Commercial Banking – a proven business model

Client and community focus
- **Clients at the center** of everything we do
- Coverage **strategically segmented** to best serve our clients
- **Local delivery** and decision-making, with **deep sector expertise**

Competing from a position of strength
- **Industry-leading**, broad-based capabilities
- Outstanding franchise **focused on the best clients**
- Operating efficiencies and **scale advantage** as part of JPMorgan Chase

Investing to better serve clients and grow our franchise
- Adding **talented bankers** and expanding local coverage
- Investing in **integrated solutions** and **digital channels**
- Enhancing **client experience** through innovation and streamlining processes

Fortress principles
- **Rigorous client selection** with a long-term, through-the-cycle orientation
- **Strong credit and control culture**, focusing on markets and sectors we know best
- Expense and capital **discipline**

Strong financial performance
- **High quality**, resilient and diversified earnings
- Strong returns while **investing for the long-term**
- Delivering on growth targets with **significant opportunity remaining**
Ten year retrospective – consistent investment and disciplined growth

**Expanded client coverage**
Added 67 locations and ~650 bankers since 2008\(^1\)

**Enabled our team**
Developed training and technology to help our people better serve clients

**Enhanced core capabilities**
Invested in differentiated treasury services and credit solutions

**Invested in our critical processes**
Maintained robust investment agenda to drive efficiency and innovation

**Maintained strong discipline**
7 straight years with NCO rate less than 10 bps

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### Financial Metrics

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2018</th>
<th>10-year CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue ($B)</strong></td>
<td>$4.8</td>
<td>$9.1</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Net income ($B)</strong></td>
<td>$1.4</td>
<td>$4.2</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Average loans ($B)</strong></td>
<td>$82</td>
<td>$206</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Average deposits(^2) ($B)</strong></td>
<td>$103</td>
<td>$171</td>
<td>5%</td>
</tr>
</tbody>
</table>

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\(^1\) Excludes Commercial Term Lending; bankers based on net increase of revenue-producing employees

\(^2\) Deposits herein represent average client deposits and other third-party liabilities
Executing our organic Middle Market expansion strategy

**Expansion market revenue ($mm)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Clients (#)</th>
<th>Loans ($B, avg.)</th>
<th>Deposits ($B, avg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>820</td>
<td>$0.9</td>
<td>$1.3</td>
</tr>
<tr>
<td>2011</td>
<td>1,100</td>
<td>$2.7</td>
<td>$3.0</td>
</tr>
<tr>
<td>2012</td>
<td>1,360</td>
<td>$5.6</td>
<td>$4.7</td>
</tr>
<tr>
<td>2013</td>
<td>1,470</td>
<td>$7.5</td>
<td>$6.1</td>
</tr>
<tr>
<td>2014</td>
<td>1,670</td>
<td>$8.6</td>
<td>$7.9</td>
</tr>
<tr>
<td>2015</td>
<td>1,970</td>
<td>$9.9</td>
<td>$8.3</td>
</tr>
<tr>
<td>2016</td>
<td>2,220</td>
<td>$11.7</td>
<td>$8.2</td>
</tr>
<tr>
<td>2017</td>
<td>2,360</td>
<td>$13.6</td>
<td>$8.8</td>
</tr>
<tr>
<td>2018</td>
<td>2,750</td>
<td>$15.1</td>
<td>$11.4</td>
</tr>
</tbody>
</table>

Note: Represents ongoing expansion into new markets since 2008; prior year figures have been revised to conform to current presentation; client figures have been rounded.

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CAGR: 37%
Value in new markets will be realized over time

Based on year-end Middle Market Banking & Specialized Industries (MMBSI) banker presence; number of MSAs is for U.S. only

1 MSAs added since 2008

Top 50 MSAs with <10 years MMBSI presence

Illustrative market penetration

- 39 MSAs
- 27 Top 50 MSAs with <10 years MMBSI presence

9 MSAs
- Charleston, Portland, Providence

6 MSAs
- Boulder, Memphis, Palo Alto

4 MSAs
- Baltimore, Jacksonville, Raleigh

11 MSAs
- Kansas City, Nashville, Philadelphia, Richmond, San Diego

9 MSAs
- Charlotte, Los Angeles, Miami, San Francisco, Seattle

Chicago, Columbus, Dallas, Houston, New York City

MMBSI presence (years)
Tremendous opportunity to grow Middle Market client franchise

Middle Market Banking & Specialized Industries market opportunity

116 MMBSI locations¹

38k Prospective MMBSI clients¹

70 Top 100 MSAs in Middle Market footprint

~70% U.S. GDP within MSA presence²

~75% MMBSI markets located within branch network³

¹ Includes Canadian presence
² Based on 2017 U.S. GDP by MSA, Bureau of Economic Analysis
³ S&P Global Market Intelligence, branch MSA presence as of 12/31/18
⁴ Size of circle indicates relative number of prospects in a given city

JPMorgan Chase & Co.
Replicating our proven CB model internationally

**Market opportunity**

- **$4T** Cumulative foreign direct investment in the U.S.\(^1\)
- **$146T** Annual wholesale cross-border payments value\(^2\)
- **$231B** Annual wholesale treasury services revenue outside of North America\(^2\)

**Targeting non-U.S. headquartered global companies**

- **Differentiated value** for global companies with U.S. footprint
- Comprehensive international **investment banking** and **treasury services capabilities**
- Existing **in-country infrastructure**
- Client identification through **data-driven analysis** and local intelligence
- Strong **partnership with CIB** and the **Private Bank**

**Expanding internationally in CCBSI\(^3\)**

EMEA expansion countries…

…with similar strategy to be executed in APAC

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\(^1\) Based on historical cost as of 2017, Bureau of Economic Analysis

\(^2\) Boston Consulting Group, An Interactive Guide to Global Payments, 2019 publication based on 2017 data

\(^3\) Corporate Client Banking & Specialized Industries
Specialized industries model drives superior value and risk management

~60% of clients within specific industry coverage

- Chase branch expansion increases addressable client opportunity
- Expanding banker coverage and aligning with high potential prospects

900 Targeted prospects

Government

- Targeted prospects
- Dedicated bankers across Life Sciences and Technology & Disruptive Commerce
- Alignment with CIB and the Private Bank

6k Targeted prospects

Innovation Economy

1 Includes CCBSI coverage only
2 Technology & Disruptive Commerce vertical covers MMBSI technology companies and high growth consumer branded companies
Unmatched ability to support our clients as they grow

Manage operations
- Liquidity
- Integrated payments
- Commercial card
- Digital access

Fund growth
- Asset-based lending
- Syndicated lending
- Equipment finance

Diversify supply sourcing
- Trade finance
- Single-use accounts

Expand internationally
- International payments
- Global liquidity management
- FX

Make strategic acquisition
- M&A advisory
- Acquisition finance

Build flagship store
- Merchant services
- Real estate financing

Seek liquidity
- EPP / ESOP / IPO
- Private banking
CB provides differentiated treasury solutions to drive client value

Investing across the end-to-end treasury management continuum…

- New integrated solutions
  - Cohesive delivery of broad functionality

- Improved data and analytics
  - Better decision making leveraging transformative data

- Enhanced digital capabilities
  - Increased connectivity and improved experience

- Advanced fraud protection
  - Faster threat identification and risk mitigation

…to further help clients unlock value

- Digitize
  - Convert paper to electronic

- Automate
  - Automate reconciliation

- Streamline
  - Decrease human interventions

- Gain insight
  - Consolidate view

- Enhance working capital
- Optimize cash management
- Reduce operating costs
- Safeguard business
Delivering the best investment bank to CB clients

Commercial Banking gross investment banking revenue¹ ($B)

39% JPMC N.A. IB fees represented by CB clients²

CAGR: 10%

$1.0 $1.2 $1.3 $1.4 $1.6 $1.7 $2.0 $2.2 $2.3 $2.4 $2.5 $3.0


1 Represents total JPMorgan Chase revenue from investment banking products provided to CB clients
2 Represents the percentage of CIB’s North America IB fees generated by Commercial Banking clients in 2018, excluding fees from fixed income and equity markets which is included in Commercial Banking gross investment banking revenue
Positioning for continued long-term success in CRE

Market leading position…

#1 multifamily lender in the U.S.¹

Real estate banking with top-tier developers, institutional investors and owners

Financed 20,000 units of affordable housing in 2018

… driven by intense client focus

Speed and certainty of execution

Simplicity and digital delivery

Continued investment and innovation

Using CREOS platform for all new Commercial Term Lending (CTL) business

CREOS

- Loan origination platform implemented in 2017, transformed the CTL lending process
- Enhances client experience and transparency
- Generates incremental operating leverage
- Further strengthens robust risk management and controls

Percentage of originations completed in <30 days²

<table>
<thead>
<tr>
<th></th>
<th>15%</th>
<th>44%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4Q16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4Q18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Based on S&P Global Market Intelligence, as of 12/31/18
² Based on normalized controllable cycle-time
Consistent risk focus and smart growth across our portfolio

Rigorous client selection
Market and industry expertise
Underwriting built on experience and analytics
Through-the-cycle discipline
Downturn preparedness

Average loans by client segment ($B)

<table>
<thead>
<tr>
<th>Year</th>
<th>C&amp;I</th>
<th>CRE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$89</td>
<td>$90</td>
<td>$179</td>
</tr>
<tr>
<td>2017</td>
<td>$96</td>
<td>$102</td>
<td>$198</td>
</tr>
<tr>
<td>2018</td>
<td>$99</td>
<td>$106</td>
<td>$206</td>
</tr>
</tbody>
</table>

CAGR

<table>
<thead>
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<th>Year</th>
<th>C&amp;I</th>
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<th>Total</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td>$179</td>
<td>5%</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td>$198</td>
<td>9%</td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td>$206</td>
<td>7%</td>
</tr>
</tbody>
</table>

Note: Commercial and Industrial (C&I) and Commercial Real Estate (CRE) groupings used herein are generally based on client segments and do not align with regulatory definitions.

1 Includes CCBS Real Estate
Maintaining strong risk discipline – C&I

Portfolio summary

- Diversified across industries and regions
- 81% of non-investment grade exposure is secured\(^1\)
- 84% of loan facilities are bilateral or JPMC-led\(^2\)
- 43% of exposure underwritten within specialized industry teams\(^3\)
- Strong credit performance in stress environments, as demonstrated in recent oil & gas downturn

Market commentary

- Credit quality remains solid, with no material signs of deterioration in the market
- Continue to closely watch certain sectors and monitor new originations
- Revolver utilization generally flat
- Loan spreads in the market have stabilized

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\(^1\) “Non-investment grade” generally represents a risk profile similar to a rating of BB+/Ba1 and below, based on internal risk assessment
\(^2\) Excludes advised and guidance facilities
\(^3\) Excludes asset-based lending
\(^4\) Peer average based on CB-equivalent C&I segments or wholesale portfolios at BAC, CMA, FITB, KEY, PNC, USB, WFC, which may not fully align with CB segmentation
Maintaining strong risk discipline – CRE

Portfolio summary

- 71% of loans in Commercial Term Lending
  - Secured by stabilized multifamily properties in supply-constrained markets
  - New originations remain high quality; LTV ratio of 49%, DSC ratio of 1.5x
- 29% of loans in Real Estate Banking, Community Development Banking and other
  - Focused on top-tier clients and lower-volatility asset classes
  - <$0.5B of loans in hospitality, homebuilders, condos and land

Market commentary

- Competition remains elevated particularly from non-bank lenders, with late-cycle characteristics
- Maintaining underwriting discipline, limiting exposure to riskier asset classes
- Continued spread compression in 2018, though have recently stabilized

Net charge-off performance

1 Represents weighted averages for 2018 originations
2 Peer average based on CB-equivalent CRE segments or wholesale portfolios at BAC, CMA, FITB, KEY, PNC, USB, WFC, which may not fully align with CB segmentation
Driving efficiency while continuing to invest in the franchise

Illustrative overhead ratio walkforward

- **Expense discipline**: Maintaining broad expense focus and management
- **Location strategy**: Optimizing domestic footprint and leveraging offshoring opportunities
- **Process improvement**: Improving processes through technology investments
- **Investments**: Maintaining robust investment agenda
- **Revenue growth**: Benefiting from growth initiatives underway

37%  
35% +/-  
2018  
Medium-term Target
2018 results reflect consistent, strong execution

### Franchise strength

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bankers¹</td>
<td>1,642</td>
<td>1,766</td>
<td>1,922</td>
</tr>
<tr>
<td>Client calls (000s)²</td>
<td>171</td>
<td>197</td>
<td>226</td>
</tr>
<tr>
<td>New relationships²</td>
<td>911</td>
<td>1,062</td>
<td>1,232</td>
</tr>
<tr>
<td>Average deposits ($B)</td>
<td>$174</td>
<td>$177</td>
<td>$171</td>
</tr>
<tr>
<td>Average loans ($B)</td>
<td>$179</td>
<td>$198</td>
<td>$206</td>
</tr>
</tbody>
</table>

### Financial performance

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue ($B)</td>
<td>$7.5</td>
<td>$8.6</td>
<td>$9.1</td>
</tr>
<tr>
<td>Net income ($B)</td>
<td>$2.7</td>
<td>$3.5</td>
<td>$4.2</td>
</tr>
<tr>
<td>NCO rate (bps)</td>
<td>9</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Overhead ratio</td>
<td>39%</td>
<td>39%</td>
<td>37%</td>
</tr>
<tr>
<td>ROE³</td>
<td>16%</td>
<td>17%</td>
<td>20%</td>
</tr>
</tbody>
</table>

¹ Based on total count of revenue-producing employees
² Excludes Commercial Term Lending
³ Allocated capital was $16B in 2016, $20B in 2017 and $20B in 2018
### Financial targets

<table>
<thead>
<tr>
<th>Execute growth initiatives (long-term revenue targets)</th>
<th>2018</th>
<th>2013-2018</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Market expansion</td>
<td>$649mm</td>
<td>17% CAGR</td>
<td>$1.0B</td>
</tr>
<tr>
<td>Investment banking&lt;sup&gt;1&lt;/sup&gt;</td>
<td>$2.5B</td>
<td>8% CAGR</td>
<td>$3.0B</td>
</tr>
<tr>
<td>International&lt;sup&gt;2&lt;/sup&gt;</td>
<td>$400mm</td>
<td>10% CAGR</td>
<td>$1.0B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maintain expense discipline (medium-term)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhead ratio</td>
<td>37%</td>
<td>39% avg.</td>
<td>35% +/-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optimize returns (medium-term)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on equity</td>
<td>20%</td>
<td>17% avg.</td>
<td>~18%</td>
</tr>
</tbody>
</table>

<sup>1</sup> Represents total JPMorgan Chase revenue from investment banking products provided to CIB clients

<sup>2</sup> 2018 revenue denotes non-U.S. revenue from U.S. multinational clients; target includes CCBSI expansion efforts to serve non-U.S. headquartered companies internationally
Why clients choose us

**Exceptional team**
- Consultative approach
- Deep client knowledge

**Coverage designed around our clients**
- Local coverage
- Industry specialization

**Unmatched solutions and capabilities**
- Broad-based and integrated
- Continued innovation

**Superior client experience**
- Omni-channel access
- Simplicity and speed of delivery

**Long-term partner**
- Continued capital support
- Substantial investment

**Safety and security**
- Fortress balance sheet
- Cyber and fraud expertise