FIRM OVERVIEW

February 26, 2019

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CORPORATE & INVESTMENT BANK

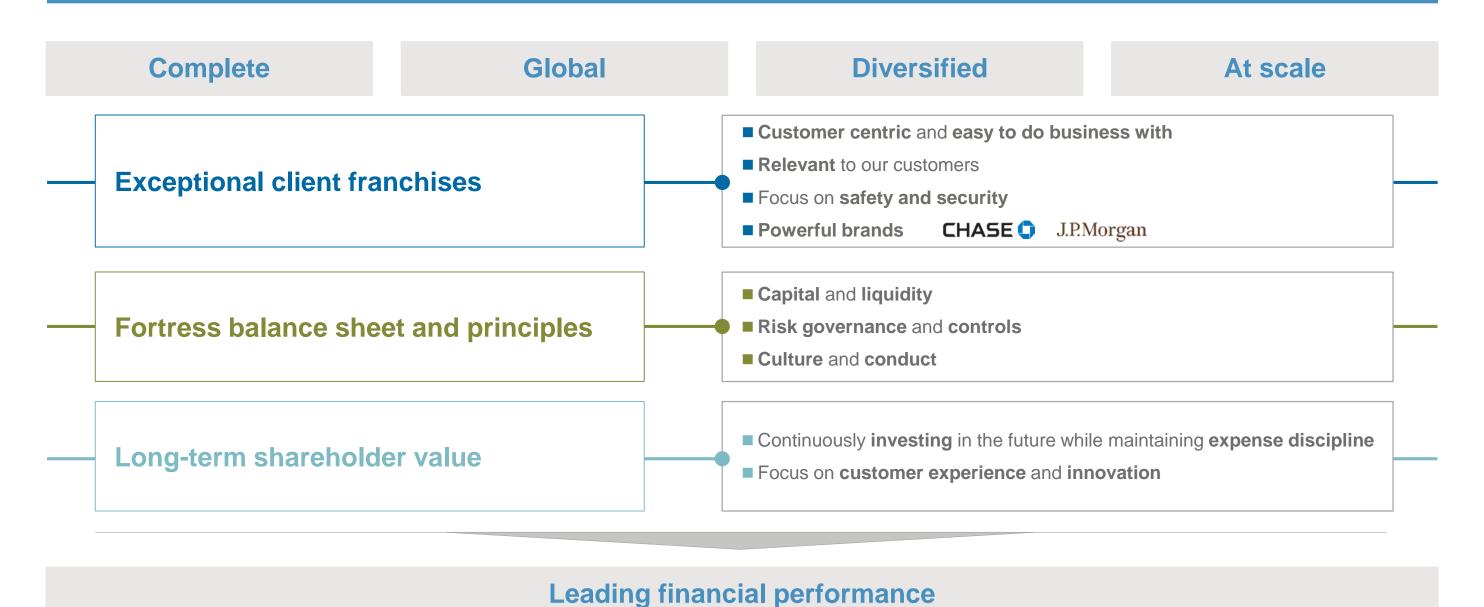
CONSUMER & COMMUNITY BANKING

ASSET & WEALTH MANAGEMENT

COMMERCIAL BANKING

JPMORGAN CHASE & CO.

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



JPMORGAN CHASE & CO.

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

\$111.5_B 1

\$32.5_B 1

\$9.00 **1**

12.0% J

CET1 ratio²

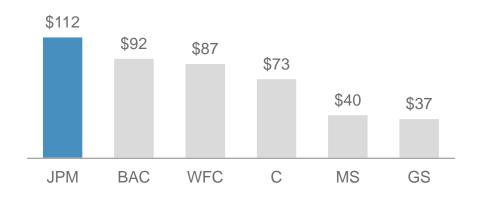
\$28.5_B 1 net capital distribution³

17% 1
ROTCE⁴

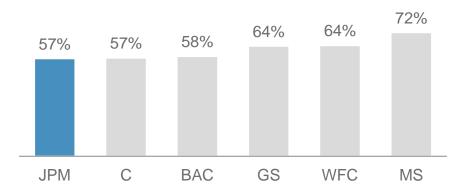
Record revenue and income

...as well as relative to our peers

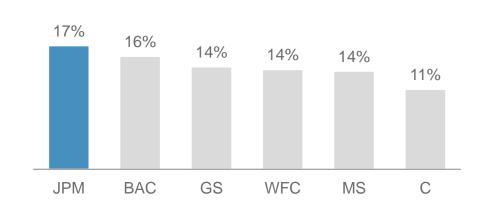
Revenue – managed (\$B)^{1,2}



Overhead ratio – managed^{1,3}



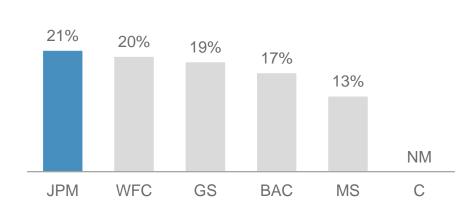
ROTCE⁴



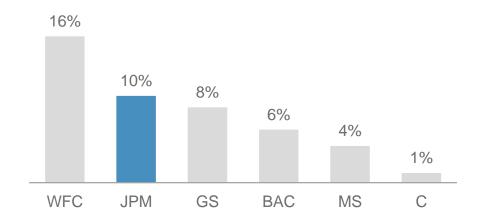
Capital distribution (\$B)⁵



EPS: 10-year CAGR⁶



TBVPS^{4,6}: 10-year CAGR



We have exceptional client franchises...

Consumer &
Community Banking

- Serve **62**mm U.S. households, including **4**mm small businesses
- **49**mm active digital customers¹, including **33**mm active mobile customers²
- 99mm debit and credit card accounts³
- ■#1 in new **primary bank** relationships nationally⁴
 - 9.0% retail deposit market share⁵
- ■#1 U.S. **credit card** issuer based on sales and outstandings⁶
 - 22.3% sales market share⁷
 - 16.6% outstandings market share⁸
- ■#2 jumbo mortgage originator9

Corporate & Investment Bank

- Business with >80% of Fortune 500 companies
- Presence in over **100** markets globally
- ■#1 in global IB fees¹⁰
 - 8.7% market share
 - Participated in 7 of the top 10 fee paying deals in 2018
- ■#1 in **Markets** revenue globally¹¹
 - 11.6% market share, including 11.9% FICC and 11.2% Equities
- ■#1 Global **Research** Firm¹²
- ■#1 in **USD payments** volume¹³
- Top 3 **custodian** globally with \$23T AUC¹⁴

Commercial Banking

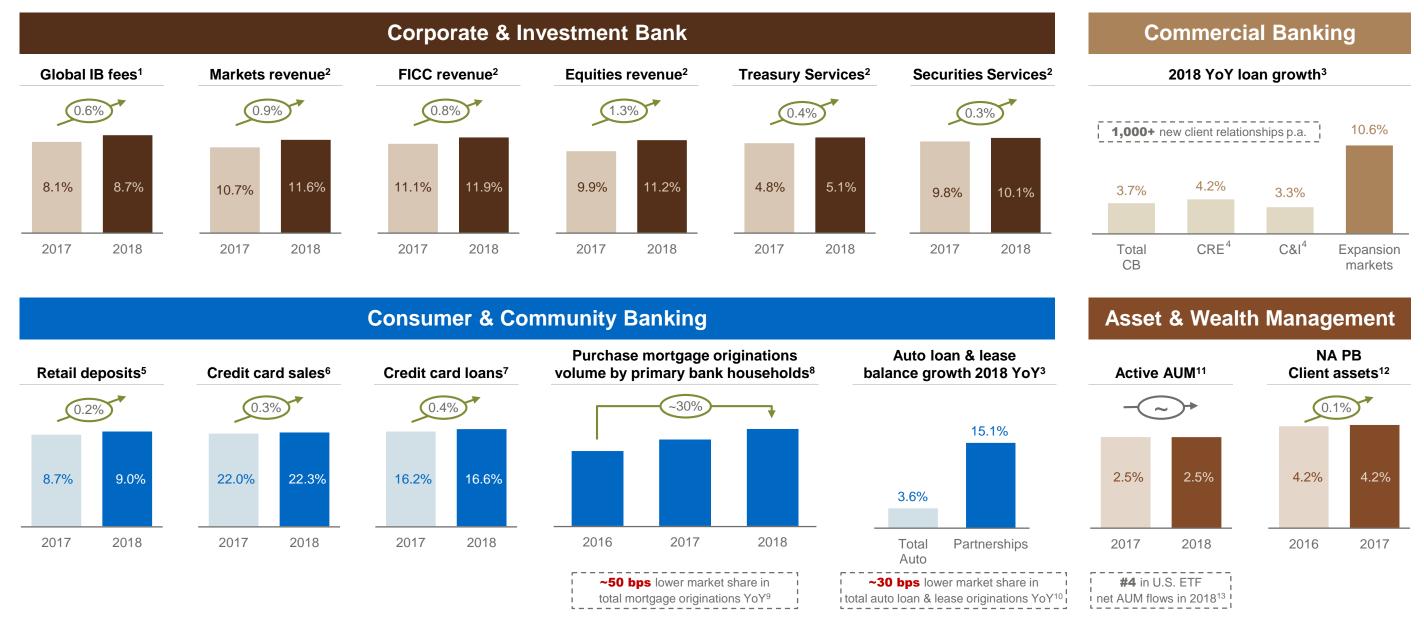
- ■133 locations across the U.S., incl. all of the top 50 MSAs
- 26 international locations
- Credit, banking and treasury services to ~17,000 <u>C&I</u> clients as well as ~34,000 <u>real estate</u> owners and investors
 - Industry leading credit –
 7th straight year of net recoveries or single-digit NCO rate
- ■#1 U.S. multifamily lender¹⁵
- \$2.5B gross investment banking revenue¹⁶
 - #1 traditional middle market bookrunner¹⁷

Asset & Wealth Management

- Serve clients across the **entire** wealth spectrum
- Business with **55%** of the world's largest pension funds, sovereign wealth funds and central banks
- ■#1 Private Bank in North America¹⁸
- Fiduciaries across all asset classes
- ■83% of 10-year mutual fund AUM performed above peer median¹⁹
- ■\$2.7T client assets, including \$2.0T AUM

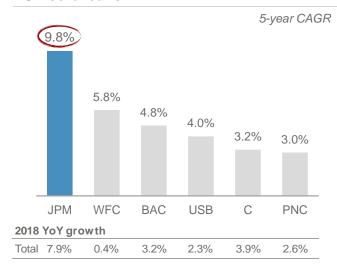
Revenue:	\$52B	\$36B	\$9B	\$14B
ROE:	28%	16%	20%	31%

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

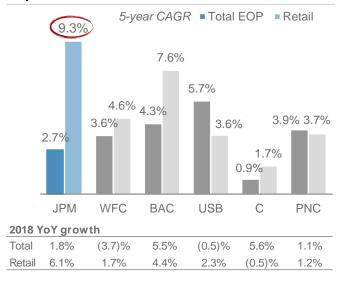


Proven best-in-class long-term performance

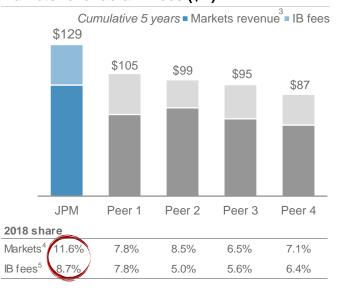
EOP core loans¹



Deposits²



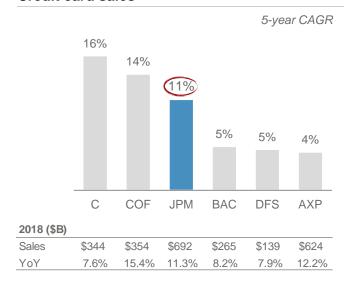
Markets revenue & IB fees (\$B)



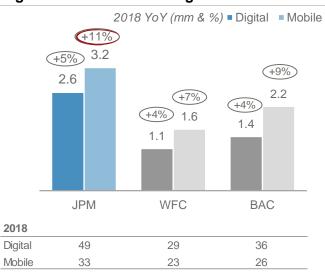
Total net client asset flows (\$B)



Credit card sales¹¹



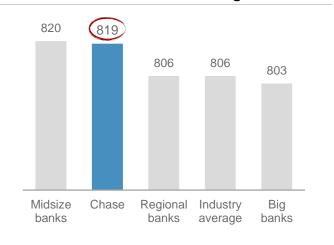
Digital & mobile customer growth



Merchant processing bankcard¹²

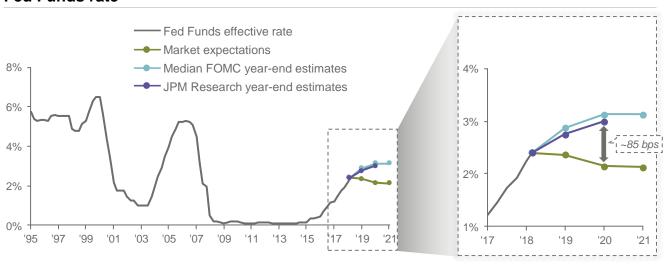


2018 J.D. Power U.S. retail banking satisfaction¹³

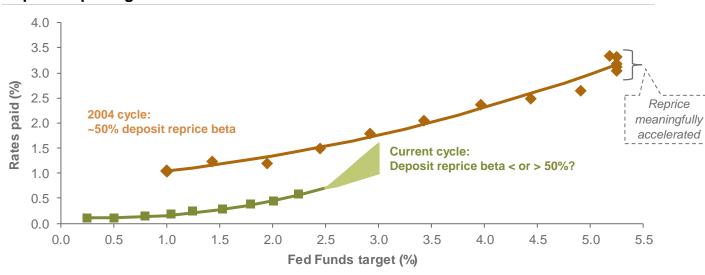


Macroeconomic backdrop

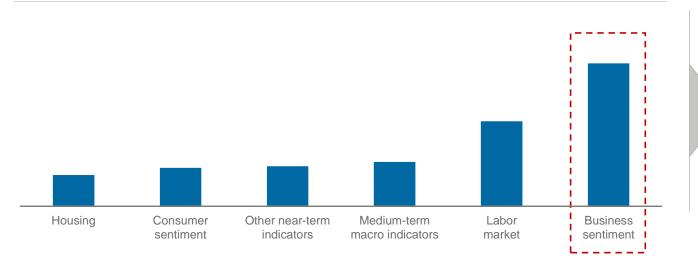
Fed Funds rate¹



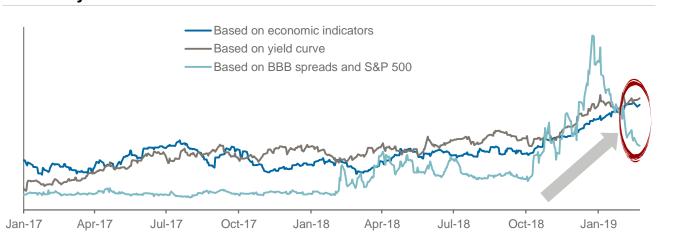
Deposit repricing²



Probability of a U.S. recession based on economic indicators – drivers YoY³

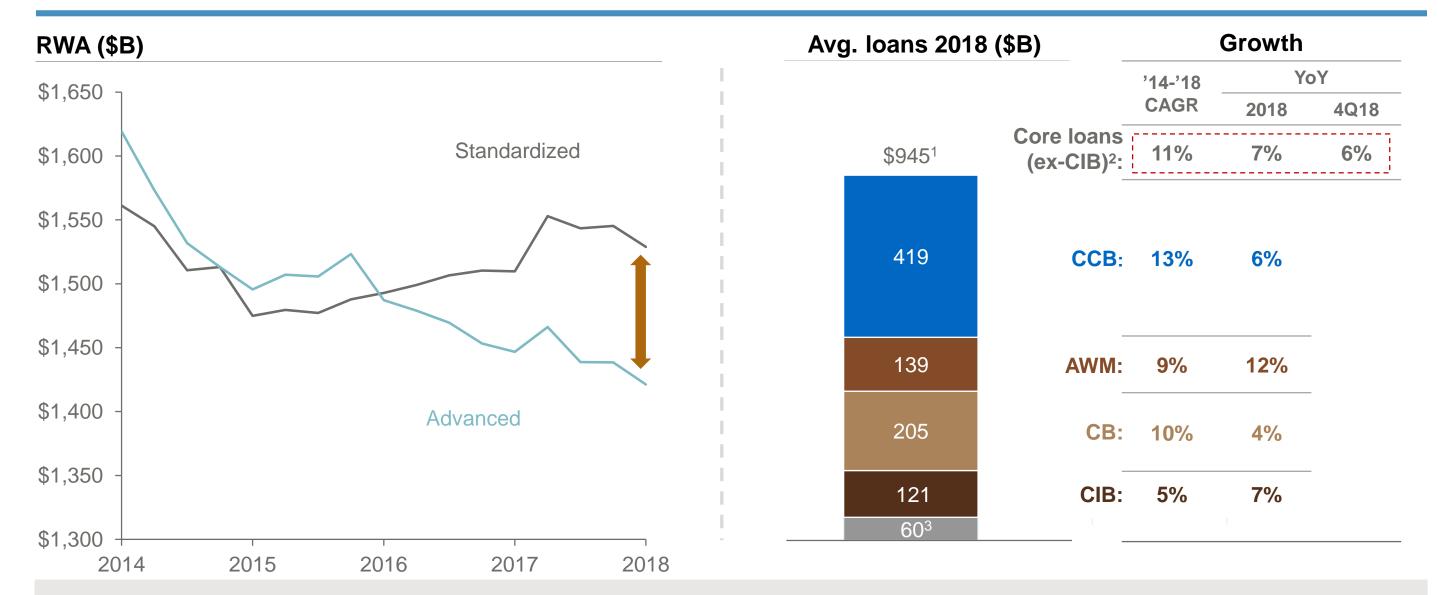


Probability of a U.S. recession in ≤12 months³



Note: For footnoted information, refer to slide 36

Evolution of the balance sheet



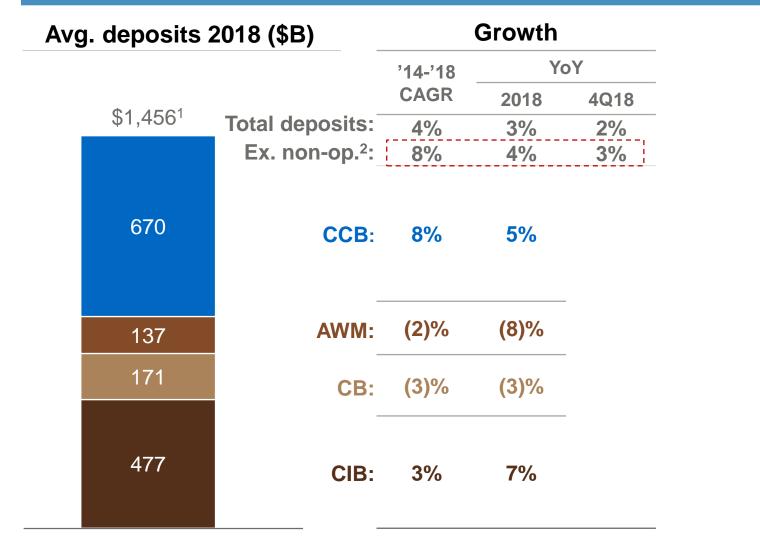
Focus on high quality loans – expect slower pace of growth

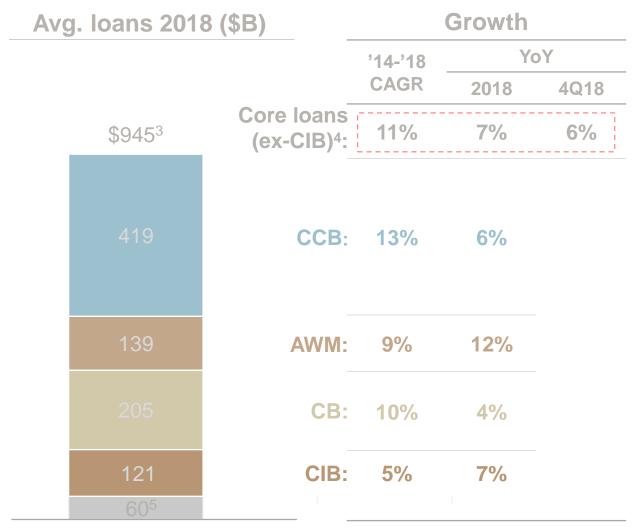
¹ Includes Corporate

² See note 2 on slide 29

³ 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

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	RV	WA	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

SCAP¹ → CCAR²

GSIB Surcharge

Living Wills

Requirements

Liquidity

Is TLAC³

Basel I → Basel III

Foundational principles

Global consistency and harmonization

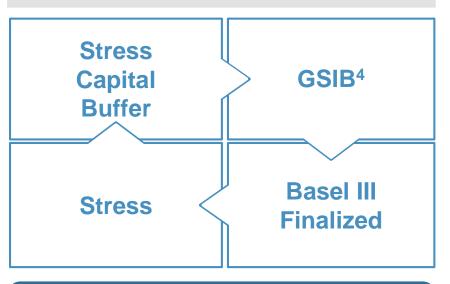
Coherence and simplification of rules

Coordinated regulatory supervision

The next chapter is close ...

2020s

Finalized implementation

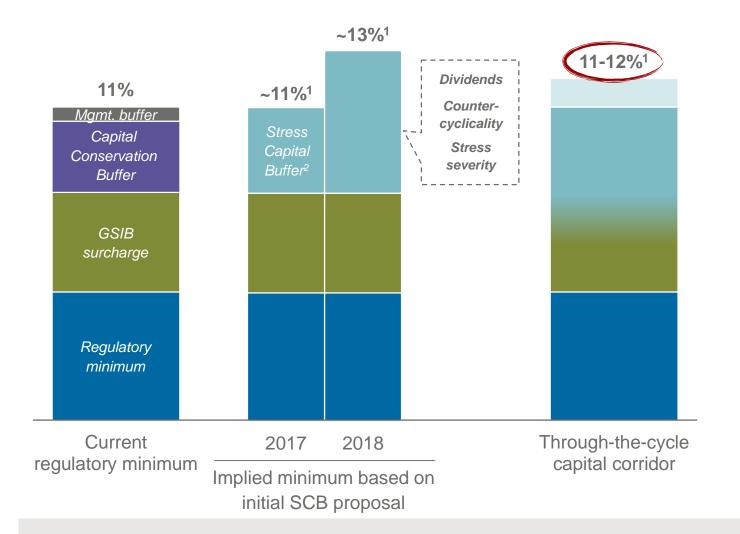


Resiliency & Resolvability
Liquidity, Living Wills, TLAC

Coherence and calibration are critical

CET1 requirement and capital distribution

Evolving CET1 requirement



Coherent regulatory capital minimums

- Appropriate calibration of SCB and GSIB
- Avoid duplication in particular, countercyclicality

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

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

	Advanced RWA	Standardized RWA	Tier 1 Leverage	Stress / CCAR	GSIB
Allocation impact					

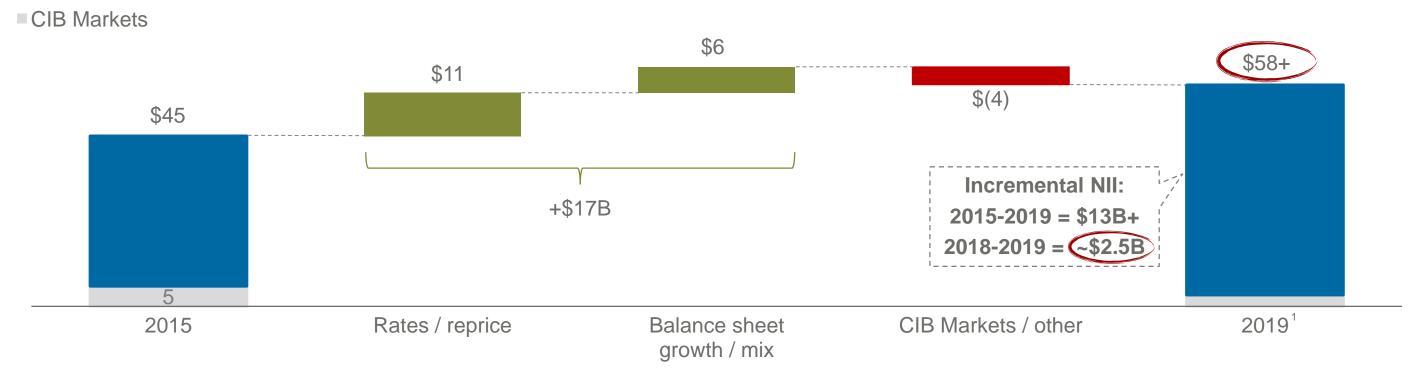
2019 capital allocation and ROE

<u> </u>	Avg. retained equity (\$B) ¹		Mediur RC	m-term DE
	2018	2019	Previous	Revised
ССВ	\$51	\$52	25%+	
СІВ	70	80	~17% ~16%	
СВ	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

Net interest income – significant growth

Net interest income (\$B)



Forward looking NII drivers

▼ Rates net of deposit reprice lags
Rate benefit more than offset by deposit reprice

▲ Balance sheet growth and mix

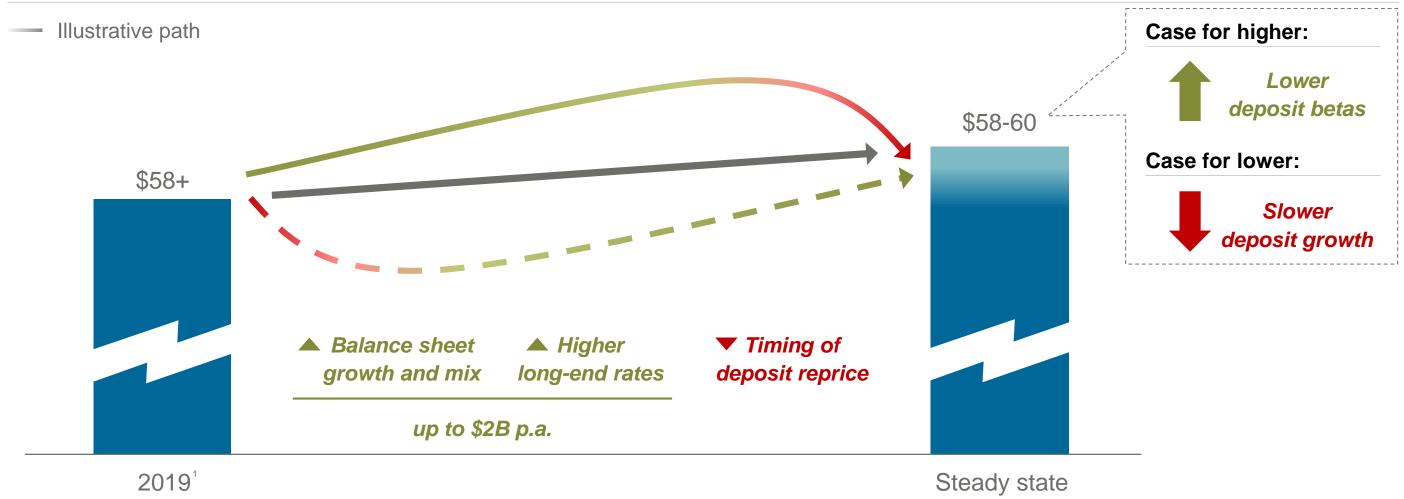
▼ CIB Markets NII

Down, but less of a drag on fewer hikes

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

Net interest income – steady state

Net interest income (\$B)



Expect steady state NII for the current cycle to be at or slightly above 2019 levels – deposit reprice dependent

Noninterest revenue¹

Noninterest revenue (\$B)

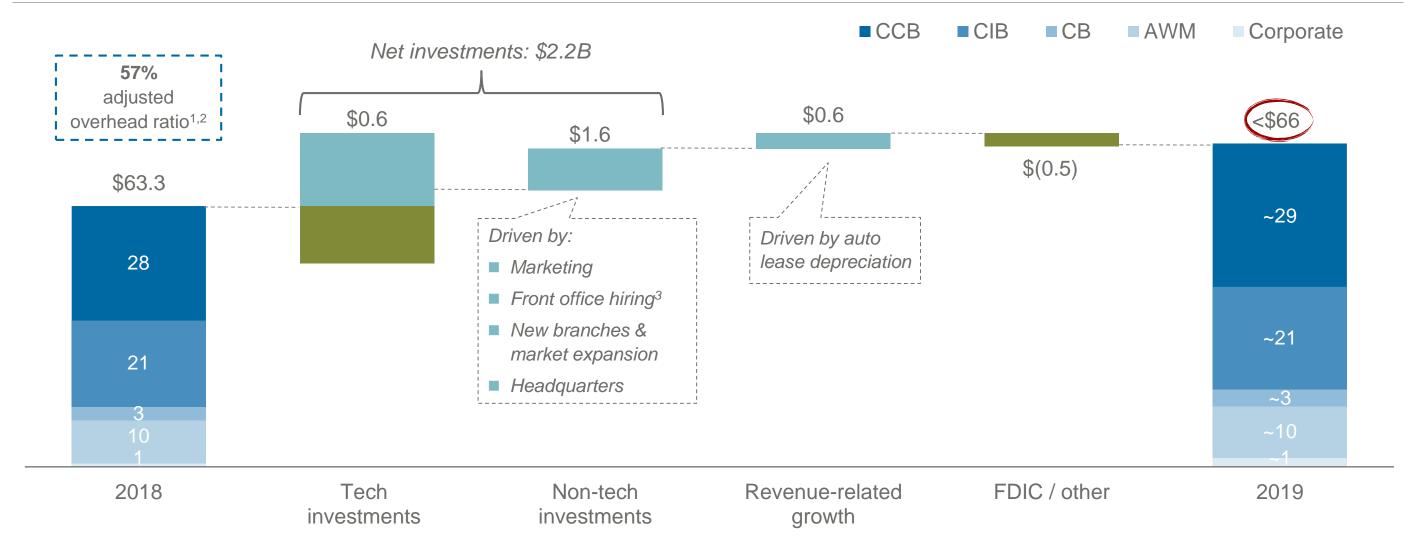




Core business drivers supporting ~3% NIR CAGR over time

Adjusted expense¹

Adjusted expense (\$B)



Credit – net charge-offs

		20	018	2019 Outlook
		NCO rate	NCOs (\$B)	NCO rate
	Home Lending ^{1,2}	(0.02)%	\$(0.0)	←→
ССВ	Card	3.10%	4.5	Medium-term: Modestly higher on mix
000	Auto	0.38%	0.2	\leftrightarrow
	Business Banking ³	0.49%	0.1	\leftrightarrow
	CIB	0.08%	0.1	\leftrightarrow
CB AWM		0.03%	0.1	\leftrightarrow
		0.01%	0.0	\leftrightarrow
	Firmwide ¹	0.53%	\$4.9	<\$5.5B Higher on growth

¹ Excludes the impact of purchased credit-impaired ("PCI") loans

² Excludes the impact of reperforming and non-performing loan sales

³ Excludes the impact of retail overdraft losses; CBB'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

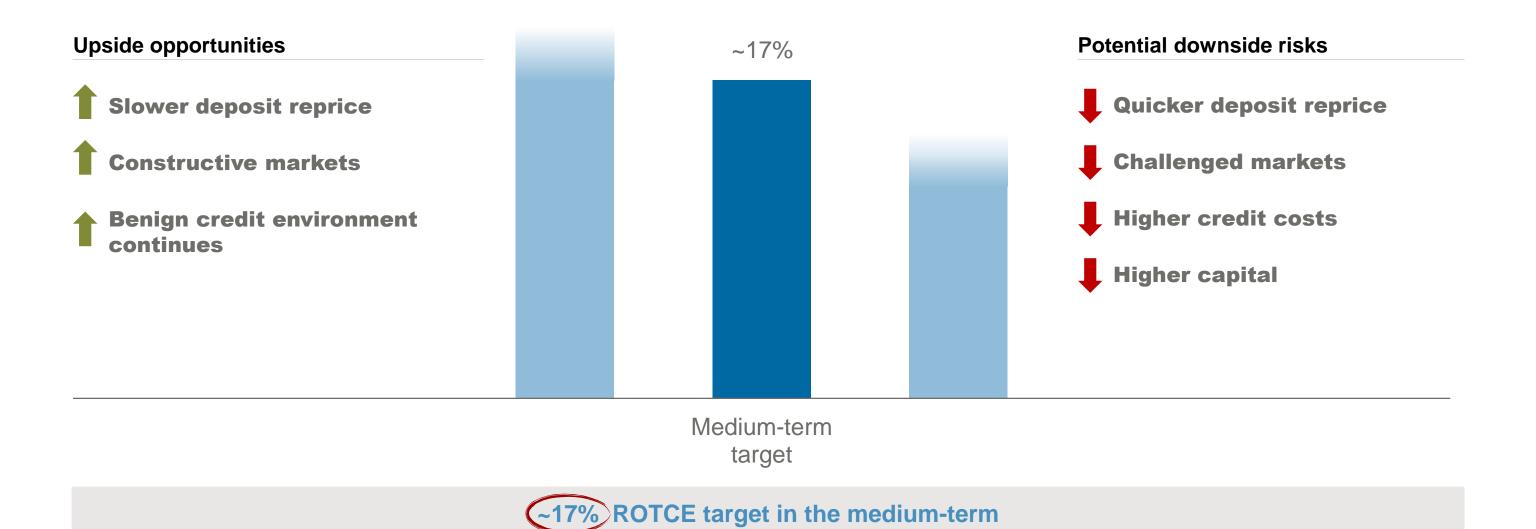
Effects

- 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	
	Card	\$5.2	Material adjustment	Current coverage is ~12m versus avg. life of ~24m
ССВ	Home Lending ¹	2.9		
	Auto & BB	1.3	Less material adjustments	
Who	olesale	5.1		
Firmwide		\$14.5	\$4-6	Adverse case \$6-10

Medium-term target for ROTCE



Conclusion

Exceptional client franchises

Fortress balance sheet and principles

Long-term shareholder value

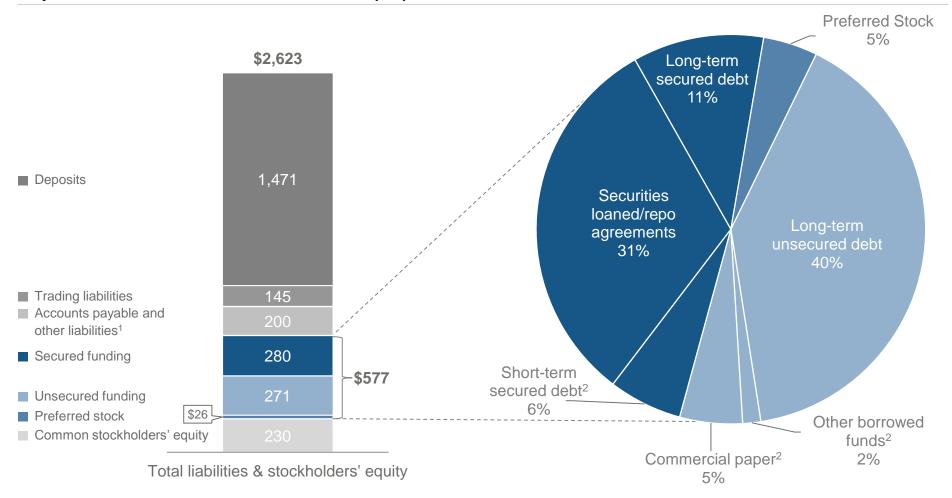
Leading financial performance (medium-term outlook) ~17% ~55% ROTCE Overhead ratio 75-100% ~12% CET1 ratio Net payout ratio

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Continuing to optimize funding mix

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



Secured funding highlights

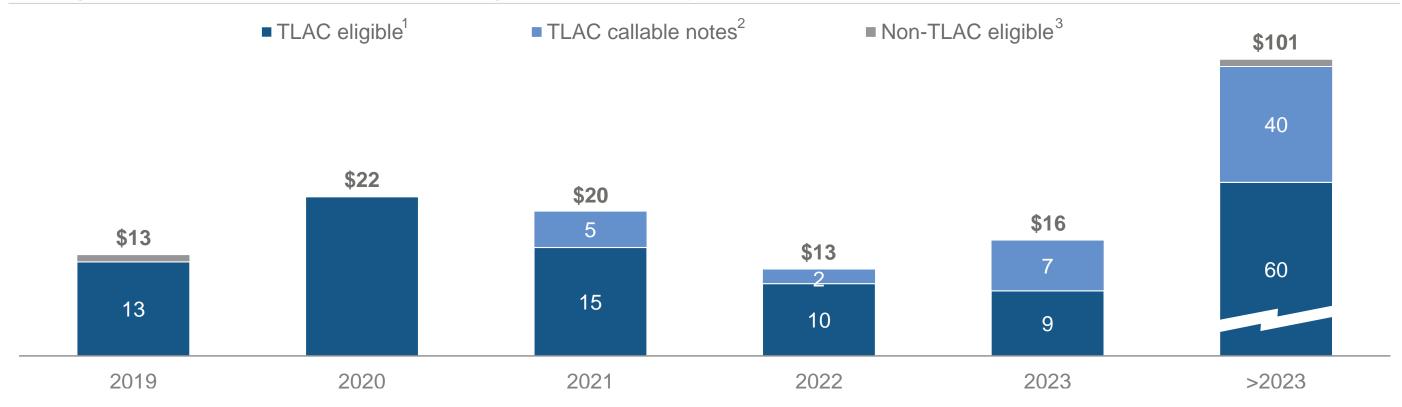
- Long-term secured debt
 - \$44B FHLB advances
 - \$13B credit card securitization
- Short-term secured debt
 - \$18B collateralized commercial paper
 - \$5B asset-backed commercial paper
 - \$11B FHLB advances

Unsecured funding highlights

- Long-term unsecured debt
- \$163B senior debt
- \$17B subordinated debt³
- \$53B structured notes
- Commercial paper
 - \$30B
 - Supports CIB Markets business

Managing maturity profile and TLAC efficiency

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

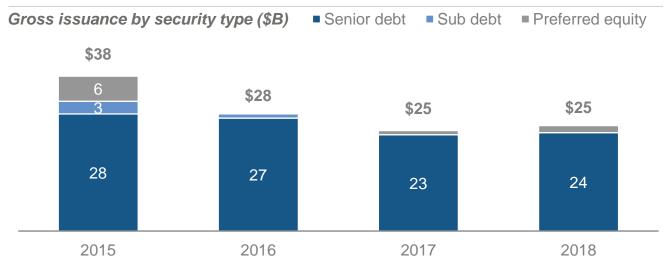


Maturity profile includes

- ■\$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

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

TLAC maturities and balance sheet drive issuance

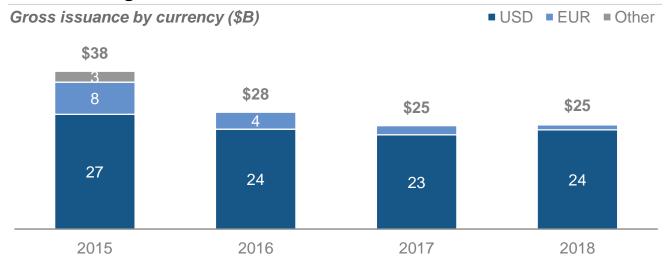


Tenor driven by maturity management and spreads

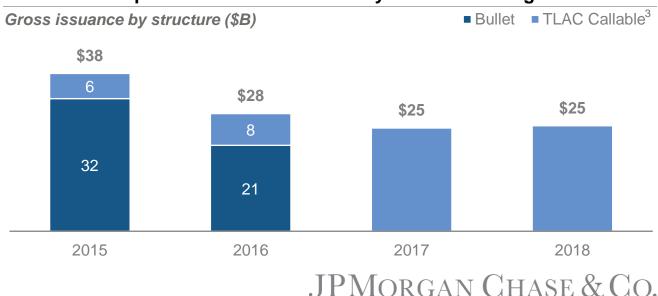


Note: Totals may not sum due to rounding. For footnoted information, refer to slide 41

Issuance weighted towards USD due to relative economics

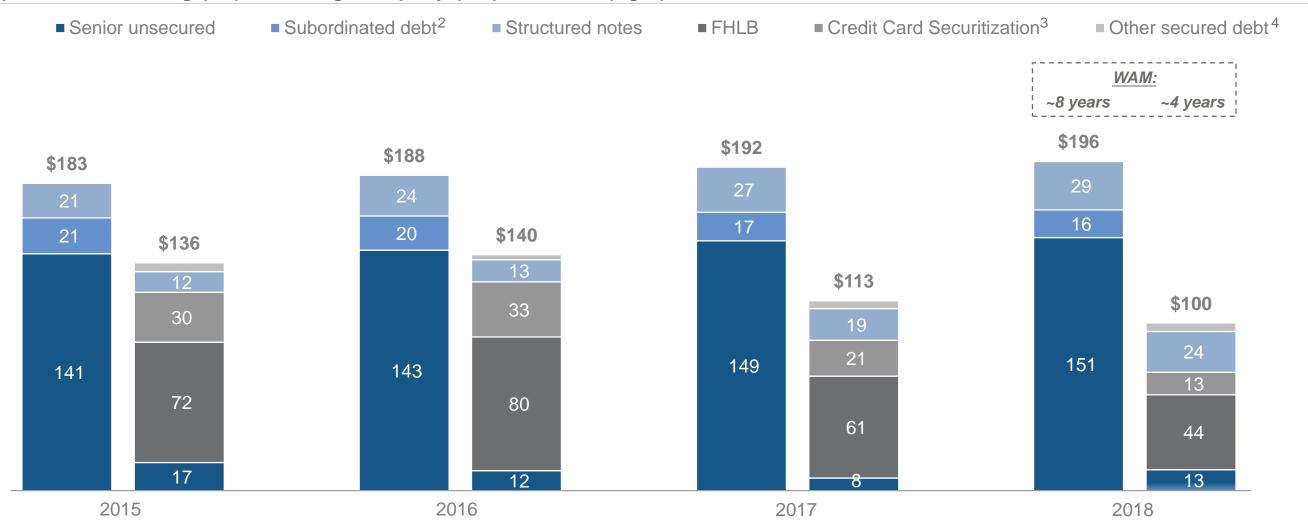


Callable notes provide maximum efficiency for TLAC management



Firmwide wholesale long-term funding outstanding

End of period outstanding (\$B) – Holding Company (left) vs. Bank¹ (right)



TLAC and external LTD requirement summary – TLAC compliance is maintained

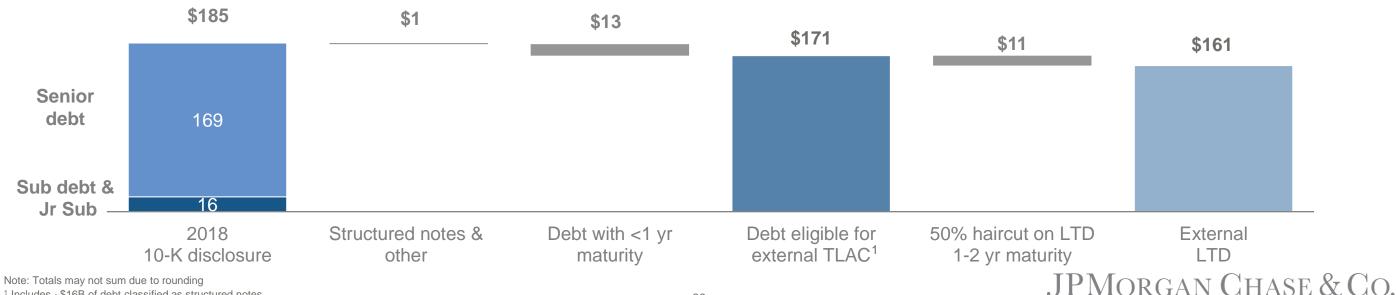
Commentary

- 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
\$171	\$161
26	-
183	-
\$381	\$161
24.9%	10.5%
23.0%	9.5%
\$29	<i>\$15</i>
11.6%	4.9%
9.5%	4.5%
\$70	\$13
	\$171 26 183 \$381 24.9% 23.0% \$29 11.6% 9.5%

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



¹ Includes ~\$16B of debt classified as structured notes

Wholesale funding sources – purpose and key features

					Avail	able to meet reg	ulatory require	ement
	Product	Typical term	Callable	Multi- currency ⁴	TLAC	T1/T2 Reg. Cap.	LCR	NSFR
	Senior Unsecured	2-30 years	✓	✓	✓	X	✓	✓
HoldCo	Subordinated Debt	10-30 years ¹	✓	✓	✓	✓	✓	✓
9	Preferred Stock	Perpetual	✓	X	✓	✓	✓	✓
	Structured Notes	2-30 years	✓	✓	√ / X ⁵	X	✓	✓
- L	Commercial Paper	Generally < 1 year ²	X ³	✓	X	X	✓	√ ²
Broker- Dealer	Securities loaned / Repo agreements	Generally < 6 months	X	✓	X	X	✓	√ ²
B O	Collateralized Commercial Paper	Generally < 1 year ²	X ³	✓	X	X	✓	√ ²
	Senior Unsecured	2-30 years	✓	✓	X	X	✓	✓
	Subordinated Debt	2-30 years	✓	✓	X	✓	✓	✓
Bank	Structured Notes	2-30 years	✓	✓	X	X	✓	✓
Ba	FHLB Borrowing	Generally < 5 years ²	√ ²	X	X	X	✓	✓
	Card Securitization	1-10 years	X	X	X	X	✓	✓
	Asset-Backed Commercial Paper	Generally < 1 year ²	X ³	X	X	X	✓	√ ²

Secured Funding

Agenda

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Notes on non-GAAP financial measures

- 1. In addition to analyzing the Firm's results on a reported basis, management reviews Firmwide results, including the overhead ratio, on a "managed" basis; these Firmwide managed basis results are non-GAAP financial measures. The Firm also reviews 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

- 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...

- 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

- 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)

- 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 outstandings, 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)

- 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 Mangement") 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

- 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

- 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

- 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)

- 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

- 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

- 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

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

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

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). JPMorgan Chase & Co. does not undertake to update any forward-looking statements.