## Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating from a position of strength</td>
<td>1</td>
</tr>
<tr>
<td>Digital everything</td>
<td>8</td>
</tr>
<tr>
<td>Payments everywhere</td>
<td>20</td>
</tr>
<tr>
<td>Business strategy – performance and updates</td>
<td>31</td>
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<tr>
<td>Consumer &amp; Community Banking</td>
<td>32</td>
</tr>
<tr>
<td>Corporate &amp; Investment Bank</td>
<td>39</td>
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<tr>
<td>Commercial Banking</td>
<td>45</td>
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<td>Asset &amp; Wealth Management</td>
<td>49</td>
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<td>Outlook</td>
<td>54</td>
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<tr>
<td>Reference materials</td>
<td>67</td>
</tr>
</tbody>
</table>
Proven operating model – positioned for success

<table>
<thead>
<tr>
<th>Complete</th>
<th>Global</th>
<th>Diversified</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer centric</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile first – digital everything – multi-channel delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deeply integrated – payments as a holistic solution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World-class technology and data capabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term strategic focus on growth and profitability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Execute with discipline – capital, expense and controls</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Our brands have never been stronger

*J.P. Morgan* and Chase

**JPMC is recognized as a leader in global business**

<table>
<thead>
<tr>
<th>Fortune's 2018 World's Most Admired Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Apple</td>
</tr>
<tr>
<td>2. Amazon</td>
</tr>
<tr>
<td>3. Alphabet</td>
</tr>
<tr>
<td>4. Berkshire Hathaway</td>
</tr>
<tr>
<td>5. Starbucks</td>
</tr>
<tr>
<td>6. Disney</td>
</tr>
<tr>
<td>7. Microsoft</td>
</tr>
<tr>
<td>8. Southwest</td>
</tr>
<tr>
<td>9. FedEx</td>
</tr>
<tr>
<td>10. JPMorgan Chase &amp; Co.</td>
</tr>
</tbody>
</table>

“Top 50 Most Innovative Companies of 2018”
– The Boston Consulting Group

**Chase brand**

- **The Harris Poll**
  - 2017 Bank “Brand of the Year”

- **KANTAR TNS**
  - #1 in Retail Banking for five years in a row
  - #1 in Premier Banking for a record six years in a row
  - #1 Primary Institution for banking and cards among Millennials

  “They’ve built a lifestyle brand out of [Sapphire Reserve] …a part of your identity, like the clothes you wear”
  – Bloomberg editorial

**JPM brand**

**J.P.Morgan**

- #1 of global large banks in *Interbrand’s* Best Global Brand 2017
- #1 Overall Global Fixed-Income Service Quality – *Greenwich Associates*
- #1 U.S. Equity Sales Trading & Execution Service Quality – *Greenwich Associates*
- *Excellence Award* for Overall Digital Banking – *Greenwich Associates 2017*
- #1 Global Research Firm – *Institutional Investor*

**Chase brand is #1 or tied for #1 in key categories**

<table>
<thead>
<tr>
<th>Chase Brand Health 2017</th>
<th>#1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>51%</td>
</tr>
<tr>
<td>Consideration</td>
<td>72%</td>
</tr>
<tr>
<td>Familiarity</td>
<td>86%</td>
</tr>
<tr>
<td>Awareness</td>
<td>99%</td>
</tr>
</tbody>
</table>

Note: For footnoted information, refer to slide 77
Attractive footprint with strong positioning across the U.S. and globally

Serving our customers across channels and geographies

<table>
<thead>
<tr>
<th>National footprint across our businesses</th>
<th>Global model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>North America:</strong> $80B+ revenue and ~70% of employees</td>
<td><strong>International:</strong> $20B+ revenue and ~30% of employees</td>
</tr>
<tr>
<td>Branch presence</td>
<td>~$2B revenue</td>
</tr>
<tr>
<td>Non-branch offices only</td>
<td>CIB: $1.1B</td>
</tr>
<tr>
<td></td>
<td>AWM: $0.8B</td>
</tr>
<tr>
<td>Over 5,100 branches across the U.S. with over 16,000 ATMs</td>
<td>~$14B revenue</td>
</tr>
<tr>
<td>Offices in 39 states with nationwide coverage for CIB, CB, AWM</td>
<td>CIB: $11.3B</td>
</tr>
<tr>
<td>CB presence in 125 U.S. cities, coverage of all Top 50 MSAs</td>
<td>AWM: $2.0B</td>
</tr>
<tr>
<td>~$2.3T of client assets and over 5,000 WM client advisors (^1)</td>
<td>CB int'l revenue of $323mm, presence in 18 countries (^2)</td>
</tr>
<tr>
<td>~$800B of client assets and ~500 WM client advisors</td>
<td>~$6B revenue</td>
</tr>
<tr>
<td></td>
<td>CIB: $4.5B</td>
</tr>
<tr>
<td></td>
<td>AWM: $1.2B</td>
</tr>
</tbody>
</table>

Commitment and resources to build and maintain a global network

**Note:** Numbers may not sum due to rounding. For footnoted information, refer to slide 78

**Note:** Data is as of or for the year ended December 31, 2017
## Financial overview

### Financial metrics exclude the impact of tax reform

<table>
<thead>
<tr>
<th>FY2017 Managed revenue(^{1,2}) ($B)</th>
<th>FY2017 Managed overhead ratio(^{1,4})</th>
<th>FY2017 YoY TBVPS(^{3,6})</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JPM</strong></td>
<td>$104</td>
<td><strong>56(^{\circ})</strong></td>
</tr>
<tr>
<td><strong>BAC</strong></td>
<td>$88</td>
<td>62%</td>
</tr>
<tr>
<td><strong>WFC</strong></td>
<td>$90</td>
<td>65%</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>$72</td>
<td>57%</td>
</tr>
<tr>
<td><strong>GS</strong></td>
<td>$32</td>
<td>65%</td>
</tr>
<tr>
<td><strong>MS</strong></td>
<td>$38</td>
<td>73%</td>
</tr>
</tbody>
</table>

| **JPM** | **13%** | 5% |
| **BAC** | 23% | (6)% |
| **WFC** | (14)% | 4% |
| **C** | 13% | (2)% |
| **GS** | 21% | (2)% |
| **MS** | 28% | 3% |

### FY2017 ROTCE\(^3\)

| **JPM** | 13.6% |
| **BAC** | 11.1% |
| **WFC** | 11.3% |
| **C** | 8.1% |
| **GS** | 11.3% |
| **MS** | 11.2% |

### FY2017 Net capital distribution ($B)

| **JPM** | $22 |
| **BAC** | $17 |
| **WFC** | $15 |
| **C** | $17 |
| **GS** | $8 |
| **MS** | $5 |

### FY2017 YoY EPS\(^3\)

- **JPM**: 13%
- **BAC**: 23%
- **WFC**: (14%)
- **C**: 13%
- **GS**: 21%
- **MS**: 28%

### FY2017 Net capital distribution ($B)

- **JPM**: $22
- **BAC**: $17
- **WFC**: $15
- **C**: $17
- **GS**: $8
- **MS**: $5

### 10-year CAGR

- **JPM**: 6%
- **BAC**: 2%
- **WFC**: 5%
- **C**: 7%
- **GS**: 5%
- **MS**: 7%

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Note: For footnoted information, refer to slide 79

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**Operating from a position of strength**

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JPMorgan Chase & Co.
Continue to operate from a position of strength…across all key dimensions

**Financial overview**

<table>
<thead>
<tr>
<th>Key dimensions</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>CET1&lt;sup&gt;1,2&lt;/sup&gt;</td>
<td>12.2%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Total assets / RWA&lt;sup&gt;1,2&lt;/sup&gt;</td>
<td>$2.5T / $1.5T</td>
<td>$2.5T / $1.5T</td>
</tr>
<tr>
<td>Firm SLR&lt;sup&gt;2&lt;/sup&gt;</td>
<td>6.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>GSIB&lt;sup&gt;3&lt;/sup&gt;</td>
<td>3.5%</td>
<td>3.5%</td>
</tr>
<tr>
<td>TLAC ext. LTD shortfall&lt;sup&gt;4&lt;/sup&gt;</td>
<td>&lt;$10B</td>
<td>✓</td>
</tr>
<tr>
<td>LCR and NSFR&lt;sup&gt;5&lt;/sup&gt;</td>
<td>&gt;100%</td>
<td>&gt;100%</td>
</tr>
<tr>
<td>Net payout ratio</td>
<td>65%</td>
<td>98%</td>
</tr>
<tr>
<td>Dividends per share</td>
<td>$1.88</td>
<td>$2.12</td>
</tr>
<tr>
<td>Adj. overhead ratio&lt;sup&gt;6&lt;/sup&gt;</td>
<td>57%</td>
<td>57%</td>
</tr>
<tr>
<td>DFAST loss rates&lt;sup&gt;7&lt;/sup&gt;</td>
<td>6.1%</td>
<td>5.7%</td>
</tr>
</tbody>
</table>

Note: For footnoted information, refer to slide 80
Capital has reached an inflection point

Medium-term expectations

- Expect capital to move down within 11-12.0% corridor in the medium-term

**Capital outlook**

<table>
<thead>
<tr>
<th>Year</th>
<th>Binding CET1 ratio</th>
<th>Medium-term CET1 ratio</th>
<th>Total net payout ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>12.1%</td>
<td>12.0%</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>11.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Capital allocation ($B)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer &amp; Community Banking</td>
<td>$51.0</td>
</tr>
<tr>
<td>Corporate &amp; Investment Bank</td>
<td>70.0</td>
</tr>
<tr>
<td>Commercial Banking</td>
<td>20.0</td>
</tr>
<tr>
<td>Asset &amp; Wealth Management</td>
<td>9.0</td>
</tr>
<tr>
<td><strong>Total LOBs</strong></td>
<td><strong>$150.0</strong></td>
</tr>
<tr>
<td>Corporate</td>
<td>35.0</td>
</tr>
<tr>
<td><strong>Total Firm</strong></td>
<td><strong>~$185.0</strong></td>
</tr>
</tbody>
</table>

1 Reflects Basel III binding Fully Phased-In measure. See note 6 on slide 76
2 Medium-term payout ratio is based on analyst estimates
3 Reflects average CET1 capital. Total Firm based on analyst estimates
Strong U.S. economic growth supports recalibration of GSIB coefficients

*Upward pressure on GSIB scores*

The U.S. economy has grown over 11% since the 2014 establishment of coefficients, with no change to fixed coefficients and no increase in systemic risk. The Federal Reserve has the ability to recalibrate coefficients to ensure changes in economic growth do not unduly affect firms' systemic risk scores.

Recalibration could create >50 GSIB points of capacity, allowing for a capacity increase of >$200B non-op. deposit reduction. The current calibration of GSIB coefficients could become a barrier to further economic growth.
Digital everything
Digital capabilities are critical to our business

Why digital matters

Importance of digital leadership

57% of Millennials would change their bank for a better tech platform¹

65% of clients would consider leaving a firm if digital channels are not integrated²

Choice of bank

Evolution of convenience³

2015  2017

51%  56%

46%  42%

Leading digital Branch convenience

Non-branch factors are increasing perceptions of convenience

Our customers demand digital capabilities

Traders

61% of FX traders extremely likely to use mobile app to trade in 2018 – nearly double from last year⁴

Corporates

76% of companies cite digital capabilities as “Highly” or “Very” important in selecting a banking partner⁵

WM clients

53% of WM clients view digital as #1 factor influencing their client service experience⁶

Note: For footnoted information, refer to slide 81
The business case for digital is compelling

Why digital matters

**Increased customer satisfaction**

- **+19%**
  - Net Promoter Score (NPS)\(^1,2,3\)

**#1 FX Single Dealer Platform**
  - Euromoney FX Survey 2017

**eXecute: Best Mobile Platform**
  - Profit & Loss Digital FX Awards 2017

**Increased retention & wallet**

- **+10ppts**
  - retention rates\(^1,2,4\)
- **+118%**
  - higher card spend\(^1,2,5\)
- **85%**
  - of wealthy individuals use financial apps\(^6\)
- **+21ppts**
  - in digitally active Business Banking clients\(^7\)
- **+40%**
  - higher deposit and investment share\(^1,2,8\)

**Business efficiencies**

- **~99%**
  - straight-through processing rate on ~$5T daily wholesale payments
- **~$365mm**
  - benefit from paperless statements\(^9\)
- **(94%)**
  - lower cost per check deposits for digital transactions (QuickDeposit)\(^10\)
- **~$0**
  - marginal cost of many electronic trades approaches $0

---

1 For digitally engaged households

Note: For additional footnoted information, refer to slide 82
The customer is at the center of everything we do

*Digital strategy*

---

**Delivering value**

### Choice
- What they want, when they want, how they want
  - Full set of products and services
  - Flexible engagement model and multi-channel delivery

### Security
- Protecting the customer and the Firm
  - Protect privacy of data
  - Secure transactions
  - Detect and mitigate fraud
  - Safe and seamless

### Ease of doing business
- Delivered fast and simply
  - Emphasizing user experience
  - Real time services
  - Automate and digitize
  - Deeply integrated

### Personalization
- From transactions to integrated experiences
  - Underwrite the whole customer
  - Leveraging data and analytics for tailored customer solutions
  - Create unique insights for each client
  - Relevant through client lifecycle

---

**Unique scale advantage**
Enhancing the client onboarding process across the bank

Make it easy to become a client – and seamless to add products and services

Creating **STREAMLINED** and **SIMPLIFIED** client documentation + approval processes

Enhancing client onboarding to facilitate **EXPEDITED** + **DIGITAL** account opening

Enabling data collection from clients **ONCE**

~90% reduction in Treasury Services account opening time driven by DataOnce™

Single application increasing multi-product engagement by **25%** (Deposit + Card) and **12%** (Deposit + Merchant Services) for small business clients¹

~85% reduction in WM advisor-supported client onboarding time²

Open a bank account online³ or a self-directed investment account in Digital Wealth Management⁴ in minutes

Note: For footnoted information, refer to slide 83
Customers rely on Chase digital offerings throughout their daily lives

*Providing choice, security, ease and personalization*

<table>
<thead>
<tr>
<th>Everyday activities enabled by Chase</th>
<th></th>
</tr>
</thead>
</table>
| Get cash… | using a **Chase eATM**
| Buy groceries… | with **digital wallets**
| Split lunch bill with friends… | using **QuickPay with Zelle**
| Deposit a check… | using **QuickDeposit**
| Check investment portfolio and get advice… | using **ChaseMobile**
| Receive notification of purchase… | by **text message** from Chase

<table>
<thead>
<tr>
<th><strong>Embedded in customers’ lives</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5 ATM transactions per month(^1)</td>
<td></td>
</tr>
<tr>
<td>6 digital wallet transactions per month(^1)</td>
<td></td>
</tr>
<tr>
<td>32 Debit and 21 Credit transactions per month(^1)</td>
<td></td>
</tr>
<tr>
<td>3 P2P transactions per month(^1)</td>
<td></td>
</tr>
<tr>
<td>2 mobile <strong>QuickDeposits</strong> per month(^1)</td>
<td></td>
</tr>
<tr>
<td>12x increase in use of online investing site since April 2017</td>
<td></td>
</tr>
<tr>
<td>18 credit card transaction alerts monthly(^2)</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Note: For footnoted information, refer to slide 84

~47mm Chase customers bank through digital channels\(^3\) – average 15+ log-ins per month\(^1\)
We seek to offer innovative digital solutions across products and asset classes

**Portfolio of innovation**

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finn</td>
<td>A mobile-only bank with tools designed to help customers take control of their money</td>
</tr>
<tr>
<td>Chase Business Quick Capital</td>
<td>Powered by OnDeck software – delivers small business customers same day access to capital, digitally</td>
</tr>
<tr>
<td>Strong customer satisfaction, with average NPS(^2) of 83</td>
<td></td>
</tr>
<tr>
<td>Chase Digital Mortgage</td>
<td>Powered by Roostify partnership transforms the Chase Digital Mortgage process to be simpler, faster and more transparent</td>
</tr>
<tr>
<td>~15% reduction in time to complete mortgage refi process(^3)</td>
<td></td>
</tr>
<tr>
<td>Chase Auto Direct</td>
<td>Powered by TrueCar – allows customers to pick a car and secure financing in one place</td>
</tr>
<tr>
<td>~90% increase in booked loan $ volume, YoY(^4)</td>
<td></td>
</tr>
</tbody>
</table>

**Chase Business Quick Capital**

- Finn – a mobile-only bank with tools designed to help customers take control of their money
- Chase Business Quick Capital – powered by OnDeck software – delivers small business customers same day access to capital, digitally
- Strong customer satisfaction, with average NPS\(^2\) of 83

**Chase Digital Mortgage**

- Promote your financial well being
- Rate purchases
- Categorize transactions
- ~15% reduction in time to complete mortgage refi process\(^3\)

**Chase Auto Direct**

- Chase Auto Direct – digital car buying service powered by TrueCar – allows customers to pick a car and secure financing in one place
- ~90% increase in booked loan $ volume, YoY\(^4\)

Note: For footnoted information, refer to slide 85
We are investing significantly in Digital Wealth Management solutions

Building tailored solutions

**Client types**

- **Just getting started**
- **Do it yourself**
- **Partner with advisor**
- **Empower the advisor**

**Tailored digital solutions for our clients’ needs**

**Digital Advice**

- Digital Advice gives clients a simple and easy way to get and stay invested in diversified portfolios
- In pilot with broad rollout planned later this year

**Online and Mobile investing**

- Online and Mobile investing, part of our new self-directed offering, gives clients a convenient way to move money and trade securities
- Percent of trades placed online has doubled to ~55% since April 2017

**Digital Portfolio Insights**

- Digital Portfolio Insights will help advisors build stronger portfolios through sophisticated analytics and customized insights
- Pilot launched February 2018 with broad rollout by end of 1Q18

**Ideas & Insights**

- Ideas & Insights, our content hub embedded within J.P. Morgan Online, empowers clients with world-class thought leadership
- New J.P. Morgan website integrates Chase’s back-end infrastructure with a Private Bank tailored interface

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1. Chase Wealth Management clients only
We provide a digital continuum for businesses of all sizes and complexities

*Corporate clients*

**Digital platforms**

- CHASE CONNECT™
- J.P. Morgan ACCESS®

**Direct access**

- APIs
  - Seamless integration
  - Flexibility

**Multi-channel access to broad-based capabilities**

- International functionality and reach
- Integrated view with custom reporting and analysis options
- Real time liquidity solutions
- Online account opening and self-service
- Easy access to loan, merchant and card
- Payments, FX and real time rates

Seamless transition as clients’ needs evolve
Electronification is integral to our Markets business model

**Institutional clients** – secular trends driving electronification

**FY 2017 Electronification**

<table>
<thead>
<tr>
<th>Category</th>
<th>% Electronic client ticket #</th>
<th>% Electronic client notional $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equities</td>
<td>99%</td>
<td>89%</td>
</tr>
<tr>
<td>Macro</td>
<td>97%</td>
<td>46%</td>
</tr>
<tr>
<td>Spread</td>
<td>51%</td>
<td>46%</td>
</tr>
</tbody>
</table>

1. Equities includes all Cash Equities
2. Macro includes securities & derivatives for Rates, Global Emerging Markets, FX and Commodities
3. Spread includes securities & derivatives for Credit, Securitized Products and Municipal Finance
We are transforming our Markets business to deliver an end-to-end digital experience

Capabilities across the lifecycle through the clients’ channel of choice

Through the clients’ channel of choice…

Voice  Online  Mobile  APIs  3rd Party

…we offer market leading capabilities across their lifecycle

- Enhanced issuer digital capabilities with connectivity to JPMM
- Integrated platform across Markets, Custody & Fund Services and Prime clients
- Expanded self-service product suite including cross asset views
- Corporate Finance
- Onboarding
- Research
- Post-trade / Clearing and Settlement
- Prime and Custody
- Bank
- Onboard
- Optimize
- Execute
- Analyze
- Execution
- Quick, efficient, secure authentication
- Curated, topical content with smart search
- Simple, modern, integrated digital analytics
- Expanded execution capabilities with further integration
- Integrated platform across Markets, Custody & Fund Services and Prime clients
- Enhanced issuer digital capabilities with connectivity to JPMM
- Expanded self-service product suite including cross asset views
Our digital solutions are designed to meet all of our customers’ needs

- Investing to deliver differentiated, personalized experiences at scale
- Accelerating time to market – improving customer satisfaction and reducing cost
- Providing value through customer journeys and supporting businesses of all sizes and complexities
- Leveraging shared platforms and capabilities across the Firm
- Executing with discipline and urgency

CONSUMER: Banking & Payments | Borrowing | Investing
WHOLESALE: Small Business | Corporates and MNCs | Institutional

Choice | Security | Ease of doing business | Personalization
Payments everywhere
A rapidly evolving payments landscape creates opportunities across our businesses

Industry overview and JPMorgan Chase position

### Industry snapshot – the payments market is large, global and growing

<table>
<thead>
<tr>
<th>Wholesale industry</th>
<th>Consumer industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global wholesale payments revenue</td>
<td>$6T</td>
</tr>
<tr>
<td>~$16T</td>
<td>~$350B</td>
</tr>
<tr>
<td>165mm</td>
<td>$5T+</td>
</tr>
<tr>
<td>SWIFT messages a year</td>
<td>Estimated total P2P market</td>
</tr>
<tr>
<td>~$290B</td>
<td>Estimated total U.S. merchant processing volume</td>
</tr>
</tbody>
</table>

### Market growth

- Expected global wholesale payments revenue to grow 7% annually through 2025
- Credit and debit card spend in the U.S. expected to grow ~5% annually over the next 5 years
- Global trade growth of 3-4% in 2018 with future upside from new trade corridors
- U.S. e-commerce purchase volume of $550B+ growing 6% annually to 2021, driven by faster growth in mobile commerce
- 2/3 of U.S. adults are likely to be active P2P users by 2022

### JPMorgan Chase is a market leader – delivering for our clients at scale

<table>
<thead>
<tr>
<th>Wholesale – JPM</th>
<th>Consumer – JPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average daily value of payments (Firmwide)</td>
<td>$900B+</td>
</tr>
<tr>
<td>#1</td>
<td>Debit &amp; credit card sales volume</td>
</tr>
<tr>
<td>USD clearing house</td>
<td>Merchant processing volume</td>
</tr>
<tr>
<td>120+</td>
<td>Volume processed through QuickPay with Zelle</td>
</tr>
<tr>
<td>$5T</td>
<td>$1T+</td>
</tr>
<tr>
<td>$41B</td>
<td>$1T+</td>
</tr>
</tbody>
</table>

Note: For footnoted information, refer to slide 86
We are well-positioned to deliver modern payments experiences

*Consumer*

---

**We have invested in our payments value chain for over a decade...**

- **2008**
  Chase dissolves joint venture with First Data

- **2013 – 2014**
  Chase announces 10 year Visa deal and launches ChaseNet – first merchants go live

- **2016**
  Chase launches Chase Pay℠ with key merchant partnerships

- **2017**
  Chase acquisitions and partnerships

- **2009/2010 – 2016/2017**
  Simplified offerings into strong, differentiated products and updated offers

- **2015 – 2018**
  Co-brand renewals/new partnerships

- **2010 and 2017**
  Real-time payment launches

---

**...and we have tremendous reach**

- **~75%**
  CCB customers are active across payments services\(^1\)

- **~48mm**
  Debit and credit card payments customers\(^2\)

- **>50% of the Zelle network**
  $41B in P2P volume\(^3\), up 40% YoY

- **>70%**
  of our active credit card customers have embedded our cards in mobile wallets, recurring bills or merchant payments\(^4\)

- **~22%**
  Credit card sales market share\(^5\)

- **~12%**
  P2P market share\(^3,6\)

- **~40%**
  CCB customers move money through Chase\(^1\)

---

Note: For footnoted information, refer to slide 87
Simplifying consumer and small business payments

**P2P and integrated payments – growth opportunities**

**Chase QuickPay® with Zelle®**

<table>
<thead>
<tr>
<th></th>
<th>Pre-launch</th>
<th>Post-launch</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transactions volume</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chase to Chase</td>
<td>96mm</td>
<td>143mm</td>
</tr>
<tr>
<td>Chase to/from non-Chase</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>YoY % △</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>△93%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>△48%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>△41%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>P2P money moved ($B)</strong></td>
<td>$29</td>
<td>$41</td>
</tr>
<tr>
<td><strong>Engaged users (mm)</strong></td>
<td>3.5</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>YoY % △</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>△40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>△27%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**P2P payments experiencing strong growth**

**Becoming a major player in the integrated payments space, providing simple onboarding and activation of payments**

**Small businesses**
- Instant onboarding for Chase payment processing with fast payouts
- Integration with merchants’ preferred software solutions, both online and in-store

**Software providers**
- Simple integration of payments into software
- Access to Chase’s network of 4 million small businesses
- Credibility, scale and security of the Chase brand

**Differentiated payments experience for small businesses**

- **Transactions volume**
  - Chase to Chase
  - Chase to/from non-Chase
- **P2P money moved ($B)**
  - Pre-launch: $29
  - Post-launch: $41 (△40%)
- **Engaged users (mm)**
  - Pre-launch: 3.5
  - Post-launch: 4.4 (△27%)
We have a strong foundation to drive habituation and personalization

Consumer – moving from transactional support to personalized, integrated experiences

Delivering value

Choice
What they want, when they want, how they want
- P2P, debit, credit, Bill Pay, ACH, wire, check
- Credit cards: cash back, T&E, co-branded
- Support all mobile wallets
- QuickPay with Zelle

Security
Protecting the customer and the Firm
- Customer and merchant protection
- Safe and secure data
- Cybersecurity
- Fraud prevention
- Tokenization

Ease of doing business
Delivered fast and simply
- Be everywhere, work everywhere
- Mobile everything
- Transparent and easy to use rewards (e.g., Pay with Points)
- Customers control “cards on file”
- WePay
- Interoperability

Personalization
From transactions to integrated experiences
- Chase Pay as a platform
  - Order ahead
  - Merchant funded offers
- Relevant, targeted lending offers
- Integrated and intuitive payments experiences

Unique scale advantage
We have built our competitive advantages on four pillars

**Wholesale**

---

**Evolving client needs...**

- End-to-end solutions
- Simple user interfaces
- Seamless integration
- Immediate – real-time settlement
- Analytics to support business processes

...are driving industry trends...

- Digitization of payments
- Demand for real-time insights
- Demand for global network
- Competition from FinTechs
- Cybersecurity and regulation

...and we are responding

1. **Focus on client experience and ability to adapt to client needs**
   - Streamline and simplify on-boarding
   - Multi-channel
   - New products, functions and capabilities

2. **Scalable, cross-business core platforms**
   - Global low cost options
   - Digital platform
   - Enable value-added services

3. **Portfolio of innovation**
   - Build, partner, invest
   - Agile approach
   - In-residence program
   - Software integration

4. **Best-in-class risk and controls**
   - Fraud behavioral analytics and pattern detection
   - Infrastructure, scale and global footprint
   - Scale advantage

---

[Text continues on the next page]
We have a complete offering across the payments value chain

Innovative client solutions

**Products and capabilities**

- **Clients:**
  - All payment types in all regions (in-house and via partnerships)
  - Best-in-class infrastructure
  - Treasury optimization
  - Dedicated teams to support all products across all clients and regions
  - Fraud behavioral analytics and pattern detection
  - Smart routing, analytics and virtual account management

**Real-time reconciliation including track-and-trace for delivery confirmation**

**Settlement & infrastructure**

**Liquidity & FX**

**Just-in-time funding to mitigate currency risk**

**Supply chain finance**

**Optimizes working capital**

**Service**

**Risk and controls**

**Pay in**

**Pay out**
Leveraging blockchain technology to transform correspondent banking

*Interbank Information Network ("IIN")*

**Current state**

- Remitter
- Remitter Bank
- Slow
- Manual
- Opaque
- Costly
- $\rightarrow$
- $\rightarrow$
- $\rightarrow$
- $\rightarrow$
- Beneficiary
- Beneficiary Bank

**Future state**

- Global Distributed Network
- Peer to peer movement
- Streamlined messaging
- Liquidity Management
- Active risk/compliance management
- Shared utility functions
- 24/7
- Automated
- Transparent
- Efficient

**IIN Overview**

- Leverages J.P. Morgan’s Quorum, a blockchain technology
- Creates a secure, decentralized, permission-based network to securely exchange information
- IIN will reduce payment delays and touch points
We are positioned to lead the Real-Time Payments market

*Collaboration driving development of new core payments system*

Driven by The Clearing House, the key features of Real-Time Payments will be:

- **Speed**: 15 seconds
  - Money is available within 15 seconds
- **Amount**: $25,000
  - USD Credit transfers up to $25k
- **Availability**: 24/7/365
  - Instant payments availability
- **Messaging**: ISO 20022
  - Extensible messaging
- **Security**: Credit Push
  - Sender initiates the transaction from DDA

We are uniquely positioned as a leader in RTP with collaboration between our wholesale and retail businesses

**Working together…**

- Sharing technology capabilities across wholesale and retail
- Working together with our largest corporate clients to design best in class solutions
- Collaboration positions us to lead the industry towards tighter electronic integration between corporate billers and consumers
- Shaping industry discussions with The Clearing House through early adopter forums

**To create more value for our clients**

**Key Use Cases**

- Just-in-time supplier payments
- SMB Payments (vendor + basic payroll)
- Last minute bill payment
- Temporary employee wages, emergency payroll, consumer refunds
- External account-to-account bank transfers
- Sending emergency funds
Protecting the Firm’s stakeholders through robust security and controls

Securing everywhere – everything we do, anywhere we operate

Risk & Controls

- Safeguarding employee access and activity
- Securing the cloud
- Cybersecurity resiliency and recovery
- Protecting data and privacy
- Payment controls
- Securing third parties

Protect the bank

- Early detection and automated response
- Integrated threat intelligence
- Industry leading collaboration

Protect our clients

- Simplify and strengthen client authentication – proactive defense capabilities
- Monitor and test health of critical payment flows
- Advanced fraud detection – leverage machine learning coupled with human expertise
- Client education and awareness
- Robust sanctions screening process

Global 24x7 Cybersecurity Operations

AMERICAS

EMEA

APAC

FINANCIAL SYSTEMIC ANALYSIS & RESILIENCE CENTER
We are uniquely positioned to deliver holistic payments solutions

- Complete set of assets, leveraging core platforms and businesses
- Market leader operating at scale in each of our payments strategies
- Continuously investing and innovating
- The opportunity ahead is large and growing
- Cross leverage investments across the company

Choice, Security, Ease of doing business, Personalization
Business strategy
Performance and updates
Consumer & Community Banking – the power of our Consumer franchise

Diversified platform with relationships with ~50% of U.S. households

- 61 million Chase households
- 4 million Small businesses
- 47 million Active digital users
- 97 million Credit and debit card accounts

Goal is to be the easiest bank to do business with

**Becoming a Chase customer**
- Single application
- Pre-approved offers

**Pay with Chase**
- Whenever, wherever
- Keep your payments safe

**Grow my wealth**
- Help you save
- Help you invest

**Own a home**
- Digital mortgage
- Realtor partnerships

**Own a car**
- Buy and finance online
- Delivering value with partnerships

Note: For footnoted information, refer to slide 88
Leading industry deposit growth driven by multi-channel engagement model

**CCB – Consumer Banking**

Since 2012...

- **Consumer Bank customer satisfaction**
  - #2 National Bank
  - 2017 JD Power

- **CBB average deposits**
  - $626B ▲ 60% Industry growth of ~20%²

- **Retail deposit growth**
  - #1 8.7% share ▲ ~200bps

- **Client investment assets**
  - $273B ▲ 72% Record 2017

**70% of our households use Chase as their primary bank**³

**Industry leading deposit growth**

**We have a multi-channel strategy**

- **Physical presence**
  - 50% of households are branch-centric or multi-channel
  - ~1mm customers in our branches daily⁵
  - ~60% of households use branches every quarter⁶
  - ~75% of our deposit growth comes from customers who use branches

- **Digital engagement**
  - 70% of households are digitally-engaged
  - 40% more deposits and investments for digitally-engaged established customers who use Chase as their primary bank⁷

- **Leverage our brand and marketing**
  - Power of Chase brand enhances J.P. Morgan brand for Asset Management

**Note:** Numbers may not sum due to rounding. For footnoted information, refer to slide 89
We continue to transform our physical footprint to sustain strong growth

**CCB – Consumer Banking – branch network**

### Branch network optimization

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>New builds</td>
<td>69 in 2017</td>
</tr>
<tr>
<td>Consolidations</td>
<td>197 since 2012</td>
</tr>
<tr>
<td>Reduction in square footage</td>
<td>20%</td>
</tr>
<tr>
<td>Branches could be exited</td>
<td>75% in 5 years...</td>
</tr>
<tr>
<td>could be extended for</td>
<td>80%</td>
</tr>
</tbody>
</table>

### Branch expansion

- **Next 5 years**
  - ~400 New branches
  - 15-20 New markets
  - $1T Deposit market

### Innovation and changing branch formats – aligned to customers’ preferences

- Standalone ATMs
- Everyday express
- Full service
- New flagships

---

1 Includes relocations

---

Expand while optimizing
We continue to grow and innovate our credit card portfolio

*CCB – Card and Merchant Services*

**Since 2012...**

- **Credit Card NPS**
  - **▲ 18 points**
- **Credit Card sales**
  - $622B **▲ 63%**
  - **Industry growth of ~50%**
- **Credit Card sales market share**
  - 22.4% **▲ ~190bps**
- **Credit Card outstandings**
  - $150B **▲ 17%**
  - **Industry growth of ~20%**

**Merchant Services NPS**
- **▲ 13 points**
  - **Since 2016**

**Merchant processing volume**
- $1.2T **▲ 82%**
  - **~2x industry average**

**Wholly-owned merchant acquirer**
- #1
  - **18.6% share**
  - **▲ ~610bps**

**Continued card innovation**
- 99% of co-brands renewed

**Chase branded cards**
- Sapphire Reserve
- Ink
- Freedom Unlimited

**New co-brand products**
- Amazon Prime
- United TravelBank
- Starbucks
- Disney
- Marriott
- Hyatt

**Sapphire Reserve highlights**
- **Average income**
  - ~$180k
- **Average FICO**
  - ~785
- **Average annual sales volume**
  - ~$39k
- **Sales active rate**
  - 96%
- **Renewals**
  - >90%

**What’s next?**
- Integrated payments experience
- Spend and lend – flexibility and enhanced targeting
- Customer focused investment in digital and mobile
- Deeper engagement with Card customers across CCB

Note: For footnoted information, refer to slide 90
We continue to build a higher quality and less volatile home lending business

**CCB – Home Lending**

**Home Lending NPS**

- ▲ 30 points

**Average loans**

- $237B ▲ 16%
- Industry growth of ~8%

**Jumbo originator**

- #2 14.2% share ▲ ~700bps

**Since 2012…**

**Home Lending average loan balances ($B)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Core</th>
<th>Non-core</th>
<th>Total</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$205</td>
<td>$152</td>
<td>$357</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>$237</td>
<td>$170</td>
<td>$407</td>
<td>+3%</td>
</tr>
</tbody>
</table>

- Total: +3%
- Non-core: (15%)
- Core: +26%

**Originations**

- $181B
- $98B

**% Retained**

- 4%
- 41%

**Well positioned to capture the growing purchase market – industry originations ($B)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Refi</th>
<th>Purchase</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$1,489</td>
<td>$587</td>
<td>$2,076</td>
</tr>
<tr>
<td>2016</td>
<td>$1,028</td>
<td>$1,037</td>
<td>$2,065</td>
</tr>
<tr>
<td>2017</td>
<td>$662</td>
<td>$1,148</td>
<td>$1,810</td>
</tr>
<tr>
<td>2018F</td>
<td>$466</td>
<td>$1,227</td>
<td>$1,693</td>
</tr>
<tr>
<td>2019F</td>
<td>$417</td>
<td>$1,288</td>
<td>$1,705</td>
</tr>
</tbody>
</table>

- Refi + ~40bps share° YoY
- Purchase Primarily jumbo

**Capturing growth opportunity**

- 61mm CCB households
- 30mm with mortgage
- 5mm with Chase mortgage

**Note:** For footnoted information, refer to slide 91

**Chase Home Lending advisors in 2017…**

- +10%

**…and +500 over next 5 years**
We continue to grow our auto originations and deepen our relationships

*CCB – Auto*

**Auto Finance NPS\(^1\)**

- \(\uparrow 10 \text{ points}\)

**Auto EOP loans and leases**

- \$83B
- \(\uparrow 53\%\)

**Auto finance bank lender\(^2\)**

- \#3
- 4.2% share
- \(\downarrow \sim 40\text{bps}\)

Our origination growth has been driven by our Manufacturing partnerships

**Originations by channel**

- Manufacturing partners
- Chase indirect
- Chase direct

<table>
<thead>
<tr>
<th>Year</th>
<th>Manufacturing partners</th>
<th>Chase indirect</th>
<th>Chase direct</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$23B</td>
<td></td>
<td></td>
<td>$23B</td>
</tr>
<tr>
<td>2017</td>
<td>$33B</td>
<td></td>
<td></td>
<td>$33B</td>
</tr>
</tbody>
</table>

**2012-2017 CAGR**

- 7%
- 6%
- (6%)

**Lease penetration**

- Chase
- Industry

<table>
<thead>
<tr>
<th>Year</th>
<th>Chase</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>12%</td>
<td>29%</td>
</tr>
<tr>
<td>2017</td>
<td>20%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Our lease penetration has grown in partnership with our Manufacturers, remaining within industry averages\(^3\)

We continue to invest in strengthening our partnerships

**Manufacturing partners**

- Support lease growth through prudent risk framework

**Dealer financing**

- Leverage JPMC suite of products

**Digital engagement**

- Improve digital customer experience

Note: For footnoted information, refer to slide 92
Significant opportunity to grow market share and deepen relationships

**CCB – Business Banking**

**Business Banking NPS**

- **20 points**

**Business Banking average loans**

- **$23B**

**Primary bank market share**

- **#3**

**Small business primary bank market share**

- **9.6%**
- **9.5%**
- **9.4%**

**Small business card net sales (incl. Ink and partner card)**

- **2016**: 12%
- **2017**: 25%

**New initiatives expected to continue driving growth in Business Banking**

- Chase Business Online
- Single application
- WePay
- Bill.com
- Chase Business Quick Capital
- Bankers and new markets

**Single application has helped drive an increase in new to bank multi-product engagement**

- **25% Deposit and Card**
- **12% Deposit and Merchant Services**

**Since 2012...**

- **Business Banking NPS**: ▲ 20 points
- **Business Banking average loans**: $23B ▲ 28%
- **Primary bank market share**: #3 8.7% share ▲ 250bps

**We have seen strong gains in small business primary bank market share**

**Sales and market share continue to increase for small business cards**

**Note:** For footnoted information, refer to slide 93
Corporate & Investment Bank – steady, consistent strategy

Leading client franchise

- #1 Global, North America, EMEA
- IB fees
- #1 Global Research Firm
- #1 Markets
- #2 in TS revenue
- #3 in AUC

Sustaining our lead across three horizons

Maintaining day-to-day discipline
- Organic growth
- Efficiencies and cost discipline
- Regulatory change management
- Risk management discipline

Optimizing our current model
- Product digitization
- Client experience
- Seamless integration
- Multi-channel accessibility

Transforming for the future
- Markets powered by artificial intelligence
- New technologies for custody and settlements
- Global payments platform

Well positioned to benefit from global wallet growth, driven by emerging markets over decades

Note: For footnoted information, refer to slide 94
Continue to return above cost of capital

*CIB – Markets*

**Markets ROE – fully loaded**

- **Equities and Prime**
  - 2016: 13%
  - 2017: 13%

- **Fixed Income Overall**
  - 2016: 16%
  - 2017: 12%

**Cost of capital**

**Markets ROE – marginal**

- **Equities and Prime**
  - Marginal ROE for Markets businesses

- **Fixed Income Overall**
  - Marginal ROE for Markets businesses

**Cost of capital**

**Client activities generate stable revenue**

- **Markets revenue** ($B)
  - 2016: $21.0
  - 2017: $18.9

- **Flow-driven revenue**
  - 2014: 8.9%
  - 2015: 9.7%
  - 2016: 11.2%
  - 2017: 11.0%

**Total global industry market share**

**Note:** For footnoted information, refer to slide 95
Preserve our leading positions and deepen our share

*CIB – Markets*

### FICC – total wallet and JPM positioning ($B)\(^1\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Share</th>
<th>Total Wallet</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>9.2%</td>
<td>$148</td>
<td>#1</td>
</tr>
<tr>
<td>2013</td>
<td>9.9%</td>
<td>$126</td>
<td>#1</td>
</tr>
<tr>
<td>2014</td>
<td>9.3%</td>
<td>$116</td>
<td>#1</td>
</tr>
<tr>
<td>2015</td>
<td>10.3%</td>
<td>$107</td>
<td>#1</td>
</tr>
<tr>
<td>2016</td>
<td>11.7%</td>
<td>$114</td>
<td>#1</td>
</tr>
<tr>
<td>2017</td>
<td>11.4%</td>
<td>$104</td>
<td>#1</td>
</tr>
</tbody>
</table>

### Equities & Prime – total wallet and JPM positioning ($B)\(^1\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Share</th>
<th>Total Wallet</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>7.7%</td>
<td>$56</td>
<td>#3</td>
</tr>
<tr>
<td>2013</td>
<td>7.8%</td>
<td>$64</td>
<td>#3</td>
</tr>
<tr>
<td>2014</td>
<td>8.0%</td>
<td>$61</td>
<td>#3</td>
</tr>
<tr>
<td>2015</td>
<td>8.8%</td>
<td>$66</td>
<td>#3</td>
</tr>
<tr>
<td>2016</td>
<td>10.1%</td>
<td>$57</td>
<td>#2</td>
</tr>
<tr>
<td>2017</td>
<td>10.3%</td>
<td>$56</td>
<td>Co- #1</td>
</tr>
</tbody>
</table>

### Number of JPM top 3 positions across 31 Markets categories\(^2\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Top 3</th>
<th>Non Top 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>39%</td>
<td>61%</td>
</tr>
<tr>
<td>2017</td>
<td>16%</td>
<td>84%</td>
</tr>
</tbody>
</table>

### Key priorities

- Defend our leadership positions
- Leverage our scale and completeness
  - Continue to invest in Cash Equities and maximize synergies with Prime
  - Capture linkages between Banking and Markets
- Seize opportunities presented by electronification across markets

Note: For footnoted information, refer to slide 96
Significant progress in M&A – preserving strong positions in ECM and DCM

**CIB – Investment Banking**

### M&A industry wallet ($B) and JPM wallet share (%) trend

<table>
<thead>
<tr>
<th>Year</th>
<th>Industry wallet</th>
<th>JPM share</th>
<th>JPM rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$20</td>
<td>6.4%</td>
<td>#2</td>
</tr>
<tr>
<td>2016</td>
<td>$25</td>
<td>8.3%</td>
<td>#2</td>
</tr>
<tr>
<td>2017</td>
<td>$24</td>
<td>8.6%</td>
<td>#2</td>
</tr>
</tbody>
</table>

### ECM industry wallet ($B) and JPM wallet share (%) trend

<table>
<thead>
<tr>
<th>Year</th>
<th>Industry wallet</th>
<th>JPM share</th>
<th>JPM rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$14</td>
<td>7.1%</td>
<td>#1</td>
</tr>
<tr>
<td>2016</td>
<td>$14</td>
<td>7.4%</td>
<td>#1</td>
</tr>
<tr>
<td>2017</td>
<td>$18</td>
<td>7.1%</td>
<td>#2</td>
</tr>
</tbody>
</table>

### DCM industry wallet ($B) and JPM wallet share (%) trend

<table>
<thead>
<tr>
<th>Year</th>
<th>Industry wallet</th>
<th>JPM share</th>
<th>JPM rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$35</td>
<td>8.2%</td>
<td>#1</td>
</tr>
<tr>
<td>2016</td>
<td>$37</td>
<td>7.8%</td>
<td>#1</td>
</tr>
<tr>
<td>2017</td>
<td>$39</td>
<td>8.3%</td>
<td>#1</td>
</tr>
</tbody>
</table>

### Key priorities

- Senior banker hires in targeted areas
- Continue to focus on transformational cross-border transactions
- Collaboration and partnership across the Firm to seamlessly deliver offerings to clients
  - Partner with the CB to better serve Middle Market clients
  - Partner with the Private Bank to better serve Family Offices
  - Capture linkages between Banking and Markets

Source: Dealogic as of January 1, 2018. ECM excludes shelf deals. DCM excludes money market, short-term debt.
Growth through investments in innovative product and platform offerings

CIB – Treasury Services

**Treasury Services performance**

**Strong growth in revenue and operating balances**

- Revenue up 15%
- Operating balances up 10%

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Operating balances</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Continued expense discipline and improved operating margin**

- Expenses down 2%
- Operating margin up 9ppts

<table>
<thead>
<tr>
<th>Year</th>
<th>Expenses</th>
<th>Operating margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key priorities**

- Develop scalable core payment platforms and provide low cost services
- Focus on innovation in an agile and flexible manner
- Continue to improve the client experience by simplifying the onboarding process and through flexible channels
- Provide best in class controls
- Strengthen position in international markets and follow clients where they grow especially as new trade corridors are established

**JPM CIB Treasury Services market rankings**

<table>
<thead>
<tr>
<th>Regional Rankings</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>#2</td>
<td>#2</td>
</tr>
<tr>
<td>EMEA</td>
<td>#5</td>
<td>#4</td>
</tr>
<tr>
<td>APAC</td>
<td>#4</td>
<td>#4</td>
</tr>
<tr>
<td>LATAM</td>
<td>#3</td>
<td>#2</td>
</tr>
</tbody>
</table>

---

1 Coalition. 2016 and preliminary 2017 regional rank analysis based on peer-set: BAML, BNPP, CITI, DB, HSBC, SG, SCB, and WFC, and reflects JPMorgan Chase business structure.
Investments have improved client experience – positioned for growth

CIB – Securities Services

Securities Services performance

Strong growth in revenue with record AUC levels

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>up 9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Interest Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$20.5T</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$23.5T</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Improved operating efficiency and operating margin

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Tech and Ops expense down 4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating margin up 8ppts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Op. margin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-tax Income</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key priorities

Delivering service excellence

- $1.3T BlackRock win will be the largest transition in the industry and leverages our full suite of products
- Highest ever client satisfaction and retention levels

Positioning for growth

- Our investments align with the priorities of our clients
  - Improved data and analytics
  - Middle office solutions
  - Comprehensive Emerging Market capabilities
  - Enhanced ETF servicing platform

Creating scale and efficiency

- Improving operating margin and delivering scale through increased investment in technology
Commercial Banking – building our business around our clients

Leading client franchise

1,800 bankers\(^1\)
50 of the top 50 MSAs
16 specialized industries
#1 U.S. multifamily lender\(^2\)

Core principles of CB model

Coverage aligned to client needs
- Well-defined segmentation
- Local delivery
- Industry specialization

Broad-based differentiated capabilities
- Leading IB solutions
- Digitally-enabled
- Flexible across clients’ lifecycle

Intense client focus
- Simplicity
- Speed of delivery
- Transparency

---

\(^1\) Based on total count of client-facing employees
\(^2\) The rank is based on S&P Global Market Intelligence as of 12/31/2017
Commitment to growth – investing to add great clients and deepen relationships

Commercial Banking

Working to deliver value to clients

- Banker count up 100+ YoY¹
- Increased calling intensity (000s)²
- Driving new relationships²

Growing expansion market revenue in Middle Market Banking ($mm)

Note: The prior period amounts have been revised to conform with the current period presentation

1 Based on total count of client-facing employees

2 Excludes Commercial Term Lending
Unmatched capabilities – investing to deliver more value to clients

**Commercial Banking**

**Investment Banking**
- 38% of N.A. IB fees from CB clients\(^1\)

**Asset & Wealth Management**
- ~$135B in Asset Management AUM from CB clients

**Treasury Services**
- ~90% of CB clients use treasury service capabilities\(^2\)

**Merchant Services**
- End-to-end solutions leveraging access to the #1 wholly-owned merchant acquirer

**16 Specialized Industries**
- ~50% of C&I clients covered within specialized industries

**International**
- Serving 2,000+ international clients, with presence in 24 international cities

**Deposits**
- ~80% of CB clients have deposit accounts with JPMC\(^2\)

**Commercial Card**
- >$20B of total annual card spend

**Loans**
- Loan growth outpacing industry across both C&I and CRE

---

1 Represents the percentage of CIB’s North America IB fees generated by Commercial Banking clients, excluding fees from fixed income and equity markets which is included in Commercial Banking gross investment banking revenue

2 Excluding Commercial Term Lending
Lending – deliver smart growth across our C&I and CRE loan portfolio

**Commercial Banking**

**Average C&I loans outstanding ($B)**

- 2012: $68 (CAGR: 7%)
- 2016: $89
- 2017: $96

**Average CRE loans outstanding ($B)**

- 2012: $53 (CAGR: 14%)
- 2016: $90
- 2017: $102

**High quality portfolio**

- Maintaining proven client selection and risk discipline
- Benefiting from investments in expansion markets and specialized industry coverage
- Credit quality remains strong – average 6bps NCOs since 2011; 5bps in 2017

**How we compete**

- Deep client relationships and speed of execution, in markets we know
- Selective around new commitments in construction
- High quality, granular loan portfolio – average 4bps NCOs since 2011; (1)bp in 2017

---

Note: CB’s 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 asset-based loans
2. Quarter-over-quarter annualized
Asset & Wealth Management – focus on client outcomes

Leading client franchise

83%¹
5 yr Investment performance

$3.1T²
client assets

$120B+³
deposits and loans

#1
Private Bank (North America/LatAm)

AWM priorities

Obsess about client experience
- Best of J.P. Morgan and Chase
- Integrated coverage model leveraging the whole Firm
- Rigorously focus on pain points across the client journey

Digitize everything
- Mobile first – digital everything
- Human & digitally enhanced advice

Investments for everyone
- Fiduciaries across all asset classes and the entire wealth spectrum
- Active & passive

Simplify for growth
- Excel where we can be a market leader
- Exit where we don’t have competitive advantages

Note: For footnoted information, refer to slide 97
Continued strong financial performance

Asset & Wealth Management

**Client assets (EOP, $T)**
- 2012: $2.1
- 2016: $2.5
- 2017: $2.8

**Revenue ($B)**
- 2012: $10.0
- 2016: $12.0
- 2017: $12.9

**Pretax income ($B)**
- 2012: $2.8
- 2016: $3.5
- 2017: $3.6

**LT Asset flows**
- 2017: $84B

**Pretax margin**
- 2017: 28%

**ROE**
- 2017: 25%

**Loans (Avg.)**
- 2017: $123B

**Deposits (Avg.)**
- 2017: $149B
Leading long-term performance, consistently strong flows, product innovation

**JPMC Wealth Management and Asset Management**

- **2017 % of JPMAM long-term mutual fund AUM over peer median\(^1\) (net of fees)**
  - **Total JPMAM**
    - 1-year: 64%
    - 5-year: 83%
    - 10-year: 86%
  - **Equity**
    - 1-year: 75%
    - 5-year: 91%
    - 10-year: 87%
  - **Fixed Income**
    - 1-year: 52%
    - 5-year: 70%
    - 10-year: 81%
  - **Multi-Asset Solutions & Alternatives**
    - 1-year: 57%
    - 5-year: 82%
    - 10-year: 90%

- **#2 in total flows over past 5 years\(^2\)**
  - Total 5Y long-term client asset flows ($B)
    - Peer 1\(^3\): $961
    - Peer 2\(^5\): $279
    - Peer 3\(^6\): $272
    - Peer 4\(^7\): $270

- **Constantly innovating and refining our offering**
  - **FY 2017**
    - Funds launched: 24
    - Funds merged/liquidated: 16
  - **Beta**
    - Multi-Asset: 20
    - Fixed Income: 12
    - Equity: 10
    - Alts.: 4
  - **Liquidity**
    - Total launched: 71
    - Total merged/liquidated: 72

- **Positive client asset flows every year beginning in 2004**

Note: For footnoted information, refer to slide 98
Complementing client portfolios with banking and liquidity products

**JPMC Wealth Management and Asset Management**

**Growing deposits**

<table>
<thead>
<tr>
<th>Year</th>
<th>JPMC WM year-end balance ($B)</th>
<th>AWM: $146B</th>
<th>CWM: $147B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$181</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>$1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>$1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>$1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$1.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>$1.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Non-op ↓ $20B
Other ↑ $36B

Average balance of PB deposit clients ($mm)

**Leading liquidity business growing and capturing share**

<table>
<thead>
<tr>
<th>Year</th>
<th>JPMAM Global Liquidity AUM$ (EOP, $B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$470</td>
</tr>
<tr>
<td>2013</td>
<td>$470</td>
</tr>
<tr>
<td>2014</td>
<td>$470</td>
</tr>
<tr>
<td>2015</td>
<td>$470</td>
</tr>
<tr>
<td>2016</td>
<td>$470</td>
</tr>
<tr>
<td>2017</td>
<td>$537</td>
</tr>
</tbody>
</table>

Market Share%: 11.2% → 11.7%

**Growing credit book...**

<table>
<thead>
<tr>
<th>Year</th>
<th>JPMC WM year-end spot balance ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$87</td>
</tr>
<tr>
<td>2013</td>
<td>$1.4</td>
</tr>
<tr>
<td>2014</td>
<td>$1.5</td>
</tr>
<tr>
<td>2015</td>
<td>$1.7</td>
</tr>
<tr>
<td>2016</td>
<td>$1.7</td>
</tr>
<tr>
<td>2017</td>
<td>$1.8</td>
</tr>
</tbody>
</table>

Lending
Jumbo mortgages

% of JPMC WM clients with loan facilities: 3%

**...with strong risk management**

Net charge-offs (%)
- Loans (ex-mortgages)
- Jumbo Mortgages

~96% with secured collateral

Note: For footnoted information, refer to slide 99
Hiring client advisors and increasing productivity

**JPMC Wealth Management and Asset Management**

<table>
<thead>
<tr>
<th>Pretax income ($B)</th>
<th>Client assets ($T)</th>
<th>Client advisors (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPMC$^1$ $5.5$</td>
<td>BLK$^2$ $6.3$</td>
<td>BAC$^5$ $20K$</td>
</tr>
<tr>
<td>BLK $5.3$</td>
<td>UBS$^3$ $3.5$</td>
<td>MS $16K$</td>
</tr>
<tr>
<td>BAC $5.0$</td>
<td>JPMC$^1$ $3.1$</td>
<td>WFC$^6$ $15K$</td>
</tr>
<tr>
<td>MS $4.8$</td>
<td>MS$^3$ $2.9$</td>
<td>UBS $11K$</td>
</tr>
<tr>
<td>WFC $4.3$</td>
<td>BAC$^3$ $2.6$</td>
<td>JPMC$^1$ $6K$</td>
</tr>
<tr>
<td>UBS $4.2$</td>
<td>WFC$^4$ $2.4$</td>
<td>BLK N/A</td>
</tr>
</tbody>
</table>

Becoming more productive (Rev./Avg. Client Advisor): >50%

Continued investment in growing client advisors and increasing productivity will drive further client asset and pretax income growth

Note: For footnoted information, refer to slide 100
Outlook
Power of the franchise
Operating environment

Outlook

- Global macro trends
  - Global GDP growth continues to be above trend
  - Consumer and business confidence, as well as sentiment, remain very strong
  - Developed markets close to full employment, which should drive higher wages and inflation

- Credit environment
  - U.S. consumer balance sheet remains relatively healthy
    - Consumer debt service burdens near record lows given low interest rates
  - Corporate debt ratios near a 20-year high – however, interest coverage ratios remain within normal range due to continued low rate environment

- Recession risk
  - Current economic and fiscal indicators suggest low risk of a near-term recession

Expect favorable global macro and credit trends to benefit our operating performance
Fortress balance sheet – core loans

**Outlook**

<table>
<thead>
<tr>
<th>Average core loans ($B)</th>
<th>Core loan growth (ex. CIB)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'16 -'17 YoY</td>
</tr>
<tr>
<td>CCB</td>
<td>9%</td>
</tr>
<tr>
<td>AWM</td>
<td>35%</td>
</tr>
<tr>
<td>CB</td>
<td>6%</td>
</tr>
<tr>
<td>CIB</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>CCB ex-HL: 6%</td>
</tr>
<tr>
<td></td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>(1%)</td>
</tr>
</tbody>
</table>

Expect 2018 core loan growth ex-CIB of **6-7%**
## Fortress balance sheet – deposits

### Outlook

<table>
<thead>
<tr>
<th></th>
<th>CCB</th>
<th>AWM</th>
<th>Operating(^2)</th>
<th>Non-Operating(^3)</th>
<th>Other(^4)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec'14</td>
<td>$1.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.4</td>
</tr>
<tr>
<td>2015</td>
<td>$1.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.3</td>
</tr>
<tr>
<td>2016</td>
<td>$1.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.3</td>
</tr>
<tr>
<td>2017</td>
<td>$1.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.4</td>
</tr>
</tbody>
</table>

### Average deposits ($T)\(^1\)

<table>
<thead>
<tr>
<th>Year</th>
<th>CCB</th>
<th>AWM</th>
<th>Operating(^2)</th>
<th>Non-Operating(^3)</th>
<th>Other(^4)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec'14</td>
<td>$1.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.4</td>
</tr>
<tr>
<td>2015</td>
<td>$1.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.3</td>
</tr>
<tr>
<td>2016</td>
<td>$1.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.3</td>
</tr>
<tr>
<td>2017</td>
<td>$1.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.4</td>
</tr>
</tbody>
</table>

### Deposit growth (ex. non-op)\(^3\)

- **'16 - '17 YoY**:
  - CCB: 9%
  - AWM: 6%
  - Operating\(^2\): 9%
  - Non-Operating\(^3\): 11%
  - Other\(^4\): 6%

- **'14 - '17 CAGR\(^5\)**:
  - CCB: 6%
  - AWM: 6%
  - Operating\(^2\): 9%
  - Non-Operating\(^3\): 6%
  - Other\(^4\): 22%

### Note:
For footnoted information, refer to slide 101

### Continue to focus on growth in retail and operating deposits
Both quantitative tightening and rate hikes will likely cause migration of deposits

Outlook

Bank deposit growth % per $1T change in Fed B/S (based on 2004-2017 data)

- **JPM**
  - Wholesale: 14.1%
  - Retail: 8.5%

- **Industry**
  - Wholesale: ~0%
  - Retail: 3.9%
  - Large: (1.5%)
  - Small: (0.9%)

Wholesale & retail deposit YoY growth (%) & money market vs. deposit yield spread (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>Wholesale Deposit Growth</th>
<th>Retail Deposit Growth</th>
<th>Money Market Fund vs. Deposit Yield Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>(5.0%)</td>
<td>(2.5%)</td>
<td>4%</td>
</tr>
<tr>
<td>00</td>
<td>(2.5%)</td>
<td>-</td>
<td>1%</td>
</tr>
<tr>
<td>01</td>
<td>2.5%</td>
<td>5.0%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>02</td>
<td>5.0%</td>
<td>7.5%</td>
<td>1%</td>
</tr>
<tr>
<td>03</td>
<td>7.5%</td>
<td>10.0%</td>
<td>2%</td>
</tr>
<tr>
<td>04</td>
<td></td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>06</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Commentary

- Quantitative tightening should reduce total banking system deposits, with the primary impact in wholesale.
- As rates normalize, spread between money market fund (MMF) rates and deposit rates expected to widen.
- Retail deposit growth should slow.
- Recycled MMF balances could drive wholesale deposit growth.

Note: For footnoted information, refer to slide 102.
Net interest income – well positioned on strength of balance sheet and rising rates

**Outlook**

<table>
<thead>
<tr>
<th>Net interest income ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• B/S growth &amp; mix</td>
</tr>
<tr>
<td>• Estimated rates impact</td>
</tr>
</tbody>
</table>

- ~$7B realized incremental NII
- $44.6
- $51.4
- $54-$55

<table>
<thead>
<tr>
<th>2015</th>
<th>NII Change</th>
<th>2017</th>
<th>NII Change</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>$44.6</td>
<td></td>
<td>$51.4</td>
<td></td>
<td>$54</td>
</tr>
</tbody>
</table>

**Forward looking NII drivers**

- **Rates**
  - From here to neutral rate environment, expect to realize ~$2.5B of net rate benefit

- **Balance sheet growth & mix**
- **Markets NII**
- **Deposit repricing**

**Longer-term NII growth will be driven mostly by balance sheet growth and mix**
Low rates paid beta partly reflects lack of intra-product migration thus far in the cycle

**Outlook**

**Deposit repricing (2004 cycle vs. current cycle)**

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noninterest-bearing deposits</td>
<td>19%</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td>Interest-bearing (ex-time) deposits</td>
<td>47%</td>
<td>64%</td>
<td>66%</td>
</tr>
<tr>
<td>Time deposits</td>
<td>34%</td>
<td>6%</td>
<td>5%</td>
</tr>
</tbody>
</table>

In the 2004 cycle, rates paid increased 70bps after the last 25bps hike in June 2006.

2004 cycle: ~50% deposit reprice beta

Current cycle: assumes >50% deposit reprice beta

<20% beta for the first 100bps of rate hikes in 2004 and 2015-17

No new news – cumulative reprice in line with prior cycle at this stage

1 2004 cycle dates: 06/04-06/06; quarterly results shown above. Excludes earnings credit rate (“ECR”) impact
### Noninterest revenue trajectory

#### Outlook

**Noninterest revenue ($B)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Home Lending headwinds</th>
<th>Card headwinds</th>
<th>Markets ex-notchable items</th>
<th>Other notable items</th>
<th>Growth</th>
<th>2018 NIR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>($0.9)</td>
<td>($0.9)</td>
<td>($0.4)</td>
<td>$0.4</td>
<td>$2.2</td>
<td>($0.4)</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>($0.9)</td>
</tr>
</tbody>
</table>

#### CBB

- Debit sales volume: 7% (2016) to 17% (2017)
- CWM investments: 7%

#### AWM AUM

- Cash AUM: 15% increase from 2016 to 2017
- LT AUM: 15%

#### Card sales volume

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>$1.0B+ reversal of headwinds in Markets &amp; Card</td>
</tr>
<tr>
<td>2017</td>
<td>≤ $2.5B of growth</td>
</tr>
</tbody>
</table>

#### CIB revenue

- Markets revenue: (12)% decrease from 2016 to 2017
- IB fees: 12%

#### CB – gross IB revenue

- 2% increase from 2016 to 2017

---

**Expect ~7% NIR growth in 2018, and ~3% CAGR going forward, market dependent**

Note: For footnoted information, refer to slide 103
Adjusted expense – continuing to fund investments and growth

Outlook

Adjusted expense² ($B)

- CCB: $1.2B
- CIB: $0.5B
- CB: $0.2B
- AWM: $0.3B
- Corporate: $0.5B

Adjusted overhead ratio 57%²

- $58.5
- $1.1
- $(1.1)
- $2.7
- $0.7
- <$62

2017

Growth / efficiencies¹

- Technology: $1.4
- Real estate: $0.4
- Rev producers³: $0.4
- Marketing: $0.3
- Other: $0.2

Investments

Auto lease depreciation

2018

2018 technology spend of ~$10.8B and gross marketing spend of ~$5.7B⁴

Driving efficiencies while accelerating and increasing investments

¹ Growth and efficiencies also include other offsetting non-core items, including benefits associated with the elimination of the FDIC surcharge

Note: Numbers may not sum due to rounding. For footnoted information, refer to slide 104

Excludes ~$1.2B of revenue recognition accounting change
Credit – net charge-offs

**Outlook**

<table>
<thead>
<tr>
<th>Consumer &amp; Community Banking</th>
<th>2017</th>
<th>Medium-term guidance +/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Lending¹</td>
<td>0.02%</td>
<td>0.05%</td>
</tr>
<tr>
<td>Card</td>
<td>2.95%</td>
<td><strong>3.25 - 3.50%</strong></td>
</tr>
<tr>
<td>Auto</td>
<td>0.51%</td>
<td>0.45%</td>
</tr>
<tr>
<td>Business Banking</td>
<td>0.57%</td>
<td>0.60%</td>
</tr>
<tr>
<td>Corporate &amp; Investment Bank</td>
<td>0.07%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Commercial Banking</td>
<td>0.02%</td>
<td>0.10%</td>
</tr>
<tr>
<td>Asset &amp; Wealth Management</td>
<td>0.01%</td>
<td>0.10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Firmwide</th>
<th></th>
<th>$5.4B including $0.5B student, exited 2Q17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$4.9B</td>
<td></td>
</tr>
</tbody>
</table>

**Commentary**

- Medium-term outlook relatively benign
- Expect 2018 and medium-term NCO rates to remain relatively flat across businesses
  - Expect Card charge-offs and reserves to be higher on seasoning of newer origination vintages
- Credit fundamentals remain strong across our businesses

¹ Excludes the impact of purchased credit-impaired ("PCI") loans. Refer to note 5 on slide 76
Medium-term guidance by LOB

Outlook

<table>
<thead>
<tr>
<th>Medium-term targets</th>
<th>Benefits from tax reform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous ROE</td>
<td>Revised ROE</td>
</tr>
<tr>
<td>CCB 20% +/-</td>
<td>25% +</td>
</tr>
<tr>
<td>CIB 14% +/-</td>
<td>~ 17%</td>
</tr>
<tr>
<td>CB 15% +/-</td>
<td>~ 18%</td>
</tr>
<tr>
<td>AWM 25% +/-</td>
<td>~ 35%</td>
</tr>
</tbody>
</table>

Firmwide medium-term ROTCE walk

<table>
<thead>
<tr>
<th>2017 Investor Day</th>
<th>2018 Investor Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>~ 15%</td>
<td>~ 15%</td>
</tr>
</tbody>
</table>

New LOB ROE targets reflect the impact of tax reform and growth
Medium-term pretax earnings simulation

Outlook

Medium-term pretax simulation ($B)

- Pretax of $39.4B ex-sig items

Simulation assumptions

- NII
  - Normalized rate environment – NII uplift driven more by balance sheet than rate over longer term
  - Core loan CAGR of 5-6%

- NIR
  - NIR CAGR of 4-5%, market dependent

- Expense
  - ~55% OH ratio

- Credit costs
  - Credit costs up on loan growth – add ~10bps higher NCO rate

2017 Pretax income

Medium-term pretax income

$40B

~$40B

~$44-47B

In the medium-term expect ROTCE of ~17%

- ~17% ROTCE
- 11-12% CET1 ratio
- ~55% Overhead ratio
- ~100% Net payout ratio

1 Excludes the impact of the enactment of TCJA of ($0.15)B pre-tax in 4Q17 and a legal benefit of $0.65B pre-tax in 2Q17. See note 4 on slide 76

2 Excludes ~$1.2B annual increase from new revenue recognition accounting rule; expect ~7% NIR growth in 2018, and ~3% CAGR going forward
Proven operating model – positioned for success

<table>
<thead>
<tr>
<th>Complete</th>
<th>Global</th>
<th>Diversified</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer centric</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile first – digital everything – multi-channel delivery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deeply integrated – payments as a holistic solution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>World-class technology and data capabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term strategic focus on growth and profitability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Execute with discipline – capital, expense and controls</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Leading to

- ~17% ROTCE
- 11-12% CET1 ratio
- ~55% Overhead ratio
- ~100% Net payout ratio
Reference materials
## Leading client franchises

### Client franchises built over the long-term

<table>
<thead>
<tr>
<th>Category</th>
<th>2006</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CCB</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposits market share&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3.6%</td>
<td>8.3%</td>
<td>8.7%</td>
</tr>
<tr>
<td># of top 50 Chase markets where we are #1 (top 3)</td>
<td>11 (25)</td>
<td>14 (38)</td>
<td>16 (40)</td>
</tr>
<tr>
<td>Average deposits growth rate</td>
<td>8%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Active mobile customers growth rate</td>
<td>n/m</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Credit card sales market share&lt;sup&gt;2&lt;/sup&gt;</td>
<td>15.9%</td>
<td>21.5%</td>
<td>22.4%</td>
</tr>
<tr>
<td>Merchant processing volume&lt;sup&gt;3&lt;/sup&gt; ($B)</td>
<td>$661</td>
<td>$1,063</td>
<td>$1,192</td>
</tr>
<tr>
<td><strong>CIB</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global IB fees&lt;sup&gt;4&lt;/sup&gt;</td>
<td>#2</td>
<td>#1</td>
<td>#1</td>
</tr>
<tr>
<td>Market share&lt;sup&gt;4&lt;/sup&gt;</td>
<td>8.7%</td>
<td>7.9%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Total Markets revenue&lt;sup&gt;5&lt;/sup&gt;</td>
<td>#8</td>
<td>#1</td>
<td>#1</td>
</tr>
<tr>
<td>Market share&lt;sup&gt;5&lt;/sup&gt;</td>
<td>6.3%</td>
<td>11.2%</td>
<td>11.0%</td>
</tr>
<tr>
<td>FICC&lt;sup&gt;5&lt;/sup&gt;</td>
<td>#7</td>
<td>#1</td>
<td>#1</td>
</tr>
<tr>
<td>Market share&lt;sup&gt;5&lt;/sup&gt;</td>
<td>7.0%</td>
<td>11.7%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Equities&lt;sup&gt;5&lt;/sup&gt;</td>
<td>#8</td>
<td>#2</td>
<td>#2</td>
</tr>
<tr>
<td>Market share&lt;sup&gt;5&lt;/sup&gt;</td>
<td>5.0%</td>
<td>10.1%</td>
<td>10.3%</td>
</tr>
<tr>
<td><strong>CB</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of MSAs with Middle Market banking presence&lt;sup&gt;6&lt;/sup&gt;</td>
<td>26</td>
<td>47</td>
<td>50</td>
</tr>
<tr>
<td>Multifamily lending&lt;sup&gt;7&lt;/sup&gt;</td>
<td>#28</td>
<td>#1</td>
<td>#1</td>
</tr>
<tr>
<td>Gross investment banking revenue ($B)</td>
<td>$0.7</td>
<td>$2.3</td>
<td>$2.3</td>
</tr>
<tr>
<td><strong>AWM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutual funds with a 4/5 star rating&lt;sup&gt;8&lt;/sup&gt;</td>
<td>119</td>
<td>220</td>
<td>235</td>
</tr>
<tr>
<td>Ranking of long-term client asset flows&lt;sup&gt;9&lt;/sup&gt;</td>
<td>n/a</td>
<td>#2</td>
<td>#2</td>
</tr>
<tr>
<td>Active AUM market share&lt;sup&gt;10&lt;/sup&gt;</td>
<td>1.8%</td>
<td>2.5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>North America Private Bank (Euromoney)</td>
<td>#1</td>
<td>#1</td>
<td>#1</td>
</tr>
<tr>
<td>Client assets market share&lt;sup&gt;11&lt;/sup&gt;</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

### Notes
- Relationships with ~50% of U.S. households
- Industry-leading deposit growth<sup>12</sup>
- #1 U.S. credit card issuer<sup>13</sup>
- #1 U.S. co-brand credit card issuer<sup>14</sup>
- #1 U.S. credit and debit payments volume<sup>15</sup>
- #2 merchant acquirer<sup>16</sup>
- >80% of Fortune 500 companies do business with us
- #1 in both North America & EMEA IB fees<sup>17</sup>
- #1 in Global Long-Term Debt & Loan Syndications<sup>17</sup>
- #1 FICC productivity<sup>18</sup>
- Top 3 Custodian globally with AUC of $23.5T<sup>19</sup>
- #1 in USD payment volumes with 20% share in 2017<sup>20</sup>
- Unparalleled platform capabilities – competitive advantage
- Top 3 in overall middle market, large middle market and asset-based lending bookrunner<sup>21</sup>
- Industry-leading credit performance – 6th straight year of net recoveries or single digit NCO rate
- 86% of 10-year LT mutual fund AUM in top 2 quartiles<sup>22</sup>
- #2 in 5-year cumulative LT client asset flows among publicly traded peers
- #1 Private Bank in North America and Latin America<sup>23</sup>
- Revenue and LT AUM growth >90% since 2006

### Footnotes
- For footnoted information, refer to slides 105-106
## LOB performance and guidance

### Performance and guidance

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>Guidance</th>
<th>Time period legend</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CCB</strong></td>
<td></td>
<td></td>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Card Services net revenue rate</td>
<td>11.29%</td>
<td>10.57%</td>
<td>11.25%+/-</td>
<td>✓</td>
</tr>
<tr>
<td>Overhead ratio</td>
<td>55%</td>
<td>56%</td>
<td>50%+/-</td>
<td>✓</td>
</tr>
<tr>
<td>ROE</td>
<td>18%</td>
<td>17%</td>
<td>25%+</td>
<td>✓</td>
</tr>
<tr>
<td><strong>CIB</strong></td>
<td></td>
<td></td>
<td></td>
<td>Medium-term (3 years)</td>
</tr>
<tr>
<td>Revenue</td>
<td>$35.2B</td>
<td>$34.5B</td>
<td>~$37B</td>
<td>✓</td>
</tr>
<tr>
<td>Overhead ratio</td>
<td>54%</td>
<td>56%</td>
<td>54%+/-</td>
<td>✓</td>
</tr>
<tr>
<td>ROE</td>
<td>16%</td>
<td>14%</td>
<td>~17%</td>
<td>✓</td>
</tr>
<tr>
<td><strong>CB</strong></td>
<td></td>
<td></td>
<td></td>
<td>Long-term (5+ years)</td>
</tr>
<tr>
<td>Middle Market expansion revenues</td>
<td>$0.4B</td>
<td>$0.5B</td>
<td>$1.0B</td>
<td>✓</td>
</tr>
<tr>
<td>Investment Banking revenues</td>
<td>$2.3B</td>
<td>$2.3B</td>
<td>$3.0B</td>
<td>✓</td>
</tr>
<tr>
<td>International revenues</td>
<td>$0.3B</td>
<td>$0.3B</td>
<td>$0.5B</td>
<td>✓</td>
</tr>
<tr>
<td>Overhead ratio</td>
<td>39%</td>
<td>39%</td>
<td>35%+/-</td>
<td>✓</td>
</tr>
<tr>
<td>ROE</td>
<td>16%</td>
<td>17%</td>
<td>~18%</td>
<td>✓</td>
</tr>
<tr>
<td><strong>AWM</strong></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LT AUM flows growth</td>
<td>2%</td>
<td>5%</td>
<td>4%+/-</td>
<td>✓</td>
</tr>
<tr>
<td>Revenue growth</td>
<td>(1%)</td>
<td>7%</td>
<td>5%+/-</td>
<td>✓</td>
</tr>
<tr>
<td>Pretax income growth</td>
<td>10%</td>
<td>1%</td>
<td>10%+/-</td>
<td>✓</td>
</tr>
<tr>
<td>Pretax margin</td>
<td>29%</td>
<td>28%</td>
<td>30%+/-</td>
<td>✓</td>
</tr>
<tr>
<td>ROE</td>
<td>24%</td>
<td>25%</td>
<td>~35%</td>
<td>✓</td>
</tr>
</tbody>
</table>
Capital markets funding sources

Continuing to optimize funding mix

Secured funding highlights
- Long-term secured debt
  - $61B FHLB advances
  - $21B credit card securitization
- Short-term secured debt
  - $18B collateralized commercial paper
  - $3B asset-backed commercial paper

Unsecured funding highlights
- Long-term unsecured debt
  - $156B senior debt
  - $17B subordinated debt
  - $46B structured notes
- Commercial paper
  - $24B
  - Used to support CIB Markets business

Note: Numbers may not sum due to rounding. For footnoted information, refer to slide 107.
JPMorgan Chase & Co. (HoldCo) unsecured long-term debt outstanding

Managing maturity profile and TLAC efficiency

<table>
<thead>
<tr>
<th>Year</th>
<th>TLAC eligible</th>
<th>TLAC callable notes</th>
<th>Non-TLAC eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$19</td>
<td>$21</td>
<td>$21</td>
</tr>
<tr>
<td>2019</td>
<td>$13</td>
<td>$13</td>
<td>$13</td>
</tr>
<tr>
<td>2020</td>
<td>$22</td>
<td>$5</td>
<td>$15</td>
</tr>
<tr>
<td>2021</td>
<td>$21</td>
<td>$11</td>
<td>$10</td>
</tr>
<tr>
<td>2022</td>
<td>$11</td>
<td>$69</td>
<td>$69</td>
</tr>
<tr>
<td>&gt;2022</td>
<td>$26</td>
<td>$97</td>
<td>$97</td>
</tr>
</tbody>
</table>

Maturity profile includes:
- $31B of TLAC callable notes issued since August 2016
- ~$19B of debt classified as structured notes, of which ~$15B is TLAC eligible

Note: Numbers may not sum due to rounding; amounts represent the carrying value. For footnoted information, refer to slide 107
JPMorgan Chase & Co. (HoldCo) benchmark issuance

Reduced issuance requirements as TLAC compliance was achieved

**Gross issuance by security type ($B)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Senior debt ($B)</th>
<th>Sub debt ($B)</th>
<th>Preferred equity ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$38</td>
<td>$28</td>
<td>$25</td>
</tr>
<tr>
<td>2016</td>
<td>$28</td>
<td>$27</td>
<td>$23</td>
</tr>
<tr>
<td>2017</td>
<td>$25</td>
<td>$27</td>
<td>$23</td>
</tr>
</tbody>
</table>

Achieved TLAC compliance in Q3 2017

**Gross issuance by currency ($B)**

<table>
<thead>
<tr>
<th>Year</th>
<th>USD ($B)</th>
<th>EUR ($B)</th>
<th>Other ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$38</td>
<td>3</td>
<td>$25</td>
</tr>
<tr>
<td>2016</td>
<td>$28</td>
<td>4</td>
<td>$23</td>
</tr>
<tr>
<td>2017</td>
<td>$25</td>
<td>4</td>
<td>$23</td>
</tr>
</tbody>
</table>

Non-USD issuance driven by relative value and diversification benefits

**Gross issuance by tenor ($B)**

<table>
<thead>
<tr>
<th>Tenor</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 yrs</td>
<td>$32</td>
<td>$28</td>
<td>$23</td>
</tr>
<tr>
<td>5-10 yrs</td>
<td>4</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>10+ yrs</td>
<td>9</td>
<td>12</td>
<td>15</td>
</tr>
</tbody>
</table>

*WAM*²: ~8 yrs

Credit spreads influence issuance tenor

**Gross issuance by structure ($B)**

<table>
<thead>
<tr>
<th>Structure</th>
<th>Bullet ($B)</th>
<th>TLAC Callable ($B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$38</td>
<td>$32</td>
</tr>
<tr>
<td>2016</td>
<td>$28</td>
<td>$21</td>
</tr>
<tr>
<td>2017</td>
<td>$25</td>
<td>$25</td>
</tr>
</tbody>
</table>

Emphasis on optimizing debt structure

Note: Numbers may not sum due to rounding. For footnoted information, refer to slide 107
Firmwide long-term funding outstanding

End of period outstanding ($B)

- Senior unsecured
- Subordinated debt
- Structured notes
- FHLB
- Credit Card Securitization
- Other secured debt

### 2015
- **HoldCo & Other Subs**: $141 billion
  - Bank Subs: $72 billion
  - Subordinated debt: $12 billion
  - Structured notes: $30 billion
  - Other secured debt: $17 billion

### 2016
- **HoldCo & Other Subs**: $143 billion
  - Bank Subs: $80 billion
  - Subordinated debt: $13 billion
  - Structured notes: $33 billion
  - Other secured debt: $12 billion

### 2017
- **HoldCo & Other Subs**: $149 billion
  - Bank Subs: $61 billion
  - Subordinated debt: $19 billion
  - Structured notes: $21 billion
  - Other secured debt: $8 billion

WAM: ~8 years ~3 years

Note: Numbers may not sum due to rounding. For footnoted information, refer to slide 108
TLAC and External LTD requirement summary

**Compliance reached in 2017**

### Commentary

- Achieved TLAC compliance in Q3 2017
  - Intend to hold management buffer to cover changes in FX rates and balance sheet as well as unexpected funding market volatility
- Issuance planning considers
  - Balance sheet evolution
  - TLAC maturities
  - Credit spreads and other market considerations
- Preferred and sub debt issuance needs based on capital planning requirements and replacement economics

### TLAC Requirements

<table>
<thead>
<tr>
<th>Key Metrics ($B)</th>
<th>External TLAC</th>
<th>External long-term debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>(at 12/31/2017)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eligible Long-term Debt</td>
<td>$160</td>
<td>$154</td>
</tr>
<tr>
<td>Preferred Equity</td>
<td>26</td>
<td>--</td>
</tr>
<tr>
<td>Common Equity Tier 1</td>
<td>183</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$370</td>
<td>$154</td>
</tr>
<tr>
<td>% of RWA</td>
<td>24.5%</td>
<td>10.2%</td>
</tr>
<tr>
<td>Requirement</td>
<td>23.0%</td>
<td>9.5%</td>
</tr>
<tr>
<td><em>(Shortfall)/Surplus</em></td>
<td>$22</td>
<td>$11</td>
</tr>
<tr>
<td>% of Leverage Assets</td>
<td>11.5%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Requirement</td>
<td>9.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td><em>(Shortfall)/Surplus</em></td>
<td>$65</td>
<td>$10</td>
</tr>
</tbody>
</table>

### Holding Company – External long-term debt at 12/31/2017 ($B)

<table>
<thead>
<tr>
<th></th>
<th>$185</th>
<th>$6</th>
<th>$19</th>
<th>$160</th>
<th>$154</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior debt</td>
<td>$168</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub debt &amp; Jr Sub</td>
<td>$17</td>
<td>$6</td>
<td></td>
<td>$6</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Numbers may not sum due to rounding

1 Includes ~$15B of debt classified as structured notes
### Wholesale funding sources – Purpose and key features

<table>
<thead>
<tr>
<th>Product</th>
<th>Typical term</th>
<th>Callable</th>
<th>Multi-currency</th>
<th>TLAC</th>
<th>T1/T2 Reg. Cap.</th>
<th>LCR</th>
<th>NSFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Unsecured</td>
<td>2-30 years</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Subordinated Debt</td>
<td>10-30 years(^1)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Preferred Stock</td>
<td>Perpetual</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Structured Notes</td>
<td>2-30 years</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Asset-Backed Commercial Paper</td>
<td>Generally &lt; 1 year(^2)</td>
<td>x(^3)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓ (^2)</td>
</tr>
<tr>
<td>Securities loaned / Repo agreements</td>
<td>Generally &lt;6 months</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓ (^2)</td>
</tr>
<tr>
<td>Collateralized Commercial Paper</td>
<td>Generally &lt; 1 year(^2)</td>
<td>x(^3)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓ (^2)</td>
</tr>
<tr>
<td>Unsecured Senior Debt</td>
<td>2-30 years</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Structured Notes</td>
<td>2-30 years</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Certificates of Deposit</td>
<td>Generally &lt; 1 year</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓ (^2)</td>
</tr>
<tr>
<td>FHLB Borrowing</td>
<td>Generally &lt; 5 years(^2)</td>
<td>✓(^2)</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Card Securitization</td>
<td>1-10 years</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>HoldCo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broker-Dealer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: excludes deposits and common equity. For footnoted information, refer to slide 108.
Notes on non-GAAP financial measures and key performance measures

1. In addition to analyzing the Firm’s results on a reported basis, management reviews Firmwide results, including the overhead ratio, on a “managed” basis; these Firmwide managed basis results are non-GAAP financial measures. The Firm also reviews results of the lines of business on a managed basis. The Firm’s definition of managed basis starts, in each case, with the reported U.S. GAAP results and includes specific reclassifications to present total net revenue for the Firm and each of the reportable business segments on a fully taxable-equivalent (“FTE”) basis. Accordingly, revenue from investments that receive tax credits and tax-exempt securities is presented in the managed results on a basis comparable to taxable investments and securities. These financial measures allow management to assess the comparability of revenue arising from both taxable and tax-exempt sources. The corresponding income tax impact related to tax-exempt items is recorded within income tax expense. These adjustments have no impact on net income as reported by the Firm as a whole or by the lines of business. For a reconciliation of the Firm’s results from a reported to managed basis, see page 52 of the Firm’s Annual Report on Form 10-K for the year ended December 31, 2017 (“2017 Form 10-K”)

2. Tangible common equity (“TCE”), return on tangible common equity (“ROTCE”) and tangible book value per share (“TBVPS”), are non-GAAP financial measures. TCE represents the Firm’s common stockholders’ equity (i.e., total stockholders’ equity less preferred stock) less goodwill and identifiable intangible assets (other than MSRs), net of related deferred tax liabilities. For a reconciliation from common stockholders’ equity to TCE, see page 54 of the 2017 Form 10-K. ROTCE measures the Firm’s net income applicable to common equity as a percentage of average TCE. TBVPS represents the Firm’s TCE at period-end divided by common shares at period-end. Book value per share was $67.04 at December 31, 2017. TCE, ROTCE, and TBVPS are meaningful to the Firm, as well as investors and analysts, in assessing the Firm’s use of equity.

3. Adjusted expense and adjusted overhead ratio are non-GAAP financial measures. Adjusted expense excluded Firmwide legal expense/(benefit) of $(35) million for the year ended December 31, 2017. The adjusted overhead ratio measures the Firm’s adjusted expense as a percentage of adjusted managed net revenue, which excluded a legal benefit of $645 million for the year ended December 31, 2017. Management believes this information helps investors understand the effect of these items on reported results and provides an alternate presentation of the Firm’s performance.

4. On December 22, 2017, the Tax Cuts & Jobs Act (“TCJA”) was signed into law. Full-year 2017 results reflect the estimated impact of the enactment of the TCJA, which resulted in a $145 million decrease to managed revenue and a $2.4 billion decrease to net income. The full year results also included a legal benefit of $406 million (after-tax) related to a settlement with the FDIC receivership for Washington Mutual and with Deutsche Bank as trustee to certain Washington Mutual trusts. Net income, EPS, ROTCE and TBVPS excluding the impact of these significant items are non-GAAP financial measures. Management believes these measures help investors understand the effect of these items on reported results as well as facilitate a comparison with the performance of peers.

5. Net charge-off (“NCO”) rates exclude purchased credit-impaired (“PCI”) loans; this is a non-GAAP financial measure. For a reconciliation of the NCO rates, including the impact of PCI loans, see pages 59-60 of the 2017 Form 10-K.

Notes on key performance measures

6. The Basel III supplementary leverage ratio (“SLR”), to which the Firm is subject to since January 1, 2018, and the Basel III Fully Phased-In common equity Tier 1 (“CET1”) capital, risk-weighted assets (“RWA”) and the CET1 ratio to which the Firm will be subject on January 1, 2019, are all considered key regulatory capital measures. The capital adequacy of the Firm is evaluated against the Basel III approach (Standardized or Advanced) that results in the lower ratio as required by the Collins Amendment of the Dodd-Frank Act (the “Collins Floor”). These measures are used by management, bank regulators, investors and analysts to assess and monitor the Firm’s capital position. For additional information on these measures, including the Collins Floor, see Capital Risk Management on pages 82-91 of the 2017 Form 10-K.

7. Core loans represent loans considered central to the Firm’s ongoing businesses; core loans exclude loans classified as trading assets, runoff portfolios, discontinued portfolios and portfolios the Firm has an intent to exit.
Notes on slide 2 – Our brands have never been stronger

1. Tied 2017 Greenwich Quality Leader
2. Tied 2017 Greenwich Quality Leader
3. U.S. Large Corporate Cash Management
4. Chase received the highest numerical Equity Score among bank brands included in the 2017 Harris Poll EquiTrend® Study, which is based on opinions of 102,617 U.S. consumers ages 15 and over surveyed online between December 30, 2016 and February 21, 2017
6. Based on JPMorgan Chase data
7. Ownership measures responses to the question: “Which of these financial service providers do you use for your category?” (Categories include a wide range of financial products like personal checking accounts, investments or retirement accounts, credit cards, etc.)
8. Consideration measures responses to the questions: “The next time you are in the market for a financial product or service, how likely are you to consider the following providers?” (Definitely would not consider; Probably would not consider; Probably would consider; Definitely would consider)
9. Familiarity measures responses to the question “Which of the following best describes your familiarity with each financial service provider below?” (Never heard of; Heard of, but not familiar; Somewhat familiar; Very familiar)
10. Awareness measures aided awareness of the brand
Notes on slide 3 – Attractive footprint with strong positioning across the U.S. and globally

1. North America client assets and client advisors include Asset & Wealth Management ("AWM") and Chase Wealth Management ("CWM"), with CWM client assets including all CWM investments and all Chase Private Client ("CPC") deposits.

2. Commercial Banking ("CB") international revenue denotes non-U.S. revenue from U.S. multinational clients, and number of countries excludes U.S.
Notes on slide 4 – Strong absolute and relative performance

1. See note 1 on slide 76
2. GS and MS showing reported revenue
3. Net income, EPS, ROTCE and TBVPS adjusted for the impact of enactment of the TCJA; if also adjusted for the 2Q17 legal benefit of $406mm, JPM net income was $26.5B, EPS was $6.87 (up 11% YoY and up 5% for the 10-year CAGR), and ROTCE was 13%
4. Managed overhead ratio = total noninterest expense / managed revenue; revenue for GS and MS is disclosed on a reported basis only
5. JPMorgan Chase adjusted overhead ratio of 57%. See note 3 on slide 76
6. See note 2 on slide 76
Notes on slide 5 – Continue to operate from a position of strength…across all key dimensions

1. Reflects Basel III binding Fully Phased-In measure
2. See note 6 on slide 76
3. Global Systemically Important Bank (“GSIB”)
4. Total Loss-Absorbing Capacity (“TLAC”) external long-term debt short-fall
5. Liquidity coverage ratio (“LCR”) and net stable funding ratio (“NSFR”)
6. See note 1 and 3 on slide 76
7. Represents the Federal Reserve’s Dodd-Frank Act Stress Test (“DFAST”) estimates under the severely adverse scenario published on June 23, 2016 and June 22, 2017, respectively
Notes on slide 9 – Digital capabilities are critical to our business

3. Novantas Customer Knowledge, USA Multi-channel survey; 2015 (N=4,346), 2017 (N=4,351); Question: “Please rank up to three things a bank could do to be the most convenient bank for your financial needs.” Reflects responses of: “Leading online/mobile banking” and “They have a branch location near my home”
4. J.P. Morgan online survey of over 400 institutional investors – October 2017
5. Greenwich Associates Market Pulse 68 – November 2017
6. EY, “Could your clients’ needs be your competitive advantage?” – 2016
Notes on slide 10 – The business case for digital is compelling

1. For digitally engaged households

2. Reflects Consumer Bank; Consumer Bank household channel segments are defined based on the tenure of the household as of the respective time period. For households with tenure of greater than 12 months, we use the following thresholds calculated over a year: Digitally-centric – <=4 branch visits and 12+ digital transactions or 100+ digital log-ins or 24+ external ACH transactions per year; Multi-channel – >4 branch visits and 12+ digital transactions or 100+ digital log-ins or 24+ external ACH transactions per year; Branch-centric – >4 branch visits and <12 digital transactions and <100 digital log-ins and <24 external ACH transactions per year; Other – <=4 branch visits and <12 digital transactions and <100 digital log-ins and <24 external ACH transactions per year. For households that are less than 12 months on book, we reduce the thresholds by 75% and track the household activity over a three-month time period. Digitally-engaged households includes Digitally-centric households and Multi-channel households. All other households includes Branch-centric households and Other households.

3. Net Promoter Score = % promoters minus % detractors. Based on Net Promoter Score data collected from December 2016 through November 2017.

4. Retention rates are based on Consumer Bank households with deposit products and exclude households that closed all of their deposit products with Chase. Retention rate for each Consumer Bank household channel segment is calculated by reclassifying households into segments each month based on their channel activity and by taking an average of the annualized monthly rates for the last 12 months as of November 2017.

5. Includes Consumer Bank households that had at least one credit transaction and one debit transaction in 2017. Normalized for number of customers per household.


7. Since 2012, based on clients who have logged onto digital platforms in prior 90 days.


9. Represents, for 2017, the estimated annual benefit of the statements suppressed in CCB (i.e., digital vs. paper).

10. Cost differential calculated using variable cost only.
Notes on slide 12 – Enhancing the client onboarding process across the bank

1. Reflects new-to-bank, multi-product business households after three full months of activity; accounts opened between May through October 2017 vs. 2016
3. Reflects accounts opened through Finn or digital account opening for existing customers; less than 8 minutes for new customers
4. For existing customers
Notes on slide 13 – Customers rely on Chase digital offerings throughout their daily lives

1. All data reflects average for the 12 months of 2017. Engagement metrics reflect average number of transactions per active users where active users are defined as customers who make at least one transaction during the period. Digital wallet transactions include Android Pay, Apple Pay, Chase Pay and Samsung Pay

2. Average for the 12 months of 2017; reflects average alerts received per card user who received at least one purchase threshold alert

3. Data reflects 4Q17; users of all online and/or mobile platforms who have logged in within the past 90 days
Notes on slide 14 – We seek to offer innovative digital solutions across products and asset classes

1. Reflects accounts opened through Finn
2. Net Promoter Score = % promoters minus % detractors; as of December 2017
3. Comparison relative to mortgages refinanced through the Consumer Direct (phone) channel. Improvements reflect the monthly average for 4Q17
4. Reflects 4Q17 vs. 4Q16
Notes on slide 21 – A rapidly evolving payments landscape creates opportunities across our businesses

1. The Boston Consulting Group Global Payments 2016: Competing in Open Seas
2. World Trade Organization. Represents 2016 world-wide imports for merchandise trade
3. USD messages received by SWIFT for fiscal year 2017
4. SWIFT – December YTD2017
8. Reflects 2017
9. Excludes Commercial Card
10. Includes Firmwide QuickPay with Zelle transactions; reflects 2017
11. The Nilson Report, Issue 1122, December 2017
12. World Trade Organization: trade outlook indicator, February 12, 2018
Notes on slide 22 – We are well-positioned to deliver modern payments experiences

1. Reflects the percentage of the CCB customer population active in each payment category as of October 2017. “Move money” services include all the digital services to send payments (e.g., Wire, Transfer, Bill Pay, and QuickPay with Zelle) and/or receive payments (e.g., Quick Deposit, QuickPay with Zelle, Internal Transfer) outside of debit and credit card payments. Customers who are active across payments services include those who engage in debit and credit card payments, digital wallet payments, and “move money” services.

2. Reflects 30-day active credit and debit card customers; data as of October 2017.

3. Includes firmwide QuickPay with Zelle transactions; reflects 2017.

4. Reflects the percent of credit card customers who had a sales transaction between October 2017 and December 2017 and also had an embedded payment during that same period. An embedded payment is defined as a transaction at a recurring bill merchant, mobile wallet, or one of Chase’s defined set of embedded payment merchants.


Notes on slide 32 – Consumer & Community Banking – the power of our Consumer franchise

1. Reflects November 2017
2. Reflects 4Q17
3. Reflects users of all web and/or mobile platforms who have logged in within the past 90 days
4. Excludes Commercial Card
Notes on slide 33 – Leading industry deposit growth driven by multi-channel engagement model

1. J.D. Power 2017 National Bank Satisfaction Study, September 2017
2. FDIC 2017 Summary of Deposits survey per S&P Global Market Intelligence. Excludes all branches with $500mm+ in deposits within the last two years (excluded branches are assumed to include a significant level of commercial deposits or are headquarter branches for direct banks). Includes all commercial banks, credit unions, savings banks, and savings institutions as defined by the FDIC. Comparisons to 2012 exclude all branches with $500mm+ in deposits within the last ten years. National banks include Wells Fargo, Bank of America, Citi, and U.S. Bancorp and Capital One. Super regional banks include all other top 50 banks by deposits
3. Primary relationship based on JPMorgan Chase definition
4. Reflects Consumer Bank; Consumer Bank household channel segments are defined based on the tenure of the household as of the respective time period. For households with tenure of greater than 12 months, we use the following thresholds calculated over a year: Digitally-centric – <=4 branch visits and 12+ digital transactions or 100+ digital log-ins or 24+ external ACH transactions per year; Multi-channel – >4 branch visits and 12+ digital transactions or 100+ digital log-ins or 24+ external ACH transactions per year; Branch-centric – >4 branch visits and <12 digital transactions and <100 digital log-ins and <24 external ACH transactions per year; Other – <=4 branch visits and <12 digital transactions and <100 digital log-ins and <24 external ACH transactions per year. For households that are less than 12 months on book, we reduce the thresholds by 75% and track the household activity over a three-month time period. Digitally-engaged households includes Digitally-centric households and Multi-channel households
5. Based on total branch visits from 4Q16 through 3Q17 by all CCB customers
6. Reflects 4Q17
7. For primary bank customers, simple average across seven age cohorts of the percentage by which average deposit and investment balances per household for digitally engaged households exceed non-digitally engaged households. These seven age cohorts are: Greatest Generation (born 1900-1927), Silent Generation (born 1928–1945), Baby Boomers (born 1946–1964), Generation X (born 1965-1980), Old Millennials (born 1981-1989), Young Millennials (born 1990-1997), and other / age not available
Notes on slide 35 – We continue to grow and innovate our credit card portfolio

1. Net Promoter Score = % promoters minus % detractors
2. Excludes Commercial Card
3. Estimated industry market size reflects disclosed U.S. full-year 2017 Visa, MasterCard, American Express and Discover payments volume
4. Represents share of general purpose credit card (“GPCC”) spend, which excludes private label and Commercial Card; based on company filings and JPMorgan Chase estimates
5. Reflects Federal Reserve Consumer Credit (G.19) release as of February 7, 2018. Growth reflects change in total revolving credit from December 2012 to December 2017
6. The Nilson Report, Issue 1105, March 2017. Data as of 2016. Chase is the #1 wholly-owned merchant acquirer in the U.S. When volume from joint ventures and revenue sharing arrangements are included in First Data’s volume, First Data holds #1 share position in the U.S.
7. Reflects self-reported income at time of application
8. Reflects sales per average open account over the last twelve months
9. Defined as number of cards with greater than zero gross sales divided by total open accounts
10. Defined as open accounts as a percentage of total cumulative booked accounts as of December 2017
11. Compares credit card spend pre-Sapphire Reserve vs. post-Sapphire Reserve acquisitions for existing Chase card customers only. Post-acquisition spend reflects spend through December 2017. Excludes spend from acquisitions post-September 2017
Notes on slide 36 – We continue to build a higher quality and less volatile home lending business

1. Net Promoter Score = % promoters minus % detractors
2. Federal Reserve Bank of New York Quarterly Report on Household Debt and Credit, February 2018 release; reflects 4Q17 vs. 4Q12 Mortgage and Home Equity Revolving EOP balances
3. Inside Mortgage Finance ("IMF") and JPMorgan Chase internal data. Includes Private Bank originations
4. Primarily includes loans held in Real Estate Portfolios, as well as loans residing in Home Lending Production and Home Lending Servicing, which are predominantly prime mortgage loans repurchased from Government National Mortgage Association ("Ginnie Mae") pools, which are insured by U.S. government agencies
5. Includes runoff portfolios, which are predominantly discontinued products no longer originated and PCI loans
6. IMF 2012 through 2017; 2018F and 2019F reflect average of forecasts from Fannie Mae (1/10/2018), Freddie Mac (1/5/2018), and Mortgage Bankers Association ("MBA") (1/20/2018)
7. Excludes Home Equity and Private Bank loans
8. Reflects data as of November 2017
9. JPMorgan Chase data
Notes on slide 37 – We continue to grow our auto originations and deepen our relationships

1. Net Promoter Score = % promoters minus % detractors

2. Experian AutoCount data for full-year 2017; reflects financing market share for new and used loans and leases at franchised and independent dealers; auto finance bank lenders are non-captive auto lenders

3. Lease penetration represents new vehicles only; calculated as total leased units divided by vehicle sales for both Chase Auto Finance (Source: OEM Partners) and Industry (Source: Autocount). Chase Auto Finance reflects penetration of total OEM partner sales volume
Notes on slide 38 – Significant opportunity to grow market share and deepen relationships

1. Net Promoter Score = % promoters minus % detractors

2. Barlow Research Associates, Primary Bank Market Share Database as of 4Q17. Rolling eight quarter average of small businesses with revenues of $100K – <$25mm

3. Reflects JPMorgan Chase estimates

4. Reflects new-to-bank multi-product business households after three full months of activity; accounts opened between May through October 2017 vs. 2016
Notes on slide 39 – Corporate & Investment Bank – steady, consistent strategy

1. Dealogic as of January 1, 2018
2. Institutional Investor, 2017
3. Source: Coalition. Preliminary 2017 rank analysis for Markets based on Coalition Index (BAML, BARC, BNPP, CITI, CS, DB, GS, HSBC, MS, JPM, SG, and UBS), for Treasury Services based on peer-set (BAML, BNPP, CITI, DB, HSBC, SG, SCB, and WFC), and reflects JPMorgan Chase's business structure
4. Source of assets under custody (“AUC”): Company filings
1. 2017 ROE and revenue exclude the impact of the TCJA in Fixed Income Markets and a fair value loss on a margin loan related to a single client in Equity Markets; 2016 ROE is restated to reflect 2017 methodology and a constant capital basis of $70B

2. Coalition. 2017 based on preliminary results. Market share reflects JPMorgan Chase’s share of the global industry revenue pool, and reflects JPMorgan Chase’s business structure

3. Client activity measure used primarily for sales and client management as a proxy for volume

4. Marginal ROE based on 2017 data
Notes on slide 41 – Preserve our leading positions and deepen our share

1. Coalition. 2017 based on preliminary results. Rank analysis based on Coalition Index (BAML, BARC, BNPP, CITI, CS, DB, GS, HSBC, MS, JPM, SG, and UBS). Market share reflects JPMorgan Chase’s share of the global industry revenue pool. Market share & rank analysis based on JPMorgan Chase’s business structure

2. Coalition. 2017 based on preliminary results. Regional rank analysis based on Coalition Index (BAML, BARC, BNPP, CITI, CS, DB, GS, HSBC, MS, JPM, SG, and UBS), and reflects JPMorgan Chase’s business structure
1. The “5 yr Investment performance” analysis represents the proportion of assets in mutual funds that are ranked above their respective peer category median on a 5-year basis as of December 31, 2017. All quartile rankings, the assigned peer categories and the asset values used to derive this analysis are sourced from Lipper for the U.S. and Taiwan domiciled funds; Morningstar for the U.K., Luxembourg and Hong Kong domiciled funds; Nomura for Japan domiciled funds and FundDoctor for South Korea domiciled funds. Includes only Asset Management retail open-ended mutual funds that are ranked by the aforementioned sources. Excludes money market funds, Undiscovered Managers Fund, and Brazil domiciled funds. Quartile rankings are done on the net-of-fee absolute return of each fund. The data providers redenominate the asset values into U.S. dollars. This % of AUM is based on fund performance and associated peer rankings at the share class level for U.S. domiciled funds, at a “primary share class” level to represent the quartile ranking of the U.K., Luxembourg and Hong Kong funds and at the fund level for all other funds. The “primary share class”, as defined by Morningstar, denotes the share class recommended as being the best proxy for the portfolio and in most cases will be the most retail version (based upon annual management charge, minimum investment, currency and other factors). Where peer group rankings given for a fund are in more than one “primary share class” territory both rankings are included to reflect local market competitiveness (applies to “Offshore Territories” and “HK SFC Authorized” funds only). The performance data could have been different if all funds/accounts would have been included. Past performance is not indicative of future results.

2. Includes all Chase Wealth Management Investments (“CWM”) and all Chase Private Client (“CPC”) deposits

3. 2017 average balances
Notes on slide 51 – Leading long-term performance, consistently strong flows, product innovation

1. The “% of 2017 JPMAM long-term mutual fund AUM over peer median” analysis represents the proportion of assets in mutual funds that are ranked above their respective peer category median on 1, 5, and 10 year basis as of December 31, 2017. All quartile rankings, the assigned peer categories and the asset values used to derive this analysis are sourced from Lipper for the U.S. and Taiwan domiciled funds; Morningstar for the U.K., Luxembourg and Hong Kong domiciled funds; Nomura for Japan domiciled funds and FundDoctor for South Korea domiciled funds. Includes only Asset Management retail open-ended mutual funds that are ranked by the aforementioned sources. Excludes money market funds, Undiscovered Managers Fund, and Brazil domiciled funds. Quartile rankings are done on the net-of-fee absolute return of each fund. The data providers redenominate the asset values into U.S. dollars. This % of AUM is based on fund performance and associated peer rankings at the share class level for U.S. domiciled funds, at a “primary share class” level to represent the quartile ranking of the U.K., Luxembourg and Hong Kong funds and at the fund level for all other funds. The “primary share class”, as defined by Morningstar, denotes the share class recommended as being the best proxy for the portfolio and in most cases will be the most retail version (based upon annual management charge, minimum investment, currency and other factors). Where peer group rankings given for a fund are in more than one “primary share class” territory both rankings are included to reflect local market competitiveness (applies to “Offshore Territories” and “HK SFC Authorized” funds only). The performance data could have been different if all funds/accounts would have been included. Past performance is not indicative of future results. The classifications in terms of product categories shown are J.P. Morgan’s own.

2. Source: Company filings, J.P. Morgan estimates. Peers include BLK, MS, UBS, and GS. UBS converted into USD at average 2013-2017 exchange rate

3. Long-term AUM

4. Long-term AUM, administration, brokerage, custody, and deposit for AWM, CWM investments, and new-to-firm CPC deposits

5. Long-term AUM, fee-generating brokerage, and deposits in fee-generating brokerage accounts

6. Long-term AUM, brokerage, and deposit

7. Long-term AUM and brokerage
Notes on slide 52 – Complementing client portfolios with banking and liquidity products

1. Pro-forma, reflecting AWM’s Wealth Management business (“WM”) plus CWM investments and CPC deposits
2. Includes assets managed on behalf of other JPMAM investment teams
3. Source: iMoney.net as of February 23, 2018
4. Includes HELOCs and $1.1B of CIO portfolio mortgage loans for AWM clients, with <5% of conforming loans
5. Percent of combined WM and CPC clients with loan facilities
Notes on slide 53 – Hiring client advisors and increasing productivity

Source: Company filings, J.P. Morgan estimates. UBS converted into USD at the average daily 2017 exchange rate for pre-tax income and the spot exchange rate as of December 31, 2017 for client assets

1. Includes AWM and CWM, including all CWM investments and CPC deposits. Client assets include total AUM, administration, brokerage, custody, and deposits
2. Total AUM
3. Total AUM, brokerage, custody, and deposits
4. Total AUM, brokerage, and deposits
5. Total primary sales professionals, including financial advisors and wealth advisors
6. Retail Brokerage financial advisors
1. To ensure consistent comparison over time, years prior to 2017 have been adjusted for certain methodology changes regarding the classification of operating and non-operating deposits

2. Represents operating and retail/SME (“small and medium enterprise”) deposits within the CIB, CB and Corporate lines of businesses based on the U.S. LCR rule. Excludes operating and retail/SME deposits in CCB and AWM

3. Represents non-operating deposits within the CIB, CB and Corporate lines of businesses based on the U.S. LCR rule, and includes all certificates of deposits in Corporate. Excludes non-operating deposits in CCB and AWM

4. Other includes collateralized deposits, margin cash deposits in CIB, and certain time deposits

5. Represents the average for December 2014 vs. the full-year 2017 average 3-year CAGR

6. December 2014 and full-year 2015 balances include the commercial paper sweeps product, which was discontinued in 2015

7. FY2015 balances are partially based on an average of weekly spot numbers
Notes on slide 58 – Both quantitative tightening and rate hikes will likely cause migration of deposits

1. Large time deposit growth has been adjusted for the slope of the yield curve based on regression analysis: large time deposit YoY % change = \(-0.69 + 5\times(1\text{ year forward 1 month swap rate} - \text{spot 1 month overnight indexed swap}) + 5.7 \times \text{spread differential between moneymarket funds ("MMF") and retail deposit proxy}\)

2. Retail deposit growth adjusted for M2 based on regression: retail deposit YoY % change = \(1.476 + 1.2 \times M2 \text{ deposits YoY}\% \text{ change} - 2.1 \times \text{spread differential between MMF and retail deposit proxy}\)
1. Includes investments in Sapphire Reserve and other notable items

2. Notable items in Markets exclude revaluation of tax-oriented investments related to the TCJA in 2017 and a fair value loss on a margin loan to a single client

3. Other notable items include a legal benefit related to a settlement with the FDIC receivership for Washington Mutual and with Deutsche Bank as trustee to certain Washington Mutual trusts, revaluation of tax-oriented investments related to the TCJA, and a fair value loss on a margin loan to a single client

4. Markets includes both NII and NIR
Notes on slide 62 – Adjusted expense – continuing to fund investments and growth

1. Growth and efficiencies also include other offsetting non-core items, including benefits associated with the elimination of the FDIC surcharge
2. See note 3 on slide 76
3. Includes compensation associated with growth in revenue producers
4. Gross marketing includes ~$2.5B of Card “SFAS 91” acquisition costs, which are recognized as contra revenue and are not included in 2018 adjusted expense
Notes on slide 68 – Leading client franchises

1. FDIC 2017 Summary of Deposits survey per S&P Global Market Intelligence. Excludes all branches with $500mm+ in deposits within the last two years (which are assumed to include a significant level of commercial deposits or are headquarter branches for direct banks). Includes all commercial banks, credit unions, savings banks, and savings institutions as defined by the FDIC. 2006 excludes Washington Mutual Bank (“WaMu”) and Bank of New York branch purchases.

2. Represents share of general purpose credit card (“GPCC”) spend, which excludes private label and Commercial Card; based on peer company filings and JPMorgan Chase estimates.

3. The 2006 figure reflects First Data joint venture.

4. IB fees market share for all periods presented are based on wallet data from Dealogic as of January 1, 2018.

5. Coalition. 2017 based on preliminary results. 2016 and 2017 rank analysis based on Coalition Index (BAML, BARC, BNPP, CITI, C S, DB, GS, HSBC, MS, JPM, SG, and UBS). Market share reflects JPMorgan Chase’s share of the global industry revenue pool. Market share & rank analysis based on JPMorgan Chase business structure. 2006 rank analysis is based on JPMorgan Chase analysis.

6. Represents Top 50 Metropolitan Statistical Areas (“MSA”) where CB has a presence.


8. Represents the “overall star rating” derived from Morningstar for the U.S., the U.K., Luxembourg, Hong Kong and Taiwan domiciled funds; and Nomura “star rating” for Japan domiciled funds. Includes only Asset Management retail open-ended mutual funds that have a rating. Excludes money market funds, Undiscovered Managers Fund, and Brazil domiciled funds.

9. Source: Company filings and JPMorgan Chase estimates. Rankings reflect competitors in the peer group with publicly reported financials and 2017 client assets of at least $500B as follows: Allianz, BAC, BEN, BK, BLK, CS, GS, IVZ, MS, TROW, UBS. JPMorgan Chase’s ranking reflects AWM long-term AUM, administration, brokerage, custody, and deposits, Chase Wealth Management investments, and new-to-firm Chase Private Client deposits.

10. Strategic Insight as of February 6th, 2018.


12. FDIC 2017 Summary of Deposits survey per S&P Global Market Intelligence. Excludes all branches with $500mm+ in deposits within two years (excluded branches are assumed to include a significant level of commercial deposits or are headquarter branches for direct banks). Includes all commercial banks, credit unions, savings banks, and savings institutions as defined by the FDIC.
13. Based on 2017 sales volume and loans outstanding disclosures by peers (C, BAC, COF, AXP, DFS) and JPMorgan Chase estimates. Sales volume excludes private label and Commercial Card. AXP reflects the U.S. Consumer segment and JPMorgan Chase estimates for AXP’s U.S. small business sales. Loans outstanding exclude private label, AXP Charge Card, and Citi Retail Cards


16. The Nilson Report, Issue 1105, March 2017. Data as of 2016. Chase is the #1 wholly-owned merchant acquirer in the U.S. When volume from joint ventures and revenue sharing arrangements are included in First Data’s volume, First Data holds the #1 share position in the U.S.

17. Dealogic as of January 1, 2018

18. Coalition. Preliminary FY 2017 revenues divided by Front-Office full-time equivalents for the first-half of 2017

19. Source of Assets under custody (“AUC”): Company filings

20. SWIFT volume report as of December YTD17

21. Thomson Reuters LPC as of FY17

22. The “10-year LT mutual fund AUM in top 2 quartiles” analysis represents the proportion of assets in mutual funds that are ranked above their respective peer category median on a 10-year basis as of December 31, 2017. All quartile rankings, the assigned peer categories and the asset values used to derive this analysis are sourced from Lipper for the U.S. and Taiwan domiciled funds; Morningstar for the U.K., Luxembourg and Hong Kong domiciled funds; Nomura for Japan domiciled funds and FundDoctor for South Korea domiciled funds. Includes only Asset Management retail open-ended mutual funds that are ranked by the aforementioned sources. Excludes money market funds, Undiscovered Managers Fund, and Brazil domiciled funds. Quartile rankings are done on the net-of-fee absolute return of each fund. The data providers redenominate the asset values into U.S. dollars. This % of AUM is based on fund performance and associated peer rankings at the share class level for U.S. domiciled funds, at a “primary share class” level to represent the quartile ranking of the U.K., Luxembourg and Hong Kong funds and at the fund level for all other funds. The “primary share class”, as defined by Morningstar, denotes the share class recommended as being the best proxy for the portfolio and in most cases will be the most retail version (based upon annual management charge, minimum investment, currency and other factors). Where peer group rankings given for a fund are in more than one “primary share class” territory both rankings are included to reflect local market competitiveness (applies to “Offshore Territories” and “HK SFC Authorized” funds only). The performance data could have been different if all funds/accounts would have been included. Past performance is not indicative of future results

23. Euromoney, 2017 results released February 2018
Notes on Fixed Income

Slide 70 – Capital markets funding sources
1. The Firm’s obligations under the collateralized commercial paper ("CCP") programs are reported under other borrowed funds ("OBF") and securities loaned or sold under agreements to repurchase ("repo agreements"), in the amount of $14.3B and $3.4B, respectively as of December 31, 2017. The balances reflected above for OBF and securities loaned/repo agreements exclude balances related to the CCP programs. OBF includes ~$2B of short-term secured borrowings. Commercial Paper and OBF are included in short-term borrowings on the Firm’s Consolidated balance sheets as of December 31, 2017 and 2016.

2. Includes federal funds purchased, long-term securities loaned and structured repo agreements; and client-driven loan securitizations which are included in beneficial interests issued by consolidated variable interest entities on the Firm’s Consolidated balance sheets, totaling ~$7B as of December 31, 2017.

3. Includes junior subordinated debt and trust preferred securities.

Slide 71 – JPMorgan Chase & Co. (HoldCo) unsecured long-term debt outstanding
1. Eligible long-term debt ("LTD") with maturity > 1 year count toward the external TLAC ("total loss absorbing capacity") requirement. Eligible LTD with a maturity > 2 years, plus 50% of eligible LTD with a maturity between 1-2 years count toward the external LTD requirement.

2. Represents callable notes with an option to redeem 1 year prior to maturity.

3. Non-TLAC eligible debt is approximately $0.5B for 2019, $0.4B for 2020, $0.2B for 2021, $0.2B for 2022 and $2.7B for >2022.

Slide 72 – JPMorgan Chase & Co. (HoldCo) benchmark issuance
1. Excludes preferred equity issuance.

2. Weighted average maturity ("WAM") is calculated based on the final maturity of all unsecured long-term debt issuance.

3. Represents callable notes with an option to redeem 1 year prior to maturity, except for callable preferred stock issuance.
Notes on Fixed Income

**Slide 73 – Firmwide long-term funding outstanding**

1. Includes junior subordinated debt and trust preferred securities
2. Includes $1.8B and $1.5B of student loan securitizations in 2015 and 2016, respectively
3. Includes $0.5B of other secured debt in a HoldCo subsidiary in each of 2015 and 2016
4. Senior unsecured for Bank Subs includes $7.7B, $3.9B and $0.3B of subordinated debt in 2015, 2016 and 2017, respectively

**Slide 75 – Wholesale funding sources – Purpose and key features**

1. Currently not optimal from a regulatory capital treatment perspective to issue with a tenor of less than 10 years
2. Commercial Paper ("CP")/Collateralized Commercial Paper ("CCP")/Asset-Backed Commercial Paper ("ABCP") can be issued up to 397 days, except for puttable CP/CCP/ABCP, and any CP/CCP relying on the SEC rule 3(a)3 exemption, which has a maximum tenor of 270 days. Certificates of Deposit ("CD") do not have a maximum contractual maturity. Federal Home Loan Bank ("FHLB") advances can have a legal maturity of up to 30 years and can also be extendible. Net stable funding ratio ("NSFR") reflects eligibility for maturities >365 days
3. CP, CCP and ABCP can be issued in callable format, but this feature is currently not optimal from a liquidity perspective
4. Multi-currency represents two or more currencies
5. Certain plain-vanilla debt that is classified as structured notes is TLAC-eligible
Forward-looking statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on the current beliefs and expectations of JPMorgan Chase & Co.'s management and are subject to significant risks and uncertainties. Actual results may differ from those set forth in the forward-looking statements. Factors that could cause JPMorgan Chase & Co.'s actual results to differ materially from those described in the forward-looking statements can be found in JPMorgan Chase & Co.'s Annual Report on Form 10-K for the year ended December 31, 2017, filed with the Securities and Exchange Commission and available on JPMorgan Chase & Co.'s website https://www.jpmorganchase.com/corporate/investor-relations/investor-relations and on the Securities and Exchange Commission’s website (www.sec.gov). JPMorgan Chase & Co. does not undertake to update the forward-looking statements to reflect the impact of circumstances or events that may arise after the date of the forward-looking statements.