<td>+7%</td>
<td>+9%</td>
<td>+48%</td>
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</table>

<table>
<thead>
<tr>
<th>1H15</th>
<th>1H16</th>
<th>1H17</th>
<th>1H18</th>
<th>1H19</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8.7B</td>
<td>$9.2B</td>
<td>$10.1B</td>
<td>$10.0B</td>
<td>$10.1B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1H15</th>
<th>1H16</th>
<th>1H17</th>
<th>1H18</th>
<th>1H19</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2.7B</td>
<td>$2.5B</td>
<td>$3.5B</td>
<td>$4.1B</td>
<td>$4.0B</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>1H15</th>
<th>1H19</th>
<th>-4pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>48%</td>
<td></td>
<td>44%</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Return on Allocated Capital</th>
<th>1H15</th>
<th>1H19</th>
<th>+4pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td></td>
<td>19%</td>
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</tr>
</tbody>
</table>
Have Consistently Grown GBAM Loans & Leases and Deposits

Loans & Leases (EOP, $B)

Deposits (Avg., $B)

Note: Loans & Leases and Deposits include Global Banking and Global Markets.
Delivering Results Across Our International Banking Footprint

Serving Clients Core Banking Needs

International Subsidiary Revenue Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>GCB 2015-2018</th>
<th>GCIB 2015-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>2016</td>
<td>114</td>
<td>113</td>
</tr>
<tr>
<td>2017</td>
<td>127</td>
<td>131</td>
</tr>
<tr>
<td>2018</td>
<td>147</td>
<td>143</td>
</tr>
</tbody>
</table>

(into 2015; YoY Change)

Banking Capabilities in Priority Markets

38% increase in International Corporate Banking employees in the last decade

46% increase in International Global Transaction Services employees in the last decade

~21% of U.S. GCB clients with international subsidiaries business

~43% of U.S./Canada GCIB clients¹ with international subsidiaries business

~44% of EMEA, APAC, and LatAm GCIB clients¹ with international subsidiaries business (~60% of revenue with subsidiaries in U.S./Canada)

Note: GCB represents Global Commercial Banking and GCIB represents Global Corporate & Investment Banking. MNCs represents Multi-National Companies. Loans & Leases and Deposits include Global Banking and Global Markets.

¹ % of Corporate Banking clients.
Investing in U.S. Local Coverage

Deepening and Broadening Banking Sales Coverage

- **~700** sales employees added to expand local coverage footprint since 2014
- **97** locations with expanded presence (Denver, Palo Alto, San Diego, Orlando, Indianapolis, Kansas City, Cincinnati, Cleveland, Dallas, Houston, etc.)
- **49** locations with new market presence (Boulder, New Orleans, Omaha, Milwaukee, etc.)

On the Ground Presence

- **~300** Business Banking relationship managers added to drive local coverage since 2014
- **~260** Global Commercial Banking relationship managers added to drive local coverage since 2014
- **80%** of Global Commercial Banking (GCB) prospects actively called vs. 27% in 2014
- **11%** reduction in number of GCB clients exceeding 200 miles from relationship manager since 2016
- **23%** increase in number of clients covered jointly by Global Commercial Banking and Investment Banking since 2017
- **18** locations with Regional Investment Bankers, including 6 new locations in 2019
- **300%** increase in dedicated Regional Investment Bankers since 2017

Note: Based on Global Banking employees (including GTS; excluding Capital Markets) in primary sales roles. No presence in Hawaii and Alaska. Clients in states without employee presence are covered by primary sales employees in other locations.
Growing GCB Investment Banking

**U.S. Mid-Market IB**

**Mid-Market IB Market Share Results**

- Bank of America (BAC) ranked #3 in Mid-Market IB, up from #4 in YTD18
- BAC has advised on more Mid-Market IB deals than any other competitor YTD
- Mid-Market IB Industry Pool for YTD19 Annualized of $16B

**Announced Mid-Market M&A Activity**

**Mid-Market M&A Highlights**

- **BAC Ranking:** #4 rank YTD, up from #9 in YTD18
- **BAC Share:** Market share +64 bps YoY
- **Performance Relative to Market:** BAC outperforming the market in YoY change in deal count and deal volume
- **Pipeline Growth:** # of Mid-Market pipeline deals +30% vs. 2018

**GWIM Referrals**

**YTD Referral Activity**

- # of YTD M&A Referrals from GWIM

- **Prior Threshold**
- **Adjusted Threshold**
- **Total Referrals**

*Threshold based on company earnings

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Note: GWIM defined as Global Wealth & Investment Management. ECM represents Equity Capital Markets.

1 Source: Dealogic as of August 31, 2019 based on fees.

2 YTD results as of July 30, 2019.

3 Source: Dealogic as of August 19, 2019 based on volumes. Includes M&A deals with a US/Canada target and deal value between $50M and $2B.
Progress in Key Investment Banking Focus Areas

Change in Year Over Year Fee Share

**Global IB**
- 1H18: 5.6%
- 1H19: 6.2%
- Change: +62bps

**M&A**
- 1H18: 4.2%
- 1H19: 4.7%
- Change: +54bps

**Equity Capital Markets**
- 1H18: 5.2%
- 1H19: 6.0%
- Change: +78bps

**Leveraged Finance**
- 1H18: 6.6%
- 1H19: 7.9%
- Change: +134bps

**Financial Sponsors**
- 1H18: 5.3%
- 1H19: 6.9%
- Change: +166bps

**1H19 Highlights**
- #3 in Global IB fees, up from #4
- Advisor on 5 out of top 10 global deals
- #1 in U.S. IPOs, Bookrunner on 12 of the top 15 ECM deals
- #2 in Global Leveraged Finance up from #4
- #3 in Global Financial Sponsors IB fees, up from #8

**Over 45 Managing Director Hires in Key Businesses and Strategic Products this Year**

Source: Dealogic as of June 30, 2019 for Investment Banking (IB) based on Dealogic’s fee model.
Delivering Our Global Transaction Services to Clients Across the Globe

Global Transaction Services (GTS) provides working capital solutions to Corporate (GCIB), Commercial (GCB), Business Banking (BB), Public Sector Banking (PSB/FICC) and Private Bank clients.

Overview

Total GTS Revenue Growth: 1H15 – 1H19

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1H15</td>
<td>100%</td>
</tr>
<tr>
<td>1H16</td>
<td>150%</td>
</tr>
<tr>
<td>1H17</td>
<td>200%</td>
</tr>
<tr>
<td>1H18</td>
<td>250%</td>
</tr>
<tr>
<td>1H19</td>
<td>300%</td>
</tr>
</tbody>
</table>

GTS Growth

Top 3 areas of investment:

- Real-Time Payments
- Data & Analytics as a Service
- CashPro®

Note: Total GTS Revenue and International GTS Revenue not to scale.
CashPro® Platform Statistics

Sowing Seeds of Our Own Disruption

- **CashPro Mobile**: Access using mobile devices (phone and tablet)
- **CashPro Online**: Access using a website
- **CashPro Connect**: Batch connectivity through client systems
- **CashPro APIs**: Real-time connectivity through client network

### People-Centric
- Users: +94%
- Logins: +165%
- Checks deposited:
  - Volume: +212%
  - Value: +283%
- Sign in with biometrics: 59%

### Straight-through-Processing-Centric
- Clients: +2%
- Payment volume: +9%
- Payment value: +17%
- Monthly developer visits: +101% YoY
- Total visits: >85,000
- Clients in production: 17

- Continued growth of our CashPro platform has reduced overall expenses by 3% and enhanced our operating margins by 4% in our GTS business in the first half of 2019.
- Recent enhancements have focused on digitizing the client service experience including integration of secure communications with bank representatives, digitization of the Know Your Customer refresh process, global expansion of electronic signing of documents, and the planned launch of an online service dashboard to deliver greater transparency into the status of service and research transactions.

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Metrics are rolling 12 months ended June 2019 with year-over-year comparisons. GTS represents Global Transaction Services.
Strong Global Markets Financial Performance

Global Markets: 1H15 – 1H19

Revenue -3%
Expenses -8%
Op Leverage +5%
Net Income +19%

Note: Numbers may not sum due to rounding

Global Markets data shown ex. DVA. DVA Revenue/net income impact ($MM): 1H15 - $600/-$372; 1H16 - $10/-$6; 1H17 - $179; 1H18 - $87; 1H19 - $92. For information on non-GAAP measures, see important presentation information on slide 18.
Markets Revenue, Stability and Growth in Market Share

Sales & Trading Revenues ($B) ¹

<table>
<thead>
<tr>
<th>Year</th>
<th>Equities</th>
<th>FICC</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>4.4</td>
<td>8.6</td>
<td>13.0</td>
</tr>
<tr>
<td>2016</td>
<td>4.0</td>
<td>9.6</td>
<td>13.6</td>
</tr>
<tr>
<td>2017</td>
<td>4.2</td>
<td>9.1</td>
<td>13.2</td>
</tr>
<tr>
<td>2018</td>
<td>4.9</td>
<td>8.4</td>
<td>13.3</td>
</tr>
<tr>
<td>1H19</td>
<td></td>
<td></td>
<td>6.8</td>
</tr>
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</table>

Sales & Trading Market Share (%) ²

<table>
<thead>
<tr>
<th>Year</th>
<th>FICC</th>
<th>Equities</th>
<th>Global Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>11.2%</td>
<td>8.0%</td>
<td>9.9%</td>
</tr>
<tr>
<td>2016</td>
<td>11.5%</td>
<td>8.4%</td>
<td>10.4%</td>
</tr>
<tr>
<td>2017</td>
<td>12.3%</td>
<td>8.8%</td>
<td>10.9%</td>
</tr>
<tr>
<td>2018</td>
<td>12.0%</td>
<td>9.4%</td>
<td>10.9%</td>
</tr>
<tr>
<td>1H19</td>
<td></td>
<td>9.3%</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

S&T Revenue Volatility (%) (1Q14 – 2Q19)

- BAC: 11%
- Peer 1: 13%
- Peer 2: 15%
- Peer 3: 18%
- Peer 4: 20%

Standard deviation of quarterly YoY change in total S&T revenues

**Notes:**
1. BAC S&T revenues ex. DVA. DVA Revenue impact ($MM): 2015 - $786; 2016 - $238; 2017 - $428; 2018 - $162; 1H19 - $121. For information on non-GAAP measures, see important presentation information on slide 18.
2. Market share based on reported sales & trading (S&T) revenue from top banks.
### Balanced Global Markets Growth to Support Clients and Deliver Results

<table>
<thead>
<tr>
<th>Trading-related Assets</th>
<th>(End of Period, $B)</th>
<th>2Q15</th>
<th>2Q17</th>
<th>2Q19</th>
<th>2Q19 vs. 2Q15</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPMorgan</td>
<td>$688</td>
<td>$716</td>
<td>$922</td>
<td>▶</td>
<td>+34%</td>
</tr>
<tr>
<td>Goldman Sachs</td>
<td>$604</td>
<td>$605</td>
<td>$620</td>
<td>▶</td>
<td>+3%</td>
</tr>
<tr>
<td>Citigroup</td>
<td>$516</td>
<td>$494</td>
<td>$565</td>
<td>▶</td>
<td>+10%</td>
</tr>
<tr>
<td>Bank of America</td>
<td>$475</td>
<td>$487</td>
<td>$553</td>
<td>▶</td>
<td>+16%</td>
</tr>
<tr>
<td>Morgan Stanley</td>
<td>$490</td>
<td>$489</td>
<td>$484</td>
<td>▶</td>
<td>-1%</td>
</tr>
</tbody>
</table>

### Global Markets Highlights

**FICC Core Strength Remains in Credit Products**

1. **#1** Municipal Bonds Underwriter
2. **#2** Securitization (Mortgages)
3. **Top 3** Corporate Credit

**#2** Global Research Firm

1. **#1** Global Research in Institutional Investor’s Fixed Income Survey
2. +30% increase in average trades per day over the last 5 years
3. ~40% of U.S. Credit electronically priced today vs. 0% in 2016
4. +74% in FX Payment revenue over the last 5 years
5. +180bps Prime Brokerage U.S. market share increase in 2018 YoY
6. >60% Equities Financing balances growth since 2014
7. +80 bps Equities U.S. market share in 2018 YoY (~10% share)
8. **#1** Underwriter of U.S. IPO volume for 1H19 and 2018
9. **Insight Mobile** – new mobile application
10. 0 Days of trading losses in 1H19

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Sources:

3. Dealogic.
Leveraging the World of Data to Better Serve Clients and Achieve Operational Excellence

**Data Innovation Group facilitating a real-time/anywhere digital platform**

<table>
<thead>
<tr>
<th>Current</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>30MM Trades per Day</td>
<td>AI-Driven Trading Signals</td>
</tr>
<tr>
<td>25T Daily Risk Calculations</td>
<td>Content Finds Clients</td>
</tr>
<tr>
<td>2B eFX Quotes</td>
<td>Real-time Pricing</td>
</tr>
<tr>
<td>156MM Equities</td>
<td>Transactions/Trades Pushed to Clients</td>
</tr>
<tr>
<td>Daily Order &amp; Trade Msgs</td>
<td>Multi-factor Investing/Cross Assets</td>
</tr>
<tr>
<td>$1.4T Daily Payments</td>
<td>Real-time Liquidity</td>
</tr>
<tr>
<td>750K Credit Facilities</td>
<td>Everything API</td>
</tr>
<tr>
<td>27.2PB of Loan Data</td>
<td>Bring Your Digital Assistant to Work</td>
</tr>
<tr>
<td>497K CashPro Online Users</td>
<td>Powerful Workstation in a Pocket</td>
</tr>
</tbody>
</table>

PB = petabyte
Summary

- One of the largest financial services platforms covering companies and institutional investors domestically and in every major market around the world

- Operating leverage and responsible growth have driven strong profitability and good returns

- Growing market share in important businesses

- Leveraging the franchise

- Investing in the franchise
Forward-Looking Statements

Bank of America Corporation (the "Corporation") and its management may make certain statements that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as “anticipates,” “targets,” “expects,” “hopes,” “estimates,” “intends,” “plans,” “goals,” “believes,” “continue” and other similar expressions or future or conditional verbs such as “will,” “may,” “might,” “should,” “would” and “could.” Forward-looking statements represent the Corporation’s current expectations, plans or forecasts of its future results, revenues, expenses, efficiency ratio, capital measures, strategy and future business and economic conditions more generally, and other future matters. These statements are not guarantees of future results or performance and involve certain known and unknown risks, uncertainties and assumptions that are difficult to predict and are often beyond the Corporation’s control. Actual outcomes and results may differ materially from those expressed in, or implied by, any of these forward-looking statements.

You should not place undue reliance on any forward-looking statement and should consider the following uncertainties and risks, as well as the risks and uncertainties more fully discussed under Item 1A. Risk Factors of our 2018 Annual Report on Form 10-K and in any of the Corporation’s subsequent Securities and Exchange Commission filings: the Corporation’s potential claims, damages, penalties, fines and reputational damage resulting from pending or future litigation, regulatory proceedings and enforcement actions; the possibility that the Corporation’s future liabilities may be in excess of its recorded liability and estimated range of possible loss for litigation, regulatory, and representations and warranties exposures; the possibility that the Corporation could face increased servicing, fraud, indemnity, contribution or other claims from one or more counterparties, including trustees, purchasers of loans, underwriters, issuers, monolines, private-label and other investors, or other parties involved in securitizations; the Corporation’s ability to resolve representations and warranties repurchase and related claims, including claims brought by investors or trustees seeking to avoid the statute of limitations for repurchase claims; the risks related to the discontinuation of the London InterBank Offered Rate and other reference rates, including increased expenses and litigation and the effectiveness of hedging strategies; uncertainties about the financial stability and growth rates of non-U.S. jurisdictions, the risk that those jurisdictions may face difficulties servicing their sovereign debt, and related stresses on financial markets, currencies and trade, and the Corporation’s exposures to such risks, including direct, indirect and operational; the impact of U.S. and global interest rates, inflation, currency exchange rates, economic conditions, trade policies, including tariffs, and potential geopolitical instability; the impact of the interest rate environment on the Corporation’s business, financial condition and results of operations; the possibility that future credit losses may be higher than currently expected due to changes in economic assumptions, customer behavior, adverse developments with respect to U.S. or global economic conditions and other uncertainties; the Corporation’s ability to achieve its expense targets and expectations regarding net interest income, net charge-offs, effective tax rate, loan growth or other projections; adverse changes to the Corporation’s credit ratings from the major credit rating agencies; an inability to access capital markets or maintain deposits or borrowing costs; estimates of the fair value and other accounting values, subject to impairment assessments, of certain of the Corporation’s assets and liabilities, including the Corporation’s merchant services joint venture; the estimated or actual impact of changes in accounting standards or assumptions in applying those standards, including the new credit loss accounting standard; uncertainty regarding the content, timing and impact of regulatory capital and liquidity requirements; the impact of adverse changes to total loss-absorbing capacity requirements and/or global systemically important bank surcharges; the potential impact of actions of the Board of Governors of the Federal Reserve System on the Corporation’s capital plans; the effect of regulations, other guidance or additional information on the impact from the Tax Cuts and Jobs Act; the impact of implementation and compliance with U.S. and international laws, regulations and regulatory interpretations, including, but not limited to, recovery and resolution planning requirements, Federal Deposit Insurance Corporation assessments, the Volcker Rule, fiduciary standards and derivatives regulations; a failure in or breach of the Corporation’s operational or security systems or infrastructure, or those of third parties, including as a result of cyber attacks; the impact on the Corporation’s business, financial condition and results of operations from the planned exit of the United Kingdom from the European Union; the impact of a federal government shutdown and uncertainty regarding the federal government’s debt limit; and other matters.

Forward-looking statements speak only as of the date they are made, and the Corporation undertakes no obligation to update any forward-looking statement to reflect the impact of circumstances or events that arise after the date the forward-looking statement was made.
Important Presentation Information

• The information contained herein speaks only as of the particular date or dates included in the accompanying slides. Bank of America does not undertake an obligation to, and disclaims any duty to, update any of the information provided.

• The Company may present certain key performance indicators and ratios, including year-over-year comparisons of revenue, noninterest expense and pretax income, excluding certain items (e.g., DVA) which result in non-GAAP financial measures. The Company believes the use of these non-GAAP financial measures provides additional clarity in understanding its results of operations and trends. Global Markets revenue on a GAAP basis was $8.1B, $8.3B, $8.7B, $9.1B and $8.3B for 1H15, 1H16, 1H17, 1H18 and 1H19, respectively.

• The Company views net interest income and related ratios and analyses on a fully taxable-equivalent (FTE) basis, which when presented on a consolidated basis are non-GAAP financial measures. The Company believes managing the business with net interest income on an FTE basis provides investors with a more accurate picture of the interest margin for comparative purposes. The Company believes that the presentation allows for comparison of amounts from both taxable and tax-exempt sources and is consistent with industry practices. The FTE adjustment was $302MM for 1H19.

• Effective January 1, 2019, the Company made certain financial reporting changes and reclassifications, which were adopted on a retrospective basis. The changes and reclassifications reflect changes to both the format of the Consolidated Statement of Income and segment allocations. For additional information, see the Company’s Current Report on Form 8-K filed with the SEC on April 1, 2019. Certain prior-period financial information presented herein for the Consolidated Statement of Income, Consolidated Balance Sheet and segment results has been updated to reflect the changes and reclassifications to conform to current period presentation.