

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

**FORM 8-K**

CURRENT REPORT  
Pursuant to Section 13 or 15(d)  
of the Securities Exchange Act of 1934

Date of Report (date of earliest event reported): February 26, 2019

**JPMorgan Chase & Co.**  
(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

1-5805  
(Commission File Number)

13-2624428  
(I.R.S. employer  
identification no.)

383 Madison Avenue, New York, New York  
(Address of principal executive offices)

10179  
(Zip Code)

Registrant's telephone number, including area code: (212) 270-6000

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure

On February 26, 2019, JPMorgan Chase & Co. (“JPMorgan Chase” or the “Firm”) held an Investor Day presentation during which it provided information to investors about the Firm and its various lines of business. Exhibit 99 is a copy of the slides furnished at, and posted on the Firm’s website in connection with, the presentation.

The slides are being furnished pursuant to Item 7.01, and the information contained therein shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liabilities under that Section. Furthermore, the information contained in Exhibit 99 shall not be deemed to be incorporated by reference into the filings of the Firm under the Securities Act of 1933.

*This Current Report on Form 8-K (including the Exhibit hereto) 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’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’s actual results to differ materially from those described in the forward-looking statements can be found in JPMorgan Chase’s Annual Report on Form 10-K for the year ended December 31, 2018, which has been filed with the Securities and Exchange Commission and is available on JPMorgan Chase’s website (<https://jpmorganchaseco.gcs-web.com/financial-information/sec-filings>) and on the Securities and Exchange Commission’s website ([www.sec.gov](http://www.sec.gov)). JPMorgan Chase does not undertake to update any forward-looking statements.*

Item 9.01 Financial Statements and Exhibits

(d) Exhibit

Exhibit No.	Description of Exhibit
99.1	<a href="#">JPMorgan Chase &amp; Co. 2019 Investor Day agenda</a>
99.2	<a href="#">JPMorgan Chase &amp; Co. 2019 Investor Day presentation slides</a>
99.3	<a href="#">JPMorgan Chase &amp; Co. 2019 Investor Day speaker biographies</a>

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

JPMorgan Chase & Co.

(Registrant)

By:

/s/ Jordan A. Costa

Jordan A. Costa  
Managing Director

Dated: February 26, 2019

# Agenda

Presentation	Speaker	Start time	End time	Duration
Registration		7:15 AM	8:00 AM	0:45
1) Firm Overview	Marianne Lake	8:00 AM	8:45 AM	0:45
2) Corporate & Investment Bank	Daniel Pinto, Troy Rohrbaugh, Takis Georgakopoulos	8:45 AM	9:45 AM	1:00
Break		9:45 AM	10:00 AM	0:15
3) Consumer & Community Banking	Gordon Smith, Thasunda Brown Duckett, Mike Weinbach, Jennifer Piepszak	10:00 AM	11:00 AM	1:00
Break		11:00 AM	11:15 AM	0:15
4) Asset & Wealth Management	Mary Callahan Erdoes	11:15 AM	11:45 AM	0:30
5) Commercial Banking	Doug Petno	11:45 AM	12:15 PM	0:30
Lunch with Senior Leaders		12:15 PM	1:30 PM	1:15
6) Closing remarks	Jamie Dimon	1:30 PM	2:30 PM	1:00

JPMORGAN CHASE & CO.





# FIRM OVERVIEW

February 26, 2019

► FIRM OVERVIEW

CORPORATE & INVESTMENT BANK

CONSUMER & COMMUNITY BANKING

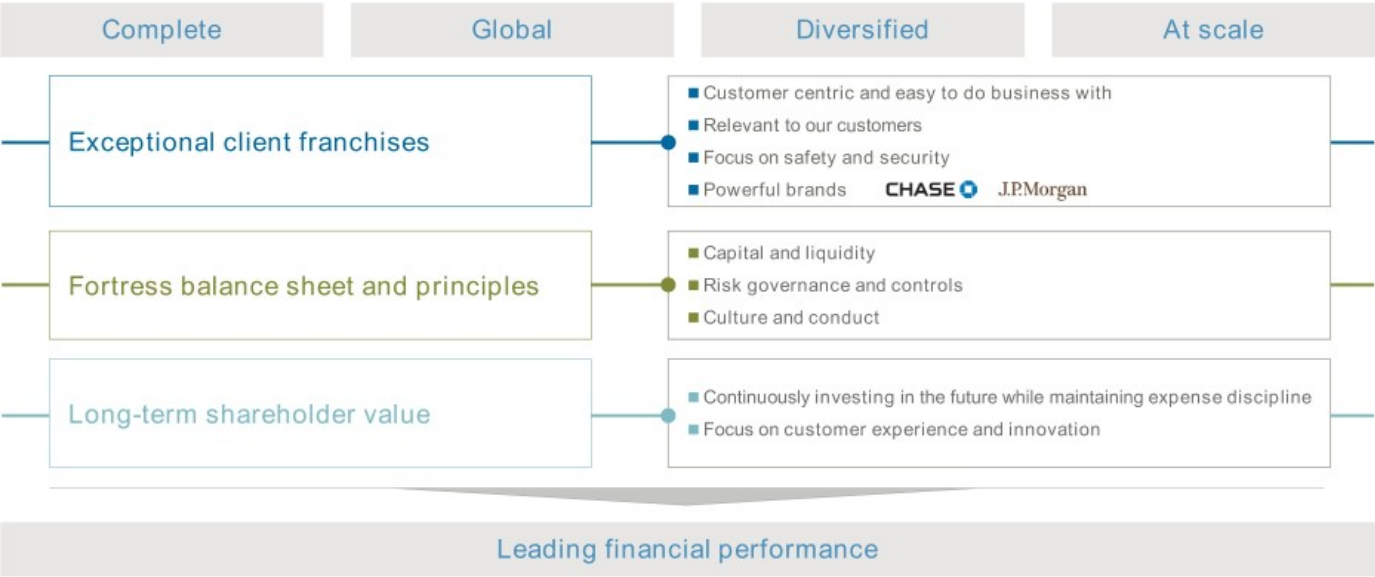
ASSET & WEALTH MANAGEMENT

COMMERCIAL BANKING

JPMORGAN CHASE & CO.

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Exceptional client franchises and proven operating model –  
positioned to outperform in any environment



Strong financial performance in 2018 on an absolute basis...

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**\$111.5<sub>B</sub>** ↑  
revenue<sup>1</sup>

---

**\$32.5<sub>B</sub>** ↑  
net income

---

**\$9.00** ↑  
EPS

---

**12.0%** ↓  
CET1 ratio<sup>2</sup>

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**\$28.5<sub>B</sub>** ↑  
net capital distribution<sup>3</sup>

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**17%** ↑  
ROTCE<sup>4</sup>

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Record revenue and income

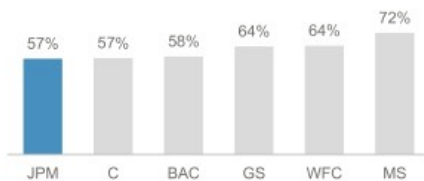
Note: For footnoted information, refer to slide 30

...as well as relative to our peers

Revenue – managed (\$B)<sup>1,2</sup>



Overhead ratio – managed<sup>1,3</sup>



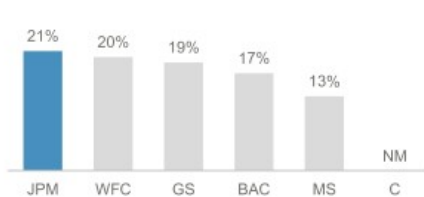
ROTCE<sup>4</sup>



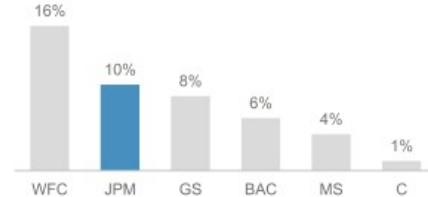
Capital distribution (\$B)<sup>5</sup>



EPS: 10-year CAGR<sup>6</sup>



TBVPS<sup>4,6</sup>: 10-year CAGR



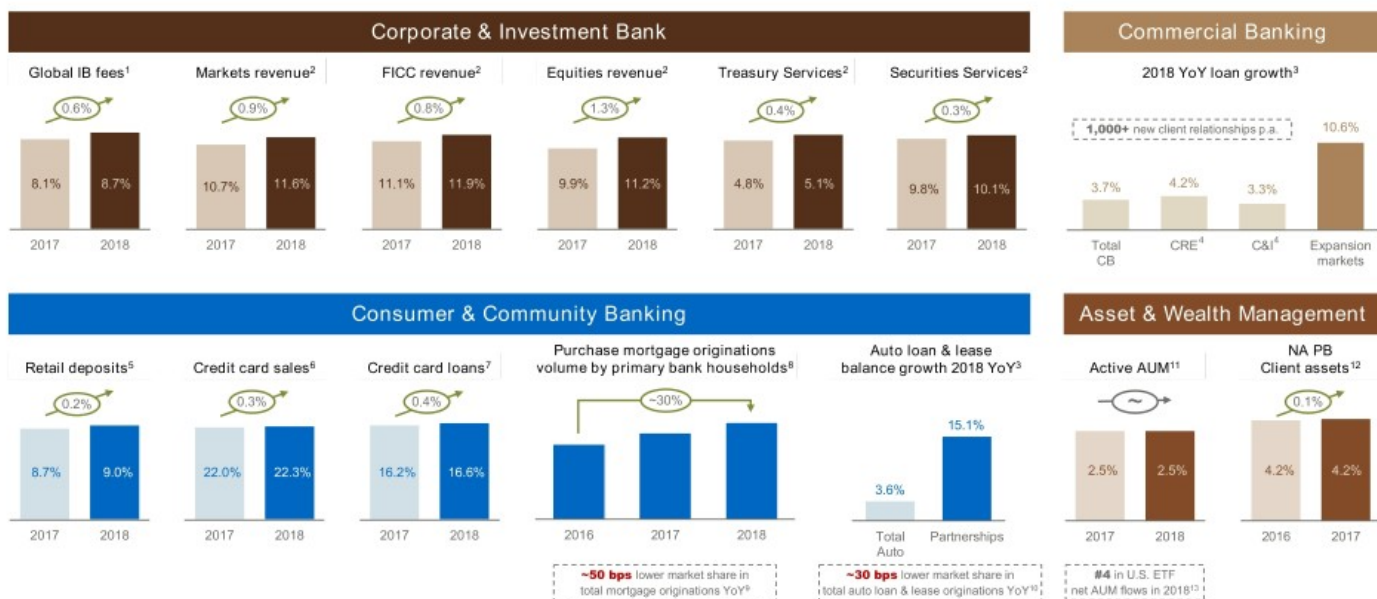
Note: For footnoted information, refer to slide 31

We have exceptional client franchises...

Consumer & Community Banking	Corporate & Investment Bank	Commercial Banking	Asset & Wealth Management
<ul style="list-style-type: none"> <li>■ Serve <b>62mm</b> U.S. households, including <b>4mm</b> small businesses</li> <li>■ <b>49mm</b> active digital customers<sup>1</sup>, including <b>33mm</b> active mobile customers<sup>2</sup></li> <li>■ <b>99mm</b> debit and credit card accounts<sup>3</sup></li> <li>■ #1 in new <b>primary bank</b> relationships nationally<sup>4</sup> <ul style="list-style-type: none"> <li>■ 9.0% retail deposit market share<sup>5</sup></li> </ul> </li> <li>■ #1 U.S. <b>credit card</b> issuer based on sales and outstandings<sup>6</sup> <ul style="list-style-type: none"> <li>■ 22.3% sales market share<sup>7</sup></li> <li>■ 16.6% outstandings market share<sup>8</sup></li> </ul> </li> <li>■ #2 <b>jumbo mortgage</b> originator<sup>9</sup></li> </ul>	<ul style="list-style-type: none"> <li>■ Business with <b>&gt;80%</b> of Fortune 500 companies</li> <li>■ Presence in over <b>100</b> markets globally</li> <li>■ #1 in global <b>IB</b> fees<sup>10</sup> <ul style="list-style-type: none"> <li>■ 8.7% market share</li> <li>■ Participated in 7 of the top 10 fee paying deals in 2018</li> </ul> </li> <li>■ #1 in <b>Markets</b> revenue globally<sup>11</sup> <ul style="list-style-type: none"> <li>■ 11.6% market share, including 11.9% FICC and 11.2% Equities</li> </ul> </li> <li>■ #1 Global <b>Research Firm</b><sup>12</sup></li> <li>■ #1 in <b>USD payments</b> volume<sup>13</sup></li> <li>■ Top 3 <b>custodian</b> globally with \$23T AUC<sup>14</sup></li> </ul>	<ul style="list-style-type: none"> <li>■ <b>133</b> locations across the U.S., incl. all of the <b>top 50 MSAs</b></li> <li>■ <b>26</b> international locations</li> <li>■ Credit, banking and treasury services to <b>~17,000 C&amp;I</b> clients as well as <b>~34,000</b> real estate owners and investors <ul style="list-style-type: none"> <li>■ Industry leading credit – <b>7<sup>th</sup></b> straight year of net recoveries or single-digit NCO rate</li> </ul> </li> <li>■ #1 U.S. <b>multifamily</b> lender<sup>15</sup></li> <li>■ \$2.5B gross <b>investment banking</b> revenue<sup>16</sup> <ul style="list-style-type: none"> <li>■ #1 traditional middle market bookrunner<sup>17</sup></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Serve clients across the <b>entire wealth spectrum</b></li> <li>■ Business with <b>55%</b> of the world's largest pension funds, sovereign wealth funds and central banks</li> <li>■ #1 <b>Private Bank</b> in North America<sup>18</sup></li> <li>■ Fiduciaries across <b>all asset classes</b></li> <li>■ <b>83%</b> of 10-year mutual fund AUM performed above peer median<sup>19</sup></li> <li>■ <b>\$2.7T</b> client assets, including <b>\$2.0T</b> AUM</li> </ul>
Revenue: <b>\$52B</b>	<b>\$36B</b>	<b>\$9B</b>	<b>\$14B</b>
ROE: <b>28%</b>	<b>16%</b>	<b>20%</b>	<b>31%</b>

Note: For footnoted information, refer to slides 32-33

...and we are gaining market share in nearly all of our businesses



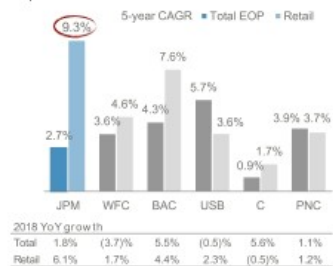
Note: Totals may not sum due to rounding. For footnoted information, refer to slide 34

## Proven best-in-class long-term performance

### EOP core loans<sup>1</sup>



### Deposits<sup>2</sup>



### Markets revenue & IB fees (\$B)



### Total net client asset flows (\$B)



### Credit card sales<sup>11</sup>



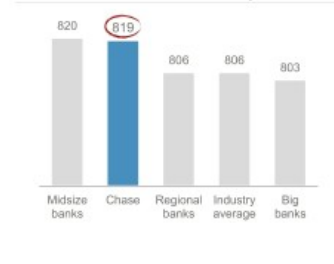
### Digital & mobile customer growth



### Merchant processing bankcard<sup>12</sup>



### 2018 J.D. Power U.S. retail banking satisfaction<sup>13</sup>

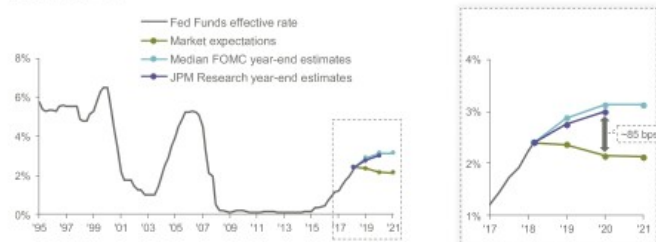


Note: For footnoted information, refer to slide 35

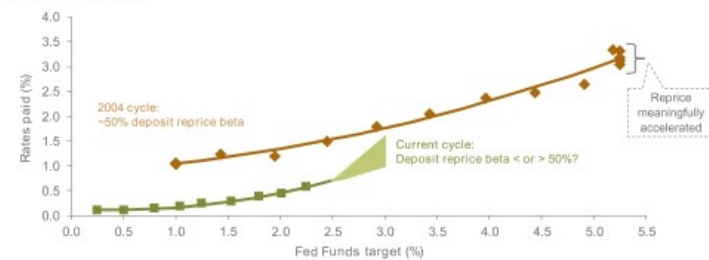


## Macroeconomic backdrop

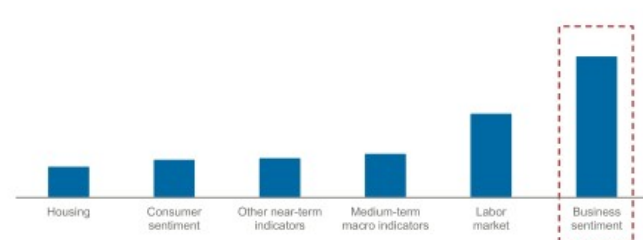
### Fed Funds rate<sup>1</sup>



### Deposit repricing<sup>2</sup>

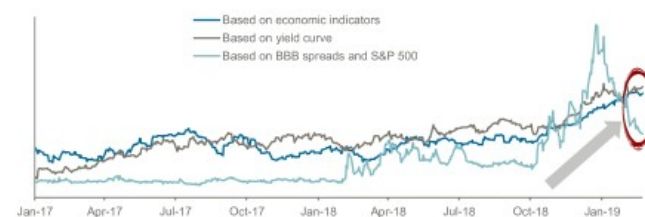


### Probability of a U.S. recession based on economic indicators – drivers YoY<sup>3</sup>



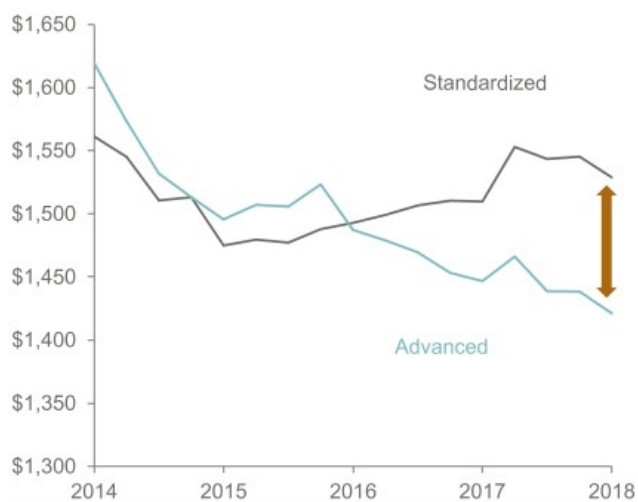
Note: For footnoted information, refer to slide 36

### Probability of a U.S. recession in ≤12 months<sup>3</sup>

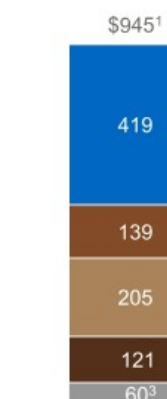


## Evolution of the balance sheet

### RWA (\$B)



### Avg. loans 2018 (\$B)



### Growth

	'14-'18 CAGR	YoY	
		2018	4Q18
Core loans (ex-CIB) <sup>2</sup>	11%	7%	6%
CCB:	13%	6%	
AWM:	9%	12%	
CB:	10%	4%	
CIB:	5%	7%	

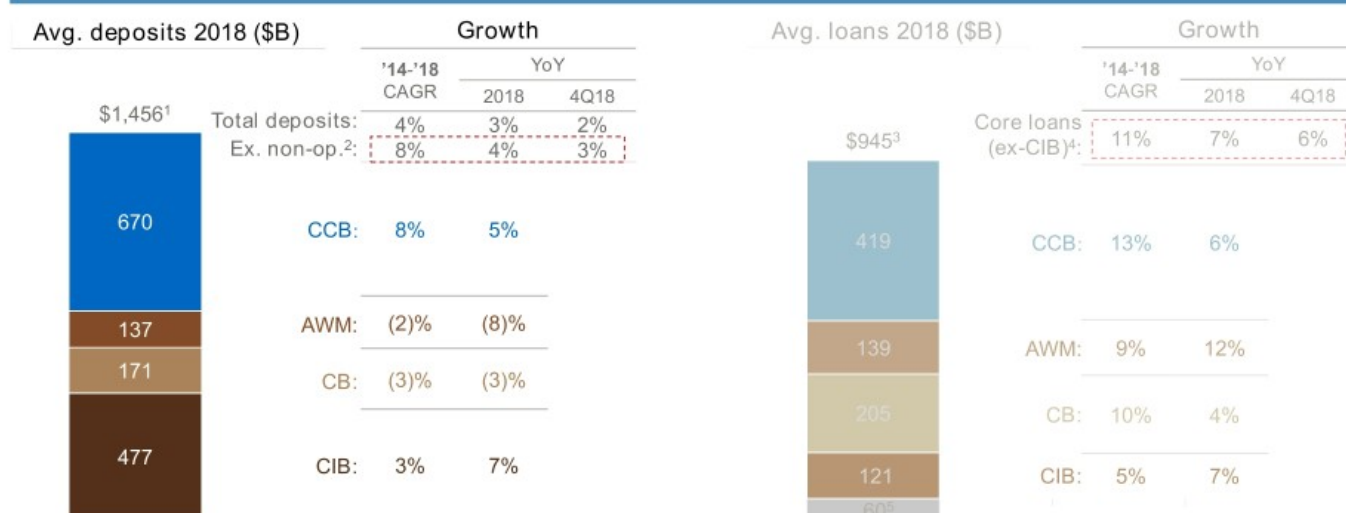
Focus on high quality loans – expect slower pace of growth

<sup>1</sup> Includes Corporate

<sup>2</sup> See note 2 on slide 29

<sup>3</sup> Loans classified as runoff portfolios, discontinued portfolios and portfolios the Firm has an intent to exit

## Evolution of the balance sheet (cont'd)



Expect slower industry deposit growth of ~2% on quantitative tightening and higher rates

Note: For footnoted information, refer to slide 37

## Balance sheet optimization strategy

### Navigating the current environment

- Marginal decisions about balance sheet growth take into consideration:
  - Capital – incremental growth will be capitalized under Standardized (more expensive and less risk-sensitive)
  - Funding cost – slower deposit growth may increase need for more expensive funding

### Illustrative economics of a marginal asset

Asset	RWA		ROE		
	Adv.	Stdz.	Adv. RWA Current avg. funding cost	Stdz. RWA Current avg. funding cost	Stdz. RWA Wholesale funding cost
Loan	~25%	~50%	~40%	~20%	<10%
Security	~25%	~25%	~50%	~50%	~25%

As marginal economics evolve, the Firm optimizes its balance sheet accordingly

## Evolution of regulatory framework

### Where we've been...

2010s  
Building a robust framework of resiliency

Dodd-Frank  
U.S. Collins Floor

SCAP<sup>1</sup> → CCAR<sup>2</sup>

GSIB  
Surcharge

Liquidity  
Requirements

Living  
Wills

TLAC<sup>3</sup>

Basel I → Basel III

### Foundational principles

Global consistency and  
harmonization

Coherence and  
simplification of rules

Coordinated  
regulatory supervision

### The next chapter is close ...

2020s  
Finalized implementation

Stress Capital Buffer	GSIB <sup>4</sup>
Stress	Basel III Finalized

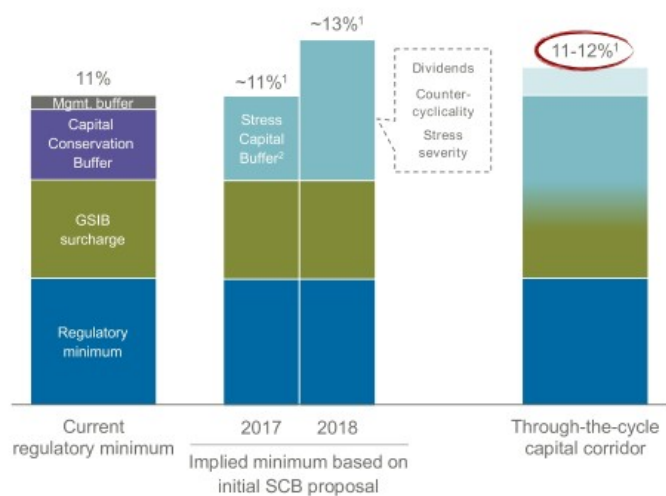
Resiliency & Resolvability  
Liquidity, Living Wills, TLAC

Coherence and calibration are critical

Note: For footnoted information, refer to slide 38

## CET1 requirement and capital distribution

### Evolving CET1 requirement



### Coherent regulatory capital minimums

- Appropriate calibration of SCB and GSIB
- Avoid duplication – in particular, counter-cyclicality

### Capital distribution

- Analyst estimates of ~90-100% net payout – CCAR results dependent

Expect to remain at the higher end of the 11-12% CET1 corridor at this point in the cycle

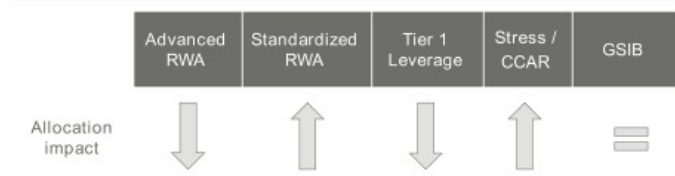
<sup>1</sup> Including management buffer  
<sup>2</sup> ("SCB")

## Capital allocation methodology and LOB ROE

### Core philosophy: Maximize long-term shareholder value

- Ensure the Firm makes **maximum use of scarce resources** – while complying with all requirements
- Considers current and potentially **binding capital constraints**
- Aligns incentives with **medium- and long-term** perspective
- Framework **dynamically responds** to changes in our capital position and regulatory environment

### Multi Metric Framework drivers for 2019 capital allocation



### 2019 capital allocation and ROE

	Avg. retained equity (\$B) <sup>1</sup>		Medium-term ROE	
	2018	2019	Previous	Revised
CCB	\$51	\$52	25%+	
CIB	70	80	~17%	~16%
CB	20	22	~18%	
AWM	9	10.5	~35%	25%+
Corporate	34	20.5	NM	
Firm	\$184	~\$185	~17% ROTCE	

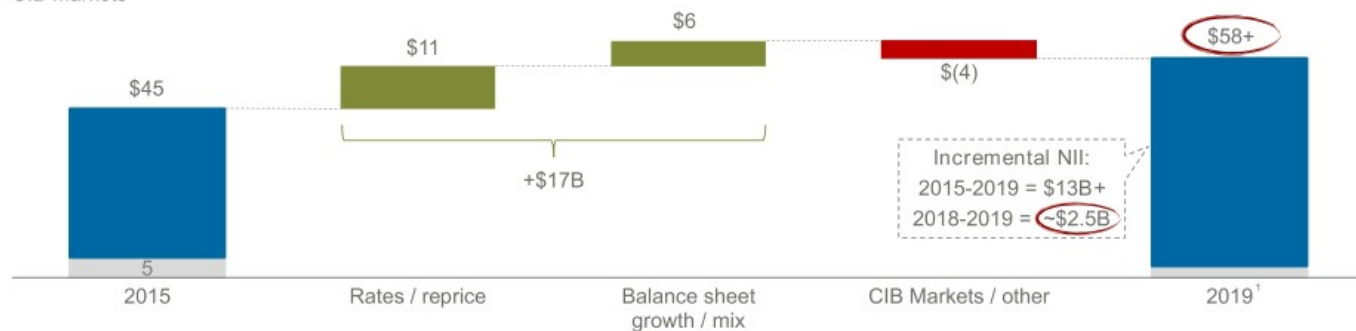
Changes to our allocation framework reflect Firmwide constraints – consistent with our philosophy

<sup>1</sup> Reflects average CET1 capital. Total Firm for 2019 is based on analyst estimates

## Net interest income – significant growth

### Net interest income (\$B)

■ CIB Markets



### Forward looking NII drivers

- ▼ Rates net of deposit reprice lags  
Rate benefit more than offset by deposit reprice
- ▲ Balance sheet growth and mix
- ▼ CIB Markets NII  
Down, but less of a drag on fewer hikes

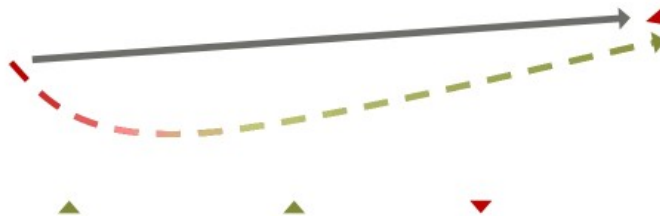
\$13B+ incremental NII includes deposit reprice lag benefit

<sup>1</sup> 2019 Outlook based on implied rate curve as of December 31, 2018



Net interest income (\$B)

— Illustrative path



Case for higher:



Lower  
deposit betas

Case for lower:



Slower  
deposit growth

## Noninterest revenue<sup>1</sup>

### Noninterest revenue (\$B)

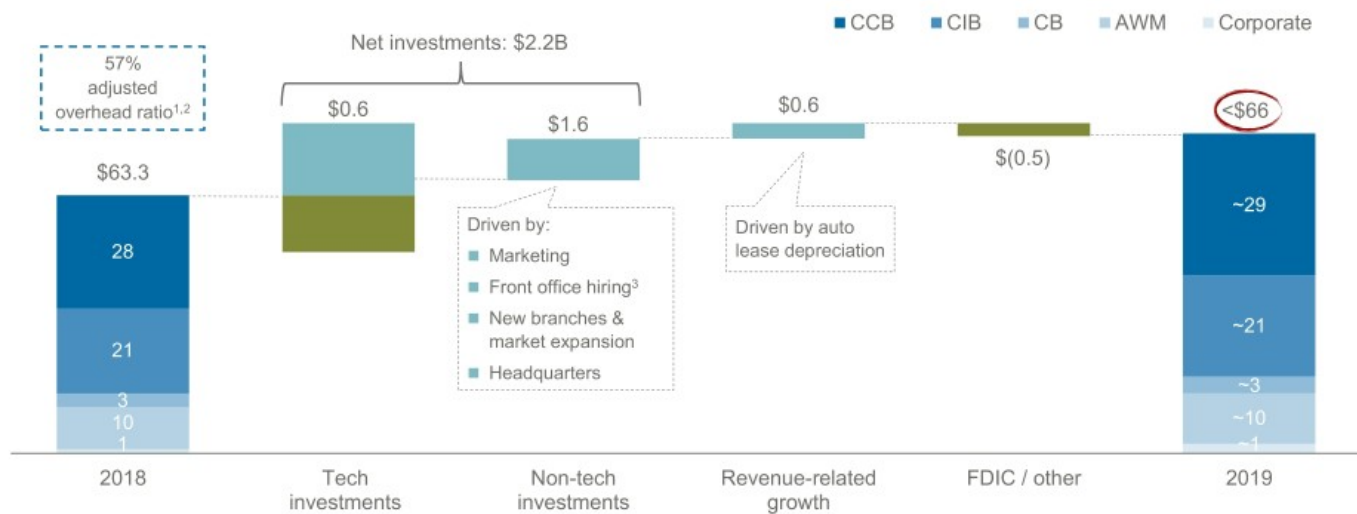


Core business drivers supporting ~3% NIR CAGR over time

Note: For footnoted information, refer to slide 39

## Adjusted expense<sup>1</sup>

Adjusted expense (\$B)



Note: Totals may not sum due to rounding. For footnoted information, refer to slide 40

## Credit – net charge-offs

		2018		2019 Outlook
		NCO rate	NCOs (\$B)	NCO rate
CCB	Home Lending <sup>1,2</sup>	(0.02)%	\$(0.0)	↔
	Card	3.10%	4.5	↔
	Auto	0.38%	0.2	↔
	Business Banking <sup>3</sup>	0.49%	0.1	↔
CIB		0.08%	0.1	↔
CB		0.03%	0.1	↔
AWM		0.01%	0.0	↔
Firmwide <sup>1</sup>		0.53%	\$4.9	<\$5.5B

Medium-term:  
Modestly  
higher on mix

Higher on  
growth

<sup>1</sup> Excludes the impact of purchased credit-impaired ("PCI") loans

<sup>2</sup> Excludes the impact of reperforming and non-performing loan sales

<sup>3</sup> Excludes the impact of retail overdraft losses; CCB's reported NCO rate was 0.90%

## Current Expected Credit Losses reserving standard ("CECL")

### Implementation adjustment

- Estimated day 1 increase to reserves of **\$5B+/- or 35%** largely **driven by Card**
- Estimates dependent on macro environment, portfolio characteristics, and continuing review of models, methodology and judgments
- **Adverse case** reflects a range of adverse outcomes

### Capital implications

- 4-year phase-in of initial capital impact – no permanent capital relief
- Included in the Firm's 2020 CCAR submission – Fed modeling to follow in 2022

### Effects

- Results in more volatile credit costs in stress
- Potential impact to credit availability and pricing

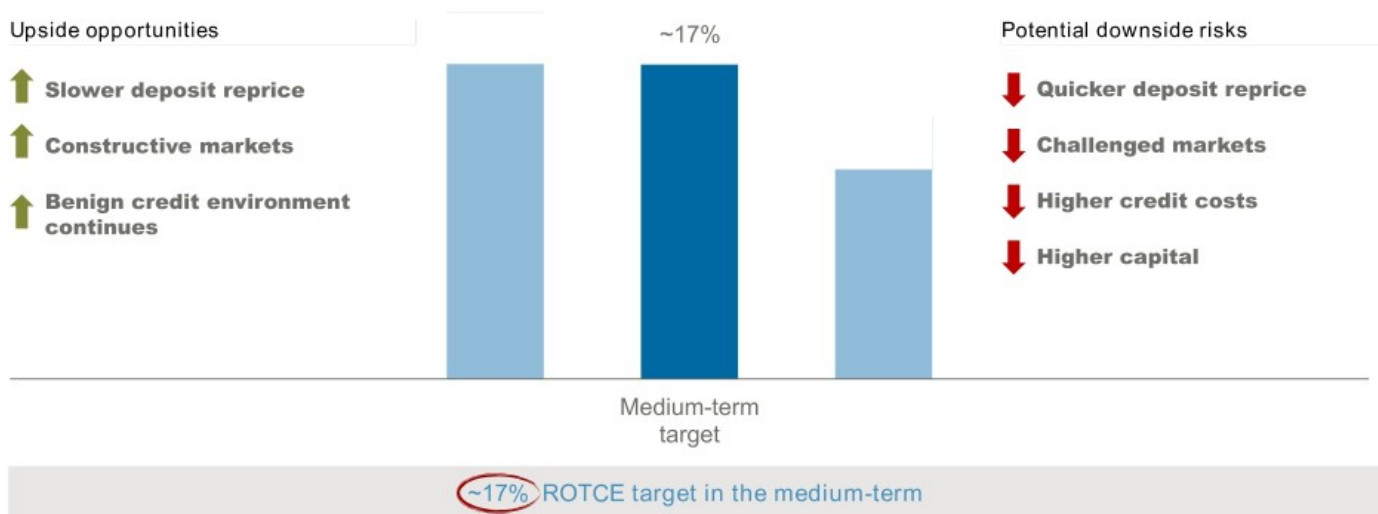
### Day 1 CECL impact (\$B)

		2018 Credit reserves	+	Estimated implementation adjustment	
CCB	Card	\$5.2		Material adjustment	Current coverage is ~12m versus avg. life of ~24m
	Home Lending <sup>1</sup>	2.9			
	Auto & BB	1.3		Less material adjustments	
Wholesale		5.1			
Firmwide		\$14.5		\$4-6	



<sup>1</sup> Home Lending includes AWM mortgage portfolio

## Medium-term target for ROTCE



## Conclusion

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Exceptional client franchises

Fortress balance sheet and principles

Long-term shareholder value

Leading financial performance  
(medium-term outlook)

~17%  
ROTCE

~55%  
Overhead ratio

~12%  
CET1 ratio

75-100%  
Net payout ratio

# Agenda

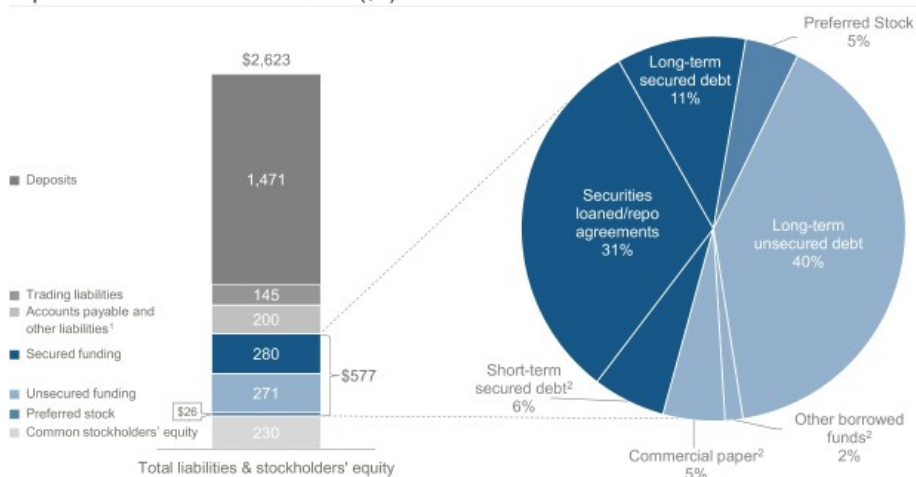
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	Page
1 <a href="#">Appendix – Fixed Income</a>	<a href="#">22</a>
2 <a href="#">Notes</a>	<a href="#">28</a>



## Continuing to optimize funding mix

Capital markets liabilities as of 12/31/18 (\$B)



### Secured funding highlights

- Long-term secured debt
  - \$44B FHLB advances
  - \$13B credit card securitization
- Short-term secured debt
  - \$18B collateralized commercial paper
  - \$5B asset-backed commercial paper
  - \$11B FHLB advances

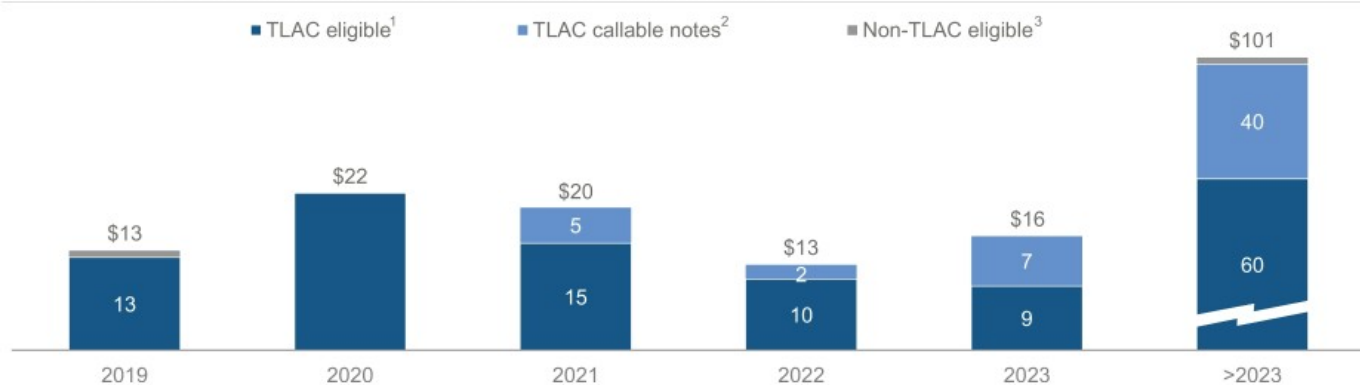
### Unsecured funding highlights

- Long-term unsecured debt
  - \$163B senior debt
  - \$17B subordinated debt<sup>3</sup>
  - \$53B structured notes
- Commercial paper
  - \$30B
  - Supports CIB Markets business

Note: For footnoted information, refer to slide 41

## Managing maturity profile and TLAC efficiency

### JPMorgan Chase & Co. (HoldCo) unsecured long-term debt maturity profile (\$B)



#### Maturity profile includes

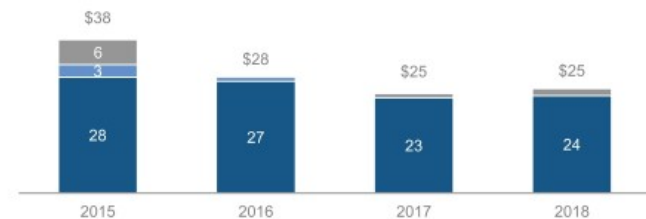
- \$128B of TLAC eligible, \$54B of TLAC callable notes and \$3B of non-TLAC eligible
- TLAC callable notes provide the option to redeem 1 year prior to maturity; e.g., the \$5B of callable notes maturing in 2021 may be redeemed in 2020
- ~\$18B of debt classified as structured notes, of which ~\$16B is TLAC eligible

Note: Totals may not sum due to rounding; amounts represent the carrying value. For footnoted information, refer to slide 41

## JPMorgan Chase & Co. (HoldCo) benchmark issuance – TLAC continues to drive issuance activity

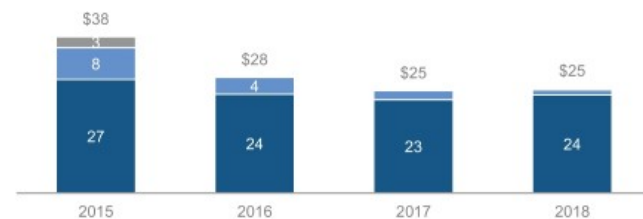
### TLAC maturities and balance sheet drive issuance

Gross issuance by security type (\$B) ■ Senior debt ■ Sub debt ■ Preferred equity



### Issuance weighted towards USD due to relative economics

Gross issuance by currency (\$B) ■ USD ■ EUR ■ Other



### Tenor driven by maturity management and spreads

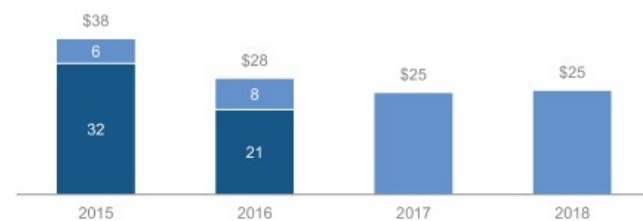
Gross issuance by tenor (\$B)<sup>1</sup> ■ <5 Yrs ■ 5-10 Yrs ■ 10+ Yrs



Note: Totals may not sum due to rounding. For footnoted information, refer to slide 41

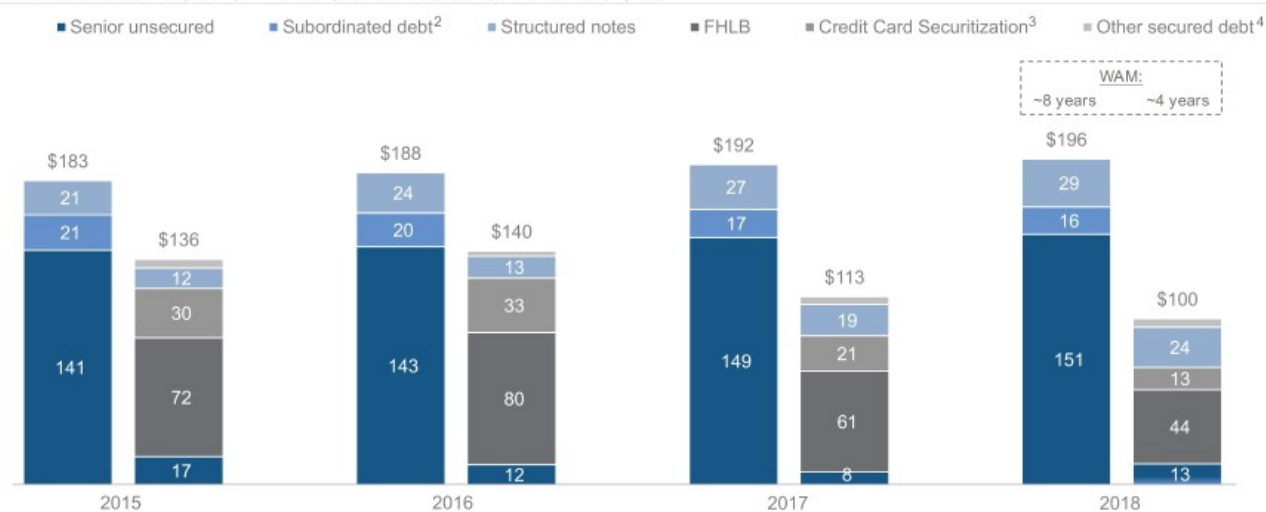
### Callable notes provide maximum efficiency for TLAC management

Gross issuance by structure (\$B) ■ Bullet ■ TLAC Callable<sup>3</sup>



## Firmwide wholesale long-term funding outstanding

End of period outstanding (\$B) – Holding Company (left) vs. Bank<sup>1</sup> (right)



Note: Totals may not sum due to rounding. The Holding Company includes the Holding Company and its non-bank subsidiaries. The Bank includes bank subsidiaries. For footnoted information, refer to slide 42.

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JPMORGAN CHASE & CO.

## TLAC and external LTD requirement summary – TLAC compliance is maintained

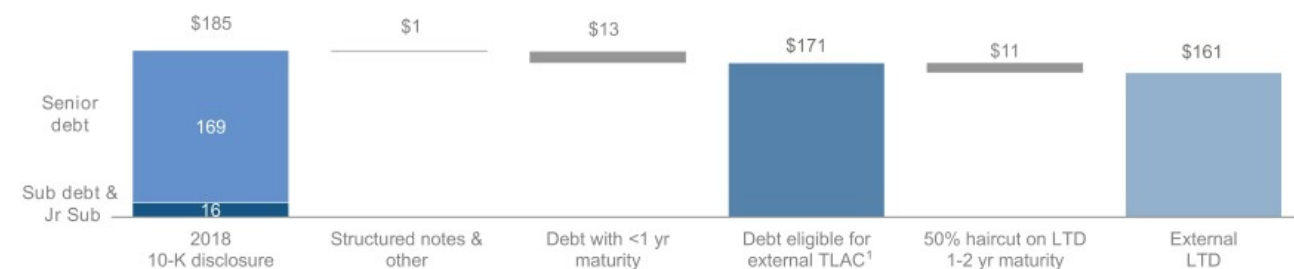
### Commentary

- Holding Company funding activity driven by
  - Balance sheet evolution
  - TLAC maturities
  - Credit spreads and other market considerations
- Preferred and subordinated debt issuance needs based on capital planning requirements and replacement economics
- Non-Holding Company funding activity driven by liquidity needs

### TLAC Requirements – key metrics at 12/31/2018 (\$B)

	Eligible External TLAC	Eligible LTD
Eligible long-term debt	\$171	\$161
Preferred equity	26	-
Common equity Tier 1	183	-
Total	\$381	\$161
% of RWA	24.9%	10.5%
Requirement	23.0%	9.5%
(Shortfall)/surplus	\$29	\$15
% of Leveraged assets	11.6%	4.9%
Requirement	9.5%	4.5%
(Shortfall)/surplus	\$70	\$13

### Holding Company – external long-term debt at 12/31/2018 (\$B)



Note: Totals may not sum due to rounding  
<sup>1</sup> Includes ~\$16B of debt classified as structured notes

## Wholesale funding sources – purpose and key features

	Product	Typical term	Callable	Multi-currency <sup>4</sup>	Available to meet regulatory requirement			
					TLAC	T1/T2 Reg. Cap.	LCR	NSFR
HoldCo	Senior Unsecured	2-30 years	✓	✓	✓	X	✓	✓
	Subordinated Debt	10-30 years <sup>1</sup>	✓	✓	✓	✓	✓	✓
	Preferred Stock	Perpetual	✓	X	✓	✓	✓	✓
	Structured Notes	2-30 years	✓	✓	✓ / X <sup>5</sup>	X	✓	✓
Broker-Dealer	Commercial Paper	Generally < 1 year <sup>2</sup>	X <sup>3</sup>	✓	X	X	✓	✓ <sup>2</sup>
	Securities loaned / Repo agreements	Generally < 6 months	X	✓	X	X	✓	✓ <sup>2</sup>
	Collateralized Commercial Paper	Generally < 1 year <sup>2</sup>	X <sup>3</sup>	✓	X	X	✓	✓ <sup>2</sup>
Bank	Senior Unsecured	2-30 years	✓	✓	X	X	✓	✓
	Subordinated Debt	2-30 years	✓	✓	X	✓	✓	✓
	Structured Notes	2-30 years	✓	✓	X	X	✓	✓
	FHLB Borrowing	Generally < 5 years <sup>2</sup>	✓ <sup>2</sup>	X	X	X	✓	✓
	Card Securitization	1-10 years	X	X	X	X	✓	✓
	Asset-Backed Commercial Paper	Generally < 1 year <sup>2</sup>	X <sup>3</sup>	X	X	X	✓	✓ <sup>2</sup>
Secured Funding								

Note: excludes deposits and common equity. For footnoted information, refer to slide 42

# Agenda

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1    Appendix – Fixed Income	22
2    Notes	28

## Notes on non-GAAP financial measures

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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 the 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 certain 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 pages 57-59 of JPMorgan Chase Co.'s Annual Report on Form 10-K for the year ended December 31, 2018 (the "2018 Form 10-K")
2. Tangible common equity ("TCE"), return on tangible common equity ("ROTCE") and tangible book value per share ("TBVPS"), are each 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 59 of the 2018 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 \$70.35 at December 31, 2018. TCE, ROTCE and TBVPS are utilized by the Firm, as well as investors and analysts, in assessing the Firm's use of equity
3. Adjusted expense and adjusted overhead ratio are each non-GAAP financial measures. Adjusted expense excluded Firmwide legal expense/(benefit) of \$72 million for the year ended December 31, 2018. The adjusted overhead ratio measures the Firm's adjusted expense as a percentage of managed net revenue. 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. Net charge-offs and net charge-off rates exclude the impact of purchased credit-impaired ("PCI") loans



## Notes on key performance measures

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1. The Basel III regulatory capital, risk-weighted assets and capital ratios (which became fully phased-in effective 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) which results in the lower ratio. While the required capital remained subject to the transitional rules during 2018, the Firm's capital ratios as of December 31, 2018 were equivalent whether calculated on a transitional or fully phased-in basis. For additional information on these measures, see Capital Risk Management on pages 85-94 of the Firm's 2018 Form 10-K.
2. 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 – Strong financial performance in 2018 on an absolute basis...

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1. See note 1 on slide 28
2. See note 1 on slide 29
3. Net of stock issued to employees
4. See note 2 on slide 28

## Notes on slide 3 – ...as well as relative to our peers

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1. See note 1 on slide 28
2. Amounts for GS and MS represent reported revenue
3. Managed overhead ratio = total noninterest expense / managed revenue; revenue for GS and MS is reflected on a reported basis
4. See note 2 on slide 28
5. Reflects common dividends and common stock repurchases, net of common stock issued to employees when available
6. The EPS 10-year CAGR for GS and MS compares reported EPS for the year ended December 31, 2018, versus reported EPS for the year ended November 30, 2008 (which was their fiscal year-end in 2008). The TBVPS 10-year CAGR for GS compares TBVPS as of December 31, 2018, versus TBVPS as of November 30, 2008. All other comparisons are for the year ended or as of December 31, 2018, versus December 31, 2008

## Notes on slide 4 – We have exceptional client franchises... (1/2)

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1. Users of all web and/or mobile platforms who have logged in within the past 90 days
2. Users of all mobile platforms who have logged in within the past 90 days
3. Excludes Commercial Card; includes Liquid accounts
4. Kantar TNS ("TNS") Retail Banking Monitor. Based on national data (49,244 surveys in 2018 and 2017). Calculations are derived from the following questions (answered by 2,463 customers in 2018 and 2017): "Which is your primary bank?" and "In what year did [selected bank] become your primary bank?" Data is weighted by TNS to ensure the survey is representative of the U.S. population
5. FDIC 2018 Summary of Deposits survey per S&P Global Market Intelligence. Excludes non-retail branch locations and 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
6. Based on 2018 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
7. Represents 2018 general purpose credit card ("GPCC") spend, which excludes private label and Commercial Card; based on company filings and JPMorgan Chase estimates
8. Represents 2018 share of loans outstanding, which excludes private label, AXP Charge Card and Citi Retail Cards; based on company filings and JPMorgan Chase estimates
9. Inside Mortgage Finance; Chase was the #2 jumbo mortgage originator for FY18
10. Dealogic as of January 1, 2019
11. Coalition, preliminary 2018 rank analysis for the following peer set: 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. The market share and rank analysis are based on JPMorgan Chase's business structure

## Notes on slide 4 – We have exceptional client franchises... (2/2)

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12. Institutional Investor

13. Based on third-party / external data

14. Source of assets under custody ("AUC"): Company filings

15. S&P Global Market Intelligence as of December 31, 2018

16. Represents total JPMorgan Chase revenue from investment banking products provided to CB clients

17. Refinitiv LPC, FY18

18. Euromoney; 2018 results released February 2019

19. The "% of 2018 JPMAM ("JPMorgan Asset Management") long-term mutual fund 10-year assets under management ("AUM") above peer median" 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, 2018. 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 on the annual management fees charged, 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

## Notes on slide 5 – ...and we are gaining market share in nearly all of our businesses

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1. Dealogic as of January 1, 2019
2. Coalition, preliminary 2018 market share analysis reflects JPMorgan Chase's share of the global industry revenue pool and is based on JPMorgan Chase's business structure
3. Based on average balances during indicated time period
4. 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
5. FDIC 2018 Summary of Deposits survey per S&P Global Market Intelligence. Excludes non-retail branch locations and 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
6. Represents GPCC spend, which excludes private label and Commercial Card; based on company filings and JPMorgan Chase estimates
7. Represents share of end-of-period ("EOP") loans outstanding, which excludes private label, AXP Charge Card and Citi Retail Cards; based on company filings and JPMorgan Chase estimates
8. Primary relationship based on internal JPMorgan Chase definition
9. Inside Mortgage Finance ("IMF") and JPMorgan Chase internal data. Excludes AWM originations
10. Experian AutoCount data; reflects financing market share for new and used loan and lease units at franchised and independent dealers
11. Strategic Insight as of February 2019. Reflects active long-term mutual funds and exchange-traded funds ("ETFs") only. Excludes fund of funds and money market funds
12. Capgemini World Wealth Report 2018. Market share estimated based on 2017 data (latest available)
13. Bloomberg as of January 3, 2019; excludes exchange-traded notes ("ETN")

## Notes on slide 6 – Proven best-in-class long-term performance

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1. Represents EOP core loans, which are calculated as follows: EOP total loans less noncore loans. The CAGR for USB and PNC is based on total loans; noncore loans are defined as "liquidating" for WFC, and loans reported in the "All Other Segment" for BAC and CitiHoldings for C. Source: company disclosures
2. Total EOP deposits – from fourth quarter company reports. Retail deposits – source: FDIC 2018 Summary of Deposits survey per S&P Global Market Intelligence; excludes non-retail branch locations and all branches with \$500mm+ in deposits within the last ten years for 2013-2018 comparison and two years for the 2017-2018 comparison (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
3. Revenue is based on JPMorgan Chase's internal analysis excluding the impact of funding valuation adjustments ("FVA"), debit valuation adjustments ("DVA") and certain non-core items for JPMorgan Chase and the peer banks; and business simplification for JPMorgan Chase
4. Coalition, preliminary 2018 market share analysis reflects JPMorgan Chase and the peer banks' share of the global industry revenue pool and is based on JPMorgan Chase's business structure
5. Dealogic as of January 1, 2019
6. Total AUM net flows
7. Includes AWM total client flows, Chase Wealth Management investments and new-to-firm Chase Private Client deposits
8. Represents Investment Management division total assets under supervision ("AUS") net flows
9. Represents Investment Management total AUM inflows plus Wealth Management fee-based asset flows
10. Includes net new money from Asset Management and Global Wealth Management divisions. Net new money for 2014 reflects old reporting structure due to data availability. In 2018, UBS began to report flows for 2016-2018 in U.S. dollars ("USD"). Flows for 2014 and 2015 were converted to USD at the 2014-2015 daily average exchange rate
11. Represents GPCC spend, which excludes spend related to private label and commercial credit cards; based on company filings and internal JPMorgan Chase estimates; C reflects Branded Cards North America; COF reflects Domestic Card; AXP reflects the U.S. consumer segment and internal JPMorgan Chase estimates for AXP's U.S. small business sales
12. Source: Nilson data; U.S. Bankcard volumes include Visa and MasterCard credit card and signature debit volumes in the U.S.
13. Source: 2018 J.D. Power U.S. Retail Banking Satisfaction Survey; Big banks is defined as top six U.S. banks (Chase, PNC, USB, C, BAC, and WFC) based on asset size

## Notes on slide 7 – Macroeconomic backdrop

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1. Federal Reserve as of December 18, 2018; J.P. Morgan Investment Bank Global Economic Research and DataQuery as of February 22, 2019
2. 2004 cycle dates; 06/04-06/06; quarterly results shown above. Excludes earnings credit rate ("ECR") impact
3. J.P. Morgan Investment Bank U.S. Economic Research, DataQuery as of February 22, 2019



## Notes on slide 9 – Evolution of the balance sheet (cont'd)

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1. Totals may not sum due to rounding
2. In determining the 2014-2018 CAGR, non-operating balances used for 2014 reflect the average for the month of December 2014 and not the full year average. Non-operating balances include only those in CIB, CB and Corporate based on the U.S. LCR rule, and include all certificates of deposits in Corporate, and exclude non-operating balances in CCB and AWM
3. Includes Corporate
4. See note 2 on slide 29
5. Loans classified as runoff portfolios, discontinued portfolios and portfolios the Firm has an intent to exit

## Notes on slide 11 – Evolution of regulatory framework

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1. Supervisory Capital Assessment Program
2. Comprehensive Capital Analysis and Review
3. Total Loss Absorbing Capacity
4. Global Systemically Important Banks

## Notes on slide 16 – Noninterest revenue

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1. See note 1 on slide 28
2. Excludes 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 and revaluation of tax-oriented investments related to the Tax Cuts & Jobs Act ("TCJA")
3. Includes a card rewards liability adjustment, mark-to-market gains on certain equity investments previously held at cost and Credit Adjustments & Other in CIB
4. Annual average is based on the simple average of month-end balances for each period
5. Markets includes both NII and NIR

## Notes on slide 17 – Adjusted expense

---

1. See note 3 on slide 28
2. See note 1 on slide 28
3. Includes compensation expense related to increased hiring of revenue-producing bankers

## Notes on Fixed Income

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### Slide 22 – Continuing to optimize funding mix

1. Includes federal funds purchased 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 ~\$3B as of December 31, 2018
2. The Firm's obligations under the collateralized commercial paper ("CCP") programs, short-term Federal Home Loan Bank ("FHLB") advances and other borrowed funds ("OBF") are reported in short-term borrowings on the Firm's Consolidated balance sheet. Obligations under the asset-backed commercial paper ("ABCP") programs are included in beneficial interests issued by consolidated variable interest entities on the Firm's Consolidated balance sheet
3. Includes junior subordinated debt

### Slide 23 – Managing maturity profile and TLAC efficiency

1. Eligible long-term debt ("LTD") with maturities > 1 year count toward the external TLAC ("total loss absorbing capacity") requirement. Eligible LTD with maturities > 2 years, plus 50% of eligible LTD with maturities 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 \$0.6B for 2019, \$0.3B for 2020, \$0.1B for 2021, \$0.2B for 2022, \$0.4B for 2023 and \$1.3B after 2023

### Slide 24 – JPMorgan Chase & Co. (HoldCo) benchmark issuance – TLAC continues to drive issuance activity

1. Excludes preferred stock 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

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### Slide 25 – Firmwide wholesale long-term funding outstanding

1. Senior unsecured for banking subsidiaries includes subordinated debt of \$7.7B and \$3.9B in 2015 and 2016, respectively, and \$0.3B in both 2017 and 2018
2. Includes junior subordinated debt
3. Includes \$1.8B and \$1.5B of student loan securitizations in 2015 and 2016, respectively
4. Includes \$0.5B of other secured debt in a Holding Company subsidiary in each of 2015 and 2016

### Slide 27 – Wholesale funding sources – purpose and key features

1. Currently it is not optimal from a regulatory capital treatment perspective to issue wholesale long-term funding with a tenor of less than 10 years
2. Commercial Paper ("CP")/CCP/ABCP can be issued up to 397 days, except for CP/CCP relying on the 3(a)3 exemption, which has a maximum tenor of 270 days. Certificates of Deposit ("CD") do not have a maximum contractual maturity. FHLB advances may have a legal maturity of up to 30 years and may also be extendible. Only funding with maturities > 365 days get full benefit for the net stable funding ratio ("NSFR")
3. Callable CP, CCP and ABCP may be issued, but the Firm has not issued such debt to-date
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

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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, 2018, which has been filed with the Securities and Exchange Commission and is available on JPMorgan Chase & Co.'s website (<https://jpmorganchaseco.gcs-web.com/financial-information/sec-filings>), and on the Securities and Exchange Commission's website ([www.sec.gov](http://www.sec.gov)). JPMorgan Chase & Co. does not undertake to update any forward-looking statements.

# CORPORATE & INVESTMENT BANK

February 26, 2019

FIRM OVERVIEW

- CORPORATE & INVESTMENT BANK
- CONSUMER & COMMUNITY BANKING
- ASSET & WEALTH MANAGEMENT
- COMMERCIAL BANKING

JPMORGAN CHASE & CO.

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# Agenda

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4    Closing remarks	30
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## We delivered strong results and had a record year in 2018

### Adjusted revenues<sup>1</sup> and income<sup>2</sup> (\$B)

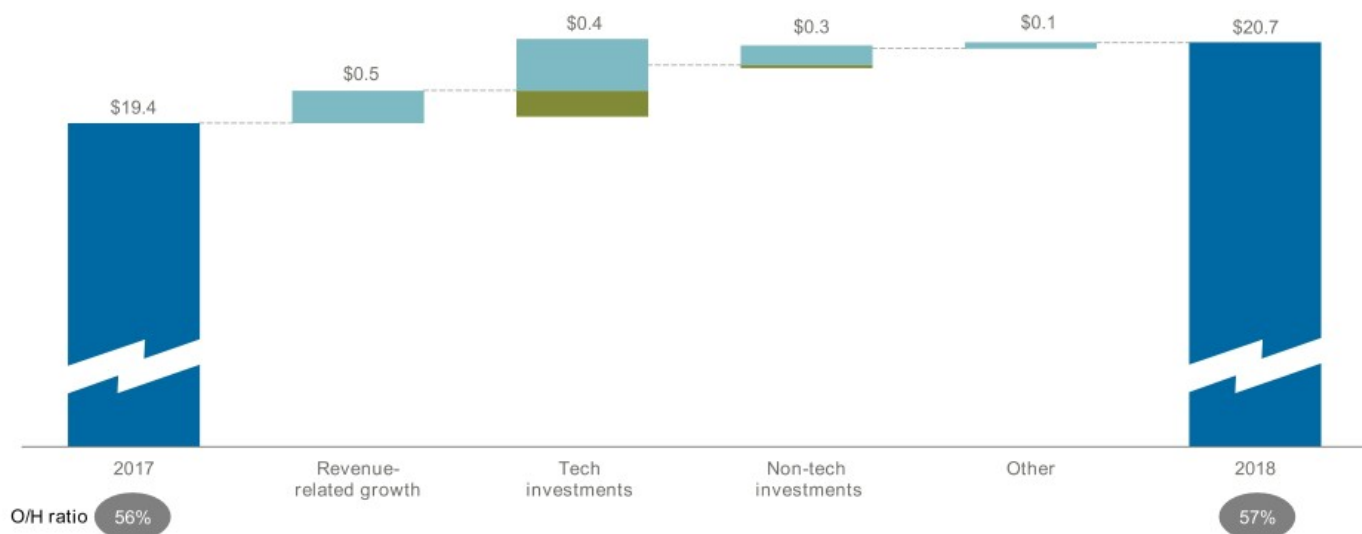
CIB ROE <sup>3</sup>	13%	14%	16%	14%	16%
Capital (\$B)	\$61	\$62	\$64	\$70	\$70



Note: For footnoted information, refer to Page 33

## Expenses increased due to higher revenues and additional investments

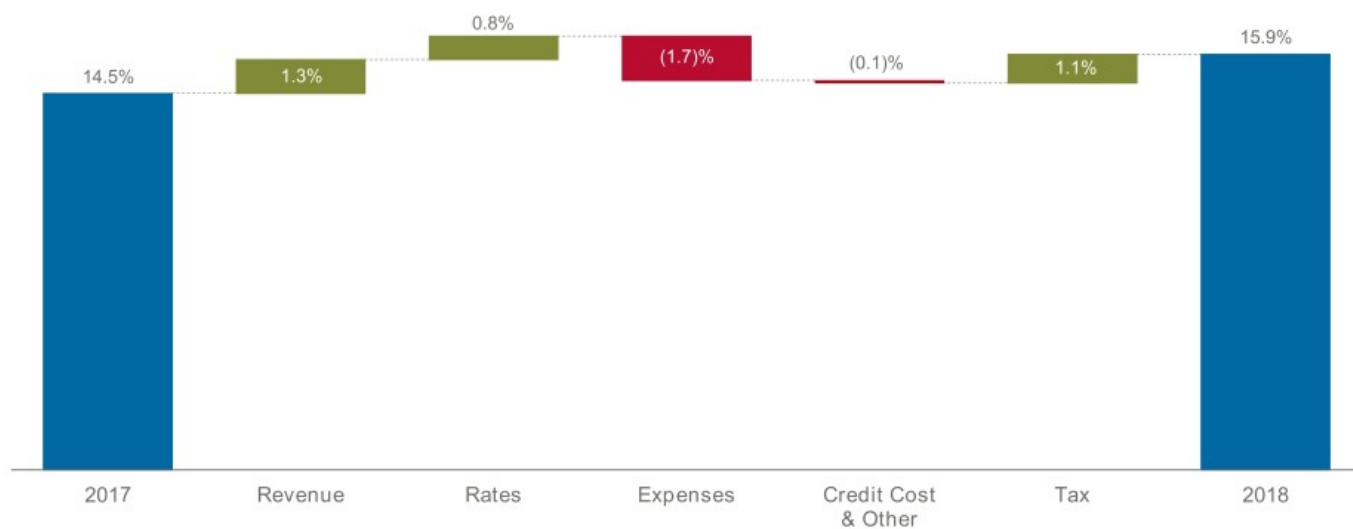
2017 to 2018 (\$B)<sup>1</sup>



<sup>1</sup> Expense adjusted for legal expense

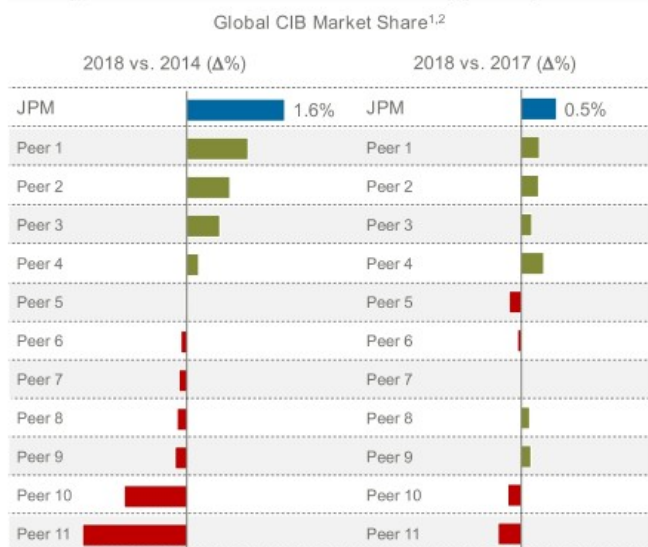
ROE increased from 14.5% in 2017 to 15.9% in 2018

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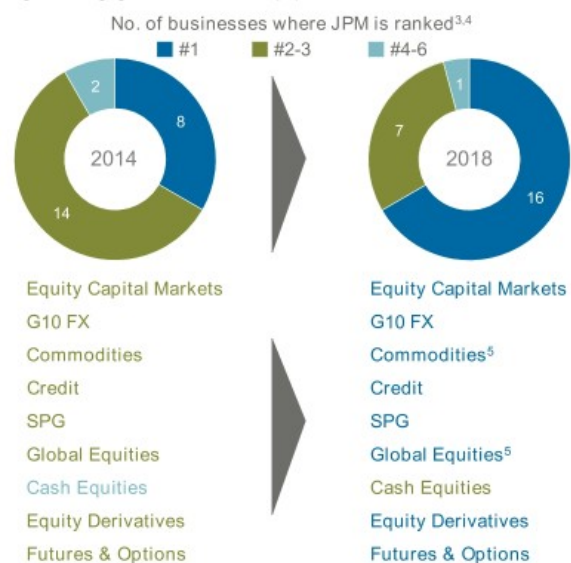
## CIB gained market share faster than peers, strengthening our leadership across businesses

### Gaining market share at a faster rate than any of our peers



Note: For footnoted information, refer to Page 34

### Strengthening global leadership positions across businesses



JPMORGAN CHASE & CO.

Global Investment Banking (GIB) grew share across all regions resulting in 8.7% market share in 2018 (highest since 2009)

#### GIB Wallet



Growth in GIB share of wallet across regions, 2014 to 2018<sup>1</sup>



#### M&A



#### DCM



#### ECM



#1 worldwide in Investment Banking fees for 10 consecutive years

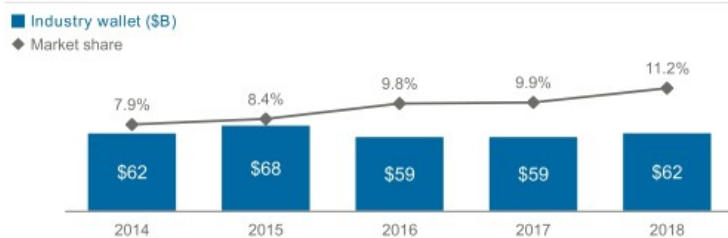
Participated in 7 of the 10 top fee paying deals in 2018

Generated \$7.5 billion in fees in 2018, a full year record

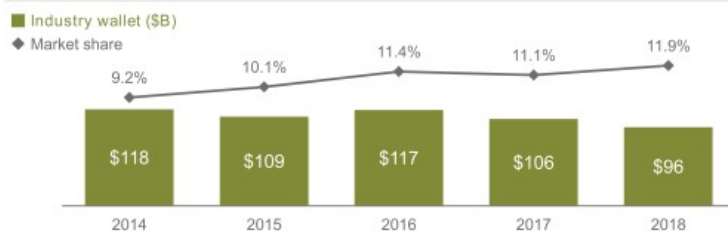
<sup>1</sup> Growth figures are rounded to the nearest tenth  
Source: Dealogic as of Jan 1, 2019; ECM excludes shelf deals. DCM excludes money market, short-term debt

## Markets business continued to increase market share across products while delivering strong returns

### Equities<sup>1</sup>



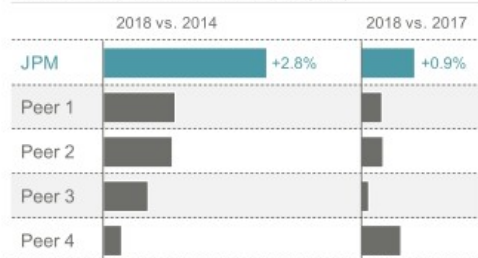
### FICC<sup>1</sup>



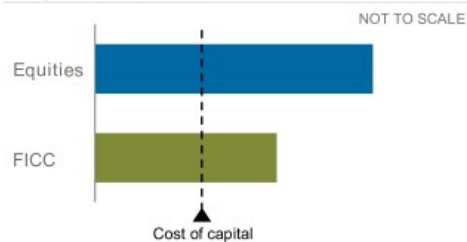
Note: For footnoted information, refer to Page 35

6

### Global Markets market share (Δ%)<sup>1,2,3</sup>



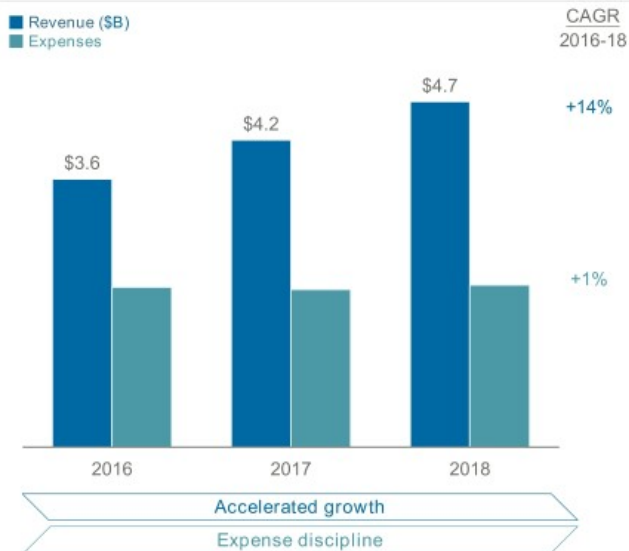
### Marginal ROE, 2018



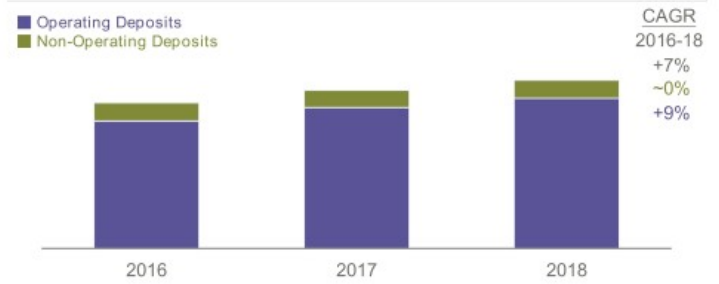
JPMORGAN CHASE & CO.

CIB Treasury Services business has grown significantly since 2016 through a combination of rising rates and organic growth

#### Strong growth in CIB TS revenue and operating leverage



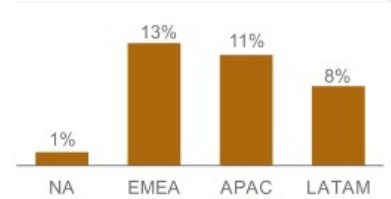
#### Strong growth in deposits...



#### ... across all client segments



#### ...and in all regions

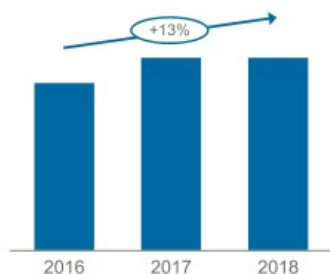




## Securities Services continues to transform itself; unprecedented new business wins and improved operating models have yielded record financial results

### Winning industry-leading mandates...

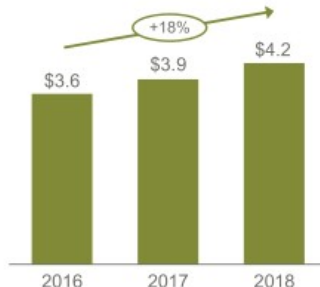
■ Assets Under Custody  
→ Total 2016-2018 change



Significant **growth and improvements in scale** as we optimized our infrastructure

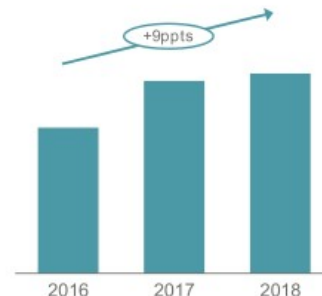
### ...resulted in highest recorded revenue and operating margins

■ Revenue (\$B)  
→ Total 2016-2018 change



Transformed the business to deliver **operational excellence** and improved platform stability

■ Operating Margin  
→ Total 2016-2018 change



Investments in technology driving **scale and efficiencies**

## We continue to focus on technology investments, productivity and efficiency

---

### We continue to invest in...

- Best in class client experiences
  - Digital, seamless, omni-channel user experiences
  - Focus on personalization and intelligence
  - Simple and self service
- Leveraging and exposing APIs
  - Standardized, re-usable components
  - Internally within JPM and externally with clients
- Data and advanced analytics
  - Embedded across the product portfolio
  - Enable data-driven decision making
- Resilient and scalable infrastructure
  - Multi-cloud, hybrid-cloud strategy
  - Optimization and rationalization
- Proactive cybersecurity to keep pace with evolving threat landscape
  - Continuous data protection
  - Secure client authentication
- Innovation by leveraging emerging technologies
  - Artificial Intelligence / Machine Learning
  - Containers
  - Distributed Ledger

To achieve this, we are driving productivity and efficiency through a transformation across our Technology organization

**Software Engineering Efficiency**  
Improve the speed, quality and security of software delivery

**Platform Simplification**  
Drive agility, lower costs and improve time to market

**Portfolio Governance**  
Provide transparency, consistent tooling and governance of the investment lifecycle

# Agenda

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## Select Markets topics for today

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### Growth in Equities

- Multi-year performance, especially in Cash Equities and Prime Finance
- Key focus areas for the Equities franchise going forward



### Impact of electronification

- Drivers of electronification and its impact on client needs
- Pace of electronification and estimated impact to overall Markets franchise

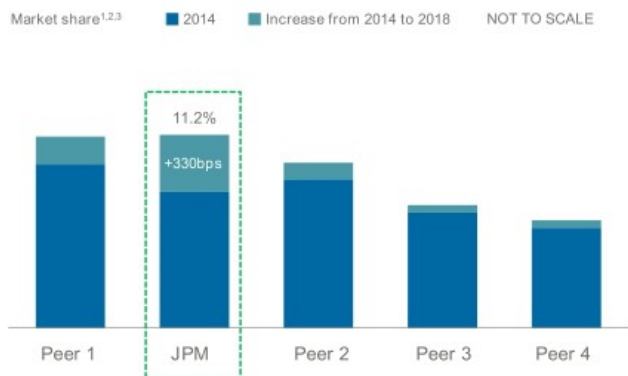


### Performance of client franchise

- Growth in share across Institutional and Corporate clients
- Investments to help address our clients' evolving needs

Our Equities franchise has steadily gained market share across our key products, benefiting from multi-year investments in execution capabilities

#### Our market share increased 330bps over the last 5 years...



#### ...driven by improved performance across all products



Cash Equities: Improved ranking from #6 in 2014 to #3 in 2018

Equity Derivatives: Ranked #1 since 2015

Prime Finance: Ranked #2 since 2016

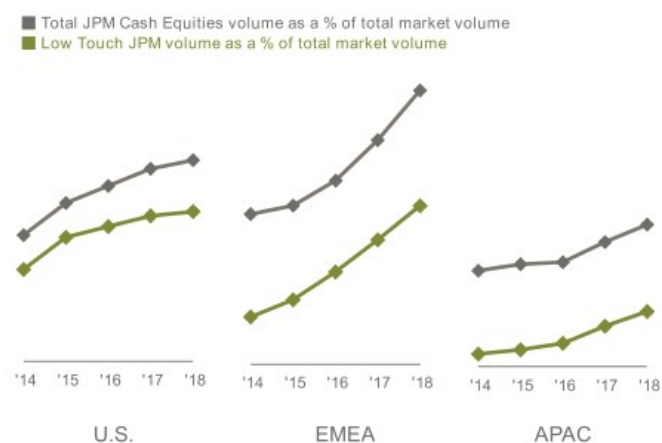
Note: For footnoted information, refer to slide 36

## Sustained investments and focus in Cash Equities has spurred substantial growth

### Global Cash Equities revenue



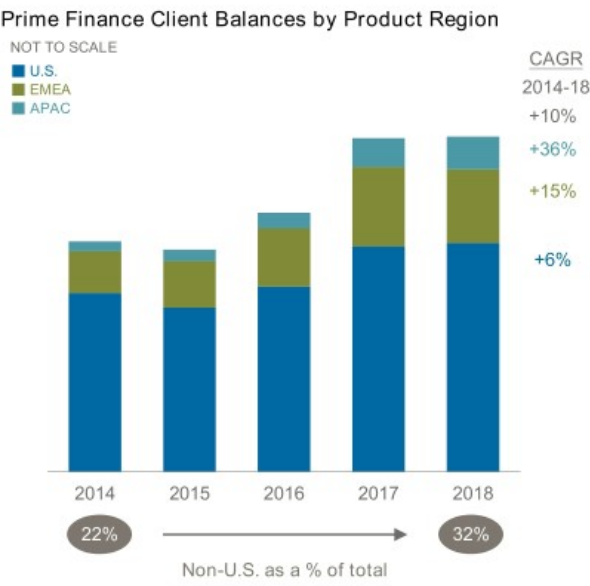
### Increase in share of Cash Equities volumes driven by Low Touch



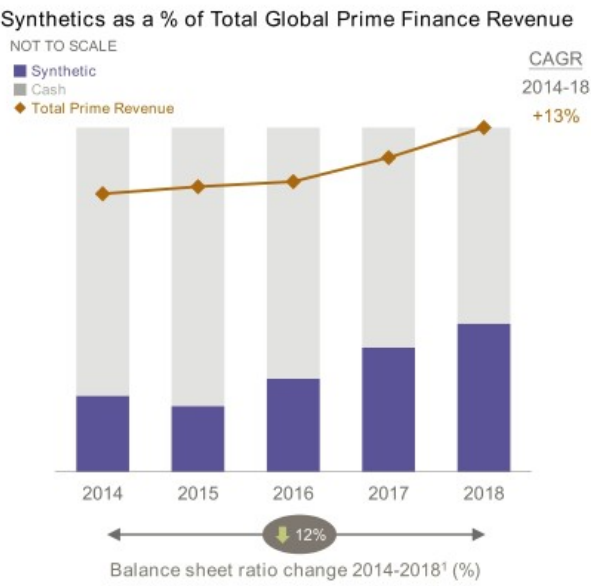
Our Cash Equities business is benefiting from stronger execution capabilities, higher Low Touch volumes and increased global reach

<sup>1</sup>Source: Coalition, preliminary 2018 analysis of global industry revenue pool

Market share gains in all regions yielded record revenue and client balances in Prime Finance



<sup>1</sup> FY Average Third Party Assets divided by FY Average Gross Client Financing Balances



## Equities franchise will continue to pursue technology and talent investments

---

### Pillars of our strategy

Invest in product and  
technology



Expand scale and  
geographic reach



Enhance coverage, service  
and operational framework



2019 performance will be market dependent but expect scale, liquidity solutions and client facing platforms to be key differentiators



# Electronification has been primarily driven by two types of factors and has created an even greater need for more sophisticated execution tools

## Key types of electronification drivers



Organic

- Electronification driven by **client and dealer demand for choice, transparency, liquidity and efficiency**
- This is a **steady long term trend** that is stabilizing in the most standardized markets such as FX
- As a result, clients benefit from increasing innovation and execution **tools which reduce execution costs**



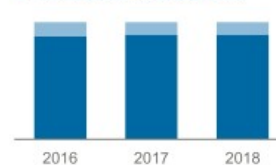
Regulatory

- **Regulations around execution standards** (most recently MiFID II) have also acted as a catalyst for some asset classes and driven greater electronification
- As a result, clients are looking to leverage work flow benefits of electronic execution to **reduce operational costs**

## Illustration of impact over last few years

### FX Spot

■ Electronic volumes as a % of total

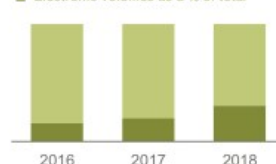


2017-2018 growth in electronic volumes



### Euro Swaps<sup>1</sup>

■ Electronic volumes as a % of total



2017-2018 growth in electronic volumes



Electronification continues to drive client need for more sophisticated execution tools to reduce execution and operational costs

<sup>1</sup> Euro Swaps volumes exclude Internal and Compression trades

## We are investing in technology to provide clients with more sophisticated execution tools

### Example: Algo Central

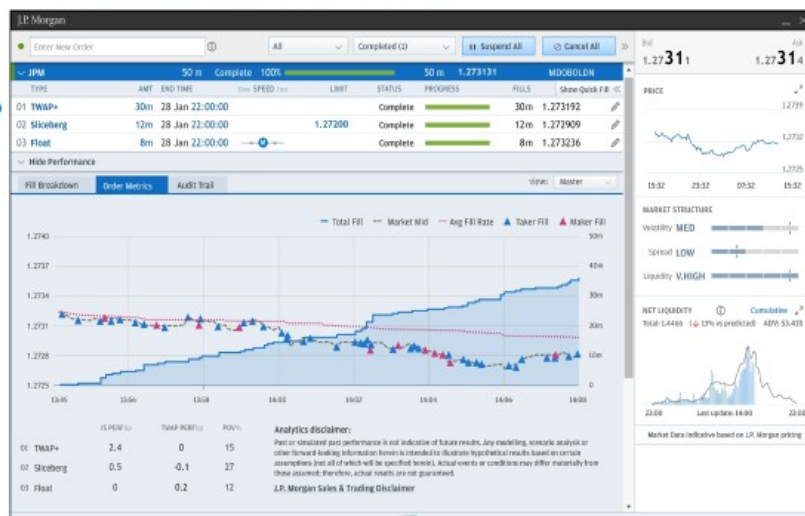
- Single entry point providing **seamless access to JPM's execution algos** and analytics to help reduce costs

#### Tailored Execution

- Ability to customize your order structure

#### Wider availability

- Integrated with JPM proprietary and third party distribution platforms



#### Rich analytics

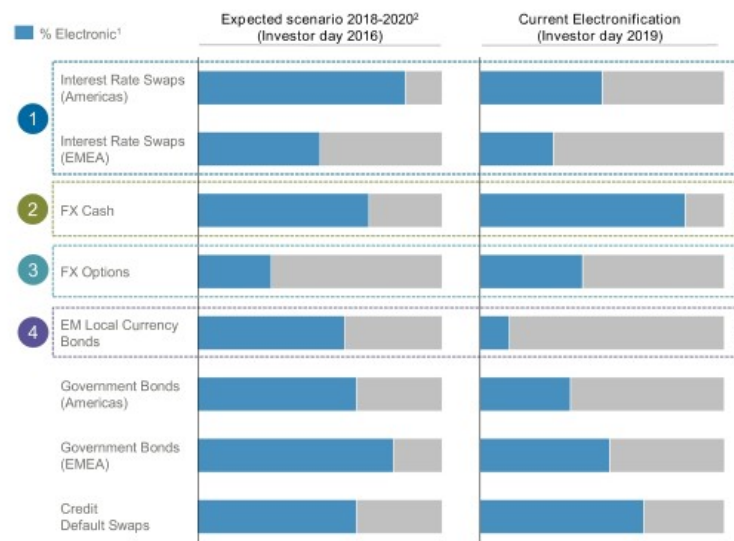
- Access to pre-trade predictions, live execution monitors and post-trade performance analytics

#### Real-time control

- Change speed, execution style and even your strategy while the order is live

## Pace of electronification has varied across different FICC products

### Electronification for select FICC asset classes



Source: JPMorgan Chase internal estimates; all estimates are global averages unless a regional product is specified  
Note: For footnoted information, refer to slide 37

### Key observations

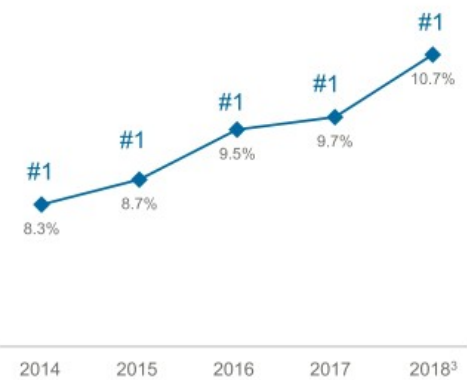
- 1 **Interest Rate Swaps**
  - Higher Electronic RFQ volumes
  - Lower volumes on Central limit order book type execution
- 2 **FX Cash**
  - Market fragmentation & rise of non-bank liquidity providers
  - Investments in e-trading infrastructure positioned us well
- 3 **FX Options**
  - Lower execution volumes on multi-dealer platforms
  - Yield compression marginally offset by increased e-volumes
- 4 **EM Local Currency Bonds**
  - Voice liquidity preferred for large sizes
  - Not all instruments listed on multi-dealer platforms
  - MiFID II deferral impacted actual electronification

JPMORGAN CHASE & CO.

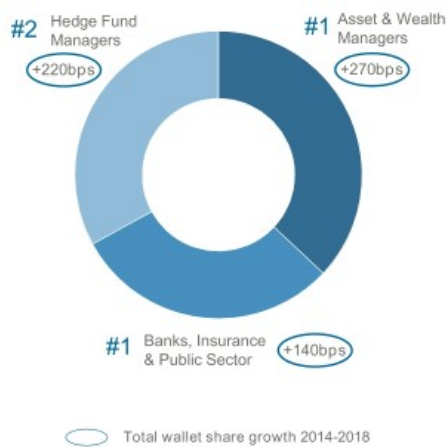
We remain highly committed to strengthening our diversified client franchise, building on top of our consistent Markets wallet growth with Institutional and Corporate clients

Institutional clients<sup>1</sup>

◆ JPM market share with Institutional clients  
# JPM rank

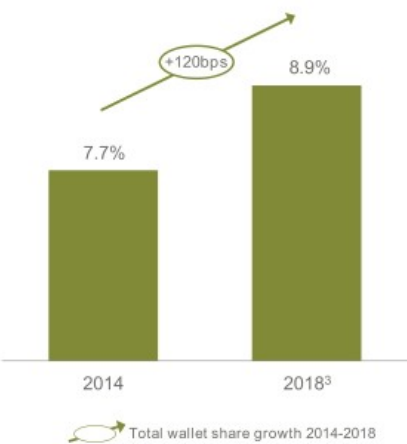


JPM Institutional clients revenue mix



Corporate clients<sup>2</sup>

■ JPM market share with Corporate clients



Note: For footnoted information, refer to slide 38

Going forward, we are investing to address clients' evolving needs for capital and risk solutions

---



### Next-gen analytics

- Increased continuity and simplified workflow between clients and us – across research, sales and trading
- Multi-asset pre-trade analytics and data platform for clients
- Smart quoting and automated risk management for trading functions
- Data analytics and visualization platform for sales functions



### Best-in-class execution

- Providing client access to next generation algo execution, enhanced with pre-trade, real-time and post-trade capabilities
- Enabling systematic market making through Artificial Intelligence-driven execution capabilities
- Aggregating client and market data to enhance trade recommendations, through analytics and research



### Enhanced client experience

- Quick, efficient and secure access, authentication, documentation and onboarding
- APIs enabling access to growing number of services, whenever and however clients choose
- Customization through smart search, while delivering curated solutions and topical content to clients

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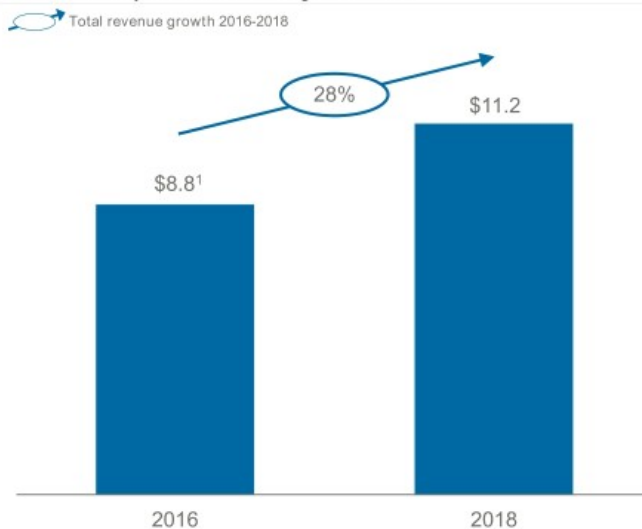
## Wholesale Payments recorded \$11B revenue and grew by 28% over the last two years



**Wholesale Payments**  
includes following services  
delivered to clients **across**  
**the firm**

- Treasury Services
- Merchant Acquiring
- Commercial Card
- Trade Finance

**Wholesale Payments revenue growth<sup>1</sup>, \$B**



- #1 Treasury Services bank worldwide
- #1 Merchant Acquirer in the U.S. & Europe
- Industry leading virtual and traditional card payment solutions
- \$1 trillion+ in annual merchant processing volume

**\$6 trillion daily  
payments Firmwide**

<sup>1</sup> Merchant Acquiring revenue in 2016 excludes a one time gain from sale of stake in Visa Europe

We bring the entire suite of Wholesale Payments products across our clients of all sizes and complexities

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#### Corporates



Multinational Corporations



Middle Market Companies



Small Businesses

#### Financial Institutions



Banks & Broker-Dealers



Non-Bank Financial Institutions

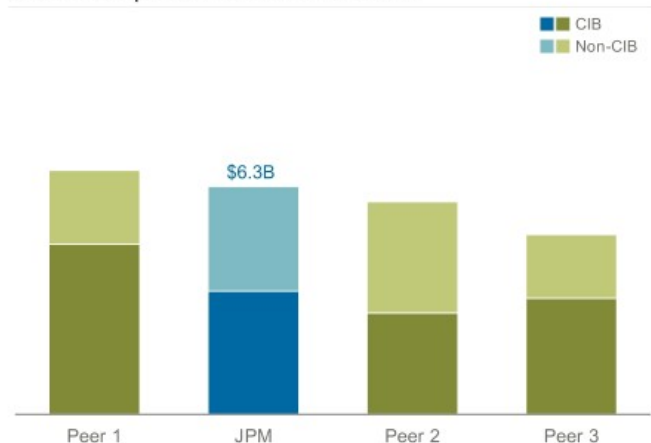


Public Sector

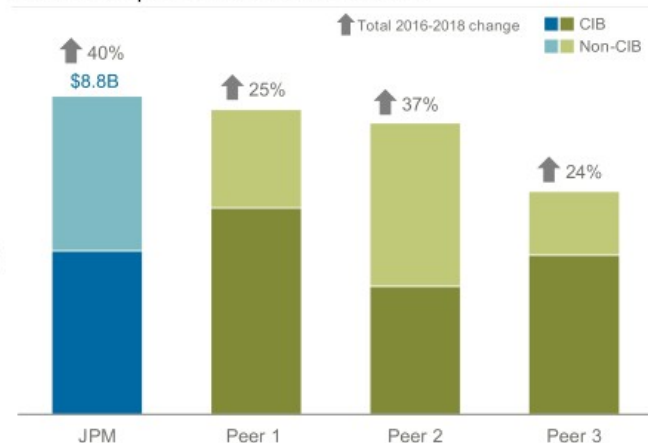


Our strong performance in Firmwide Treasury Services over the course of the last two years has made us a market leader

FY2016 Competitor Revenue Benchmark<sup>1</sup>



FY2018 Competitor Revenue Benchmark<sup>1</sup>



Ranked #1 at the Firmwide level due to faster growth than our key competitors

Note: For footnoted information, refer to slide 39

We are creating a unique value proposition for our clients through our integrated Wholesale Payments strategy

---

### Our Wholesale Payments strategy...



Any product,  
anywhere

- Accept and collect from any method of payment, in any currency, anywhere in the globe



Flexible channel  
connectivity

- Enable clients to connect to us in whatever way they want, from a single global exchange to APIs



Real-time analytics  
& optimization

- Provide data-driven insights to our clients, to improve their operational and capital efficiency

### ...is supported by...

#### Integrated global platforms

- Offer scalable modular architecture that supports full capabilities across payments and cash management needs

#### Best-in-class controls

- Provide a robust security and control environment with the backing of a single, trusted counterparty

#### Innovation & partnership agenda

- Offer clients maximum choice and access to best of breed solutions including in-house and partner-led innovations

## We continue to make progress on delivering global, scalable platforms

### Core Payments



#### Key Milestones

- Live today in several countries
- Featuring a number of state-of-the-art configurable components



#### Looking Ahead

- Reduce costs by decommissioning legacy platforms
- Significant improvement in speed to market for future product development

### Merchant Acquiring



- Launching new platform with pilot merchants in July 2019
- Building capabilities and partnerships across APAC and LATAM countries

- Expand rollout in APAC and LATAM – including local acquiring
- Integrate customer experience across payments and merchant acquiring
- Expand capabilities in the U.S. small business market, leveraging WePay asset

### Innovation



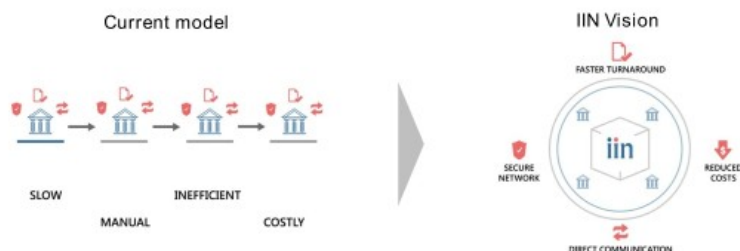
- Interbank Information Network
  - 185+ signed letters of intent
  - Live with several banks
- First U.S. bank with a digital coin

- Reach ubiquity with 200+ banks
- Launch apps on the IIN network
- Enable JPM Coin<sup>1</sup> to other platforms and standard blockchain networks

<sup>1</sup> JPM Coin is a prototype. JPMorgan Chase will complete all internal procedures and satisfy all regulatory and compliance obligations, prior to any live products or services being launched utilizing JPM Coin

## Interbank Information Network and JPM Coin: examples of Wholesale Payments innovation

### iin Interbank Information Network Eliminating Information Inefficiencies





- Global distributed network for **real-time, interconnected flow of information**
- **185+ banks with signed LOIs** – on target to be the largest blockchain-based banking information network
- **Initial focus on building utility applications** that address immediate pain points
  - **Resolve:** streamline process for resolving inquiries related to payments (live today)
  - **Validate:** global beneficiary and account validation (in testing)
- **Longer-term vision to build a platform ecosystem** with value-added applications developed by participants targeting more complex issues: onboarding, KYC, errors, returns, etc.

### JPM Coin<sup>1</sup> Will Enable 24/7/365 Global Value Transfer

- Digital coin designed to facilitate **instantaneous payments** using distributed ledger technology
  - Will be available to JPMorgan Chase institutional clients
  - Prototype tested successfully
- JPM Coin will **facilitate payments in United States Dollars**
  - Will be extended to other major currencies in the future
  - Will be issued on Quorum Blockchain, but can be used on other blockchain platforms
- **Many potential uses** in the future for institutional clients of JPMorgan Chase:
  - Cross-border money movement 24/7/365 – outside traditional banking hours
  - Payments for asset transfers over blockchain
  - Internal liquidity optimization for large, complex corporate clients

<sup>1</sup> JPM Coin is a prototype. JPMorgan Chase will complete all internal procedures and satisfy all regulatory and compliance obligations, prior to any live products or services being launched utilizing JPM Coin

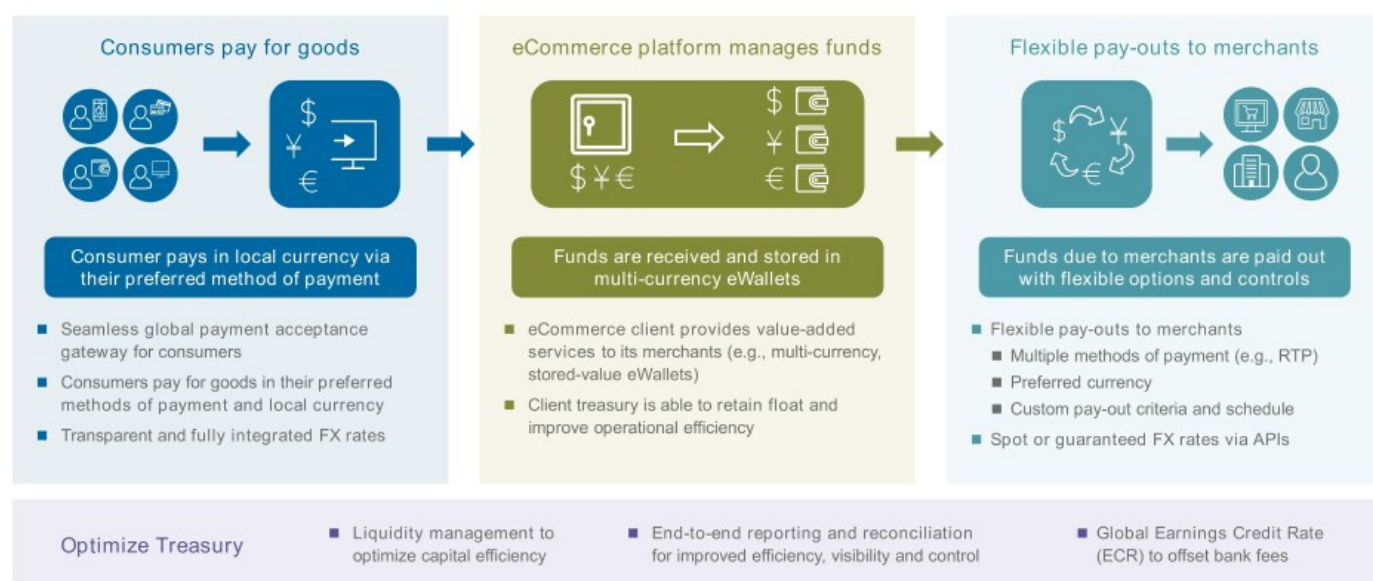
## Product innovation delivered over the past 12 months

	 Key Milestones	 Looking Ahead
 Global MassPay	<ul style="list-style-type: none"> <li>■ 100+ countries</li> <li>■ ~50 currencies</li> </ul>	<ul style="list-style-type: none"> <li>■ 120+ countries</li> <li>■ 70+ currencies</li> </ul>
 Virtual Account Management	<ul style="list-style-type: none"> <li>■ Live in all regions by <b>March 2019</b></li> <li>■ ~40 currencies</li> </ul>	<ul style="list-style-type: none"> <li>■ Complete roll-out across all major markets</li> </ul>
 APIs & Open Banking	<ul style="list-style-type: none"> <li>■ Industry-leading API environment</li> </ul>	<ul style="list-style-type: none"> <li>■ Launch <b>new front-end terminals</b> for clients</li> <li>■ Expand partnerships with FinTechs, ERP / TMS providers</li> <li>■ Become a <b>leader in Open Banking</b> in EMEA</li> </ul>
 Digitization / Automation	<ul style="list-style-type: none"> <li>■ Account opening in <b>&lt; 70 seconds</b></li> <li>■ <b>98%+</b> STP rate</li> </ul>	<ul style="list-style-type: none"> <li>■ Increase <b>automation</b> across client lifecycle</li> <li>■ Expand <b>Machine Learning</b>-based solutions</li> </ul>
 Real-Time Payments	<ul style="list-style-type: none"> <li>■ <b>First</b> bank to be live in <b>USD, EUR and GBP</b></li> <li>■ Clients across <b>CIB, CB</b> and <b>Chase.com</b></li> </ul>	<ul style="list-style-type: none"> <li>■ Expand <b>leadership</b> in RTP globally</li> <li>■ Explore <b>new real time cross-border</b> opportunities</li> </ul>

## U.S. Real-Time Payments: product innovation at scale



## eCommerce platform: Example of our end-to-end Wholesale Payments solutions and benefits





Our strategic focus is to be the leader in delivering solutions to meet all of our clients' treasury and payments needs

---



### Middle Market and Small Businesses

- Bundled solutions for payment needs, including merchant acquiring services and core cash management
- Focus on simplicity, ease of implementation and user experience
- Integrated set of digital capabilities with multiple connectivity options



### Large Multinational Corporates

- Consultative approach to design bespoke solutions, providing visibility and efficiency across liquidity and payments
- Existing GCB and GIB clients
- Opportunities in every region and industry
- \$1 billion gap to #1



### FIG (Banks, NBFIs and Public Sector)

- Global clearing capabilities with leading scale and efficiency
- Deep expertise in every client segment and region
- Operational excellence and best-in-class controls
- Industry-leading innovations – e.g., Interbank Information Network (IIN) blockchain service

We have a complete suite of products and services to serve clients of all segments and sizes and can tailor our solutions for their individual, unique needs



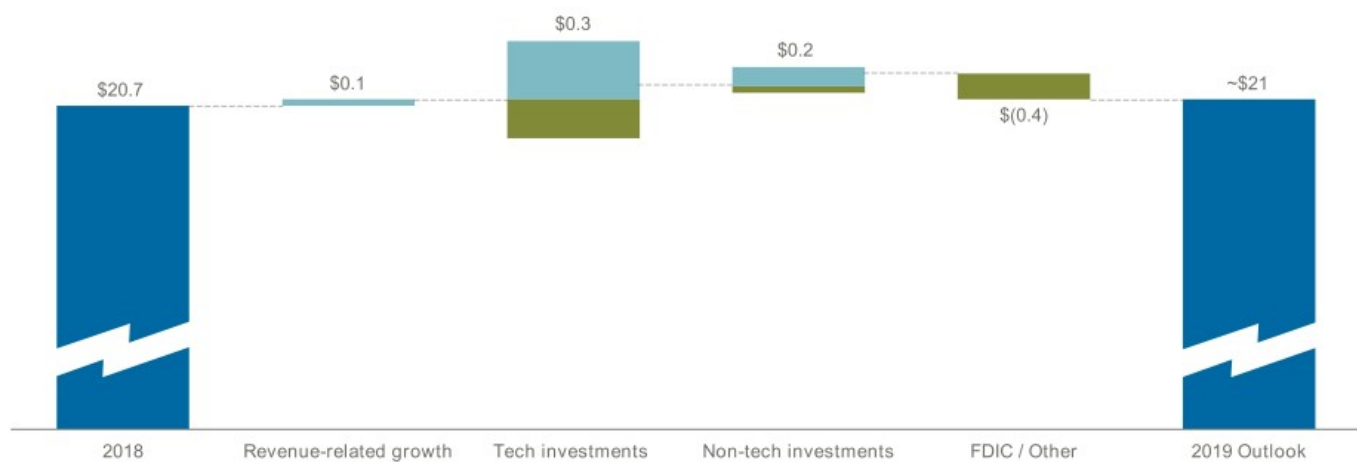
# Agenda

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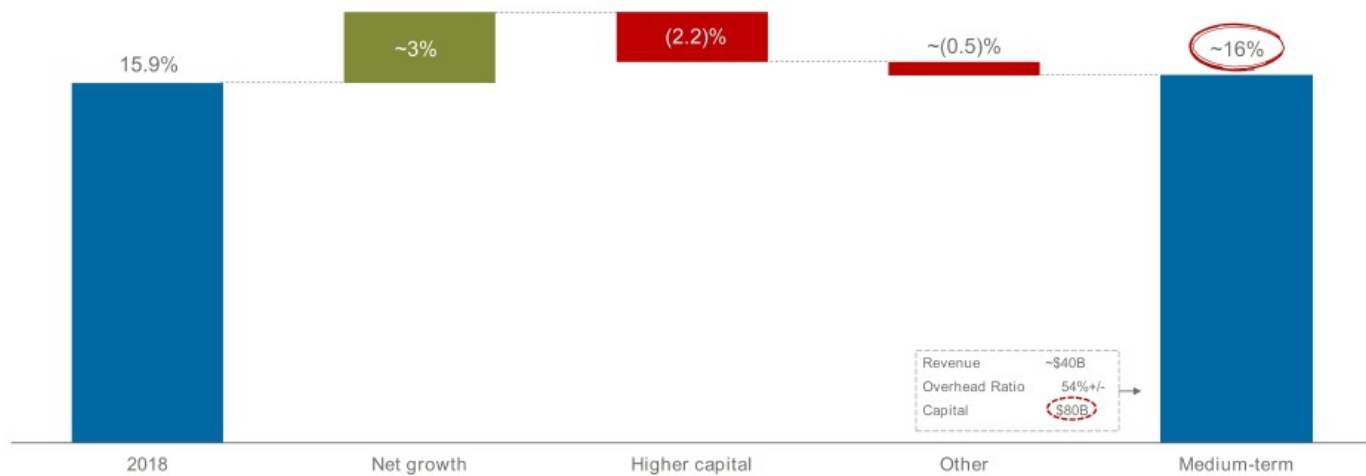
## Expense walkforward (adjusted)

2018 to 2019 Outlook (\$B)<sup>1</sup>



<sup>1</sup> Expense adjusted for legal expense

## ROE Walk: 2018 Actuals – Medium-term target



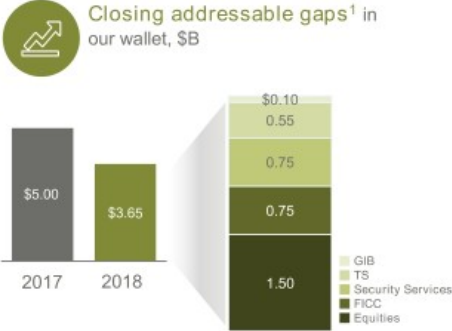
We remain focused on maintaining day-to-day discipline, optimizing our current model and transforming for the future

Maintaining day-to-day discipline

- Continuous focus on **client experience** and **ease of doing business**
- Best-in-class execution** and delivery against our core strategic priorities
- Unflinching risk, credit, capital, liquidity and expense **discipline**

Note: For footnoted information, refer to slide 40

Optimizing our current model



Transforming for the future

- Investing in **new and emerging tech** to develop a future-proof infrastructure
- Reshaping our approach to data** to unlock the true power of ML & AI and transform the way we do business with our clients
- Develop new business opportunities** and create an unparalleled client experience

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## Notes on slide 1 – We delivered strong results and had a record year in 2018

---

### Notes

1. Adjusted revenue excludes the impact of business simplification initiatives. As a result, adjusted revenue is lower by \$1.9 billion, \$353 million, \$220 million, \$86 million and \$47 million for 2014, 2015, 2016, 2017 and 2018, respectively
2. Adjusted net income excludes the impact of (1) business simplification on revenue and expense, and (2) legal expense. As a result, adjusted net income is higher by \$1.7 billion, \$1.1 billion, \$72 million, \$16 million and \$226 million for 2014, 2015, 2016, 2017 and 2018, respectively
3. CIB ROE represents adjusted net income/capital. Reported ROE was 10%, 12%, 16%, 14% and 16%, for 2014, 2015, 2016, 2017 and 2018, respectively
4. Adjusted overhead ratio represents adjusted revenue/adjusted expense

## Notes on slide 4 – CIB gained market share faster than peers, strengthening our leadership across businesses

---

### Notes

1. CIB market share analysis – Source: Coalition. Market share analysis reflects JPMorgan Chase's share of the global industry revenue pool and is based on JPMorgan Chase's business structure
2. Peer numbering may be different across pages
3. Ranks for Banking - Source: Dealogic as of January 1, 2019
4. Ranks for Markets, Treasury Services and Securities Services - Source: Coalition, preliminary 2018 rank analysis based on following peer-sets and is based on JPMorgan Chase's business structure
  - Markets (BAML, BARC, BNPP, CITI, CS, DB, GS, HSBC, JPM, MS, SG and UBS)
  - Treasury Services (BAML, BNPP, CITI, DB, HSBC, JPM, SG, SCB and WFC)
  - Securities Services (BAML, BBH, BNY, CITI, CACEIS, DB, HSBC, JPM, NT, RBC, SCB, SS and SG)
5. Co-ranked #1

## Notes on slide 6 – Markets business continued to increase market share across products while delivering strong returns

---

### Notes

1. Source: Coalition, preliminary 2018 market share analysis reflects JPMorgan Chase's share of the global industry revenue pool and is based on JPMorgan Chase's business structure. FY18 analysis is based on preliminary results and peer-set BAML, BARC, BNPP, CITI, CS, DB, GS, HSBC, JPM, MS, SG and UBS
2. Analysis reflects top 4 peers within peer-set
3. Peer numbering may be different across pages



## Notes on slide 11 – Our Equities franchise has steadily gained market share across our key products, benefiting from multi-year investments in execution capabilities

---

### Notes

1. Source: Coalition 2018 preliminary Competitor Analytics. Equities Market Share reflects share of the global industry revenue pool. Market Share & rank analysis based on JPMorgan Chase's business structure. FY18 analysis is based on preliminary results and peer-set BAML, BARC, BNPP, CITI, CS, DB, GS, HSBC, JPM, MS, SG and UBS
2. Analysis reflects top 4 peers within peer-set
3. Peer numbering may be different across pages

## Notes on slide 17 – Pace of electronification has varied across different FICC products

---

### Notes

1. % Electronic is based on notional volume executed through Single Dealer Venues, Multi Dealer Venues / Non-Central Limit Order Books and All-to-all / Central Limit Order Books
2. Source: JPMorgan Chase's Investor Day 2016 on February 23, 2016

Notes on slide 18 – We remain highly committed to strengthening our diversified client franchise, building on top of our consistent Markets wallet growth with Institutional and Corporate clients

---

Notes

1. Source: Coalition Institutional Wallet Analytics – based on the leading 1,300 Institutional Clients across Global Markets products only
2. Source: Coalition Corporate Wallet Analytics – based on the leading 2,000 Corporate Clients across Global Markets products only
3. FY18 share is based on 3Q18 for Institutional and 1H18 for Corporates

## Notes on slide 22 – Our strong performance in Firmwide Treasury Services over the course of the last two years has made us a market leader

---

### Notes

1. Source: Coalition, preliminary FY18 competitor analysis. Analysis reflects TS revenues (excluding Commercial Cards) across CIB and non-CIB and is based on top 3 peers within peer-set: BAML, BNPP, CITI, DB, HSBC, JPM, SG, SCB and WFC

## Notes on slide 32 – We remain focused on maintaining day-to-day discipline, optimizing our current model and transforming for the future

---

### Notes

1. Source: Coalition, preliminary FY18 Competitor Analytics. Gap analysis reflects addressable gap to the product leader across multiple asset-classes by region based on Coalition's preliminary FY18 Competitor Analytics and reflects JPMorgan Chase's business structure. Addressable Gap represents gap that JPMorgan Chase is able to address with relatively little change in business model or investment

# CONSUMER & COMMUNITY BANKING

February 26, 2019

FIRM OVERVIEW

CORPORATE & INVESTMENT BANK

► CONSUMER & COMMUNITY BANKING

ASSET & WEALTH MANAGEMENT

COMMERCIAL BANKING

JPMORGAN CHASE & CO.

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## We remain focused on a consistent set of strategic priorities

---

- Deliver **One Chase experiences** that provide choice, security, ease, personalization, and integrated payments
- Create **interoperability** between physical and digital channels to provide seamless omni-channel experiences for our customers
- Execute **expense management strategies** while continuing to **invest** for the future
- Continue in our unwavering commitment to operate an effective and efficient **risk and control environment**
- **Protect** the Firm's systems and confidential data from internal and external threats, and **safeguard** the privacy of customers and employees
- Attract, develop, and retain the **best talent** for today and the future, harnessing the power of diversity



## We have made significant progress against our commitments

### We have committed to...

Deliver One Chase experiences to grow share from a position of strength

Create interoperability between physical and digital channels

Manage expenses while continuing to invest in the future

Operate an effective and efficient risk and control environment

### ...and have delivered on those promises

- ✓ Relationships with ~50% of U.S. households – of which 25% have a multi-LOB relationship
- ✓ ~2x retail deposit growth rate vs. the industry<sup>1</sup>
- ✓ #1 in total U.S. card sales volume and #1 in credit card outstandings<sup>2</sup>

- ✓ Differentiated our customer experience with a seamless omni-channel approach
- ✓ Expanded into new markets utilizing integrated physical and digital channels
- ✓ Digitally opened ~1.5mm deposit accounts since Feb. 2018<sup>3</sup>

- ✓ Reduced overhead ratio by ~4ppts since 2014
- ✓ Increased investments in technology and marketing by ~30% since 2016 – deployed with discipline

- ✓ Improved risk monitoring capabilities to enable surgical pullbacks
- ✓ De-risked the mortgage business

Note: For footnoted information, refer to slide 43

## Performance targets

### Consumer & Community Banking targets

		2017	2018	2019 outlook	
Business Banking	Net charge-off rate	0.57%	0.49%	↔	
Home Lending	Net charge-off / (recovery) rate <sup>1</sup>	0.03%	(0.02%)	↔	
Card Services	Net charge-off rate	2.95%	3.10%	↔	Medium-term: Modestly higher on mix
	Net revenue rate	10.57%	11.27%	11.50%+/-	Prior year target 11.25%+/-
Auto	Net charge-off rate	0.51% <sup>2</sup>	0.38%	↔	
				Medium-term guidance	
Total CCB	ROE	17%	28%	25%+	
	Overhead ratio	56%	53%	50%+/-	

<sup>1</sup> Excludes the impact of purchased credit-impaired ("PCI") loans and reperforming and non-performing loan sales

<sup>2</sup> Included ~\$50mm of incremental charge-offs reported in accordance with regulatory guidance related to customer bankruptcies; adjusted net charge-off rate of 0.43%

## Continuous investment is driving strong momentum across key business drivers

Key business drivers (\$B, except ratios and where otherwise noted)

		2018	YoY $\Delta$
Consumer & Community Banking	Households (mm)	61.7	1%
	Small businesses (mm)	4.2	5%
	Active digital customers <sup>1</sup> (mm)	49.3	5%
	Active mobile customers <sup>2</sup> (mm)	33.3	11%
	Average deposits	\$670	5%
	Average loans	\$478	2%
Consumer Banking	Average deposits	\$527	4%
	Deposit margin <sup>3</sup>	2.38%	41 bps
	Client investment assets (end of period)	\$282	3%
Business Banking	Average deposits	\$130	7%
	Average loans	\$24	5%
Home Lending	Total mortgage originations	\$79	(19%)
	Average loans	\$242	2%
	Total loans serviced (end of period)	\$790	(3%)
Credit Card	Sales volume <sup>4</sup>	\$692	11%
	Average loans	\$146	4%
Merchant Services	Merchant processing volume	\$1,366	15%
Auto	Loan and lease originations	\$32	(5%)
	Average loan and leased assets	\$83	4%

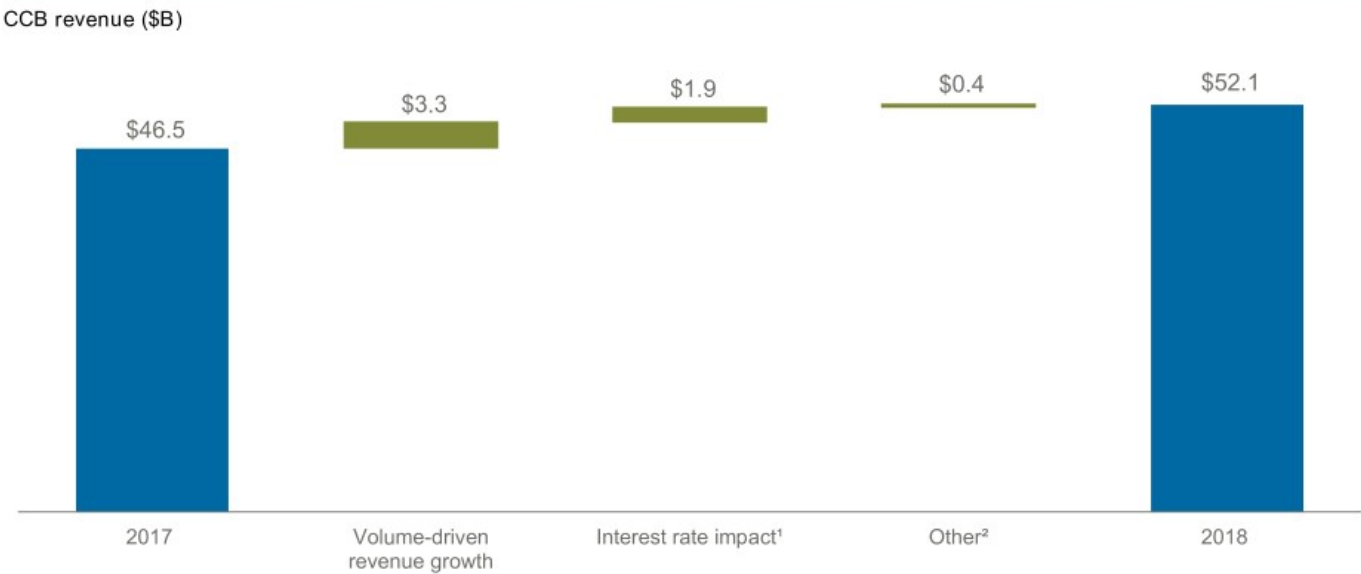
<sup>1</sup> Users of all web and/or mobile platforms who have logged in within the past 90 days

<sup>2</sup> Users of all mobile platforms who have logged in within the past 90 days

<sup>3</sup> Includes Consumer and Business Banking deposits

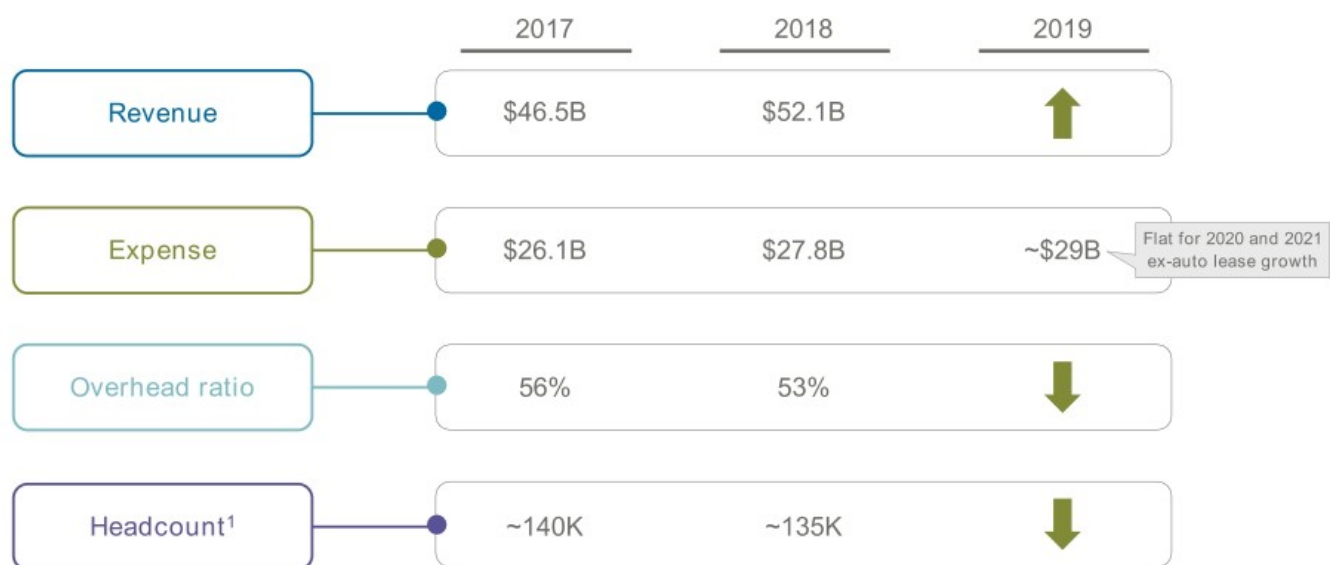
<sup>4</sup> Excludes Commercial Card

Volume-driven growth and rate benefit drove strong top-line results for the year



Note: Numbers may not sum due to rounding  
<sup>1</sup> Includes Home Lending production revenue margin compression due to increased competition in a smaller market  
<sup>2</sup> Reflects Sapphire Reserve acquisition costs, net of Card deal renegotiations

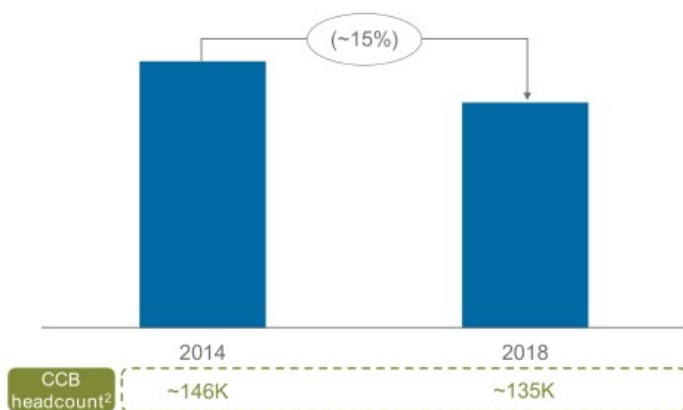
We improved our operating leverage while continuing to invest and grow



<sup>1</sup> Includes employees and contractors. 2017 excludes Commercial Card headcount. During 3Q18, ~1,200 employees transferred from CCB to CIB as part of the reorganization of the Commercial Card business

Our investments made it easier for customers to self-serve and enabled operational efficiencies and workforce transformation, which have lowered costs

#### Reduction in cost to serve<sup>1</sup> per CCB household



CCB's overhead ratio has improved ~4ppts from 2014 – 2018, while the cost to serve efficiency ratio<sup>1</sup> has improved ~10ppts

#### Efficiency examples

Customer behavior shift

>80% of transactions completed through **self-service channels**<sup>3</sup>

Operational efficiencies

Inbound calls per household **down 3%**<sup>4,5</sup>  
Cost per call **down 7%**<sup>4,5</sup>

Workforce transformation

Technology / digital headcount up **2K+**<sup>4</sup>  
Operations headcount down **~7K**<sup>4</sup>

Going forward, expect continued headcount reductions in operations and efficiencies in technology / digital

Note: For footnoted information, refer to slide 44

## We have a portfolio of investments that will fuel long-term results

### Increasing efficiency

- Technology investments in 2018 are expected to generate:
  - **>\$1B** in annual run-rate savings<sup>1</sup>
  - ROI<sup>2</sup> of **>2x**

### Digital experience and innovation

- Created differentiated experiences (e.g., QuickPay with Zelle®, Digital Account Opening, Credit Journey<sup>SM</sup>) for **49mm** active digital customers<sup>3</sup>, up **5% YoY**
- Pace of product launches has accelerated over the last 12 months

### Marketing

- Marketing investments in 2018 generated:
  - **~8mm** new Card accounts, which are expected to drive **~\$80B** in spend<sup>4</sup>
  - **2mm+** new Consumer Banking households and **~\$15B** in average deposits<sup>4</sup>

### Branch expansion

- Opened first 10 branches in 3 expansion markets (Boston, Washington, D.C., and Philadelphia), which alone represent a **~\$400B** deposit opportunity
- Regulatory approval for another 8 expansion markets, representing an additional **~\$300B** deposit opportunity

### Regulatory and controls

- Continue to uplift standards – cybersecurity, KYC, and data

<sup>1</sup> Reflects projected 2022 results for technology programs with active development in 2018

<sup>2</sup> Reflects five-year cumulative pretax income excluding development costs divided by development costs for expense-reducing technology programs with active development in 2018

<sup>3</sup> Users of all web and/or mobile platforms who have logged in within the past 90 days

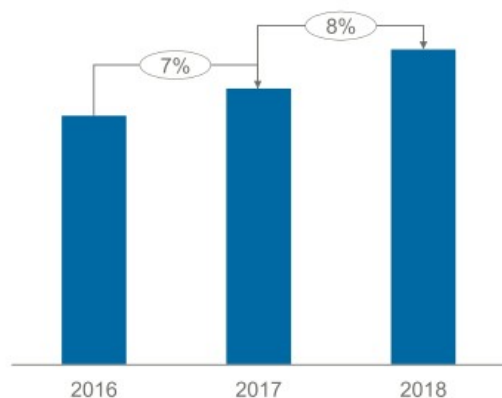
<sup>4</sup> Reflects steady-state year 3 performance for Card and year 1 performance for Consumer Banking

## The power of our digital platform

Our digital platform is embedded in our customers' daily lives...

**49mm** Active digital customers<sup>1</sup>

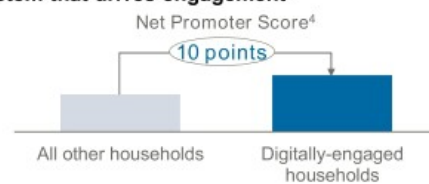
Monthly digital logins per customer<sup>2</sup>



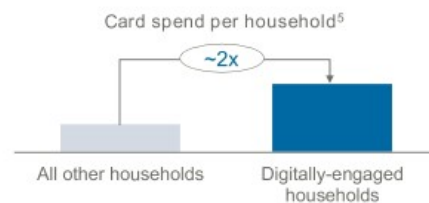
Note: For footnoted information, refer to slide 45

...creating an ecosystem that drives engagement<sup>3</sup>

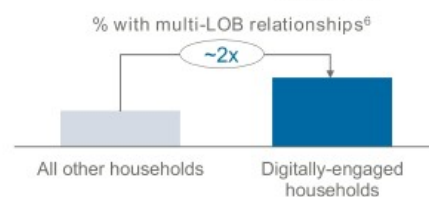
Customers are more satisfied...



...more engaged...



...and have deeper Chase relationships



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# Agenda

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## We have made significant progress against our priorities

---

### Acquire and deepen relationships

- ✓ Grew Consumer Banking deposit & investment balances by **\$215B** since 2014<sup>1</sup>
- ✓ Acquired **2.5mm** net new households since 2014<sup>2</sup>

### Increase engagement

- ✓ **75%** of new customers are mobile-active after 6 months<sup>3</sup>
- ✓ **22mm** mobile-active Consumer Banking customers, up 8% since last year<sup>4</sup>

### Increase efficiency

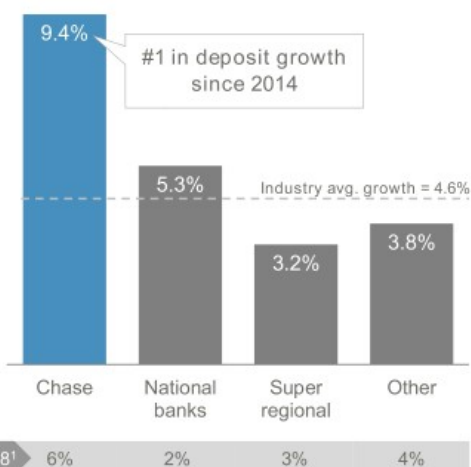
- ✓ Lowered the variable cost per Consumer Banking household by **14%** since 2014<sup>5</sup>
- ✓ Reduced teller transactions by **34%** since 2014<sup>6</sup>

Note: For footnoted information, refer to slide 46

# We continue to grow our business at an industry-leading pace, winning with both new and existing customers

## We are growing at an industry-leading pace...

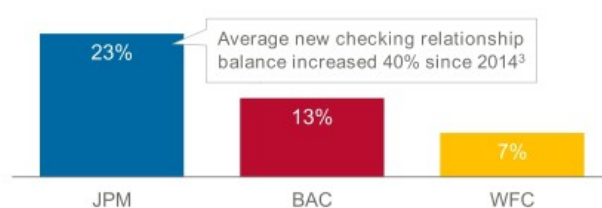
Four year deposit growth<sup>1</sup>  
2014 – 2018 CAGR



Note: For footnoted information, refer to slide 47

## ...by winning with both new and existing customers

Share of new primary bank relationships in 2017 and 2018<sup>2</sup>



↑ 4.6ppts increase in overall customer satisfaction since 2014<sup>4</sup>

↓ 2.5ppts decrease in attrition rate since 2014<sup>5</sup>

JPMORGAN CHASE & CO.

Our investments in digital platforms and functionality have made it easier for customers to self-serve

---

**#1** largest active mobile banking customer base among U.S. banks<sup>1</sup>

**#1** fastest-growing mobile banking customer base among U.S. banks<sup>1</sup>

Everyday digital activities enabled by Chase

Manage your finances with the Chase app



**21**

Mobile logins per month in 2018<sup>2</sup>

Up 9% since 2017

Split a bill with friends using QuickPay with Zelle®



**7.6mm**

QuickPay with Zelle® active users in 2018<sup>3</sup>

Up from 5.8mm in 2017

Deposit checks with QuickDeposit<sup>SM</sup>



**29%**

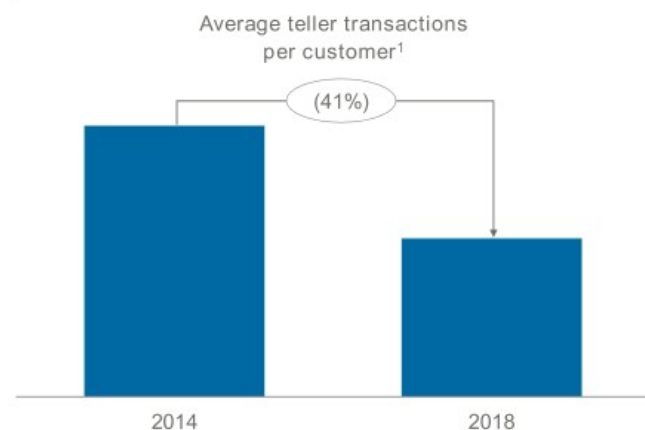
Proportion of check deposit transactions through QuickDeposit<sup>SM</sup> in 2018<sup>4</sup>

Up from 25% in 2017

Note: For footnoted information, refer to slide 48

## Our physical network has been critical to achieving industry-leading deposit growth

As we strengthen our self-service capabilities, customers are **transacting at the teller line less often...**



**...but still highly value a physical presence**

**#1** Convenient branch locations are the top consideration driver for prospective switchers<sup>2</sup>




**21mm** households have used a branch in the last year<sup>3</sup>

**70%** of our deposit growth from 2014 – 2018 was driven by households who frequently use branches<sup>4</sup>

We have maintained flexibility in our physical network  
Over 75% of our branches could be exited within 5 years and over 85% could be extended for more than 10 years

Note: For footnoted information, refer to slide 40

We are innovating across our channels and throughout the customer lifecycle

Open	Manage	Deepen
<ul style="list-style-type: none"><li>Digital Account Opening reduced time to open an account to 3 – 5 minutes<sup>1</sup></li><li>Launching Digital Account Opening in the branch will enable bankers to optimize their time for advice</li></ul>	<ul style="list-style-type: none"><li>First retail U.S. bank to send external transfers within 15 seconds via the new Real-Time Payments network<sup>3</sup></li><li>ATMs can process 74% of teller transactions<sup>4</sup></li></ul>	<ul style="list-style-type: none"><li>Increasing engagement and banker productivity through new tools such as Digital Meeting Scheduler</li><li>Deepening with CCB customers through better together products</li></ul>
<p>~1.5mm deposit accounts opened through Digital Account Opening since Feb. '18<sup>2</sup></p> 	<p>10ppts growth in digital engagement since 2014<sup>5</sup></p> 	<p>Multi-LOB engaged households contribute 2.5x higher pretax income<sup>6</sup></p> 

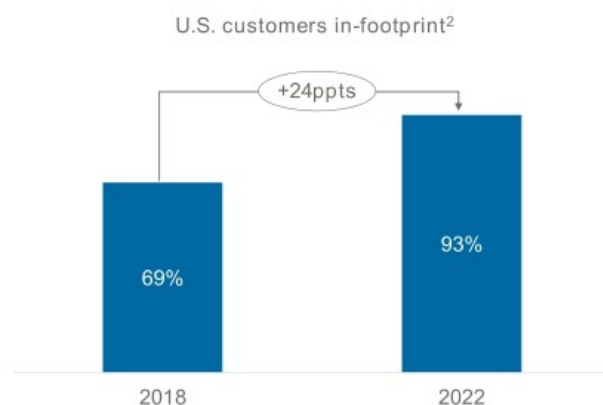
Note: For footnoted information, refer to slide 50

## We are effectively expanding our physical network to attractive new markets

### Drivers of effective market expansion

- ✓ **Attractive markets:** Large, fast-growing expansion markets, including three of the top 10 markets, which alone represent ~\$400B of industry deposits<sup>1</sup>
- ✓ **Cross-LOB customers:** Sizable existing customer base from other LOBs with high Chase brand affinity; Card customers have a 2.2x higher offer response rate
- ✓ **Omni-channel:** Powerful combination of branch-driven new-to-bank acquisitions and digitally-driven deepening
- ✓ **Smarter footprint:** Enabled by card transaction data and new ATM capabilities

### Delivering Chase to more of the U.S.



Applying this playbook to our existing network, we have grown our deposit share from 13% to 16% in top 10 markets while reducing our share of branches<sup>3</sup>

Note: For footnoted information, refer to slide 51

## We are well-positioned for long-term financial success and industry outperformance

---

### Acquire and deepen relationships

- ✓ Expand our physical footprint to cover **93%** of the U.S. population by the end of 2022 (up from 69% before market expansion), allowing us to reach **80mm** more U.S. consumers<sup>1</sup>
- ✓ Continue expanding our distribution beyond the branch through **Digital Account Opening**

### Increase engagement

- ✓ Scale banker digital tools and resources nationally to better connect our **26mm** active digital customers<sup>2</sup> with the right people to address their unique financial needs
- ✓ Utilize **in-branch digital account opening** efficiencies to further migrate banker time from process management to customer relationship building

### Increase efficiency

- ✓ Deploy **leaner, innovative** physical formats at scale across existing and expansion markets
- ✓ Continue to migrate transactions to **lower cost channels** through digital enhancements and ATMs that continue to get closer to teller parity

<sup>1</sup> 2018 U.S. population sourced from U.S. Census Bureau. Sum of population of states in which Chase currently has or will have a branch presence post market expansion

<sup>2</sup> Consumer Bank users who were 90-day active on an online or mobile platform in December 2018



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## We continue to build a high-quality, customer-focused Home Lending business

---

Maintain excellent origination credit quality	<ul style="list-style-type: none"><li>✓ We are taking a disciplined approach to growth<ul style="list-style-type: none"><li>■ Strong portfolio credit quality (average FICO 756, average CLTV 57%)<sup>1</sup></li><li>■ Loan balances optimized for liquidity and capital</li></ul></li></ul>
Improve quality of servicing portfolio and de-risk the business	<ul style="list-style-type: none"><li>✓ Our portfolio de-risking positions us well through the credit cycle, and we plan to maintain credit quality at this level<ul style="list-style-type: none"><li>■ Foreclosure inventory down to ~25K in 2018 from 93K in 2014</li><li>■ Continued improvement in servicing portfolio delinquency rates from 6.23% in Dec.'14 to 3.56% in Dec.'18<sup>2</sup></li></ul></li></ul>
Continue to focus on delivering a great customer experience...	<ul style="list-style-type: none"><li>✓ Customer satisfaction continues to improve<ul style="list-style-type: none"><li>■ Improvement in J.D. Power rank (+3 in Originations, +4 in Servicing) between 2017 and 2018<sup>3</sup></li><li>■ Record high Home Lending NPS score</li></ul></li></ul>
...while innovating to win with Chase primary bank customers	<ul style="list-style-type: none"><li>✓ We are investing in enhancements to deliver a differentiated home buying experience for Chase customers<ul style="list-style-type: none"><li>■ Chase MyHome digital mortgage fulfillment experience for customers and simplified applications with Chase data prefill</li><li>■ Digital and instant customer verification pilot</li></ul></li></ul>

<sup>1</sup> Excludes Private Bank loans and mortgage loans insured by U.S. government agencies

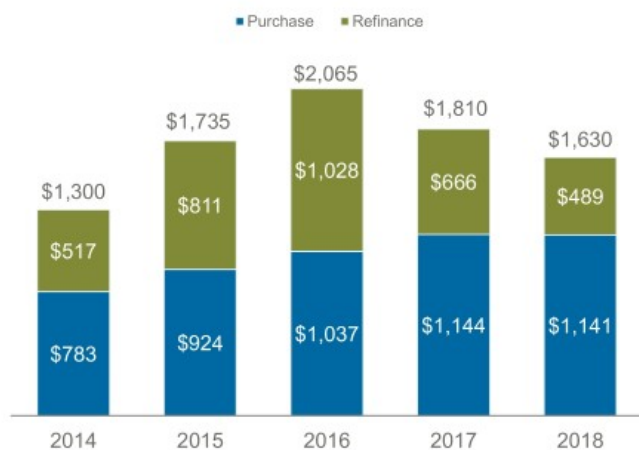
<sup>2</sup> Based on number of loans serviced. Includes foreclosures and second liens and excludes real estate owned ("REO") inventory

<sup>3</sup> Source: "U.S. Primary Mortgage Origination and Servicer Satisfaction Studies," J.D. Power, 2017 and 2018

## The home lending industry is in a state of transition

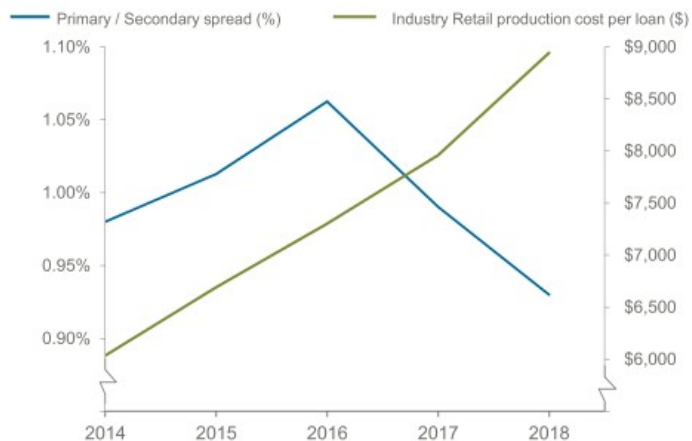
Profitability remains challenged across the industry as origination volume continues to decrease, spreads compress, and production costs rise

Mortgage origination market<sup>1</sup> (\$B)



Note: Numbers may not sum due to rounding  
Note: For footnoted information, refer to slide 52

Primary<sup>2</sup> / Secondary<sup>3</sup> mortgage rate spread and industry Retail production cost per loan (\$)<sup>4</sup>



We are being intentional in our positioning across production, servicing, and our portfolio

Key business drivers (\$B, except ratios where otherwise noted)

		2017	2018	YoY Δ
Home Lending Production	Total mortgage origination volume	\$98	\$79	(19%)
	Consumer origination volume	\$40	\$38	(5%)
	Correspondent origination volume	\$57	\$41	(28%)
	Total market mortgage origination volume <sup>1</sup>	\$1,810	\$1,630	(10%)
Home Lending Servicing	Total loans serviced (end of period)	\$816	\$790	(3%)
	Foreclosure units (K, end of period)	35	25	(29%)
	30+ delinquency rate <sup>2</sup>	4.97%	3.56%	(28%)
Home Lending Loans	Home Lending loans (average)	\$237	\$242	2%
	Home Lending core loans (average)	\$170	\$188	11%
	Home Lending net charge-off / (recovery) rate <sup>3</sup>	0.03%	(0.02%)	(5) bps

Note: Numbers may not sum due to rounding

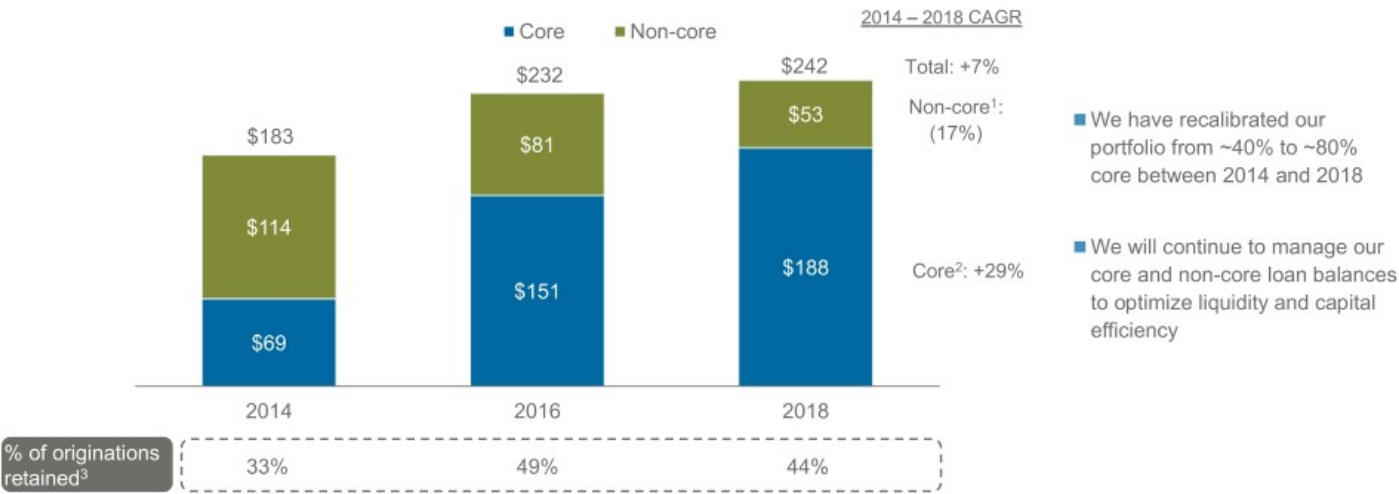
<sup>1</sup> Source: Inside Mortgage Finance ("IMI")

<sup>2</sup> Based on number of loans serviced. Includes foreclosures and second liens and excludes REO inventory

<sup>3</sup> Excludes the impact of PCI loans and reperforming and non-performing loan sales

# We have successfully rebalanced our loan portfolio

Home Lending average loan balances (\$B)



Note: Numbers may not sum due to rounding

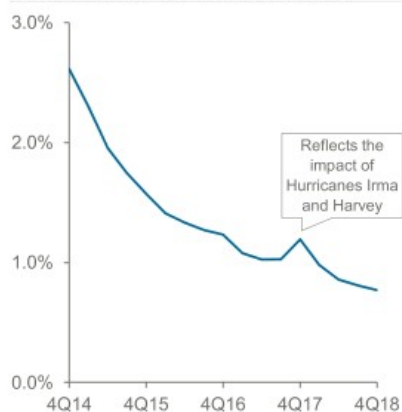
<sup>1</sup> Non-core loans include runoff portfolios, which are predominantly discontinued products no longer originated and PCI loans

<sup>2</sup> Core loans primarily include 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

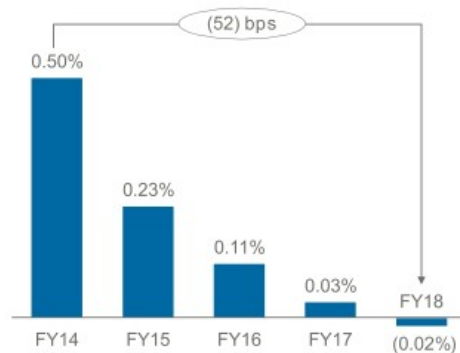
<sup>3</sup> Excludes Home Equity and Private Bank loans

## Portfolio credit quality continues to improve and is extremely strong...

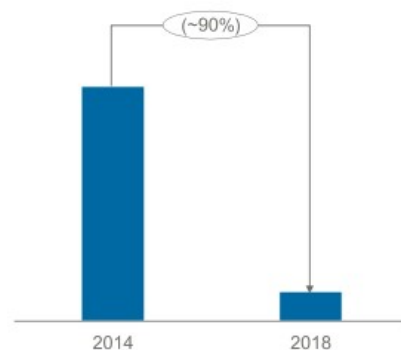
Home Lending<sup>1</sup> 30+ delinquency rate



Home Lending net charge-off / (recovery) rate<sup>2</sup>



% of Home Lending portfolio with FICO < 700 and CLTV > 80%<sup>3</sup>



<sup>1</sup> Excludes PCI loans and mortgage loans insured by U.S. government agencies that are 30 or more days past due. These amounts have been excluded based upon the government guarantee

<sup>2</sup> Excludes the impact of PCI loans and reperforming and non-performing loan sales

<sup>3</sup> Excludes Private Bank, PCI, and mortgage loans insured by U.S. government agencies

...and we continue to de-risk our servicing business, which will protect us in a downturn

#### 2014 – 2018 Chase servicing book activity

**"Coming In"** Dec. 2014 through Dec. 2018

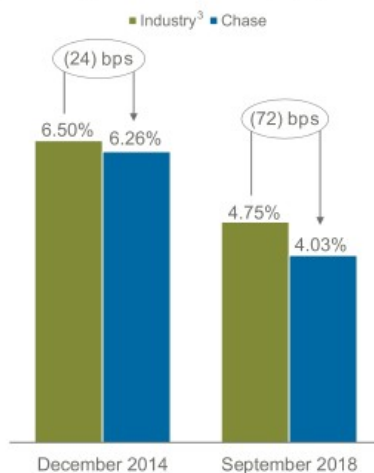
	Units	30+ delinquency rate <sup>1</sup>
New originations	~1.3mm	0.71%
Acquired servicing	~250K	1.77%
<b>Total "in flows"</b>	<b>~1.6mm</b>	<b>0.88%</b>

**"Going Out"** Dec. 2014 through Dec. 2018

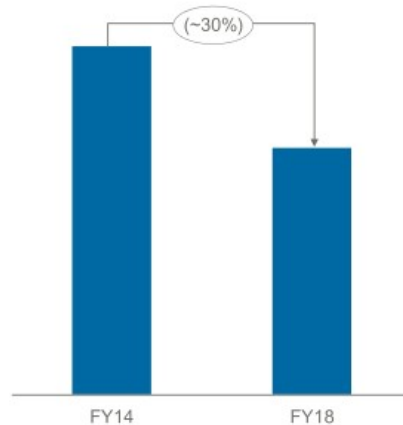
	Units	30+ delinquency rate <sup>1</sup>
Run-off	~3.2mm	7.19%
Sales	~600K	29.03%
<b>Total "out flows"</b>	<b>~3.9mm</b>	<b>10.65%</b>

Note: Numbers may not sum due to rounding  
Note: For footnoted information, refer to slide 53

#### 30+ delinquency rate<sup>2</sup> for Chase servicing book vs. industry<sup>3</sup> (%)



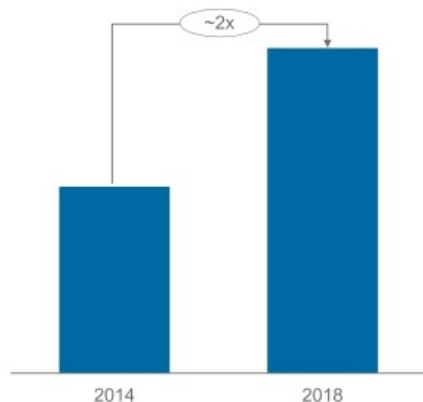
#### Servicing cost per unit (\$)<sup>4</sup>



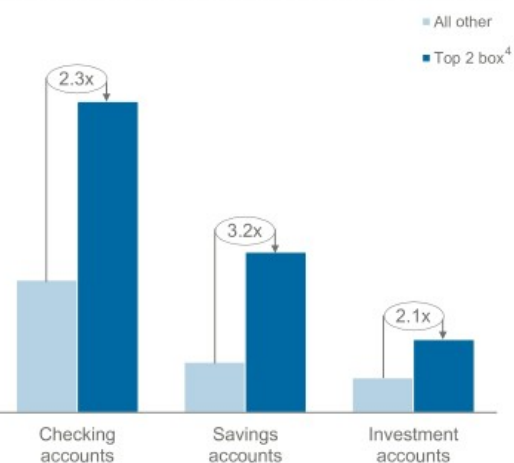
JPMORGAN CHASE & CO.

## Despite a challenging market, we are committed to delivering for our customers

### Home Lending Net Promoter Score<sup>1</sup>



### % of Chase mortgage customers who subsequently opened other products<sup>2</sup>, by mortgage satisfaction level<sup>3</sup>



### Of existing Chase deposit customers who opened a mortgage:



<sup>1</sup> Net Promoter Score = % promoters minus % detractors. Survey started in August 2012. Survey methodology changed in 3Q14

<sup>2</sup> Product penetration is defined as the % of new-to-Chase mortgage customers who opened a particular account within 12 months of origination




<sup>3</sup> Customer satisfaction based on internal JPMorgan Chase methodology using a 10-point scale

<sup>4</sup> Top 2 box represents "very satisfied"



We are deepening relationships with our core Home Lending customers, and building on our existing momentum...

We are focused on deepening relationships with our core Home Lending customers through targeted objectives to meet their unique needs

	Households	New origination capture rate <sup>3</sup>
Chase households with an existing Chase mortgage	 ~4mm	~20%
Chase primary bank households <sup>1</sup> with a non-Chase mortgage	 ~6mm	~10%
Chase primary bank households <sup>1</sup> who are potential first-time home buyers	 ~3mm <sup>2</sup>	~10%

Growth to-date with our primary bank customers has been strong



These core Home Lending customers represent a significant financial opportunity for Chase

Note: For footnoted information, refer to slide 54

...by simplifying the digital mortgage process and providing differentiated experiences for Chase customers

We offer a digitally-enabled fulfillment process through Chase MyHome<sup>1</sup> ...

#### Transparent

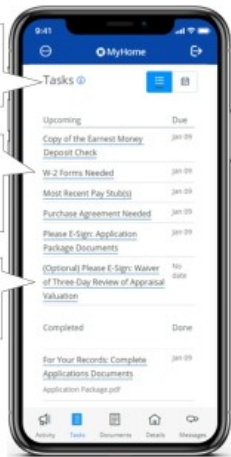
Customers can keep track of action items and deadlines

#### Connected

Customers can use phone to take pictures of documents and upload to Chase MyHome

#### Convenient

Customers can e-sign documents

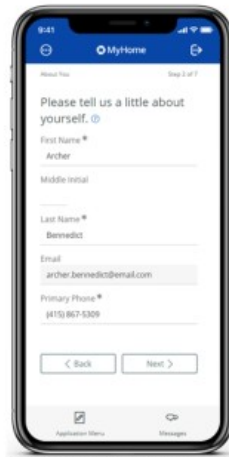


✓ ~40% of funded applications used Chase MyHome in 4Q18

✓ >20% faster cycle time<sup>2</sup>

✓ Customer satisfaction at record highs

... and have a foundation of differentiated solutions to deliver to Chase customers



✓ Prefilled applications to streamline the home loan process

✓ Automatic verification of income and employment

✓ Personalized pre-approved Home Lending offers

✓ On-time closing guarantee for home purchase loans

Example of prefilled application using Chase customer data

These solutions will allow us to improve customer experiences and reduce costs

<sup>1</sup> Launch completed in 3Q18

<sup>2</sup> 2018 average for Consumer purchase and refinance as compared to paper

## We continue to build a high-quality, customer-focused Home Lending business

---

Maintain excellent origination credit quality	✓ We are taking a disciplined approach to growth
Improve quality of servicing portfolio and de-risk the business	✓ Our portfolio de-risking positions us well through the credit cycle, and we plan to maintain credit quality at this level
Continue to focus on delivering a great customer experience...	✓ Customer satisfaction continues to improve
...while innovating to win with Chase primary bank customers	✓ We are investing in enhancements to deliver a differentiated home buying experience for Chase customers

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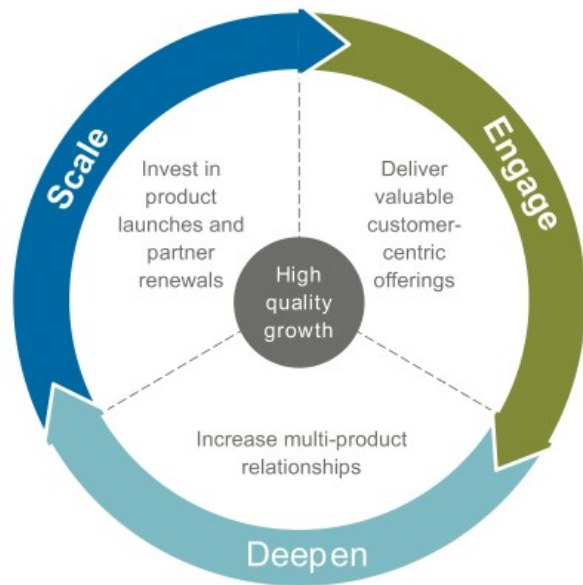
We are executing on a clear strategy

---

Build **scale** with great products and marketing

**Engage** our customers to drive profitability and lower attrition

**Deepen** relationships across the franchise



## Our sustained investment in products and customer acquisition has created tremendous scale

### We launched several compelling, new products...



Freedom Unlimited®  
(2016)



Sapphire Reserve®  
(2016)



Ink Business  
Unlimited®  
(2018)

### ...and renewed and refreshed our #1 cobrand portfolio<sup>1</sup>



Amazon Prime®  
(2017)



Avios®  
(2018)



Hyatt®  
(2018)



IHG® Rewards  
Club  
(2018)



Marriott®  
(2018)



Southwest®  
(2018)



United®  
(2018)

Note: For footnoted information, refer to slide 55

### We are operating from a position of strength

**#1** in credit card spend (22% share)<sup>2</sup> and  
outstandings (17% share)<sup>3</sup>

**~40mm** active credit card accounts<sup>4</sup>

**~8mm** new accounts in 2018<sup>5</sup>

**~9B** credit card transactions in 2018

This scale enables strong top-line account, sales, outstandings, and revenue growth



Select examples of growth drivers

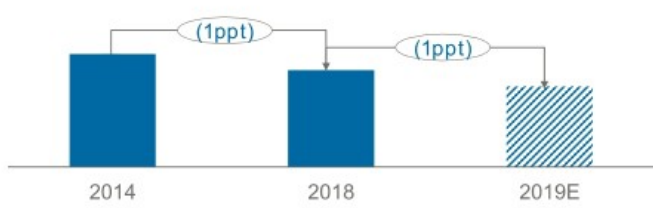


<sup>1</sup> Excludes Commercial Card

## Importantly, our scale has also created cost efficiencies

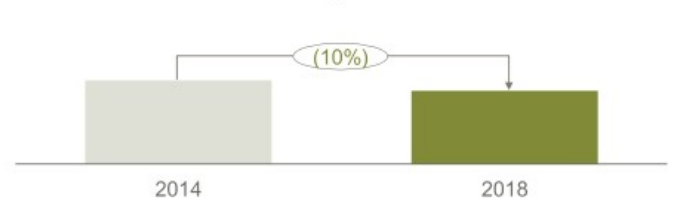
### Increased operating leverage

Overhead ratio



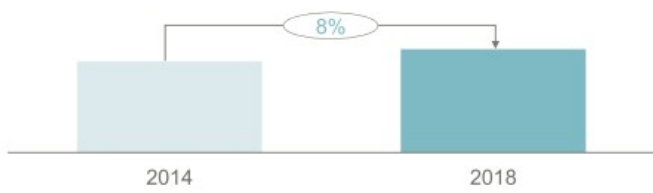
### Improved operating efficiency

Contact cost per statement<sup>1</sup>



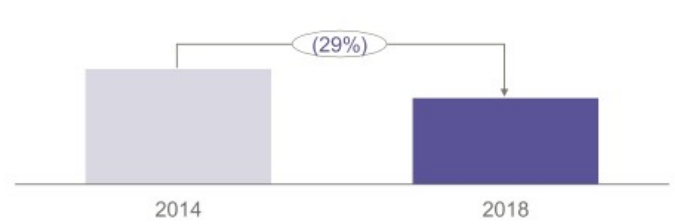
### Improved marketing efficiency

Credit card sales generated per dollar spent on acquisition marketing<sup>2</sup>



### Reduced fraud losses

Fraud losses as a % of sales<sup>3</sup>

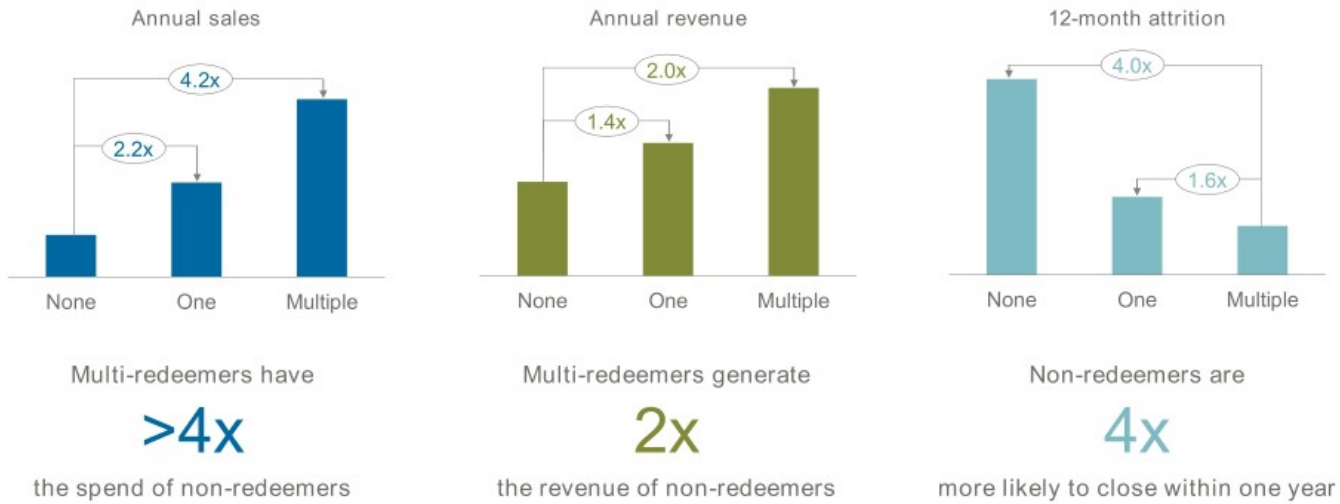


Note: For footnoted information, refer to slide 56



## Our experience has shown the value of engaging our large customer base

Ultimate Rewards® redeemers have higher sales and revenue, with lower attrition<sup>1,2</sup>

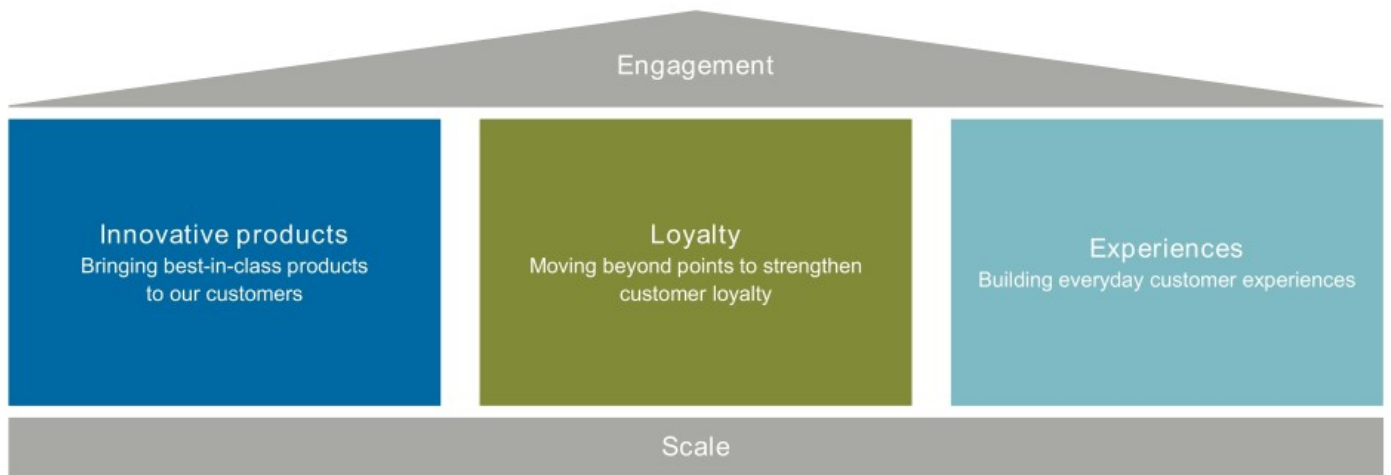


<sup>1</sup> Defined as customers who have redeemed points through the Ultimate Rewards® portal. Non-redeemers have redeemed 0 times, single-redeemers 1 time, and multi-redeemers 2+ times in the 2-year period from Jan. '15 to Dec. '17

<sup>2</sup> Reflects FY18 for sales and revenue; as of Dec. '18 for attrition

## We have three fundamental levers to drive engagement

---



My Chase Plan<sup>SM</sup> will make borrowing easier for our customers

---

Opportunity:  
**~\$250B** outstandings held off-us  
by existing customers<sup>1</sup>



<sup>1</sup> Total outstanding balances on non-Chase cards by existing Chase consumer card customers; as of December 2018

My Chase Loan<sup>SM</sup> will enable our customers to better use their existing line to borrow

---

## My Loan

For larger purchases, including non-cardable spend, with equal payments at a competitive rate

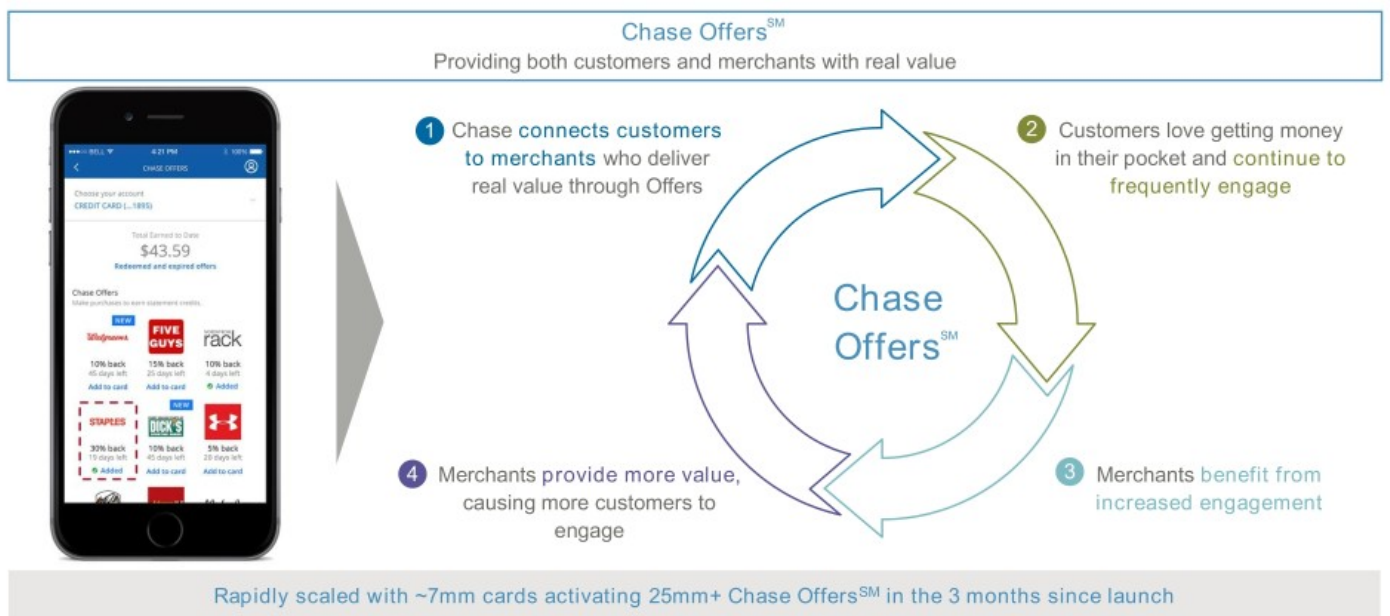


Opportunity:

**~\$250B** outstandings held off-us by existing customers<sup>1</sup>

<sup>1</sup> Total outstanding balances on non-Chase cards by existing Chase consumer card customers; as of December 2018

## Chase Offers<sup>SM</sup> has seen tremendous engagement in the first few months



Note: Simulated screen

## Credit Journey<sup>SM</sup> drives repeat customer engagement and familiarity with Chase for prospects

Credit Journey<sup>SM</sup> will deliver value for our customers and returns for the franchise

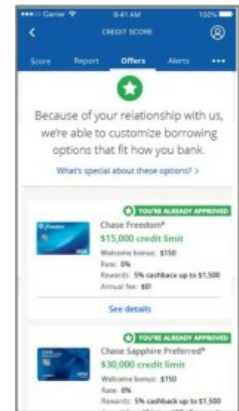
Access to your credit score and identity protection



View historical scores and see factors impacting your score



Receive tailored pre-approved offers for the full suite of Chase products



Over 15mm customers and non-customers enrolled

Note: Simulated screens. Illustrative offers

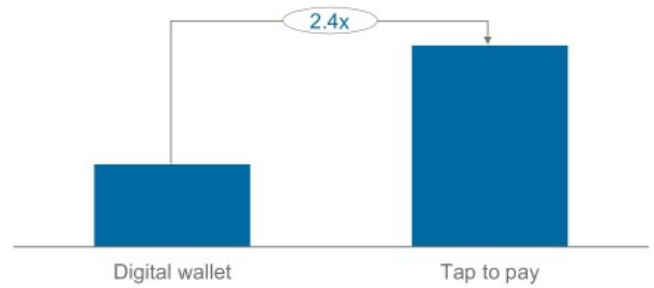
## Tap to pay makes using your Chase card faster and simpler

### Chase customers can “tap to pay” using contactless cards



### Tap to pay has already experienced meaningful adoption

Customer adoption of tap to pay vs. digital wallet<sup>1</sup>



Tap to pay already exceeding digital wallet penetration for customers who have contactless cards

Note: The Contactless Symbol and Contactless Indicator are trademarks owned by and used with the permission of EMVCo, LLC

<sup>1</sup> Reflects percentage of Chase consumer card customers who used POS contactless functionality / digital wallets from Jan. 14, 2019 – Feb. 12, 2019, out of all customers who were shipped a contactless card before Jan. 13, 2019

## Engagement improves our ability to deepen relationships across Chase

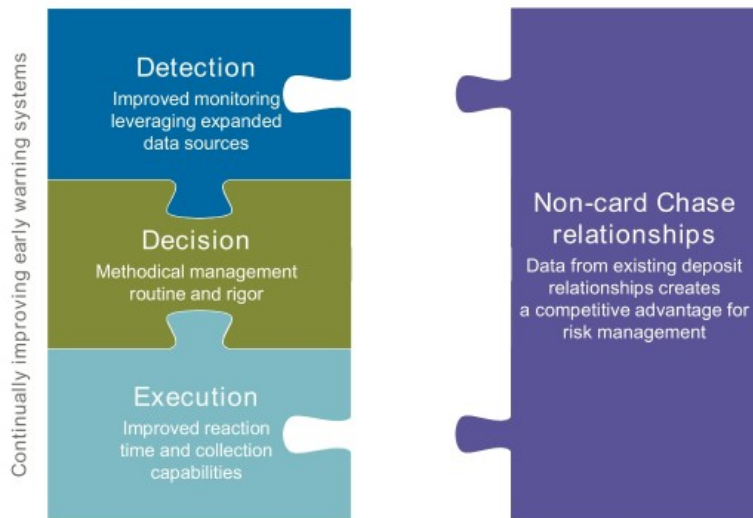


Note: For footnoted information, refer to slide 57

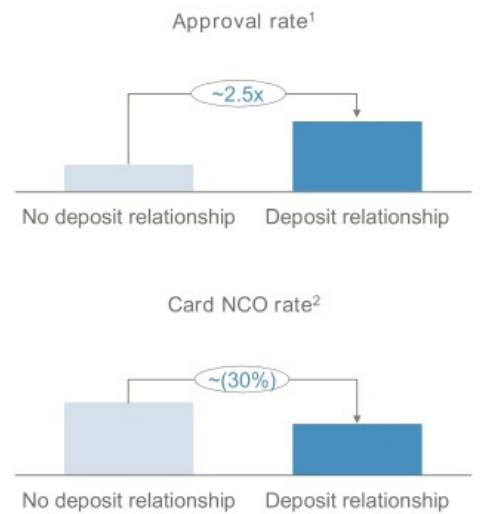


## Deepened relationships give us unique risk management advantages

### Critical components of disciplined underwriting...



### ...drive better risk decisions



<sup>1</sup> Full-year 2018. Card approval rate for customers <700 credit score (based on internal JPMorgan Chase score with default rate odds aligned to FICO)

<sup>2</sup> As of December 2018; Year 3 NCO rate for Freedom and State card customers

We are prepared for any economic scenario with strong risk management capabilities

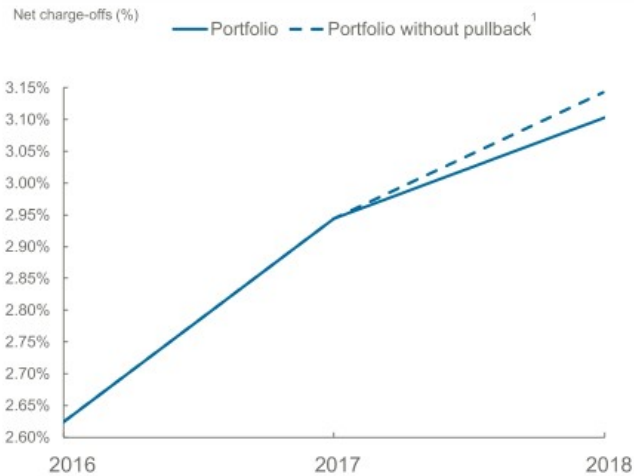
New risk monitoring capabilities enable surgical pullbacks...

Data for the example customer Jane



	2007	Today
Internal risk scores	✓	✓
Off-us data	Point-in-time	Trends
On-us data trends (e.g., DDA information)		✓
Conservative balance transfer product design		✓
Geographic segmentation	✓	✓
Customer 'balance sheet' (e.g., debt servicing abilities)		✓

...which improved portfolio NCOs with limited impact to growth



<sup>1</sup> Based on JPMorgan Chase internal analysis

Our clear strategy, risk management, and franchise differentiators will ensure high quality growth

---

**We have a clear strategy to scale, engage, and deepen...**



**... and all the ingredients for sustainable success**

- ✓ Unmatched scale and distribution
- ✓ Proprietary rewards platform
- ✓ Full set of banking products
- ✓ Strong brand across premium and mass
- ✓ Best-in-class cobrand partners
- ✓ Largest network acceptance

# Agenda

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## We remain focused on executing against our strategy

---

Deliver One Chase experiences to grow from a position of strength

- Drive engagement by introducing innovative lending products, strengthening customer loyalty and creating everyday customer experiences
- Expand branch network to 15 – 20 new markets, allowing us to reach 80mm more U.S. consumers

Create interoperability between physical and digital channels

- Scale digital tools and resources to better meet our customers' financial needs
- Integrate digital platform with branch network to win with our primary bank customers

Manage expenses while continuing to invest in the future

- Continue to migrate transactions to lower cost channels and drive operational efficiencies
- Deploy a smarter, leaner branch footprint across existing and expansion markets

Operate an effective and efficient risk and control environment

- Take a disciplined approach to growth to remain well positioned through the cycle
- Continuously monitor our credit portfolios

We will continue to invest in order to deliver the power of One Chase to our customers

# Agenda

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## Notes on slide 2 – We have made significant progress against our commitments

---

1. Source: FDIC 2018 Summary of Deposits survey per S&P Global Market Intelligence. Excludes non-retail branch locations and 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
2. Based on 2018 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
3. As of February 2019

## Notes on slide 7 – Our investments made it easier for customers to self-serve and enabled operational efficiencies and workforce transformation, which have lowered costs

---

1. Cost to serve defined as total CCB expense less investments, auto lease depreciation, legal losses, and FDIC surcharge. Cost to serve efficiency ratio reflects cost to serve expense divided by revenue net of auto lease income
2. Includes employees and contractors. 2014 excludes Commercial Card headcount. During 3Q18, ~1,200 employees transferred from CCB to CIB as part of the reorganization of the Commercial Card business
3. Reflects transactions within Consumer Banking in 2018
4. Reflects changes from 2014 to 2018
5. Includes calls from Consumer Banking, Credit Card, and Auto customers



## Notes on slide 9 – The power of our digital platform

---

1. Users of all web and/or mobile platforms who have logged in within the past 90 days
2. Reflects 90-day digital logins among 90-day active users divided by three to estimate average monthly logins. Data reflects December 2016, December 2017, and December 2018 for all CCB
3. Reflects Consumer Banking. Consumer Banking 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 –  $\leq 4$  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 –  $\leq 4$  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
4. Net Promoter Score = % promoters minus % detractors. Based on Net Promoter Score data collected from January through December 2018
5. Includes Consumer Banking households that had at least one credit transaction or one debit transaction in 2018. Normalized for number of customers per household
6. Multi-LOB relationship defined as 2 or more products across lines of business

## Notes on slide 10 – We have made significant progress against our priorities

---

1. Represents average deposits and end of period investment balances
2. Includes Consumer Banking households
3. Represents Consumer Banking customers that are 90-day mobile-active six months after account opening. Includes Consumer Banking customers whose first product was a checking account opened between July 2017 and June 2018
4. Consumer Banking 90-day mobile-active users in December 2018 compared to December 2017
5. Decrease in the annual variable cost per Consumer Banking household from 2014 to 2018. Includes variable teller transaction cost (includes cost of teller FTE), cost of other transactions, variable account servicing cost, and variable risk and compliance cost
6. All teller transactions in Chase branches

## Notes on slide 11 – We continue to grow our business at an industry-leading pace, winning with both new and existing customers

---

1. #1 in absolute deposit dollar balance growth from 2014 to 2018. Source: FDIC 2018 Summary of Deposits survey per S&P Global Market Intelligence. Excludes non-retail branch locations and all branches with \$500mm+ in deposits within the last two years for 2017 to 2018 comparison and the last 10 years for the 2014 to 2018 comparison (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; National banks (BAC, WFC, C, USB, PNC, TD, and COF) include institutions with over \$200B in total deposits as reported by the FDIC (excluding non-retail locations), Super Regional banks include remaining institutions in the top 50 based on total deposits as reported by the FDIC (excluding non-retail locations)
2. Kantar TNS ("TNS") Retail Banking Monitor. Based on Chase footprint (28,728 surveys in 2018 and 2017). Calculations derived from the following questions (answered by 1,383 customers in 2018 and 2017): "Which is your primary bank?" and "In what year did [selected bank] become your primary bank?" Data is weighted by TNS to ensure the survey is representative of the U.S. population
3. Represents Consumer Banking households six months after account opening. Includes Consumer Banking households whose first product was a checking account opened between July 2017 and June 2018. Balances refer to checking deposit balances for new households
4. Consumer Banking overall satisfaction ("OSAT") metric. Branch OSAT is based on over 600,000 customer surveys conducted after a visit to a Chase branch each year. Customers rate their visit on a 1-10 scale. OSAT score is calculated by the proportion of 9 and 10 scores
5. Attrition rates are based on Consumer Banking households with deposit products and include households that closed all their deposit products with Chase. Attrition rate calculated by taking an average of the annualized monthly rates for the 12 months of each year

## Notes on slide 12 – Our investments in digital platforms and functionality have made it easier for customers to self-serve

---

1. Based on 4Q18 peer disclosure for JPM's Consumer & Community Banking, BAC's Consumer Banking, WFC's Community Banking and Citi's North America GCB segments. #1 growth in terms of incremental number of mobile users from 2017 to 2018
2. Mobile logins per month reflect 90-day logins among 90-day active users divided by three to estimate average monthly logins. Data reflects December 2017 and December 2018. Consumer Banking customers only
3. Reflects 90-day active users in December 2018 and December 2017. Consumer Banking customers only
4. Total check deposit transactions through QuickDeposit as a proportion of total check deposit transactions in 2018 and 2017. Includes deposit transactions that combine cash and check. Based on number of transactions, not number of checks. Consumer Banking customers only

## Notes on slide 13 – Our physical network has been critical to achieving industry-leading deposit growth

---

1. Average teller transactions among all Consumer Banking customers. Represents 4Q14 and 4Q18
2. Novantas Customer Knowledge, 2018 U.S. Shopper Study. Prospective switchers (N=4,866). Convenient branch locations ranked top among "Reasons for Future Consideration"
3. Consumer Banking households who visited a branch at least once in 2018
4. Deposit growth from 4Q14 to 4Q18. Includes multi-channel and branch-centric channel segments. Consumer Banking 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 –  $\leq 4$  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 –  $\leq 4$  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

## Notes on slide 14 – We are innovating across our channels and throughout the customer lifecycle

---

1. Median existing customer opened account via Digital Account Opening ("DAO") in ~3 minutes. Median new-to-bank customer opened account via DAO in ~5 minutes. Does not include time to open an account via in-branch DAO
2. As of February 2019
3. When customers initiate an external transfer to a Real-Time Payments (RTP) network enabled bank, they have the option to use RTP, which settles within 15 seconds
4. Proportion of 4Q18 teller transactions that were eligible to be completed at an ATM
5. Includes multi-channel and digitally-centric channel segments; Consumer Banking customer channel segments are defined based on the tenure of the customer as of the respective time period. For customers 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 customers that are less than 12 months on book, we reduce the thresholds by 75% and track the customer activity over a three-month time period
6. Analysis shows difference in full year pretax income, Jan. – Dec. 2018, for households that are engaged with 2 or more products across lines of business vs. Consumer Banking-only engaged households

## Notes on slide 15 – We are effectively expanding our physical network to attractive new markets

---

1. FDIC 2018 Summary of Deposits survey per S&P Global Market Intelligence. Excludes non-retail branch locations and 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
2. 2018 U.S. population sourced from U.S. Census Bureau. Sum of population of states in which Chase currently has or will have a branch presence post market expansion
3. Reflects 2014-2018 growth in the top 10 deposit markets as of 2018. Source: FDIC 2018 Summary of Deposits survey per S&P Global Market Intelligence. Excludes non-retail branch locations and all branches with \$500mm+ in deposits within the last 10 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

## Notes on slide 18 – The home lending industry is in a state of transition

---

1. Source: Inside Mortgage Finance ("IMF")
2. Source: Freddie Mac Primary Mortgage Market Survey ("PMMS"). Represents 30-year fixed rate
3. Source: JPMorgan Chase Securitized Products Group ("SPG") Research. Represents Fannie Mae 30-yr current coupon rate
4. Source: Reflects weighted average Retail expense for Large Banks peer group as defined by the Mortgage Bankers Association (MBA) and STRATMOR Peer Group Roundtables (PGR) program. 2018 reflects first half annualized



## Notes on slide 22 – ...and we continue to de-risk our servicing business, which will protect us in a downturn

---

1. 30+ delinquency rate for total "in flows" as of December 2018. Total "out flows" at time of transfer
2. Source: IMF. Includes all loans past due and in foreclosure
3. Industry defined as Large Servicer Delinquency Index reported by IMF
4. Driven by mix

## Notes on slide 24 – We are deepening relationships with our core Home Lending customers, and building on our existing momentum...

---

1. Primary relationship based on internal JPMorgan Chase definition
2. Based on JPMorgan Chase internal analysis
3. Represents Chase's percentage share of targeted customers who originated a purchase or refinance mortgage between January 2018 and November 2018. Calculation based on JPMorgan Chase internal data and CoreLogic data
4. Source: IMF

## Notes on slide 28 – Our sustained investment in products and customer acquisition has created tremendous scale

---

1. "Credit Card Market: Cobrand Market Share by Issuer," Phoenix, October 2018. For 1H18, based on number of accounts, total spend, and revolving balance dollars
2. Represents 2018 share of general purpose credit card ("GPCC") spend, which excludes private label and Commercial Card. Based on company filings and JPMorgan Chase estimates
3. Represents 2018 share of loans outstandings, which excludes private label, AXP Charge Card, and Citi Retail Cards. Based on company filings and JPMorgan Chase estimates
4. Average number of active credit card accounts per month in 2018. Active defined as those that have at least one credit card sales transaction in respective month
5. Excludes Commercial Card

## Notes on slide 30 – Importantly, our scale has also created cost efficiencies

---

1. Reflects customer service expense per statement
2. Reflects year 3 sales on domestic acquisitions. Acquisition marketing excludes media
3. Fraud losses exclude disputes

## Notes on slide 38 – Engagement improves our ability to deepen relationships across Chase

---

1. Analysis shows difference in percentage of in-footprint, Chase consumer card-only customers, who opened a deposit relationship after 18 months, as of June 2017
2. Low-spend engagement is defined as annual spend <\$5K and spend share of wallet <25% across 12 months prior to June 2017; high-spend engagement is defined as annual spend >\$30K and spend share of wallet >75% across 12 months prior to June 2017
3. Defined as at least one mobile sign-on in June 2017
4. Defined as enrolled in Credit Journey in or before June 2017
5. Analysis shows difference in full year average pretax income, Jan. – Dec. 2018, for households that are engaged with 2 or more products across lines of business vs. Card-only, engaged households
6. Analysis shows difference in NPS, based on Jan. – Dec. 2018 responses, for households that are engaged with 2 or more products across lines of business vs. Card-only, engaged households

# ASSET & WEALTH MANAGEMENT

February 26, 2019

FIRM OVERVIEW

CORPORATE & INVESTMENT BANK

CONSUMER & COMMUNITY BANKING

► ASSET & WEALTH MANAGEMENT

COMMERCIAL BANKING

JPMORGAN CHASE & CO.

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## AWM delivers superior client outcomes and consistent financial performance



### A Consistent through-the-cycle

- Leading long-term investment performance
- Increasing revenue and pre-tax income while investing in our future
- Reliable growth engine with strong ROE



### B Client-centric

- Fiduciary for institutions, advisors, and individuals for nearly 200 years
- Deep expertise across all asset classes leads to superior client outcomes
- Obsess about the client journey



### C Next-generation growth

- Digital everything
- Branch + Advisor = Power of JPMC
- Global footprint expansion



95% retention rate for top talent<sup>1</sup>

### Never stop investing in the business



Positive asset flows every year for over a decade



Continuous investments in talent + technology

Note: For footnoted information, refer to slide 16

**A Consistent: Reliable growth engine with strong ROE**

Revenue (\$B)<sup>1</sup>



Pretax income (\$B)



Client assets (EOP, \$T)



2018

Pretax margin

26%

ROE

31%

Loans (Avg.)

\$139B

Deposits (Avg.)

\$137B

LT AUM flows

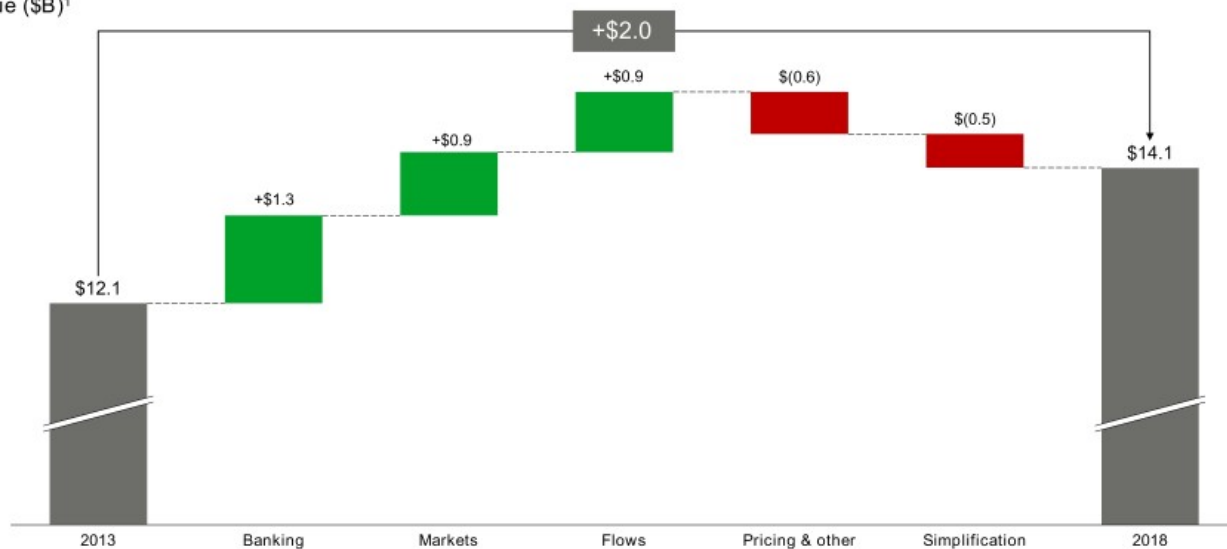
\$25B

Note: For footnoted information, refer to slide 16



## A Consistent: Diversified revenue growth

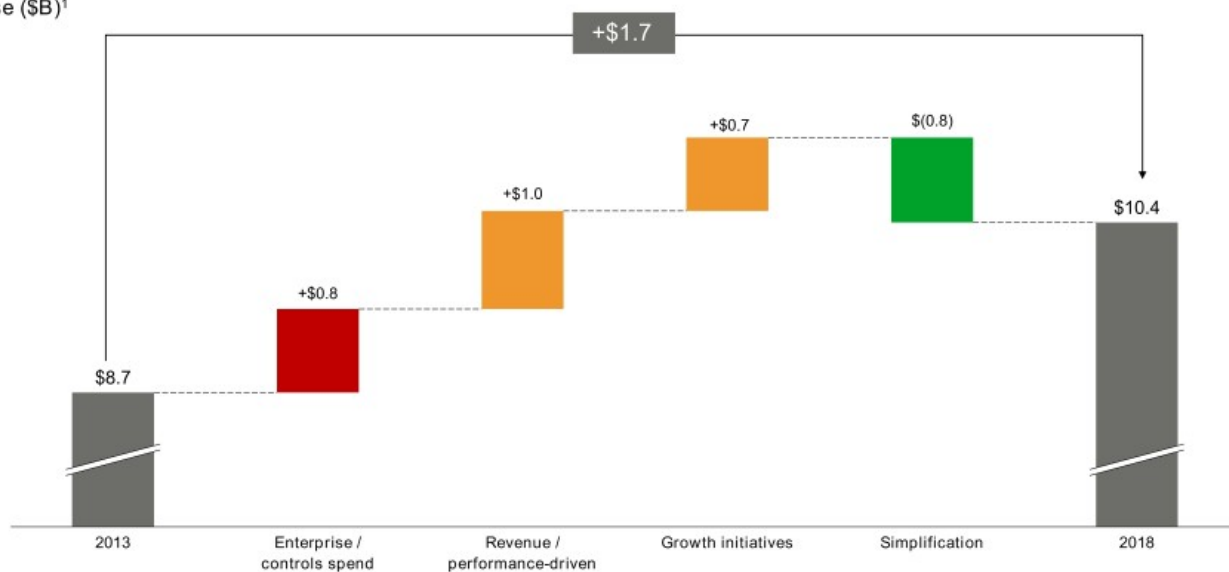
Revenue (\$B)<sup>1</sup>



Numbers may not tie due to rounding  
Note: For footnoted information, refer to slide 16

**A Consistent: Simplify for growth**

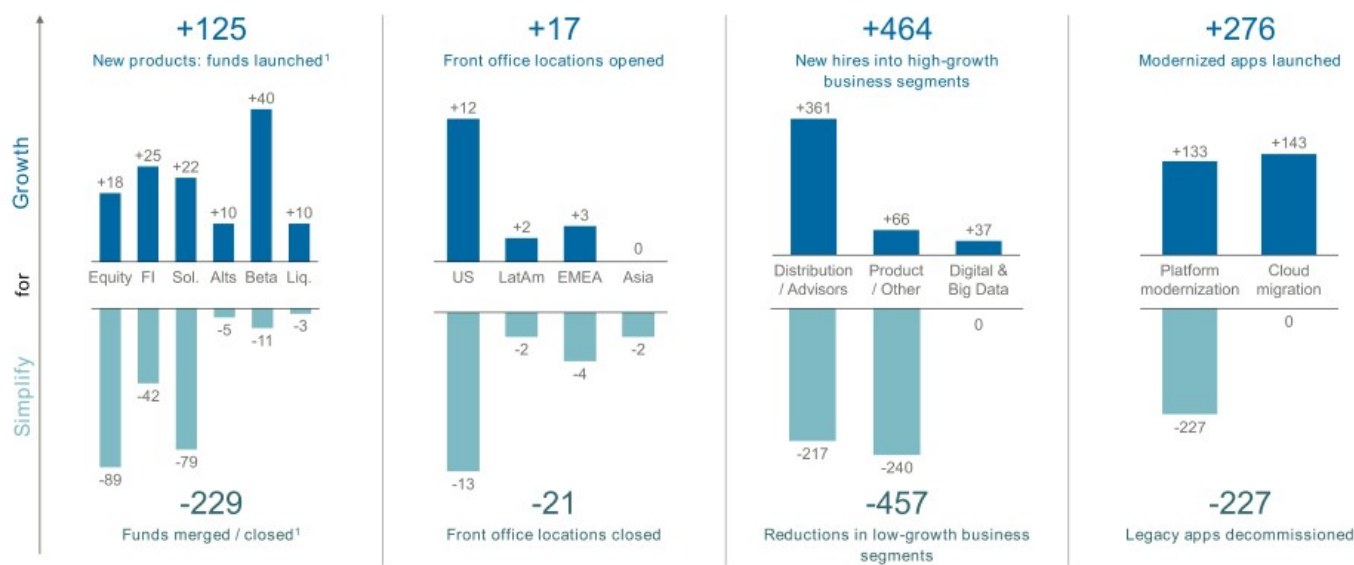
Expense (\$B)<sup>1</sup>



Numbers may not tie due to rounding  
 Note: For footnoted information, refer to slide 16













## A Consistent: Simplify for growth

Key initiative metrics over past two years



Note: For footnoted information, refer to slide 16

**A Consistent: Actively reducing costs for our clients**

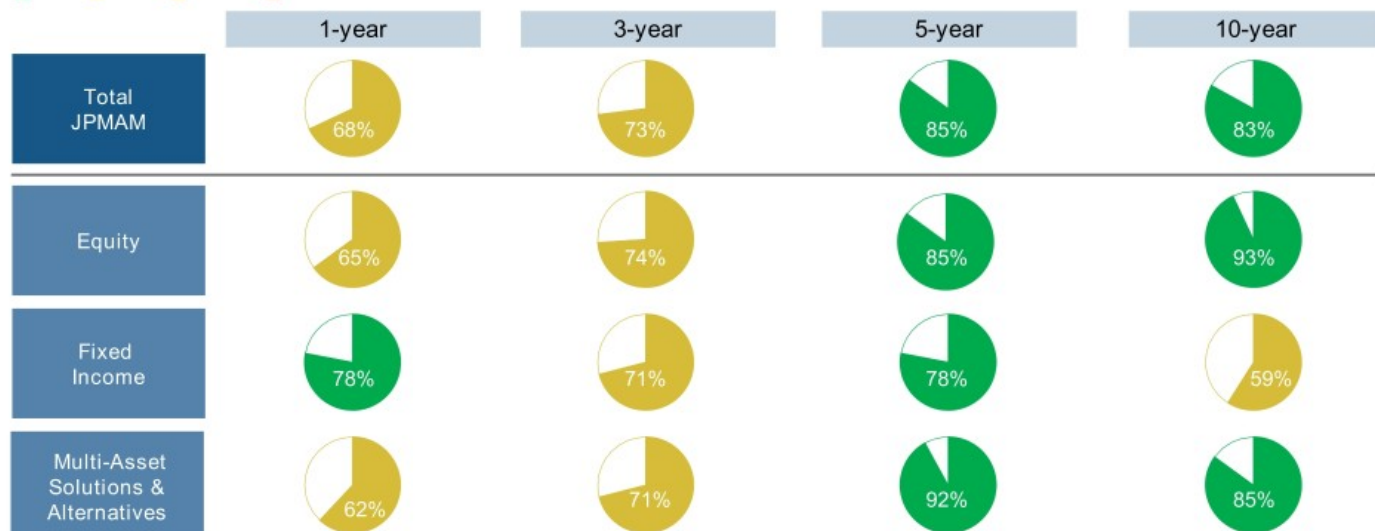
What we've done	Example		Savings for clients
 JPMC Fees <sup>1</sup>	Largest equity fund fees	 20%	  \$350 million per year
 External trading commissions	Equity bps per trade	 46%	  \$200 million per year
 Third-party fund fees	Large cap beta fees	 50%	  \$75 million per year

Note: For footnoted information, refer to slide 16

## A Consistent: Leading long-term investment performance

2018 % of JPMAM long-term mutual fund AUM over peer median (net of fees)<sup>1</sup>

■ >74% ■ 50-74% ■ 25-49% ■ 0-24%



Note: For footnoted information, refer to slide 16

## A Consistent: Diversification drives flows



### 5Y Total Client Asset Flows (\$B)

Publically-traded peers only

#1 BLK<sup>2</sup> \$1,037

#2 JPMC<sup>3</sup> \$443

#3 GS<sup>4</sup> \$417

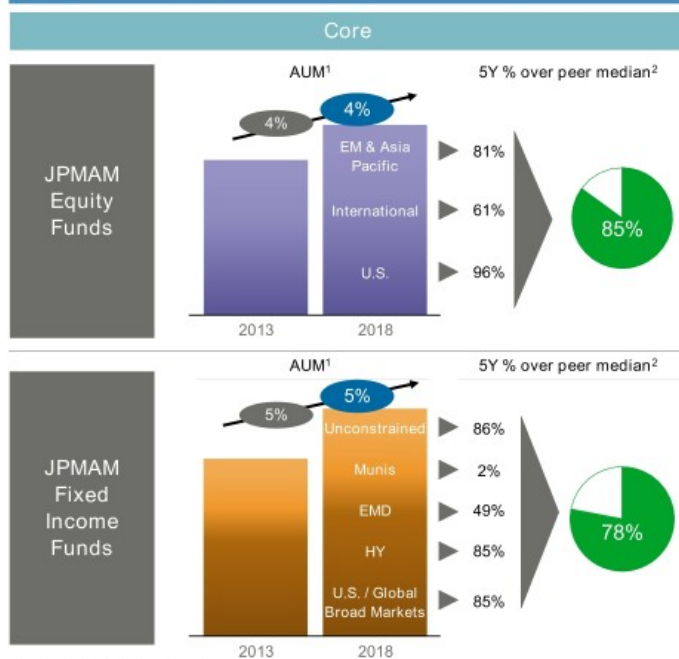
#4 MS<sup>5</sup> \$347

#5 UBS<sup>6</sup> \$282

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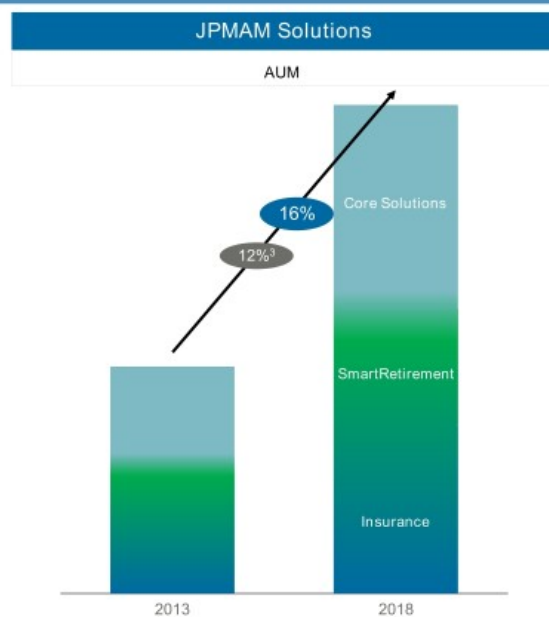
## B Client-centric: Alpha engines drive growth

Legend  
 JPM CAGR  
 Industry CAGR



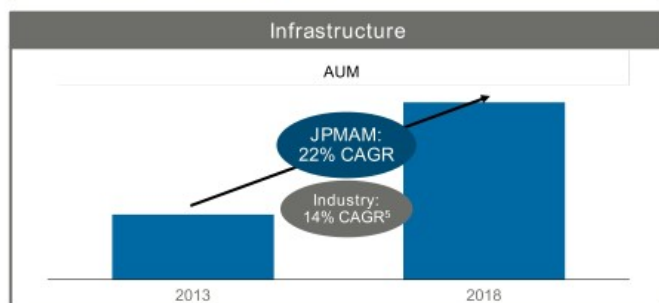
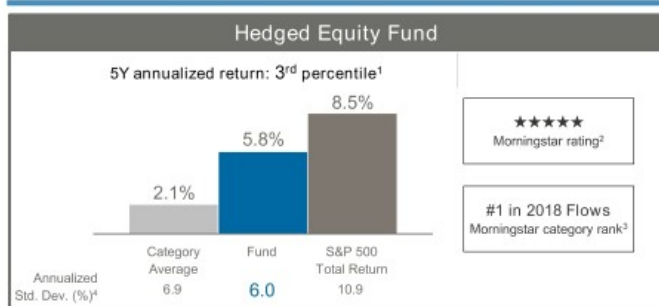
Note: For footnoted information, refer to slide 17

9

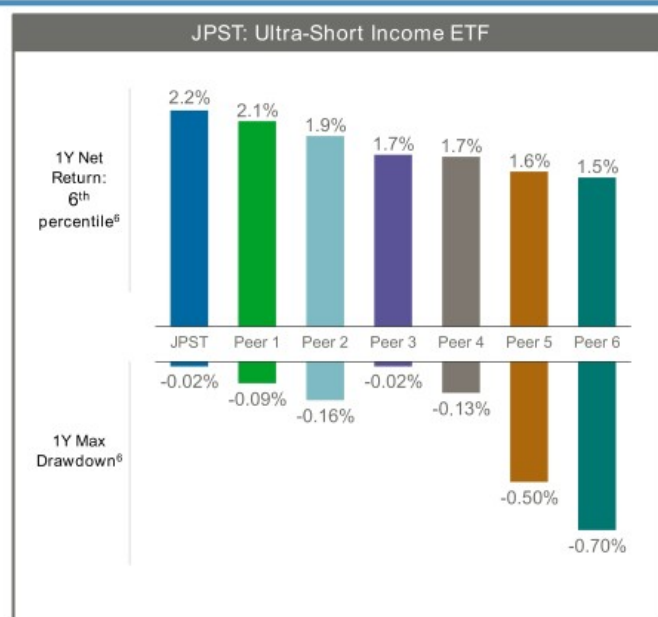


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**B Client-centric: Successfully innovating across our platform**



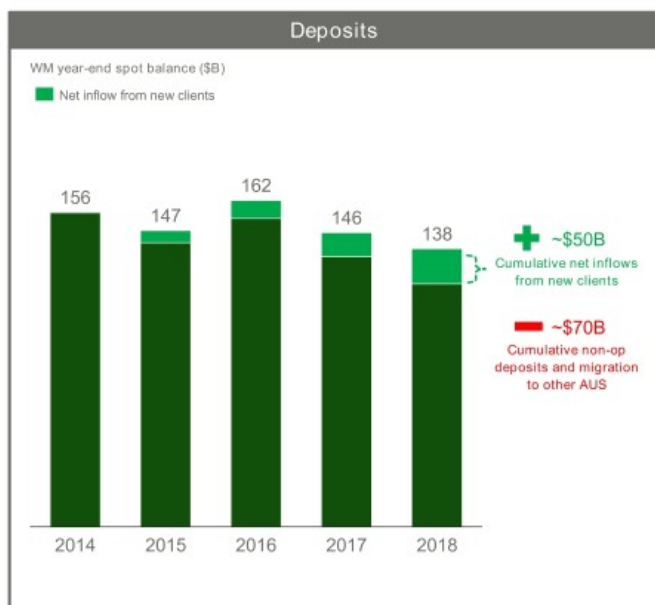
Note: For footnoted information, refer to slide 18



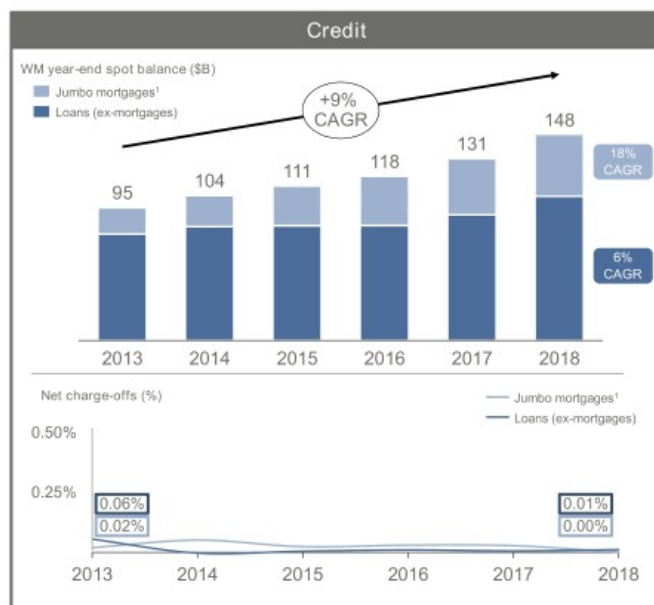
JPMORGAN CHASE & CO.



**B Client-centric:** Advising individuals on both sides of their balance sheet



Note: For footnoted information, refer to slide 18



JPMORGAN CHASE & CO.

## C Next-generation growth: Digital everything

### Digital tools for different client needs

#### Advisors

##### Digital Portfolio Insights

Digital Portfolio Insights helps advisors build stronger portfolios through sophisticated analytics and customized insights



Powered by  
J.P. Morgan Spectrum



Customized insights  
& analytics

~5,000

Financial Advisors using Digital Portfolio Insights  
since Summer 2018 launch

#### Institutions

##### Global Cash Portal

Global Cash Portal enables institutions to centrally manage and execute liquidity investments online



Analytics for stronger  
portfolio construction



Seamless, digital execution  
capabilities

~\$700 million

Average daily trade volume

#### Individuals

##### You Invest

You Invest by J.P. Morgan is an easy, smart and low cost way to invest online



Access investments through  
Chase mobile app



Easy-to-navigate desktop  
home page

89%

of clients are first-time investors with Chase

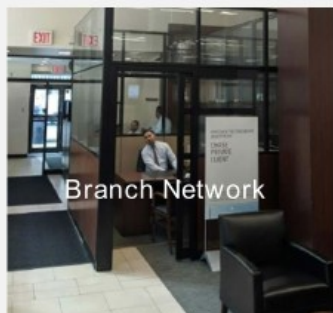
**c Next-generation growth:** Integrating our human expertise with distinctive digital offerings

2013

Expanding our offering...

2018

...across the spectrum



J.P.Morgan

UHNW

Affluent / HNW

Aspiring Affluent

Upper Mass

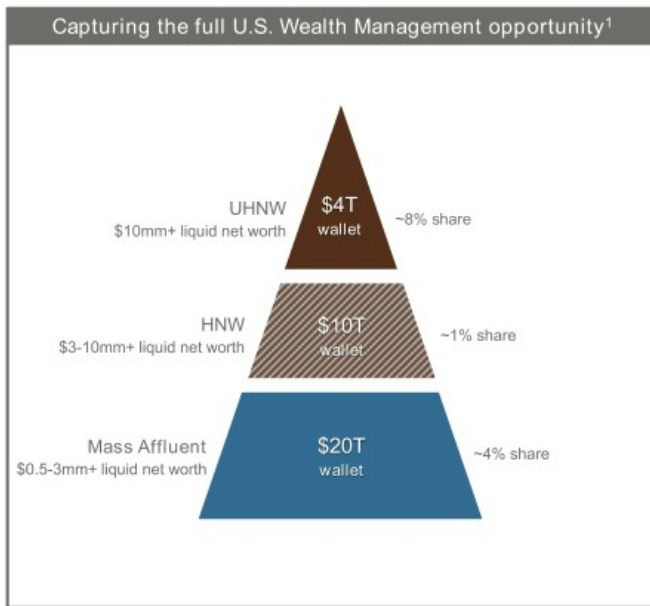
Mass

Underbanked

College

CHASE

## c Next-generation growth: Global footprint expansion



Note: For footnoted information, refer to slide 18



JPMORGAN CHASE & CO.

## How we measure against our targets

---

	LT AUM Flows	Revenue growth	Pretax income growth	Pretax margin	ROE
Medium-term targets (+/-)	4%	5%	10%	30%	25%+
2016 – 2018 Results range	2 – 5%	(1) – 8%	1 – 10%	26 – 28%	24 – 31%
Target met?	✓	✓	✗	✗	✓

Agenda

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## Notes on slides 1-7

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### Slide 1 – AWM delivers superior client outcomes and consistent financial performance

1. Employees identified as top talent by senior executives

### Slide 2 – Consistent: Reliable growth engine with strong ROE

1. Historical revenue revised as a result of the adoption of the new accounting guidance for revenue recognition, effective January 1, 2018

### Slide 3 – Consistent: Diversified revenue growth

1. Historical revenue revised as a result of the adoption of the new accounting guidance for revenue recognition, effective January 1, 2018

### Slide 4 – Consistent: Simplify for growth

1. Historical expense revised as a result of the adoption of the new accounting guidance for revenue recognition, effective January 1, 2018

### Slide 5 – Consistent: Simplify for growth

1. Fund activity across pooled vehicles. Excludes Brazil-domiciled fund activity and activity where funds were transferred to third-party managers

### Slide 6 – Consistent: Actively reducing costs for our clients

1. Inclusive of reductions across Asset & Wealth Management and Chase Wealth Management

### Slide 7 – Consistent: Leading long-term investment performance

1. The "% of 2018 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, 3, 5, and 10 year basis as of December 31, 2018. 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.

## Notes on slides 8-9

### Slide 8 – Consistent: Diversification drives flows

1. Includes Asset & Wealth Management, Chase Wealth Management investments, and new-to-firm Chase Private Client Deposits from 2012-2018; prior to 2012, flows data for Chase Wealth Management investments and new-to-firm Chase Private Client Deposits unavailable
2. Total AUM net flows
3. Includes Asset & Wealth Management total client flows, Chase Wealth Management investments, and new-to-firm Chase Private Client Deposits
4. Represents Investment Management division total assets under supervision ("AUS") net flows
5. Represents Investment Management total AUM inflows plus Wealth Management fee-based asset flows
6. Includes net new money from Asset Management and Global Wealth Management divisions. Net new money for 2014 reflects old reporting structure due to data availability. In 2018, UBS began to report flows for 2016-2018 in U.S. dollars ("USD"). Flows for 2014 and 2015 were converted to USD at the 2014-2015 daily average exchange rate

### Slide 9 – Client-centric: Alpha engines drive growth

1. Source: Strategic Insight Simfund retrieved February 22, 2019. Excludes ETFs and Fund-of-funds. The classifications in terms of product categories shown are J.P. Morgan's own
2. The "5Y % over peer median" analysis represents the proportion of assets in mutual funds that are ranked above their respective peer category median on 5-year basis as of December 31, 2018. 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
3. Source: McKinsey, Strategic Insight Simfund, Cerulli, P&I. Based on 2013-2017 data



## Notes on slides 10-14

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### Slide 10 – Client-centric: Successfully innovating across our platform

1. Source: Morningstar. 5Y return are net of fees for Institutional Share class as of December 31, 2018. 5Y percentile rankings for Institutional Share class as of December 31, 2018. Category Average based on Options-based Morningstar category. Other share classes may have higher expenses, which would lower returns. Retrieved February 21, 2019
2. Source: Morningstar. Star rating for Institutional Share class as of December 31, 2018. Other share classes may have different performance characteristics and may have different ratings. All star ratings sourced from Morningstar reflect the Morningstar Overall Rating™
3. Source: Strategic Insight Simfund retrieved January 18, 2019, based on Options-based Morningstar fund category
4. Source: Morningstar. Hedged Equity based on Institutional Share class as of December 31, 2018. Category Average based on Options-based Morningstar category
5. Source: Preqin. Based on 2013-2017 data
6. Source: Morningstar as of December 31, 2018. Retrieved February 22, 2019. Returns are net of fees, max drawdown based on daily returns. Peer funds shown represent 3 largest ETFs and 3 largest open-end mutual funds by AUM in the Ultrashort Bond category as of 12/31/18. Peer funds include iShares Short Treasury Bond ETF, PIMCO Short Term Fund, Putnam Short Duration Income Fund, Lord Abbett Ultra Short Bond Fund, PIMCO Enhanced Short Maturity Active ETF, and iShares Floating Rate Bond ETF. Mutual fund share classes represented are Institutional or No-load shares

### Slide 11 – Client-centric: Advising individuals on both sides of their balance sheet

1. HELOC Balances and Charge-offs are part of "Loans (ex-mortgages)" up until 2014 and part of "Jumbo mortgages" starting 2015

### Slide 14 – Next-generation growth: Global footprint expansion

1. Total wallet estimates based on Equifax – IXI Network Database

# COMMERCIAL BANKING

February 26, 2019

FIRM OVERVIEW

CORPORATE & INVESTMENT BANK

CONSUMER & COMMUNITY BANKING

ASSET & WEALTH MANAGEMENT

► COMMERCIAL BANKING

JPMORGAN CHASE & CO.

## Commercial Banking – a proven business model

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Client and community focus

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



Competing from a position of strength

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



Investing to better serve clients and grow our franchise

- Adding **talented bankers** and expanding local coverage
- Investing in **integrated solutions** and **digital channels**
- Enhancing **client experience** through innovation and streamlining processes



Fortress principles

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



Strong financial performance

- **High quality**, resilient and diversified earnings
- Strong returns while **investing for the long-term**
- Delivering on growth targets with **significant opportunity remaining**

## Ten year retrospective – consistent investment and disciplined growth



### Expanded client coverage

Added 67 locations and  
~650 bankers since 2008<sup>1</sup>



### Enabled our team

Developed training and technology to help  
our people better serve clients



### Enhanced core capabilities

Invested in differentiated treasury services  
and credit solutions



### Invested in our critical processes

Maintained robust investment agenda  
to drive efficiency and innovation



### Maintained strong discipline

7 straight years with NCO rate  
less than 10 bps

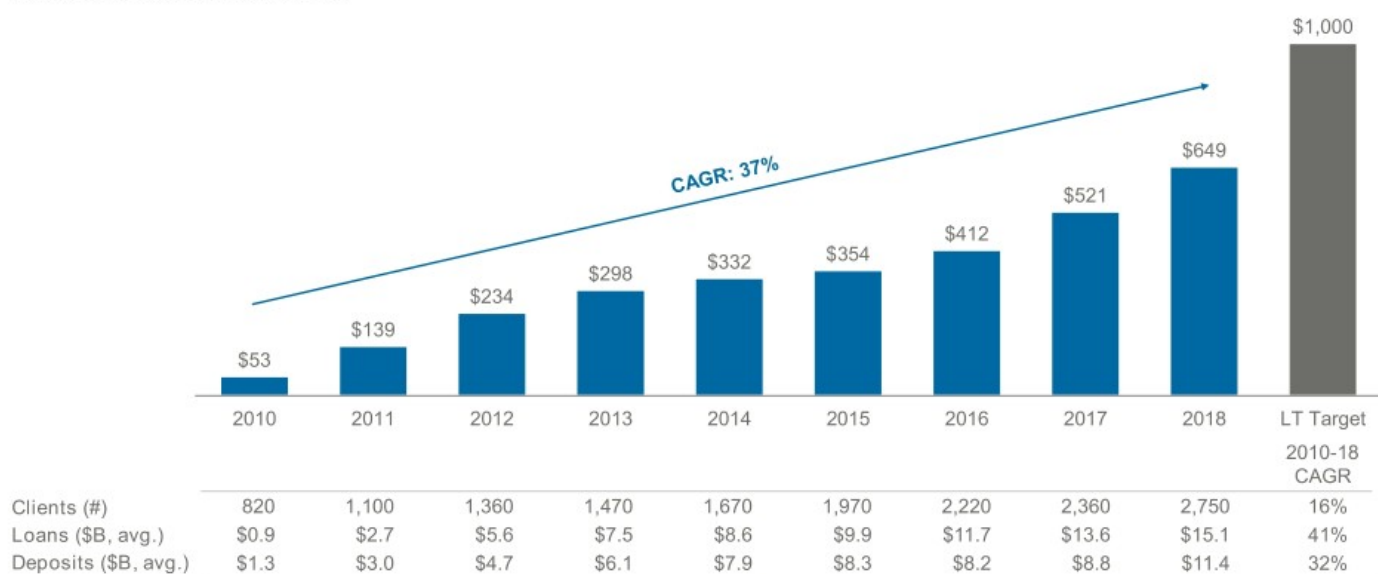


<sup>1</sup> Excludes Commercial Term Lending; bankers based on net increase of revenue-producing employees

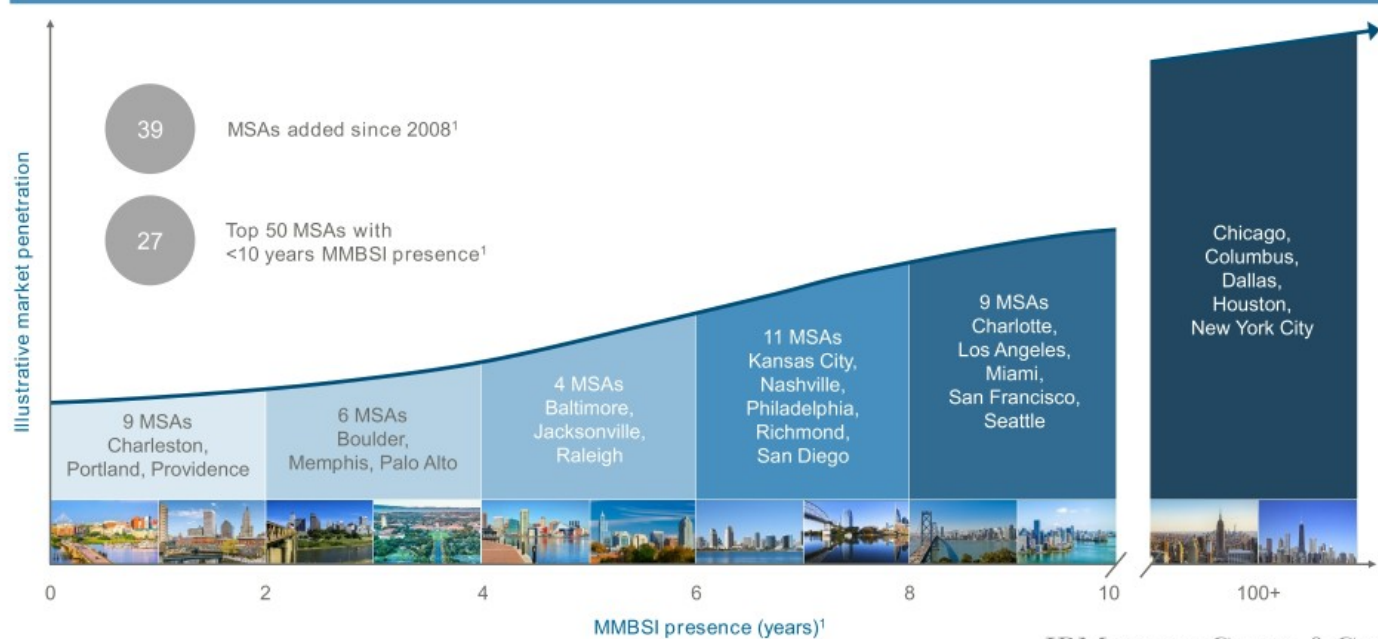
<sup>2</sup> Deposits herein represent average client deposits and other third-party liabilities

## Executing our organic Middle Market expansion strategy

Expansion market revenue (\$mm)



## Value in new markets will be realized over time

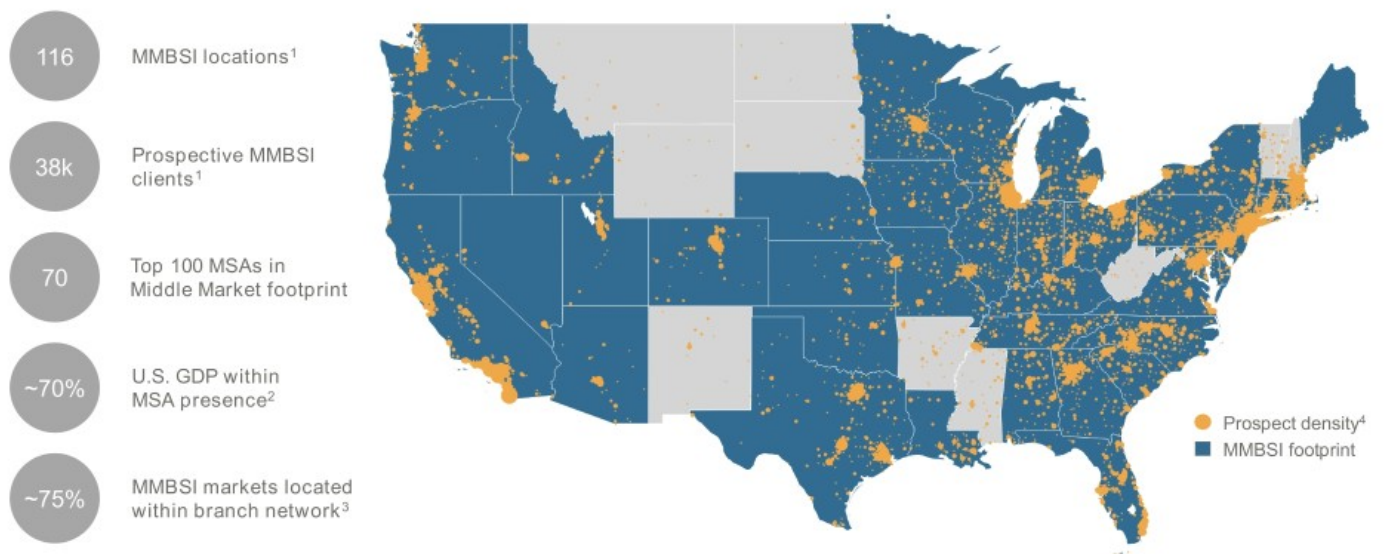


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<sup>1</sup> Based on year-end Middle Market Banking & Specialized Industries (MMBSI) banker presence; number of MSAs is for U.S. only

## Tremendous opportunity to grow Middle Market client franchise

### Middle Market Banking & Specialized Industries market opportunity



<sup>1</sup> Includes Canadian presence

<sup>2</sup> Based on 2017 U.S. GDP by MSA, Bureau of Economic Analysis

<sup>3</sup> S&P Global Market Intelligence, branch MSA presence as of 12/31/18

<sup>4</sup> Size of circle indicates relative number of prospects in a given city

## Replicating our proven CB model internationally

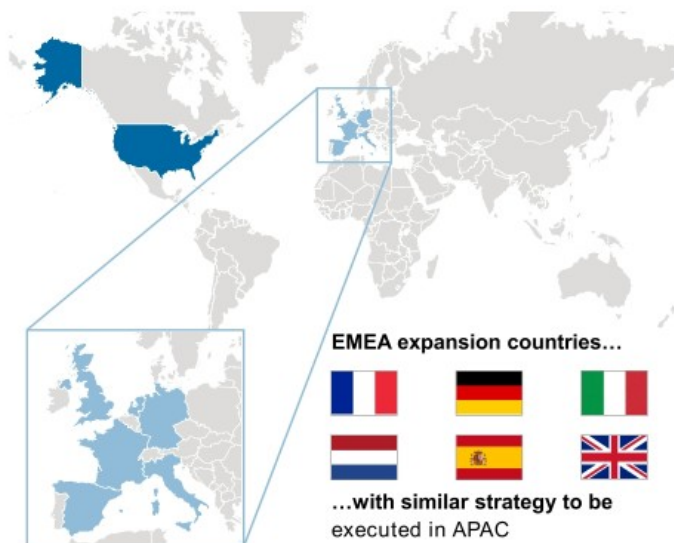
### Market opportunity



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

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

### Expanding internationally in CCBSI<sup>3</sup>



JPMORGAN CHASE & CO.

<sup>1</sup> Based on historical cost as of 2017, Bureau of Economic Analysis

<sup>2</sup> Boston Consulting Group, An Interactive Guide to Global Payments, 2019 publication based on 2017 data

<sup>3</sup> Corporate Client Banking & Specialized Industries



## Specialized industries model drives superior value and risk management

~60% of clients within specific industry coverage



### Government

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

900

Targeted prospects

### Innovation Economy

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

6k

Targeted prospects

<sup>1</sup> Includes CCBSI coverage only

<sup>2</sup> Technology & Disruptive Commerce vertical covers MMBSI technology companies and high growth consumer branded companies

## Unmatched ability to support our clients as they grow



## CB provides differentiated treasury solutions to drive client value

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



New integrated solutions  
Cohesive delivery of  
broad functionality



Improved data and analytics  
Better decision making  
leveraging transformative data



Enhanced digital capabilities  
Increased connectivity and  
improved experience



Advanced fraud protection  
Faster threat identification and  
risk mitigation

...to further help clients unlock value

Digitize



Convert paper  
to electronic

Automate



Automate  
reconciliation

Streamline



Decrease human  
interventions

Gain insight

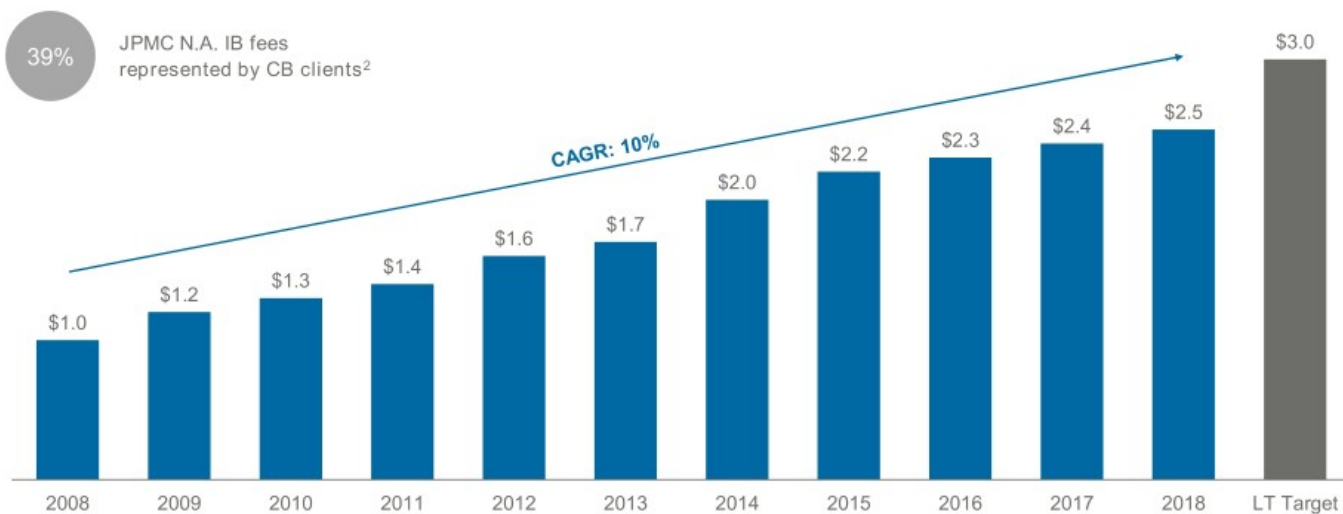


Consolidate  
view

- ✓ Enhance working capital
- ✓ Optimize cash management
- ✓ Reduce operating costs
- ✓ Safeguard business

## Delivering the best investment bank to CB clients

Commercial Banking gross investment banking revenue<sup>1</sup> (\$B)



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

<sup>2</sup> Represents the percentage of CIB's North America IB fees generated by Commercial Banking clients in 2018, excluding fees from fixed income and equity markets which is included in Commercial Banking gross investment banking revenue

## Positioning for continued long-term success in CRE

### Market leading position...



#1 multifamily lender in the U.S.<sup>1</sup>



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



Financed 20,000 units of affordable housing in 2018

### ... driven by intense client focus



Speed and certainty of execution



Simplicity and digital delivery



Continued investment and innovation

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

#### CREOS

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

Percentage of originations completed in <30 days<sup>2</sup>



JPMORGAN CHASE & CO.

<sup>1</sup> Based on S&P Global Market Intelligence, as of 12/31/18

<sup>2</sup> Based on normalized controllable cycle-time

## Consistent risk focus and smart growth across our portfolio



Rigorous client selection



Market and industry expertise



Underwriting built on experience and analytics



Through-the-cycle discipline



Downturn preparedness

Average loans by client segment (\$B)

■ C&I ■ CRE<sup>1</sup>



12

JPMORGAN CHASE & CO.

Note: Commercial and Industrial (C&I) and Commercial Real Estate (CRE) groupings used herein are generally based on client segments and do not align with regulatory definitions.  
<sup>1</sup> Includes CCBSI Real Estate

## Maintaining strong risk discipline – C&I

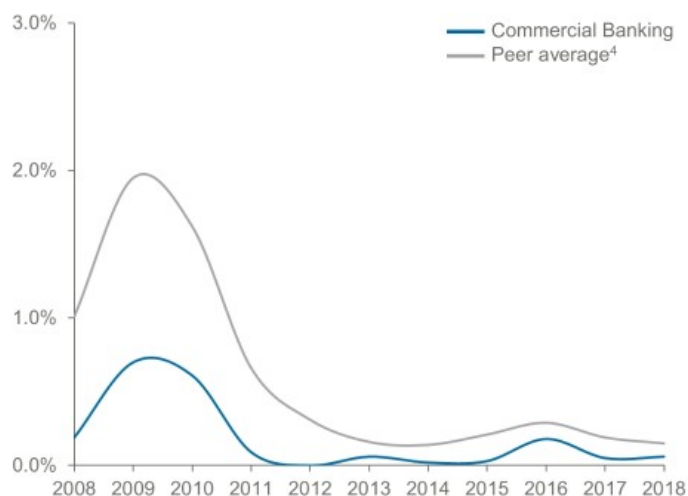
### Portfolio summary

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

### Market commentary

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

### Net charge-off performance



<sup>1</sup> "Non-investment grade" generally represents a risk profile similar to a rating of BB+/Ba1 and below, based on internal risk assessment

<sup>2</sup> Excludes advised and guidance facilities

<sup>3</sup> Excludes asset-based lending

<sup>4</sup> Peer average based on CB-equivalent C&I segments or wholesale portfolios at BAC, CMA, FITB, KEY, PNC, USB, WFC, which may not fully align with CB segmentation

## Maintaining strong risk discipline – CRE

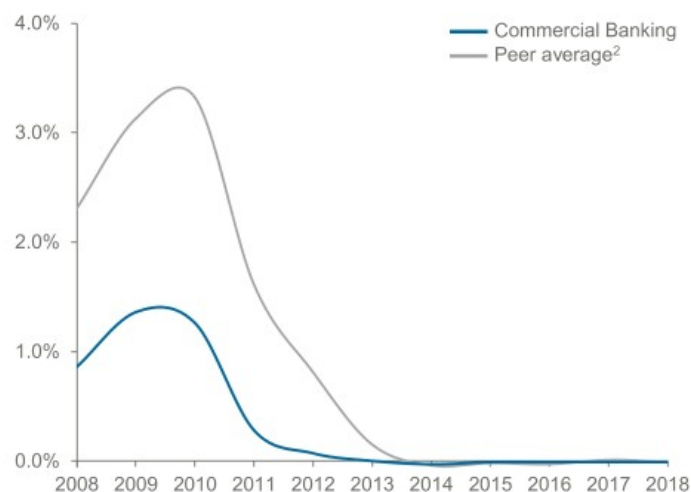
### Portfolio summary

- 71% of loans in Commercial Term Lending
  - Secured by stabilized multifamily properties in supply-constrained markets
  - New originations remain high quality; LTV ratio of 49%, DSC ratio of 1.5x<sup>1</sup>
- 29% of loans in Real Estate Banking, Community Development Banking and other
  - Focused on top-tier clients and lower-volatility asset classes
  - <\$0.5B of loans in hospitality, homebuilders, condos and land

### Market commentary

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

### Net charge-off performance

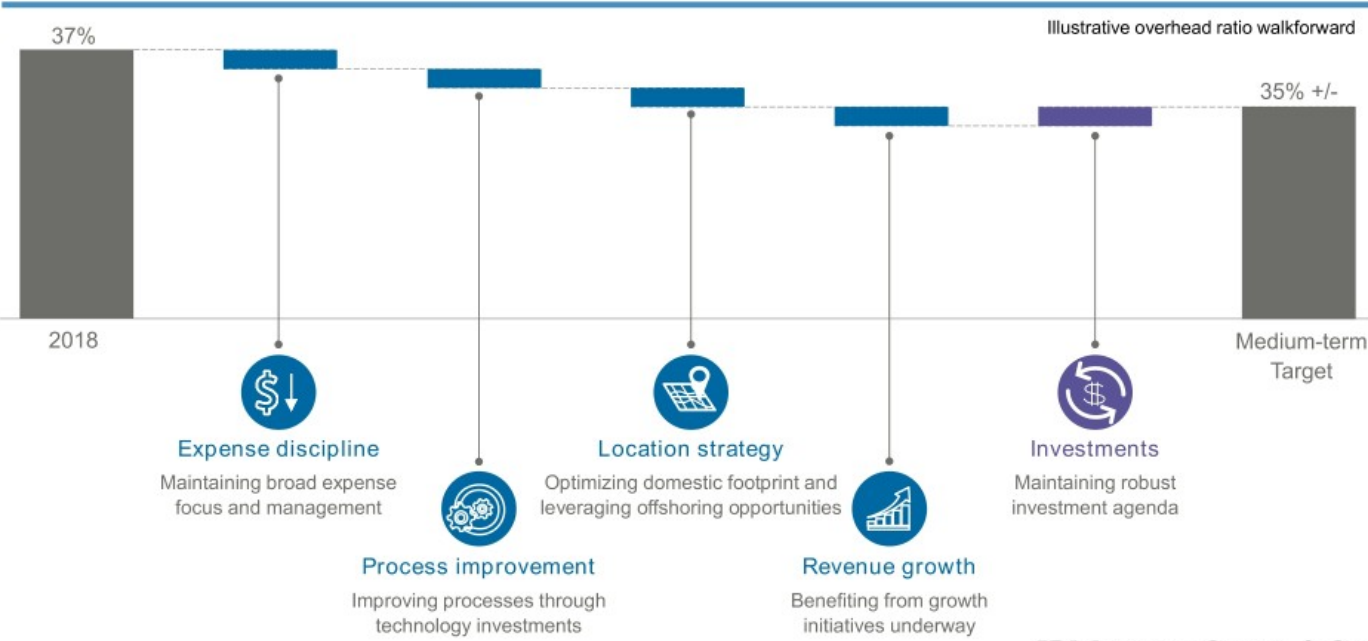


<sup>1</sup> Represents weighted averages for 2018 originations

<sup>2</sup> Peer average based on CB-equivalent CRE segments or wholesale portfolios at BAC, CMA, FITB, KEY, PNC, USB, WFC, which may not fully align with CB segmentation

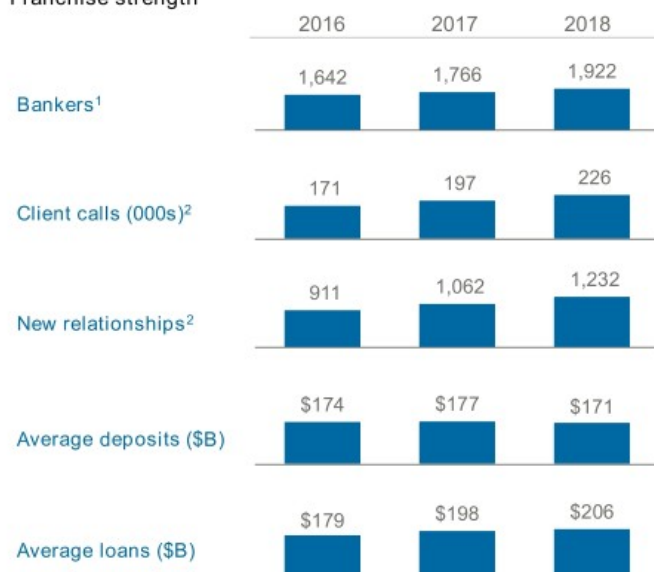


Driving efficiency while continuing to invest in the franchise

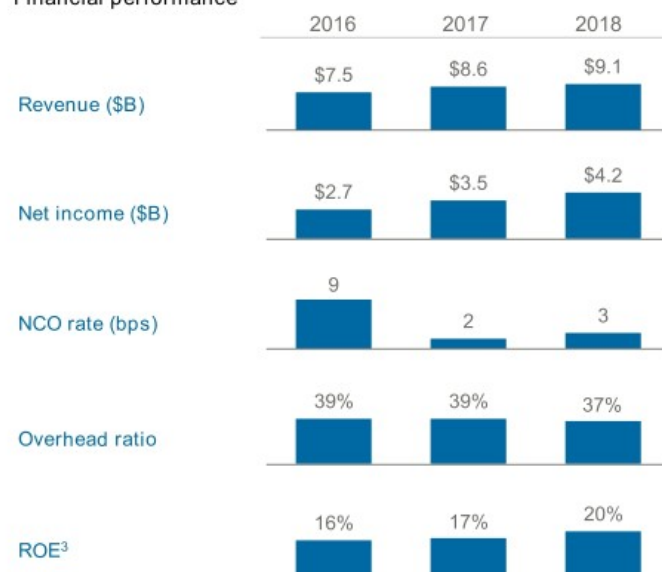


## 2018 results reflect consistent, strong execution

### Franchise strength



### Financial performance



JPMORGAN CHASE & CO.

<sup>1</sup> Based on total count of revenue-producing employees

<sup>2</sup> Excludes Commercial Term Lending

<sup>3</sup> Allocated capital was \$16B in 2016, \$20B in 2017 and \$20B in 2018

## Financial targets

		2018	2013-2018	Target
Execute growth initiatives (long-term revenue targets)	Middle Market expansion	\$649mm	17% CAGR	\$1.0B
	Investment banking <sup>1</sup>	\$2.5B	8% CAGR	\$3.0B
	International <sup>2</sup>	\$400mm	10% CAGR	\$1.0B
Maintain expense discipline (medium-term)	Overhead ratio	37%	39% avg.	35% +/-
Optimize returns (medium-term)	Return on equity	20%	17% avg.	~18%

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

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

## Why clients choose us

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### Exceptional team

Consultative approach  
Deep client knowledge



### Coverage designed around our clients

Local coverage  
Industry specialization



### Long-term partner

Continued capital support  
Substantial investment



### Unmatched solutions and capabilities

Broad-based and integrated  
Continued innovation



### Superior client experience

Omni-channel access  
Simplicity and speed of delivery



### Safety and security

Fortress balance sheet  
Cyber and fraud expertise



# SPEAKER BIOGRAPHIES

February 26, 2019

JPMORGAN CHASE & CO.

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## Jamie Dimon

Chairman & Chief Executive Officer

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Jamie Dimon is Chairman of the Board and Chief Executive Officer of JPMorgan Chase & Co., a global financial services firm with assets of \$2.6 trillion and operations worldwide. The Firm is a leader in investment banking, financial services for consumers, small business, commercial banking, financial transaction processing and asset management.

Dimon became CEO on January 1, 2006 and one year later also became Chairman of the Board. He was named President and Chief Operating Officer upon the company's merger with Bank One Corporation on July 1, 2004. Dimon joined Bank One as Chairman and CEO in 2000.

Dimon began his career at American Express Company. Next, he served as Chief Financial Officer and then President at Commercial Credit, which made numerous acquisitions and divestitures, including acquiring Primerica Corporation in 1987 and The Travelers Corporation in 1993. Dimon served as President and Chief Operating Officer of Travelers from 1990 through 1998 while concurrently serving as Chief Operating Officer of its Smith Barney Inc. subsidiary before becoming co-Chairman and Co-CEO of the combined brokerage following the 1997 merger of Smith Barney and Salomon Brothers. In 1998, Dimon was named President of Citigroup Inc., the global financial services company formed by the combination of Travelers Group and Citicorp.

Dimon earned his bachelor's degree from Tufts University and holds an MBA from Harvard Business School. He serves on the boards of directors of a number of non-profit institutions including the Bank Policy Institute and Harvard Business School. Additionally, he is the Chairman of the Business Roundtable and serves on the executive committee of the Business Council and the Partnership for New York City, and is a member of the Financial Services Forum and Council on Foreign Relations.



**Marianne Lake**  
Chief Financial Officer

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Marianne Lake is the Chief Financial Officer of JPMorgan Chase & Co. and a member of the Firm's Operating Committee.

Previously, Lake was the Chief Financial Officer of Consumer & Community Banking from 2009 to 2012. She served as the Investment Bank's Global Controller from 2007 to 2009 and managed global financial infrastructure and control programs as part of the Corporate Finance group from 2004 to 2007.

Prior to 2004, Lake worked at both Chase and J.P. Morgan in London. At Chase, she was the Senior Financial Officer in the U.K. and at J.P. Morgan she was the Chief Financial Officer for the Credit Trading business. Lake started her career as a chartered accountant at PricewaterhouseCoopers in the London and Sydney offices.

Lake received a Bachelor of Science in Physics from Reading University in the U.K. She is on the Board of Directors for the JPMorgan Chase & Co. Foundation, as well as the New York City Ballet. Lake is also the co-founder of the Women on the Move initiative and the Operating Committee sponsor of the Women on the Move Interactive Network, the employee Business Resource Group.





## Daniel Pinto

Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of the Corporate & Investment Bank

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Daniel Pinto is Co-President and Co-Chief Operating Officer of JPMorgan Chase & Co., a leading global financial services firm, and a member of its Operating Committee. He is also Chief Executive Officer of its Corporate & Investment Bank, an industry leader in investment banking, trading markets and investor services.

Daniel has spent his career at JPMorgan Chase & Co. and its predecessor companies. He began as a financial analyst and foreign exchange trader at Manufacturers Hanover in 1983 in Buenos Aires. In 1992, he was appointed head of Sales for Chemical Bank, responsible for clients in Argentina, Uruguay and Paraguay. Shortly after, he became head trader and Treasurer of Chemical Bank in Mexico. Daniel moved to London in 1996 to oversee local markets in Eastern Europe, the Middle East, Africa and Asia for Chase Manhattan, later taking charge of the markets side of the Firm's emerging-market business.

In early 2006, Daniel was made global head of Emerging Markets. He was given added responsibility for the Global Credit Trading & Syndicate business in early 2008. In 2009, he was made co-head of Global Fixed Income for the Investment Bank before becoming sole head of the group in 2012. He was also made co-CEO of the Corporate & Investment Bank in 2012, and became sole CEO in 2014. In January 2018, he was named Co-President and Co-Chief Operating Officer of JPMorgan Chase & Co., to work closely with the CEO and the Board to identify and pursue critical firmwide opportunities.

Daniel holds a bachelor's degree in Public Accounting and Business Administration from Universidad Nacional de Lomas de Zamora in Buenos Aires. He is a member of the Board of Directors of the Institute of International Finance.



## Gordon Smith

Co-President, Co-Chief Operating Officer of JPMorgan Chase & Co. and Chief Executive Officer of Consumer & Community Banking

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Gordon Smith became Co-President and Co-Chief Operating Officer of JPMorgan Chase & Co. in 2018. He reports to Chairman and Chief Executive Officer Jamie Dimon and is a member of the Firm's Operating Committee.

He is also the Chief Executive Officer of Consumer & Community Banking, a leading provider of banking, credit cards, auto finance, payments, mortgages, and investment advice. Its ~130,000 employees serve ~62 million households including ~4 million small businesses through ~5,000 bank branches and ~16,000 ATMs across 27 U.S. states and D.C. Chase is also the #1 U.S. credit card issuer, a top auto lender and a top U.S. mortgage originator and servicer. Chase.com is the most-visited banking portal in America, as more than 49 million customers access the bank's digital channels regularly, including more than 33 million mobile users.

Smith joined Chase in 2007. He served first as Chief Executive Officer of Card and then of the Card, Merchant Services and Auto businesses before taking over Consumer & Community Banking in 2012.

Before joining Chase, he spent more than 25 years at American Express, where he led and managed several businesses, including the U.S. Domestic Consumer Card Business. From August 2005 until June 2007, he was President of the Global Commercial Card business.

Smith serves on the Board of Directors for Nordstrom Inc. He holds a master's degree from the Thunderbird School of Global Management.

He is married with two grown children and lives in New Jersey.



## Mary Callahan Erdoes

Chief Executive Officer of Asset & Wealth Management

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Mary Callahan Erdoes is Chief Executive Officer of J.P. Morgan's Asset & Wealth Management division, a global leader in investment management and private banking with \$2.7 trillion in client assets. She is also a member of JPMorgan Chase & Co.'s Operating Committee.

Ms. Erdoes joined J.P. Morgan in 1996 from Meredith, Martin & Kaye, a fixed income specialty advisory firm. Previously, she worked at Bankers Trust in corporate finance, merchant banking and high yield debt underwriting.

Ms. Erdoes is a board member of Robin Hood, the U.S. Fund for UNICEF, and the U.S.-China Business Council. She also serves on the Federal Reserve Bank of New York's Investor Advisory Committee on Financial Markets.

Ms. Erdoes is a graduate of Georgetown University (B.S., Mathematics) and Harvard Business School (M.B.A.). She lives in New York City with her husband and three daughters.



## Douglas Petno

Chief Executive Officer of Commercial Banking

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Doug Petno is the Chief Executive Officer of Commercial Banking, one of the Firm's four lines of business. He reports to Jamie Dimon, Chairman and CEO, and is a member of the Firm's Operating Committee.

Commercial Banking has more than 10,000 professionals located in 130 locations across the U.S. and 26 major international cities. Commercial Banking delivers industry leading capabilities and comprehensive financial solutions, including investment banking, treasury services, merchant services, and commercial lending. The business serves more than 17,000 clients, including mid-sized businesses and corporations, government entities and not-for-profit organizations and more than 34,000 real estate investors/owners.

Petno has more than 29 years of experience at the Firm. Prior to his current role, Doug was Global Head of J.P. Morgan's Natural Resources Investment Banking Group, where he oversaw client coverage for Oil & Gas, Power & Utilities, Chemicals, Metals & Mining, Building Products, and Paper & Packaging. He joined Commercial Banking in 2010 as Chief Operating Officer and then became the Chief Executive Officer in 2012.

Petno recently joined The Nature Conservancy Board of Directors and is Vice Chairman of NatureVest, an initiative to advance impact investing in conservation. Petno is on the Board of the American Bankers Association and is actively engaged with the members on key issues facing the banking industry. He also serves on the Board of Directors for the J.P. Morgan Chase & Co. Foundation. He received an A.B. degree in Biology from Wabash College and holds a Master of Business Administration from the University of Rochester's Simon School of Business.



## Troy Rohrbaugh

Head of Global Markets

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Troy Rohrbaugh is the head of Global Markets for J.P.Morgan, the industry's largest trading franchise, and a leader in both Equities and Fixed Income. He is a member of the Corporate & Investment Bank Management Team.

Prior to his current role, Troy was the head of Macro Markets, which includes the Rates, Foreign Exchange, Emerging Markets and Commodities businesses.

Troy has worked in the financial industry for more than 25 years and has managed businesses in New York, London and Asia. During his career, he has taken active roles in key industry organizations, including as the Chair of the New York Federal Reserve Foreign Exchange Committee. He has also served as the chair of the Global Financial Markets Association's (GFMA) Foreign Exchange Group and as a member of the Bank of England's Joint Standing Committee.

Troy joined J.P.Morgan in 2005 as a managing director and global head of Foreign Exchange Derivatives. He began his career on the Philadelphia Stock Exchange, trading options for CooperNeff, a specialist firm acquired by Banque Nationale in 1995. He led Banque Nationale's Asia Foreign Exchange Options business before joining Goldman Sachs, where he managed the North American Foreign Exchange Options business.

Troy graduated from the Gilman School in 1988 and Johns Hopkins University in 1992 with a B.A. in Political Science. He is a member of the Johns Hopkins University Krieger School of Arts and Sciences Advisory Board, a member of the Board of Trustees of the Gilman School and a Founding member and Advisory Board member of The Frannie Foundation. Troy lives in New York with his wife and their two sons.



## Takis Georgakopoulos

Head of Wholesale Payments

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Takis Georgakopoulos is head of Wholesale Payments for J.P. Morgan, a business that combines cash management, payment solutions and merchant services to corporate clients, financial institutions and governments. In this role, he also oversees the Product, Client Service & Implementations and Sales teams globally.

Prior to this role, Takis led Treasury Services for two years, a business that provides all aspects of cash management solutions for client treasurers. From 2012 to 2017, he served as the head of CIB Strategy and Chief of Staff, developing and executing the Firm's strategic initiatives. Before that, Takis spent four years in London building J.P. Morgan's Global Corporate Bank, first as Chief Financial Officer and then as global head of Coverage for Multinational clients. Takis first joined J.P. Morgan in 2007 as head of Corporate Strategy. In that role, he was responsible for addressing a broad range of strategic issues impacting the Firm, including those resulting from the financial crisis of 2008-09 and M&A activity during the same period.

Before J.P. Morgan, Takis was a partner at McKinsey & Company in New York, where he advised U.S. banks and Asset Managers, and helped lead McKinsey's Asset Management and Retirement practice.

Takis has a Ph.D. in Mathematical Economics from the Technical University of Athens, an MA in Mathematics of Finance from Columbia University and an undergraduate degree in Electrical Engineering and Computer Science. During his Ph.D., he worked as a researcher for the European Commission helping to evaluate the economic impact of European integration and environmental regulation.



## Thasunda Brown Duckett

Chief Executive Officer of Consumer Banking

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Thasunda Brown Duckett is the Chief Executive Officer of Consumer Banking. She is a member of the Consumer & Community Banking Leadership Committee.

Chase is one of the largest U.S. providers of banking, lending, treasury, wealth management and investment services. Duckett oversees a banking network with more than \$800 billion in deposits and investments, ~5,000 branches, ~16,000 ATMs and more than 48,000 branch employees – including more than 3,000 financial advisors – serving more than 25 million households nationwide. From 2013 – 2016, Duckett was the Chief Executive Officer of Auto, one of the leading bank providers of auto financing in the country with a portfolio of more than \$80 billion in loan and lease assets and relationships with 75% of U.S. franchised automotive dealers. Under her leadership, Auto moved from #27 in the JD Power Dealer Financing Satisfaction Survey to #1 in Prime and Non-Prime. She broadened its dealer partnerships and launched Chase Auto Direct, the bank's new direct-to-consumer business.

Prior to Auto, Duckett served as the National Retail Sales Executive for Home Lending, where she managed 4,000 mortgage bankers who provide home financing to customers across the nation. She was previously Head of Home Lending's East Region Sales team for three years. She has also served as the Channel Executive of Bank Branch Integration and as Director of Affordable Lending and Emerging Markets. Before joining JPMorgan Chase & Co. in 2004, Duckett was a Director of Emerging Markets at Fannie Mae, where she led the implementation of national strategies designed to increase homeownership among African Americans and Hispanics across the country.

Duckett has been recognized widely as a leading executive in the financial industry. She was named as a "Top 100 Leading Female Executive" by Automotive News; one of the most powerful women in banking by American Banker magazine; one of the 50 most powerful women in corporate America by Black Enterprise magazine and among the top most influential blacks in corporate America by Savoy magazine. Duckett is a founding member of the Firm's Women on the Move initiative, Advancing Black Pathways and an Executive Sponsor of The Fellowship Initiative. The enrichment program, run by JPMorgan Chase & Co., offers young men of color academic, social and emotional support to help them achieve personal and professional success.

Duckett is originally from Texas. She holds a Bachelor's degree in Finance and Marketing from the University of Houston, and an MBA from Baylor University. She is married and has four children. She and her family live in Connecticut.



## Mike Weinbach

Chief Executive Officer of Home Lending

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Mike Weinbach is the Chief Executive Officer of Home Lending.

Chase is one of the largest U.S. providers of banking, lending, treasury, wealth management and investment services. Chase serves ~62 million households, including consumers, small businesses, mid-size companies, corporations, financial institutions, nonprofits and governments. Chase's Home Lending business is the second largest in the U.S.

In Mike's previous role as Head of Servicing, he managed a portfolio of more than 6 million mortgages representing a combined balance of more than \$900 billion. Prior to joining Home Lending, Mike was responsible for Sales in Consumer Banking and held a similar role in Business Banking. He also served as Chief Financial Officer for Consumer Banking and Product & Pricing Chief Financial Officer in Auto.

Prior to Chase, he operated a small business specializing in workforce motivational products and services and worked at Citigroup in New York.

Mike graduated from the Wharton School at the University of Pennsylvania and earned his MBA at Harvard Business School.





## Jennifer Piepszak

Chief Executive Officer of Card Services

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Jennifer Piepszak is the Chief Executive Officer of Card Services, which includes Chase's consumer and small business businesses, as well as the largest co-brand credit card business in the world. Chase is the number one credit card issuer in the United States based on sales volume and leads the industry in loans with more than \$155 billion in outstandings.

Jenn has been with JPMorgan Chase & Co. for 25 years, the last eight in the Firm's Consumer & Community Banking division. Prior to becoming Chief Executive Officer of Card Services in February 2017, Jenn was Chief Executive Officer of Business Banking which serves more than 2.5 million U.S. small business households and was Chief Financial Officer of Home Lending prior to that.

During Jenn's first 17 years at the Firm, she held progressively responsible roles in the Corporate & Investment Bank serving as Controller for Global Equities and Prime Services, Chief Financial Officer and Controller for the Proprietary Positioning Business and Principal Investments Management, and Chief Financial Officer for the Investment Bank Credit Portfolio as well as several Fixed Income markets businesses.

A member of the Board of Directors of the United Way of New York City and the Executive Committee of the American Bankers Association's Card Policy Council, Jenn holds a Bachelor of Science degree from Fairfield University. She and her husband have three children and live in New Jersey.

