

Third Quarter 2022 Earnings Results Presentation

October 18, 2022

Results Snapshot

Net Revenues	
3Q22	\$11.98 billion
3Q22 YTD	\$36.77 billion

Net Earnings	
3Q22	\$3.07 billion
3Q22 YTD	\$9.94 billion

EPS	
3Q22	\$8.25
3Q22 YTD	\$26.71

Annualized ROE ¹	
3Q22	11.0%
3Q22 YTD	12.2%

Annualized ROTE ¹	
3Q22	12.0%
3Q22 YTD	13.1%

Book Value Per Share	
3Q22	\$308.22
YTD Growth	8.4%

Highlights

Record firmwide Management and other fees of \$2.24 billion, up 15% YoY

Strong Global Markets performance across FICC and Equities

#1 in M&A and Equity and equity-related offerings²

Record Consumer & Wealth Management net revenues, up 18% YoY

One Goldman Sachs Ethos Driving Outperformance

#1 Global Investment Bank²

A Leading Global Markets Franchise

World Class Active Asset Manager

Premier UHNW Wealth Manager

Best-in-Class Share Gains and Growth

Since Investor Day 2020

+320bps
Investment Banking

+320bps
Global Markets

~40%
BVPS Growth

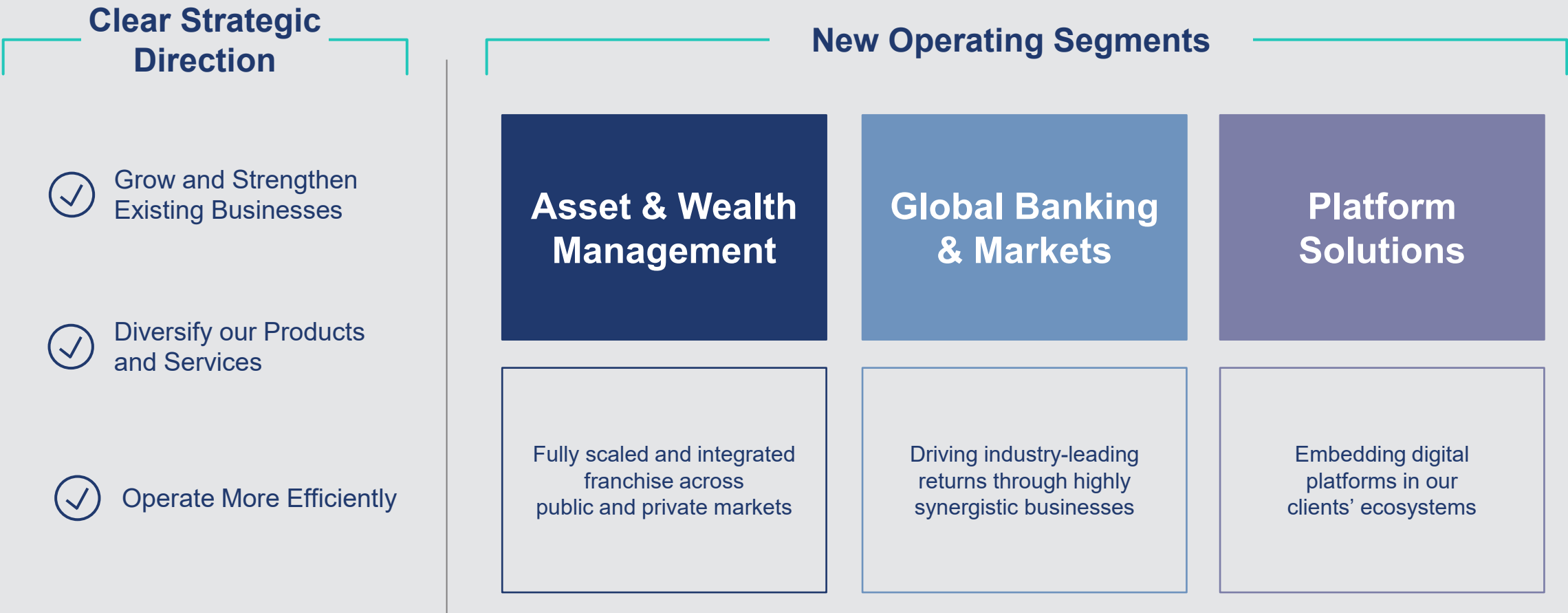
Ranking
Relative to
Peers³:

#1

#1

#1

The Next Step in Our Strategic Evolution



Platform Solutions: Embedding Best-in-Class Financial Products in Clients' Ecosystems



Enhancing our focus on building platforms that deliver digital financial services to corporate and institutional clients

We Have Made Significant Progress Building Our Consumer Franchise

\$110bn+
deposits

~\$19bn
loans

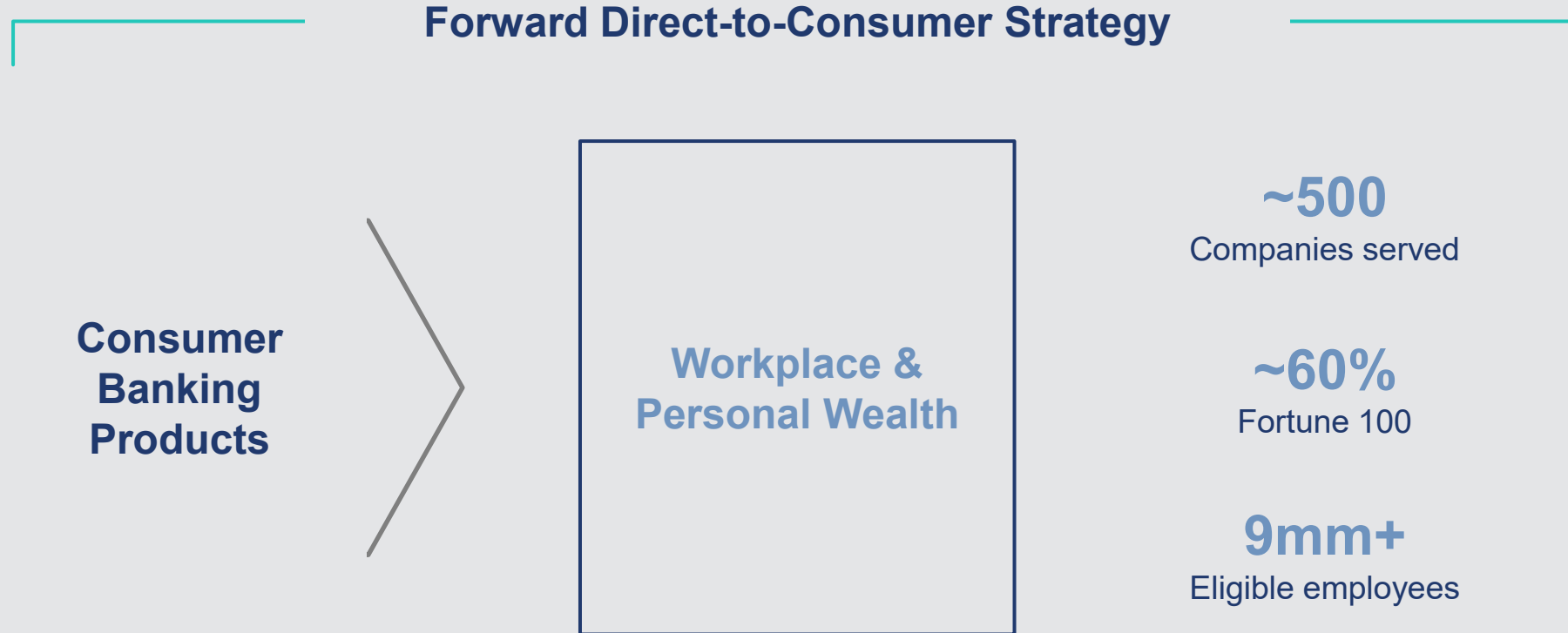
15mm+
active customers

As of 3Q22

\$2.2bn
LTM net revenues

+95%
3Q22 YoY net revenue growth

Purposeful Shift in Our Customer Acquisition Strategy



Amplifying Our Strengths and Unlocking Shareholder Value

Clear Strategic Direction

- ✓ Grow and Strengthen Existing Businesses
- ✓ Diversify our Products and Services
- ✓ Operate More Efficiently

Our Key Priorities

1

Grow management fees

2

Maximize wallet share and grow financing activities

3

Scale Platform Solutions to deliver pre-tax profitability

Financial Overview

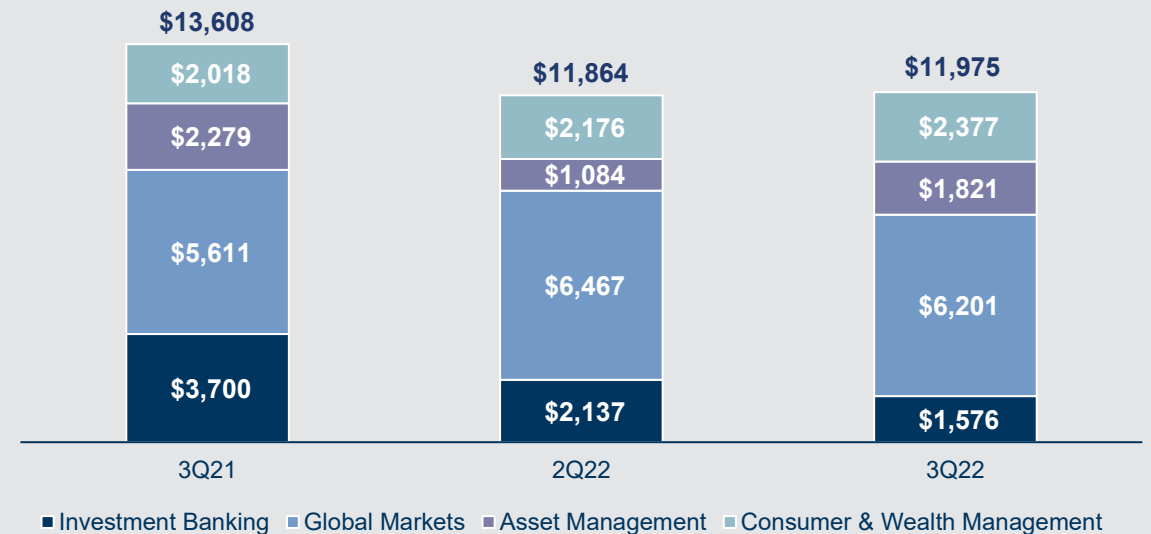
Financial Results

<i>\$ in millions, except per share amounts</i>	3Q22	vs. 2Q22	vs. 3Q21	3Q22 YTD	vs. 3Q21 YTD
Investment Banking	\$ 1,576	(26)%	(57)%	\$ 6,124	(45)%
Global Markets	6,201	(4)%	11%	20,540	14%
Asset Management	1,821	68%	(20)%	3,451	(71)%
Consumer & Wealth Management	2,377	9%	18%	6,657	21%
Net revenues	11,975	1%	(12)%	36,772	(21)%
Provision for credit losses	515	(23)%	194%	1,743	N.M.
Operating expenses	7,704	1%	17%	23,073	(6)%
Pre-tax earnings	\$ 3,756	6%	(45)%	\$ 11,956	(46)%
Net earnings	\$ 3,069	5%	(43)%	\$ 9,935	(44)%
Net earnings to common	\$ 2,962	6%	(44)%	\$ 9,579	(45)%
Diluted EPS	\$ 8.25	7%	(45)%	\$ 26.71	(45)%
ROE ¹	11.0%	0.4pp	(11.5)pp	12.2%	(13.5)pp
ROTE ¹	12.0%	0.6pp	(11.8)pp	13.1%	(14.1)pp
Efficiency Ratio ⁴	64.3%	(0.2)pp	15.9pp	62.7%	9.9pp

Financial Overview Highlights

- 3Q22 results included EPS of \$8.25 and ROE of 11.0%
 - 3Q22 net revenues were lower compared with a strong 3Q21
 - Significantly lower net revenues in Investment Banking and Asset Management
 - Partially offset by higher net revenues in Global Markets and Consumer & Wealth Management
 - 3Q22 provision for credit losses was \$515 million, reflecting consumer portfolio growth, net charge-offs and the impact of continued broad concerns on the macroeconomic outlook
 - 3Q22 operating expenses were higher YoY, driven by both non-compensation expenses and compensation and benefits expenses

Net Revenues by Segment (\$ in millions)



Investment Banking

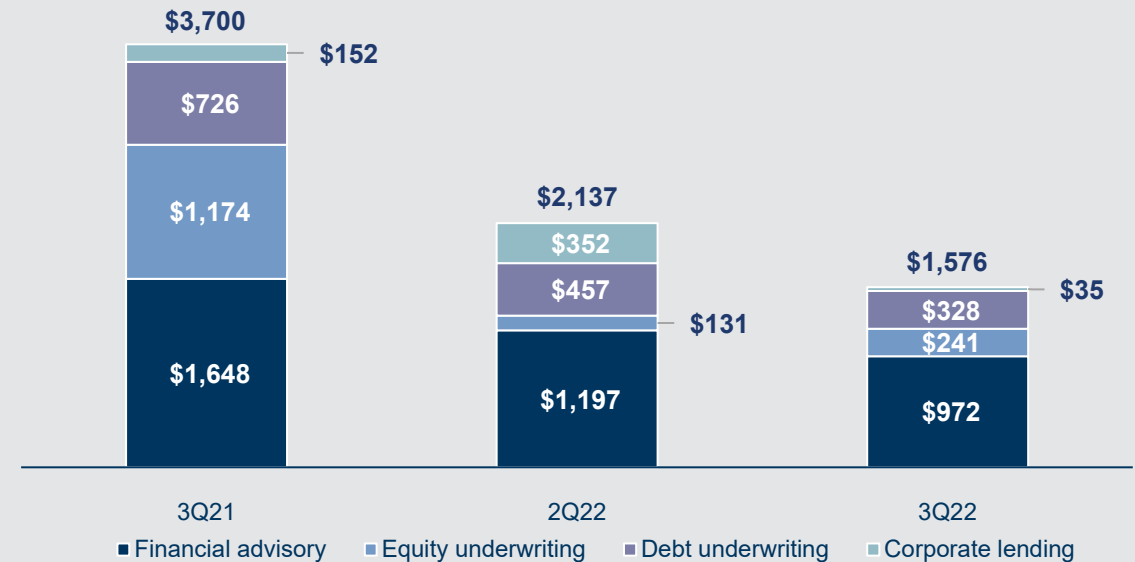
Financial Results

	<i>\$ in millions</i>	3Q22	vs. 2Q22	vs. 3Q21	3Q22 YTD	vs. 3Q21 YTD
Financial advisory	\$	972	(19)%	(41)%	\$ 3,296	(18)%
Equity underwriting		241	84%	(79)%	633	(84)%
Debt underwriting		328	(28)%	(55)%	1,528	(40)%
Underwriting		569	(3)%	(70)%	2,161	(67)%
Corporate lending		35	(90)%	(77)%	667	29%
Net revenues		1,576	(26)%	(57)%	6,124	(45)%
Provision for credit losses		78	(6)%	90%	325	N.M.
Operating expenses		1,038	(6)%	(23)%	3,391	(34)%
Pre-tax earnings	\$	460	(52)%	(80)%	\$ 2,408	(61)%
Net earnings	\$	370	(53)%	(80)%	\$ 2,001	(60)%
Net earnings to common	\$	355	(54)%	(80)%	\$ 1,950	(60)%
Average common equity	\$	9,720	(7)%	(6)%	\$ 10,649	4%
Return on average common equity		14.6%	(14.7)pp	(55.7)pp	24.4%	(39.5)pp

Investment Banking Highlights

- 3Q22 net revenues were significantly lower compared with a strong 3Q21
 - Financial advisory net revenues reflected a significant decline in industry-wide completed mergers and acquisitions transactions from elevated activity levels in 3Q21
 - Equity underwriting and Debt underwriting net revenues reflected a significant decline in industry-wide volumes
 - Corporate lending net revenues primarily reflected net mark-downs on acquisition financing activities and net losses on hedges
- Overall backlog⁴ was essentially unchanged vs. 2Q22

Investment Banking Net Revenues (\$ in millions)



Global Markets

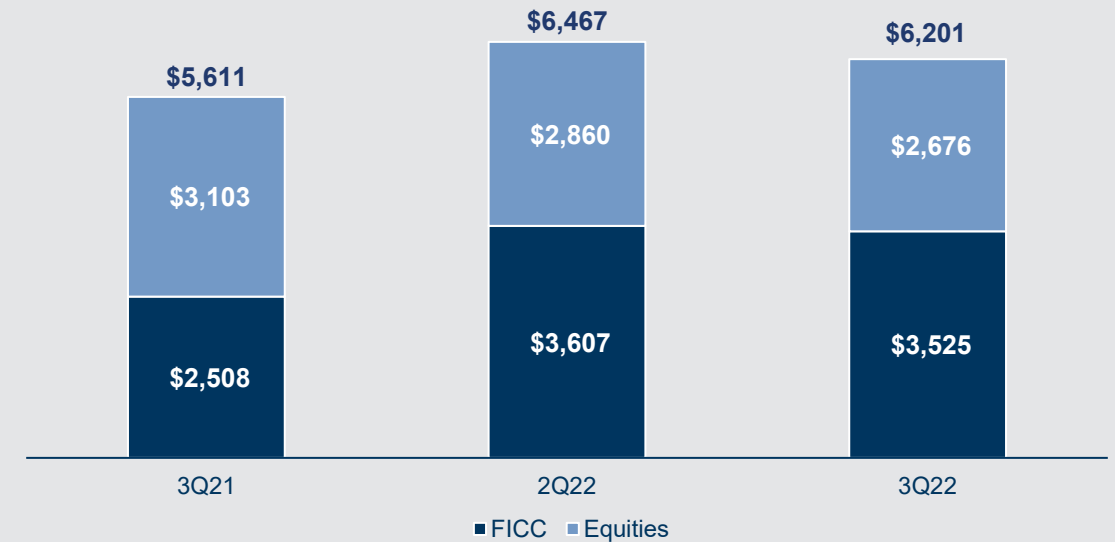
Financial Results

<i>\$ in millions</i>	3Q22	vs. 2Q22	vs. 3Q21	3Q22 YTD	vs. 3Q21 YTD
FICC	\$ 3,525	(2)%	41%	\$ 11,855	36%
Equities	2,676	(6)%	(14)%	8,685	(7)%
Net revenues	6,201	(4)%	11%	20,540	14%
Provision for credit losses	(43)	N.M.	N.M.	190	N.M.
Operating expenses	3,213	(5)%	15%	10,340	—
Pre-tax earnings	\$ 3,031	2%	7%	\$ 10,010	29%
Net earnings	\$ 2,474	1%	10%	\$ 8,318	33%
Net earnings to common	\$ 2,408	2%	10%	\$ 8,102	34%
Average common equity	\$ 57,078	3%	22%	\$ 54,842	24%
Return on average common equity	16.9%	(0.1)pp	(1.8)pp	19.7%	1.4pp

Global Markets Highlights

- 3Q22 net revenues were higher YoY
 - FICC net revenues reflected significantly higher net revenues in both intermediation and financing
 - Equities net revenues reflected lower net revenues in intermediation and slightly lower net revenues in financing
- 3Q22 operating environment was generally characterized by continued solid client activity, high market volatility and central bank actions amid high inflation

Global Markets Net Revenues (\$ in millions)



Global Markets – FICC & Equities

FICC Net Revenues

	<i>\$ in millions</i>	3Q22	vs. 2Q22	vs. 3Q21	3Q22 YTD	vs. 3Q21 YTD
FICC intermediation	\$	2,800	(1)%	40%	\$ 9,677	32%
FICC financing		725	(6)%	41%	2,178	58%
FICC	\$	3,525	(2)%	41%	\$ 11,855	36%

FICC Highlights

■ 3Q22 net revenues were significantly higher YoY

- FICC intermediation net revenues reflected significantly higher net revenues in interest rate products and currencies, and higher net revenues in commodities and credit products, partially offset by significantly lower net revenues in mortgages
- FICC financing net revenues were significantly higher, primarily driven by repurchase agreements and mortgage lending

Equities Net Revenues

	<i>\$ in millions</i>	3Q22	vs. 2Q22	vs. 3Q21	3Q22 YTD	vs. 3Q21 YTD
Equities intermediation	\$	1,549	(11)%	(19)%	\$ 5,444	(13)%
Equities financing		1,127	—	(5)%	3,241	5%
Equities	\$	2,676	(6)%	(14)%	\$ 8,685	(7)%

Equities Highlights

■ 3Q22 net revenues were lower YoY

- Equities intermediation net revenues reflected significantly lower net revenues in cash products and lower net revenues in derivatives
- Equities financing net revenues were slightly lower

Asset Management

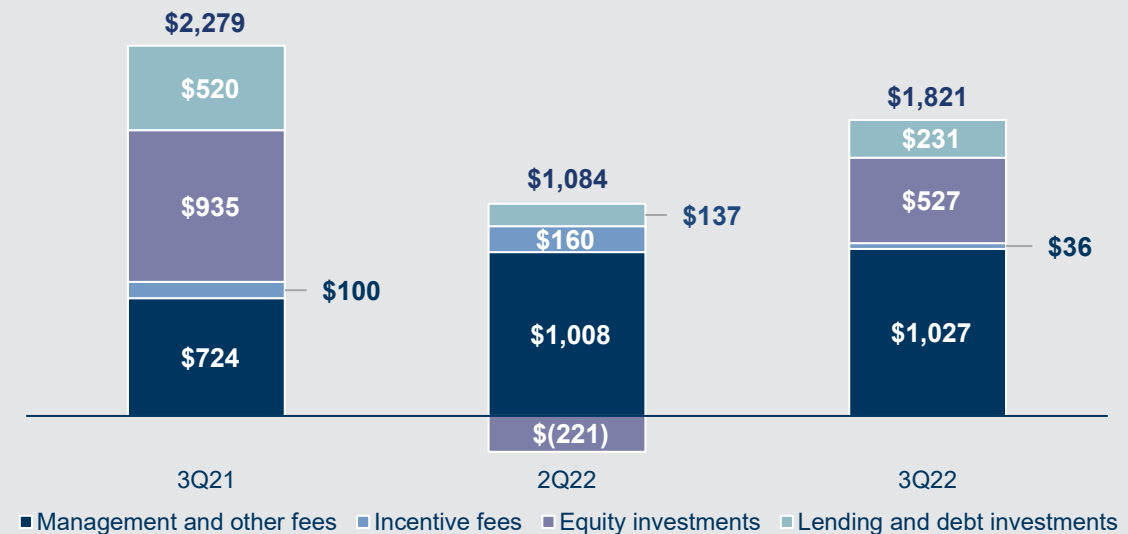
Financial Results

<i>\$ in millions</i>	3Q22	vs. 2Q22	vs. 3Q21	3Q22 YTD	vs. 3Q21 YTD
Management and other fees	\$ 1,027	2%	42%	\$ 2,807	31%
Incentive fees	36	(78)%	(64)%	248	13%
Equity investments	527	N.M.	(44)%	(61)	N.M.
Lending and debt investments	231	69%	(56)%	457	(76)%
Net revenues	1,821	68%	(20)%	3,451	(71)%
Provision for credit losses	29	(51)%	190%	129	N.M.
Operating expenses	1,565	7%	90%	4,121	(11)%
Pre-tax earnings / (loss)	\$ 227	N.M.	(84)%	\$ (799)	N.M.
Net earnings / (loss)	\$ 195	N.M.	(83)%	\$ (664)	N.M.
Net earnings / (loss) to common	\$ 181	N.M.	(83)%	\$ (717)	N.M.
Average common equity	\$ 24,587	1%	(5)%	\$ 24,358	(4)%
Return on average common equity	2.9%	9.2pp	(14.1)pp	(3.9)%	(34.8)pp

Asset Management Highlights

- 3Q22 net revenues were significantly lower YoY reflecting significantly lower net revenues in Equity investments and Lending and debt investments
 - Management and other fees reflected the inclusion of NN Investment Partners in 3Q22 and the impact of fee waivers on money market funds in 3Q21
 - Equity investments net revenues reflected significantly lower net gains from investments in private equities, partially offset by mark-to-market net gains from investments in public equities compared with significant net losses in 3Q21
 - Private: 3Q22 ~\$310 million, compared to 3Q21 ~\$1,755 million
 - Public: 3Q22 ~\$215 million, compared to 3Q21 ~\$(820) million
 - Lending and debt investments net revenues primarily reflected net mark-downs compared with net mark-ups in 3Q21

Asset Management Net Revenues (\$ in millions)



Asset Management – Asset Mix

Equity Investments of \$16 billion⁵

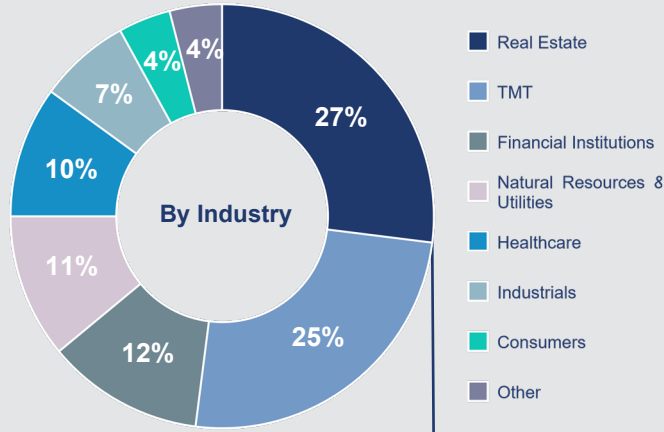
~\$13 billion Private, ~\$3 billion Public

By Vintage

45%
2019-thereafter
25%
2016-2018
30%
2015 or earlier

By Region

66%
Americas
18%
Asia
16%
EMEA



Real Estate: Multifamily 8%, Mixed Use 7%, Other 7%, Office 5%

Consolidated Investment Entities⁶ of \$13 billion⁵

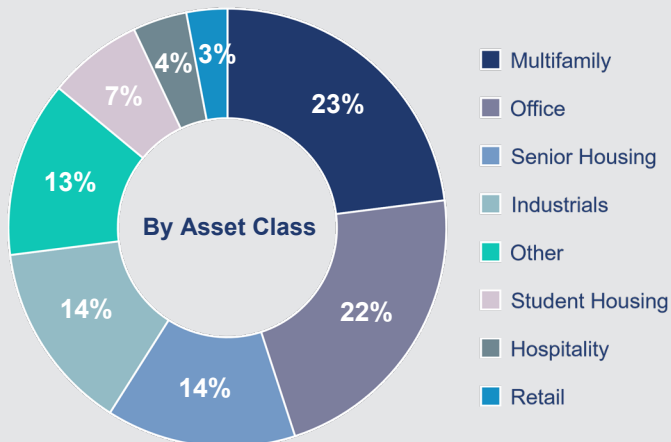
Funded with liabilities of ~\$7 billion⁶

By Vintage

50%
2019-thereafter
46%
2016-2018
4%
2015 or earlier

By Region

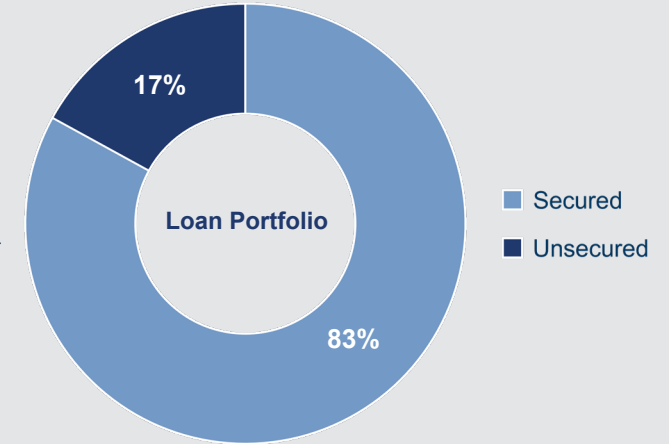
68%
Americas
10%
Asia
22%
EMEA



Lending and Debt Investments of \$24 billion⁵

\$12 billion
Loans

\$12 billion
Debt investments

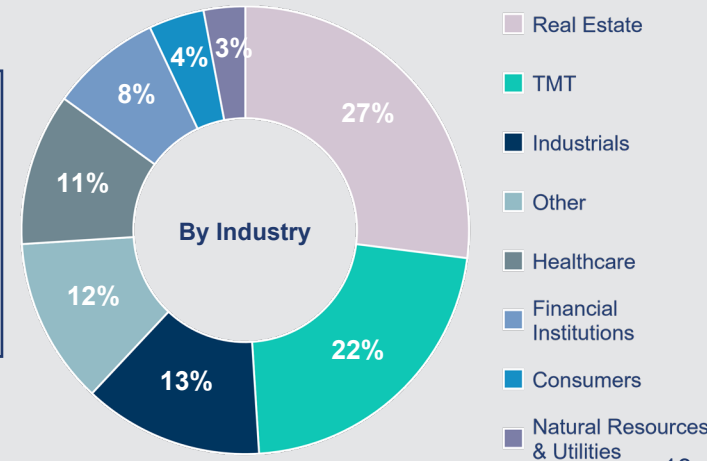


By Accounting Classification

12%
Loans at FV/Held for sale
38%
Loans at amortized cost
50%
Debt investments at FV

By Region

47%
Americas
19%
Asia
34%
EMEA



Consumer & Wealth Management

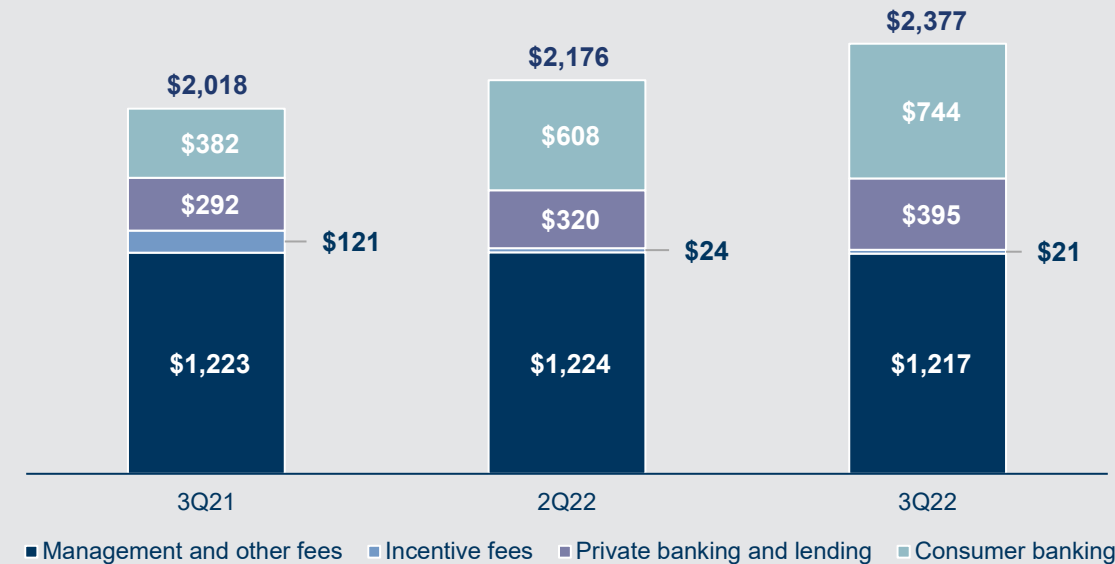
Financial Results

<i>\$ in millions</i>	3Q22	vs. 2Q22	vs. 3Q21	3Q22 YTD	vs. 3Q21 YTD
Management and other fees	\$ 1,217	(1)%	—	\$ 3,696	8%
Incentive fees	21	(13)%	(83)%	72	(56)%
Private banking and lending	395	23%	35%	1,054	29%
Wealth management	1,633	4%	—	4,822	10%
Consumer banking	744	22%	95%	1,835	64%
Net revenues	2,377	9%	18%	6,657	21%
Provision for credit losses	451	14%	205%	1,099	301%
Operating expenses	1,888	10%	16%	5,221	16%
Pre-tax earnings	\$ 38	(38)%	(84)%	\$ 337	(54)%
Net earnings	\$ 30	(39)%	(84)%	\$ 280	(52)%
Net earnings to common	\$ 18	(49)%	(90)%	\$ 244	(56)%
Average common equity	\$ 15,925	5%	48%	\$ 14,866	42%
Return on average common equity	0.5%	(0.4)pp	(6.2)pp	2.2%	(4.9)pp

Consumer & Wealth Management Highlights

- 3Q22 net revenues were a record and higher YoY
 - Wealth management net revenues were essentially unchanged
 - Management and other fees were essentially unchanged YoY despite recent market depreciation
 - Incentive fees were significantly lower, driven by harvesting in 3Q21
 - Private banking and lending net revenues were significantly higher, reflecting higher loan and deposit balances
 - Consumer banking net revenues were nearly double the amount in 3Q21, primarily reflecting significantly higher credit card balances and higher deposit spreads
- 3Q22 provision for credit losses primarily reflected growth in credit cards and net charge-offs

Consumer & Wealth Management Net Revenues (\$ in millions)



Asset Management and Consumer & Wealth Management Details

Firmwide Assets Under Supervision^{4,5}

<i>\$ in billions</i>	3Q22	2Q22	3Q21
Asset Management	\$ 1,760	\$ 1,824	\$ 1,678
Consumer & Wealth Management	667	671	694
Firmwide AUS	\$ 2,427	\$ 2,495	\$ 2,372

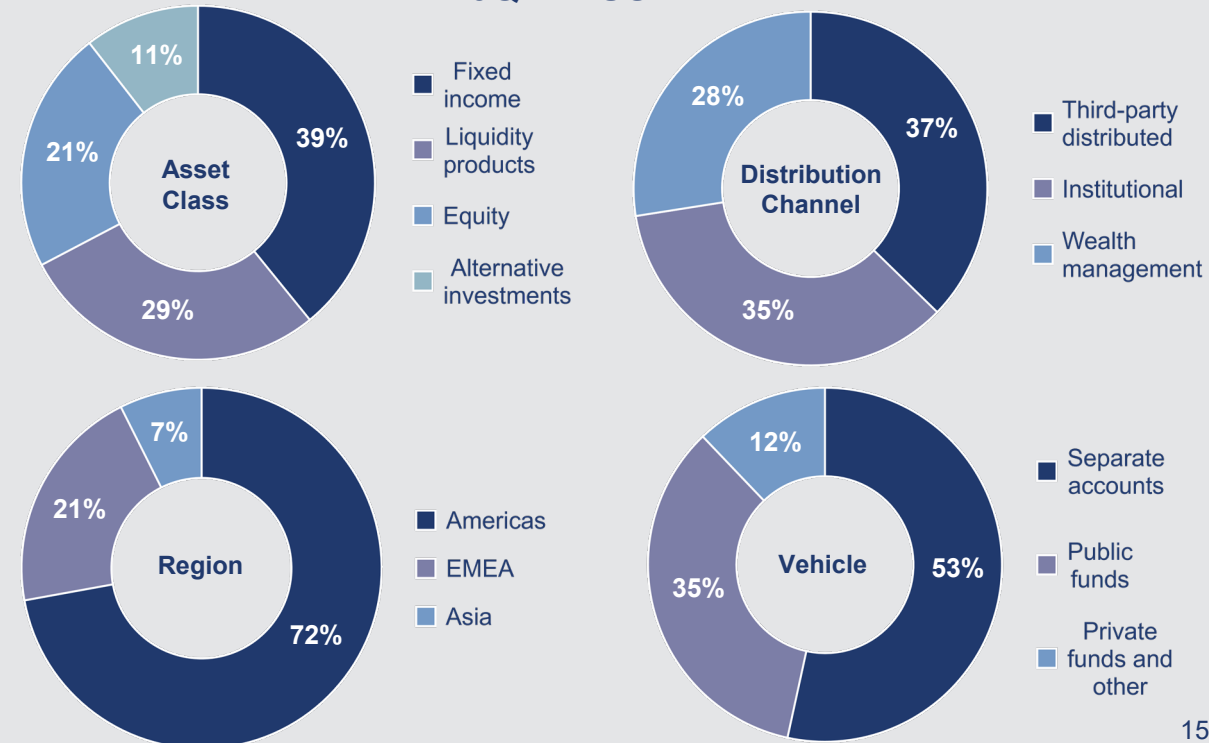
Firmwide Management and Other Fees/Incentive Fees

<i>\$ in millions</i>	3Q22	vs. 2Q22	vs. 3Q21	3Q22 YTD	vs. 3Q21 YTD
Asset Management	\$ 1,027	2%	42%	\$ 2,807	31%
Consumer & Wealth Management	1,217	(1)%	—	3,696	8%
Total Management and other fees	\$ 2,244	1%	15%	\$ 6,503	17%
Asset Management	\$ 36	(78)%	(64)%	\$ 248	13%
Consumer & Wealth Management	21	(13)%	(83)%	72	(56)%
Total Incentive fees	\$ 57	(69)%	(74)%	\$ 320	(16)%

Highlights^{4,5}

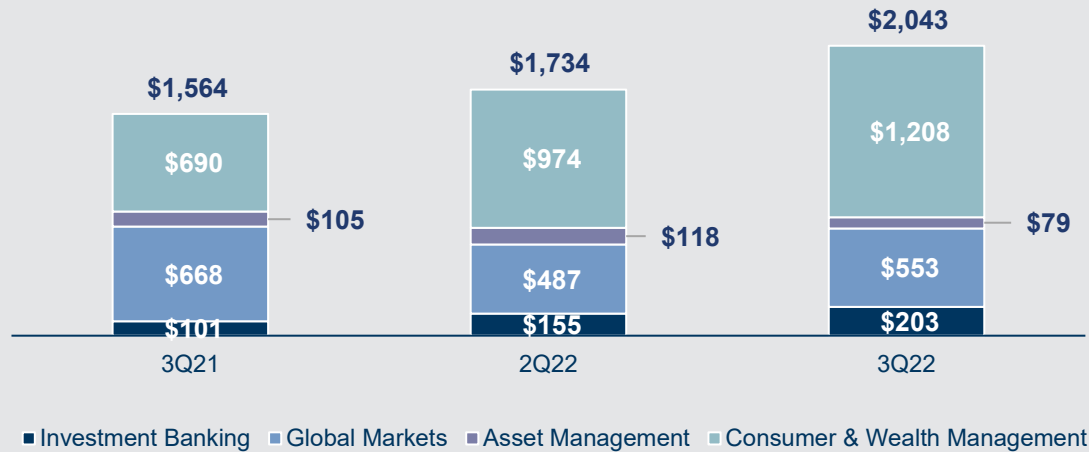
- Firmwide AUS decreased \$68 billion during the quarter, as Asset Management AUS decreased \$64 billion and Consumer & Wealth Management AUS decreased \$4 billion
 - Liquidity products net inflows of \$18 billion and long-term net inflows of \$9 billion
 - Net inflows from acquisitions / (dispositions) of \$4 billion included the acquisition of NextCapital
 - Net market depreciation of \$99 billion, driven by fixed income and equity assets
- Firmwide Management and other fees increased 15% YoY

3Q22 AUS Mix^{4,5}



Net Interest Income and Loans

Net Interest Income by Segment (\$ in millions)



Net Interest Income Highlights

- 3Q22 net interest income increased \$479 million YoY
- The YoY increase in net interest income primarily reflected higher loan balances and rates

Loans⁵

	\$ in billions		
	3Q22	2Q22	3Q21
Corporate	\$ 63	\$ 62	\$ 54
Wealth management	50	48	42
Commercial real estate	26	28	22
Residential real estate	15	17	13
Installment	5	5	3
Credit cards	14	12	6
Other	9	9	6
Allowance for loan losses	(5)	(5)	(3)
Total Loans	\$ 177	\$ 176	\$ 143

Metrics

2.9%

ALLL to Total
Gross Loans, at
Amortized Cost

1.7%

ALLL to Gross
Wholesale Loans, at
Amortized Cost

12.6%

ALLL to Gross
Consumer Loans, at
Amortized Cost

Lending Highlights

- Total loans were up slightly QoQ, primarily reflecting growth in credit cards and wealth management loans, offset by a decrease in real estate loans
- Total allowance was \$5.59 billion (including \$4.85 billion for funded loans), up ~\$0.32 billion QoQ
 - \$3.16 billion for wholesale loans, \$2.43 billion for consumer loans
- Provision for credit losses of \$515 million in 3Q22, compared with \$175 million in 3Q21
- 3Q22 net charge-offs of \$172 million for an annualized net charge-off rate of 0.4%, unchanged QoQ
 - Wholesale annualized net charge-off rate of 0.1%, down 10bps QoQ
 - Consumer annualized net charge-off rate of 2.9%, up 60bps QoQ

Expenses

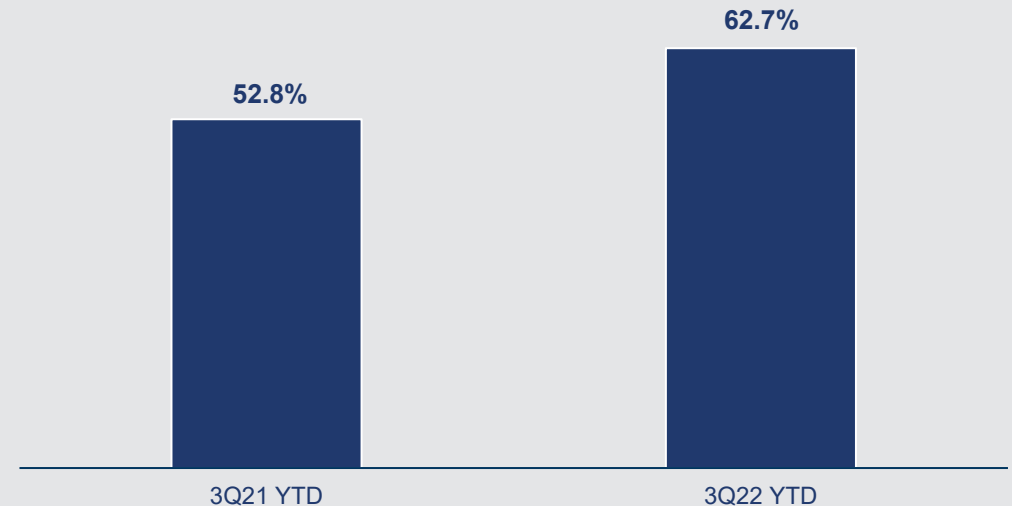
Financial Results

<i>\$ in millions</i>	3Q22	vs. 2Q22	vs. 3Q21	3Q22 YTD	vs. 3Q21 YTD
Compensation and benefits	\$ 3,606	(2)%	14%	\$ 11,384	(21)%
Transaction based	1,317	—	16%	3,878	10%
Market development	199	(15)%	21%	596	66%
Communications and technology	459	3%	16%	1,327	16%
Depreciation and amortization	666	17%	31%	1,728	13%
Occupancy	255	(2)%	7%	765	5%
Professional fees	465	(5)%	7%	1,392	22%
Other expenses	737	15%	36%	2,003	12%
Total operating expenses	\$ 7,704	1%	17%	\$ 23,073	(6)%
Provision for taxes	\$ 687	11%	(53)%	\$ 2,021	(53)%
<i>Effective Tax Rate</i>				16.9%	(2.7)pp

Expense Highlights

- 3Q22 total operating expenses increased YoY
 - Compensation and benefits expenses were higher, reflecting a smaller reduction in the year-to-date ratio of compensation and benefits to net revenues, net of provision for credit losses, compared to 3Q21
 - Non-compensation expenses were significantly higher, reflecting:
 - Higher expenses related to growth initiatives (including acquisitions)
 - Higher net provisions for litigation and regulatory proceedings
 - Higher business activity
- 3Q22 YTD effective income tax rate was 16.9%, up from 16.3% for the first half of 2022, primarily due to a decrease in the impact of tax benefits on the settlement of employee share-based awards in the first nine months of 2022 compared with the first half of 2022

Efficiency Ratio⁴



Capital and Balance Sheet

Capital^{4,5}

<i>\$ in billions</i>	3Q22	2Q22	3Q21
Common Equity Tier 1 (CET1) capital	\$ 98.7	\$ 98.3	\$ 93.3
Standardized RWAs	\$ 689	\$ 692	\$ 664
Standardized CET1 capital ratio	14.3%	14.2%	14.1%
Advanced RWAs	\$ 675	\$ 686	\$ 672
Advanced CET1 capital ratio	14.6%	14.3%	13.9%
Supplementary leverage ratio (SLR)	5.6%	5.6%	5.6%

Selected Balance Sheet Data⁵

<i>\$ in billions</i>	3Q22	2Q22	3Q21
Total assets	\$ 1,557	\$ 1,601	\$ 1,443
Deposits	\$ 395	\$ 391	\$ 333
Unsecured long-term borrowings	\$ 240	\$ 251	\$ 243
Shareholders' equity	\$ 119	\$ 118	\$ 106
Average GCLA ⁴	\$ 417	\$ 391	\$ 356

Capital and Balance Sheet Highlights

- Both Standardized and Advanced CET1 capital ratios increased QoQ
 - CET1 capital increased, reflecting net earnings in excess of share repurchases and dividends
 - Standardized RWAs reflected a decrease in market RWAs on reduced exposures, partially offset by an increase in credit RWAs on increased exposures
 - Advanced RWAs primarily reflected a decrease in market RWAs on reduced exposures
- As of October 1, 2022, the firm's Standardized CET1 capital ratio requirement is 13.3%, reflecting an SCB of 6.3%
- Returned \$1.89 billion of capital to common shareholders during the quarter
 - 3.0 million common shares repurchased for a total cost of \$1.00 billion⁴
 - \$893 million of common stock dividends
- BVPS increased 2.1% QoQ, driven by net earnings

Book Value

<i>In millions, except per share amounts</i>	3Q22	2Q22	3Q21
Basic shares ⁴	352.3	355.0	347.5
Book value per common share	\$ 308.22	\$ 301.88	\$ 277.25
Tangible book value per common share ¹	\$ 284.80	\$ 278.75	\$ 263.37

Cautionary Note Regarding Forward-Looking Statements

This presentation contains “forward-looking statements” within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are not historical facts or statements of current conditions, but instead represent only the firm’s beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside of the firm’s control. It is possible that the firm’s actual results, financial condition and liquidity may differ, possibly materially, from the anticipated results, financial condition and liquidity in these forward-looking statements. For information about some of the risks and important factors that could affect the firm’s future results, financial condition and liquidity and the forward-looking statements below, see “Risk Factors” in Part I, Item 1A of the firm’s Annual Report on Form 10-K for the year ended December 31, 2021.

Information regarding the firm’s assets under supervision, capital ratios, risk-weighted assets, supplementary leverage ratio, balance sheet data and global core liquid assets (GCLA) consists of preliminary estimates. These estimates are forward-looking statements and are subject to change, possibly materially, as the firm completes its financial statements. Statements regarding (i) estimated GDP growth and interest rate and inflation trends, (ii) the impact of the COVID-19 pandemic on the firm’s business, results, financial position and liquidity, (iii) the timing, profitability, benefits and other prospective aspects of business initiatives, business realignment and the achievability of medium- and long-term targets and goals, (iv) the future state of the firm’s liquidity and regulatory capital ratios (including the firm’s stress capital buffer and G-SIB buffer), (v) the firm’s prospective capital distributions (including dividends and repurchases), (vi) the firm’s future effective income tax rate, (vii) the firm’s investment banking transaction backlog and future results, (viii) the firm’s planned 2022 benchmark debt issuances, and (ix) the impact of Russia’s invasion of Ukraine and related sanctions and other developments on the firm’s business, results and financial position, are forward-looking statements. Statements regarding estimated GDP growth and interest rate and inflation trends are subject to the risk that actual GDP growth and interest rate and inflation trends may differ, possibly materially, due to, among other things, changes in general economic conditions and monetary and fiscal policy. Statements about the effects of the COVID-19 pandemic on the firm’s business, results, financial position and liquidity are subject to the risk that the actual impact may differ, possibly materially, from what is currently expected. Statements about the timing, profitability, benefits and other prospective aspects of business initiatives, business realignment and the achievability of medium and long-term targets and goals are based on the firm’s current expectations regarding the firm’s ability to effectively implement these initiatives and realignment and achieve these targets and goals and may change, possibly materially, from what is currently expected. Statements about the future state of the firm’s liquidity and regulatory capital ratios (including the firm’s stress capital buffer and G-SIB buffer), as well as its prospective capital distributions, are subject to the risk that the firm’s actual liquidity, regulatory capital ratios and capital distributions may differ, possibly materially, from what is currently expected. Statements about the firm’s future effective income tax rate are subject to the risk that the firm’s future effective income tax rate may differ from the anticipated rate indicated, possibly materially, due to, among other things, changes in the tax rates applicable to the firm, the firm’s earnings mix or profitability, the entities in which the firm generates profits and the assumptions made in forecasting the firm’s expected tax rate, and potential future guidance from the U.S. IRS. Statements about the firm’s investment banking transaction backlog and future results are subject to the risk that transactions may be modified or may not be completed at all, and related net revenues may not be realized or may be materially less than expected. Important factors that could have such a result include, for underwriting transactions, a decline or weakness in general economic conditions, an outbreak or worsening of hostilities, including the escalation or continuation of the war between Russia and Ukraine, continuing volatility in the securities markets or an adverse development with respect to the issuer of the securities and, for financial advisory transactions, a decline in the securities markets, an inability to obtain adequate financing, an adverse development with respect to a party to the transaction or a failure to obtain a required regulatory approval. Statements regarding the firm’s planned 2022 benchmark debt issuances are subject to the risk that actual issuances may differ, possibly materially, due to changes in market conditions, business opportunities or the firm’s funding needs. Statements about the impact of Russia’s invasion of Ukraine and related sanctions and other developments on the firm’s business, results and financial position are subject to the risks that hostilities may escalate and expand, that sanctions may increase and that the actual impact may differ, possibly materially, from what is currently expected.

Footnotes

1. Annualized return on average common shareholders' equity (ROE) is calculated by dividing annualized net earnings applicable to common shareholders by average monthly common shareholders' equity. Annualized return on average tangible common shareholders' equity (ROTE) is calculated by dividing annualized net earnings applicable to common shareholders by average monthly tangible common shareholders' equity. Tangible common shareholders' equity is calculated as total shareholders' equity less preferred stock, goodwill and identifiable intangible assets. Tangible book value per common share (TBVPS) is calculated by dividing tangible common shareholders' equity by basic shares. Management believes that tangible common shareholders' equity and TBVPS are meaningful because they are measures that the firm and investors use to assess capital adequacy and that ROTE is meaningful because it measures the performance of businesses consistently, whether they were acquired or developed internally. Tangible common shareholders' equity, ROTE and TBVPS are non-GAAP measures and may not be comparable to similar non-GAAP measures used by other companies.

The table below presents a reconciliation of average and ending common shareholders' equity to average and ending tangible common shareholders' equity:

Unaudited, \$ in millions	AVERAGE FOR THE		AS OF		
	THREE MONTHS ENDED SEPTEMBER 30, 2022	NINE MONTHS ENDED SEPTEMBER 30, 2022	SEPTEMBER 30, 2022	JUNE 30, 2022	SEPTEMBER 30, 2021
Total shareholders' equity	\$ 118,013	\$ 115,418	\$ 119,290	\$ 117,871	\$ 106,297
Preferred stock	(10,703)	(10,703)	(10,703)	(10,703)	(9,953)
Common shareholders' equity	107,310	104,715	108,587	107,168	96,344
Goodwill	(6,242)	(5,546)	(6,288)	(6,196)	(4,326)
Identifiable intangible assets	(1,987)	(1,463)	(1,963)	(2,014)	(497)
Tangible common shareholders' equity	\$ 99,081	\$ 97,706	\$ 100,336	\$ 98,958	\$ 91,521

2. Dealogic – Based on M&A and Equity & equity-related offerings volumes, for January 1, 2022 through September 30, 2022.
3. Investment Banking and Global Markets wallet share gains from full year 2019 to first half of 2022. Book value per share (BVPS) growth from December 31, 2019 to June 30, 2022. Wallet share data based on reported revenues for Advisory, Equity underwriting and Debt underwriting for Investment Banking and for FICC and Equities for Global Markets. Total wallet includes GS, MS, JPM, BAC, C, DB, UBS, CS, BARC.
4. For information about the following items, see the referenced sections in Part I, Item 2 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the firm's Quarterly Report on Form 10-Q for the period ended June 30, 2022: (i) investment banking transaction backlog – see "Results of Operations – Investment Banking" (ii) assets under supervision – see "Results of Operations – Assets Under Supervision" (iii) efficiency ratio – see "Results of Operations – Operating Expenses" (iv) basic shares – see "Balance Sheet and Funding Sources – Balance Sheet Analysis and Metrics" (v) share repurchase program – see "Capital Management and Regulatory Capital – Capital Management" and (vi) global core liquid assets – see "Risk Management – Liquidity Risk Management."

For information about risk-based capital ratios and the supplementary leverage ratio, see Note 20 "Regulation and Capital Adequacy" in Part I, Item 1 "Financial Statements (Unaudited)" in the firm's Quarterly Report on Form 10-Q for the period ended June 30, 2022.

5. Represents a preliminary estimate for the third quarter of 2022 and may be revised in the firm's Quarterly Report on Form 10-Q for the period ended September 30, 2022.
6. Includes consolidated investment entities, substantially all of which are engaged in real estate investment activities. These assets are generally accounted for at historical cost less depreciation. Substantially all liabilities are nonrecourse, thereby reducing the firm's equity at risk. Amounts by vintage, region and asset class are net of financings.