INVESTOR DAY 2022

CORPORATE & INVESTMENT BANK

FIRM OVERVIEW
GLOBAL TECHNOLOGY
CONSUMER & COMMUNITY BANKING
INTERNATIONAL CONSUMER GROWTH INITIATIVES
CORPORATE & INVESTMENT BANK
COMMERCIAL BANKING
ASSET & WEALTH MANAGEMENT

JPMorgan Chase & Co.
## Topics for discussion

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<td>Strong financial performance</td>
<td></td>
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</tbody>
</table>

| 4 | Closing Remarks |
Since the formation of the CIB, we have consistently delivered strong financial performance and remain the #1 CIB franchise.

### Revenue ($B)
- **INVESTMENT BANKING Fees ($B)**: Up 128%
- **PAYMENTS Firmwide Revenue ($B)**: Up 45%
- **MARKETS Revenue ($B)**: Up 42%
- **SECURITIES SERVICES Revenue ($B)**: Up 23%

### Net Income ($B)
- **NET INCOME ($B)**: Up 164%

### Capital ($B)
- **CAPITAL ($B)**: Up 77%

### ROE
- **ROE**: Up 800bps

### Overhead Ratio
- **OVERHEAD RATIO**: Down 1600bps

### Global, complete, diversified, and at scale
- **100+ countries**
- **~100 currencies**
- **90%+ of Fortune 500 companies**
- **Top 2 in 21 of 24 businesses; #1 in 14 businesses**
- **~68,000 employees**

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1. Shaded bar represents reported ROE. Solid bar represents adjusted ROE which is a non-GAAP financial measure. Refer to page 44 for non-GAAP financial measures.
4. Includes CB and CCB. 2011 revenue adjusted to include firmwide Chase Merchant Services revenue of $1B in Other.
5. 2011 revenue adjusted by $(0.4)B to exclude the impact of past business simplification, exit actions and accounting changes.
Since 2017, our market share has grown across all businesses and regions, while maintaining expense discipline and operating leverage.

Significant market share improvements between 2017 and 2021:

- **GLOBAL**: +180bps
- **AMERICAS**: +220bps
- **EMEA**: +70bps
- **APAC**: +170bps
- **INVESTMENT BANKING**: +130bps
- **PAYMENTS (TS)**: +180bps
- **MARKETS**: +160bps
- **SECURITIES SERVICES**: +50bps

...enabled strong financial results:

- **Revenue**: CAGR 10%
- **Expense**: CAGR 6%
- **Net Income**: CAGR 18%

OVERHEAD RATIO

- 2017: 35.5%
- 2021: 46%

- **CAPITAL ($B)**
  - 2017: 70
  - 2021: 83

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1 Source: Coalition Greenwich Competitor Analytics and Dealogic. Securities Services excludes Corp Trust, Escrow and Clearing & Settlement. For footnoted information, refer to page 45.
2 For footnoted information, refer to page 44.
We’ve delivered strong results across our businesses at returns above the firmwide cost of capital.

**Corporate & Investment Bank**

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital</th>
<th>Heritage TSS ROE</th>
<th>Heritage IB ROE</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>$70B</td>
<td>17%</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>2018</td>
<td>$70B</td>
<td>20%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>2019</td>
<td>$80B</td>
<td></td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>2020</td>
<td>$80B</td>
<td></td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>2021</td>
<td>$83B</td>
<td></td>
<td></td>
<td>25%</td>
</tr>
</tbody>
</table>

**Investment Banking**

**CIB Payments**

**Markets**

**Securities Services**

**Note:** As reported ROE for Corporate & Investment Bank. ROE for CIB businesses (Investment Banking, Payments, Markets, Securities Services) adjusted to exclude the impact of legal expense.
Expense growth was mainly driven by business volume / revenue growth and investments.

Adjusted Expense¹ (2019 – 2022 Market Dependent, $B)

Revenue ($B) 39  52

Additional details on next page

² Digital, Data and AI/ML represents dedicated product resources. CIB and Enterprise Technology incorporates additional Digital, Data and AI/ML spend of $0.3B.

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Our technology and product investments are opening up new growth opportunities and strengthening our leadership position

We continue to increase our technology and product investment spend... to drive business growth, advance strategic platforms and invest in AI/ML (select examples)

- Drive business growth with a focus on delivering best-in-class products and experiences to clients
  - China franchise expansion to provide onshore business capabilities to clients
  - Fusion data platform to provide integrated solutions across the investment lifecycle
  - eTrading platform to support clients with the ongoing growth of electronic execution
  - E-commerce capabilities (Wallet, Express Checkout, Embedded Banking) to focus on Marketplaces and SMB
  - Capital Connect platform to connect clients, founders and investors for private equity placements

- Advance strategic platforms to deliver the Firm to our clients and to support our business priorities
  - Athena to provide cross-asset risk, pricing and trade management solutions to clients
  - Client portals including J.P. Morgan Markets and Access to provide seamless cash management, research, execution and pricing solutions
  - Real-time and faster payment capabilities deployed to clients globally by Graphite
  - Helix, our API-based Merchant Acquiring platform to focus on unified APIs and cloud enablement
  - GLASS platform to provide liquidity and account services such as wallet, virtual accounts, sweeps and pooling

- Invest in AI/ML and Next Gen Technology to ensure we remain competitive
  - Onyx by J.P. Morgan, our blockchain business unit, building innovative platforms like Liink, JPM Coin and Onyx Digital Assets
  - Real-time client facing analytics across Corporate and Small Business clients
  - Flow Trader utilizing AI to deliver faster quotes to clients
  - Leveraging AI/ML to improve our operational processes across KYC, reconciliation, fraud and settlement

1 Digital, Data and AI/ML represents dedicated product resources. CIB and Enterprise Technology incorporates additional Digital, Data and AI/ML spend of $0.3B.
We have supported significant volume growth with modest increases to operational expense

<table>
<thead>
<tr>
<th>Cash Payments</th>
<th>Cash Equities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual payment transaction volumes</td>
<td>47%</td>
</tr>
<tr>
<td>Operations cost per transaction</td>
<td>18%</td>
</tr>
</tbody>
</table>

**Collateral**

| OTC margin calls avg. monthly volumes | 35% | 31% |
| Operations cost per OTC margin call | 23% | 22% |

**Securities Processing**

| Annual securities trade volume | 167% |
| Operations cost per trade | 63% |

**Fund Services**

| Daily NAV volumes | 65% |
| Operations cost per NAV | 24% |

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We have driven efficiency at scale...

...while controlling our costs

<table>
<thead>
<tr>
<th>Technology Run The Bank expense²</th>
<th>Operations direct expense</th>
</tr>
</thead>
</table>

2017-22 CAGR

<table>
<thead>
<tr>
<th>2017</th>
<th>2019</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>$4.2B</td>
<td>$4.7B</td>
<td>$4.9B</td>
<td>$5.2B</td>
</tr>
</tbody>
</table>

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1 All percentages reflect 2017-21 absolute percentage change. Operations cost reflects the fully loaded cost of operations teams directly supporting the product and does not represent a full measure of unit cost.

2 Includes Enterprise Technology and Digital, Data and AI/ML.
Together our businesses enable us to bring a holistic set of solutions to our clients

Delivering synergy and connectivity across clients

CIB clients served by 3+ CIB businesses (out of 4)\(^1\)

- 79%
- 80%

Top 200 Financial Institution clients
- Capital Markets and M&A Advisory
- Financing Solutions
- Asset & Liability Management
- Research
- Trading Execution and Risk Management
- Trade Finance
- Merchant Acquiring
- Payments and Liquidity Solutions
- Investment Advisory
- Custody, Fund Services and Middle Office

Top 200 Corporate clients

\(^1\) Represents CIB clients that attributed minimum $1,000 revenue to CIB businesses (Investment Banking, Payments, Markets, Securities Services) during the last 24 months as of March 2022.
Global Investment Banking achieved record fees in 2021, and delivered market share of 9.5%.

Ranked #1 by Investment Banking fees for over a decade

<table>
<thead>
<tr>
<th>Year</th>
<th>Industry wallet ($B)</th>
<th>Market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>82</td>
<td>8.2%</td>
</tr>
<tr>
<td>2018</td>
<td>80</td>
<td>8.6%</td>
</tr>
<tr>
<td>2019</td>
<td>78</td>
<td>8.9%</td>
</tr>
<tr>
<td>2020</td>
<td>92</td>
<td>9.2%</td>
</tr>
<tr>
<td>2021</td>
<td>128</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Continued strong leadership position

<table>
<thead>
<tr>
<th>Year</th>
<th>Industry wallet (global) ($B)</th>
<th>JPM market share (global)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>39</td>
<td>8.6%</td>
</tr>
<tr>
<td>2018</td>
<td>36</td>
<td>8.5%</td>
</tr>
<tr>
<td>2019</td>
<td>36</td>
<td>8.6%</td>
</tr>
<tr>
<td>2020</td>
<td>40</td>
<td>9.4%</td>
</tr>
<tr>
<td>2021</td>
<td>51</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

Americas: #1 Market share: 11.3%
EMEA: #1 Market share: 9.1%
APAC: #4 Market share: 4.0%

Source: Dealogic. For footnoted information, refer to page 45.
We are focused on closing product and coverage gaps, and capturing new growth opportunities to gain market share.

### Consistently targeting top positions across all products and sectors

<table>
<thead>
<tr>
<th>Wallet mix by product</th>
<th>JPM 2017-21 rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCM</td>
<td>44% #1</td>
</tr>
<tr>
<td>ECM</td>
<td>24% #2</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>32% #2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wallet mix by sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
</tr>
<tr>
<td>Healthcare</td>
</tr>
<tr>
<td>Tech</td>
</tr>
<tr>
<td>FIG</td>
</tr>
<tr>
<td>Diversified</td>
</tr>
<tr>
<td>Other¹</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>JPM 2017-21 rank</th>
<th>Overall</th>
<th>Ex. DCM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>10%</td>
<td>#1</td>
</tr>
<tr>
<td>Healthcare</td>
<td>12%</td>
<td>#1</td>
</tr>
<tr>
<td>Tech</td>
<td>14%</td>
<td>#2</td>
</tr>
<tr>
<td>FIG</td>
<td>17%</td>
<td>#2</td>
</tr>
<tr>
<td>Diversified</td>
<td>20%</td>
<td>#2</td>
</tr>
<tr>
<td>Other¹</td>
<td>27%</td>
<td>#2</td>
</tr>
</tbody>
</table>

### Focusing on four key strategic pillars

- **Middle Market**
  - Deepen/broaden industry and regional specialization
  - Launch and scale Capital Connect by J.P. Morgan, a digital platform connecting early-stage companies and investors for smaller deals
  - Continue to invest in high touch servicing of larger deals
  - Collaborate with Commercial Bank and Asset & Wealth Management

- **Private Capital**
  - Deepen coverage of New Economy and Healthcare companies
  - Deepen coverage expertise in Australia, China, India, and Japan

- **APAC**
  - Deepen advisory expertise
  - Build on centers of excellence (Center for Carbon Transition and ESG Solutions)

- **ESG**
  - Deepen advisory expertise
  - Build on centers of excellence (Center for Carbon Transition and ESG Solutions)

---

**Source:** Dealogic. For footnoted information, refer to page 45.

1 Includes Consumer & Retail, Real Estate IB, Media & Communications, Venture Capital, Financial Sponsors, Middle Market, Sovereign Wealth Fund, Public Finance.
Our Payments business has grown significantly despite rate headwinds

### Focus areas for deep-dive discussions

- **World’s largest payments franchise**, occupying a unique place in the payments industry
- **Targeting double-digit revenue and pre-tax income growth** supported by market share gains, higher rates and substantial operating leverage
- **Treasury Services and Merchant Services** businesses together generate significant client and product synergies
- **Significant investments** focused on delivering scalability, efficiency, and differentiated product offerings

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**Revenues ($B)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Fees</th>
<th>NII</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>9.1</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>10.3</td>
<td></td>
</tr>
</tbody>
</table>

**Deposits ($B)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>442</td>
</tr>
<tr>
<td>2021</td>
<td>800</td>
</tr>
</tbody>
</table>

**TS Market Share**

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>5.4%</td>
</tr>
<tr>
<td>2021</td>
<td>7.2%</td>
</tr>
</tbody>
</table>

---

1. 2017 revenue adjusted down by $0.1B for MS accounting re-class. Includes CB and CCB, excludes Credit Portfolio Group.
2. 2021 revenue includes CB and CCB, excludes Credit Portfolio Group.
3. Includes average liquidity deposits for CIB and CB only.
We have maintained our position as the leading Markets franchise

Revenue ($B)¹

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>FICC</td>
<td>12.8</td>
<td>16.9</td>
</tr>
<tr>
<td>Equities</td>
<td>5.7</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Focus areas for deep-dive discussions

- Continue to strengthen our industry leadership by deepening relationship with clients
- Uniquely positioned to capture secular growth of large institutional clients, and across private alternatives
- Agile management of capital to pursue opportunities and maintain profitability
- Compete in newer market structures and preserve leadership in electronic trading
- Track record of being disciplined with expense

Strengthen market leadership by growing share across our client franchise through technology innovation, capital and expense discipline

¹ Revenue on externally reported basis (excluding credit adjustment and other).
² Source: Coalition Greenwich Competitor Analytics. For footnoted information, refer to page 45.
Securities Services has achieved both record revenue and assets under custody

Our Clients

Asset Managers

Asset Owners

100% of our top 200 clients overlap with at least one other CIB business

Our Business

Custody & Fund Services
- Custody
- Alternatives
- Fund Services
- Middle Office
- ETFs

Trading Services
- Cash, FX & Liquidity Mgmt.
- Agency Securities Finance
- Collateral Management
- Depositary Receipts

Data Solutions
- Data Management
- Performance, Risk & Analytics

By the Numbers

AUC ($T)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>23</td>
<td>33</td>
</tr>
</tbody>
</table>

DEPOSITS ($B)\(^1\)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>142</td>
<td>216</td>
</tr>
</tbody>
</table>

REVENUE ($B)\(^2\)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32</td>
<td>31</td>
</tr>
</tbody>
</table>

OPERATING MARGIN (%)\(^3\)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32</td>
<td>31</td>
</tr>
</tbody>
</table>

1 Represents average deposits in 2021 as compared to average deposits in 2017.
2 2017 revenue adjusted by $(0.1)B to exclude the impact of past business simplification, exit actions and accounting changes.
3 Operating margin excludes credit reserves of $(5)mm and $(67)mm for 2017 and 2021, respectively.
4 Source: Coalition Greenwich Competitor Analytics. For footnoted information, refer to page 45.
We have a strategy to deliver growth for our business and clients, now and in the future.

**Scale & Efficiency**
- **Optimizing and streamlining technology and operating models**
  - Modern technology architecture and globally consistent operating models
  - Record volume and activity
    - Daily NAV deliveries up 65% to >25k (since 2017)
    - Derivatives positions up ~50%
  - Consistently strong operating margin (30%+)

**Comprehensive Client Solutions**
- **Delivering products and services to meet client needs and close gaps**
  - ETFs: Full ETF servicing capabilities driving new mandates and growth, doubling assets since 2017
  - Alternatives: Enhanced capabilities across Alternative and Private assets; doubled AUA while reducing operating expense
  - Middle Office: Scalable next generation platform leveraging Markets capabilities

**Investing for the Future**
- **Addressing client needs across the investment lifecycle**
  - Digital Assets: Developing innovative digital asset solutions to support evolving client needs including full crypto record keeping services and collateral tokenization capabilities
  - Data Solutions: Launched Fusion, a cloud-native platform enabling clients to seamlessly access internal and third-party data
  - Providing integrated solutions through a modern data catalogue and APIs

Deliver scale and efficiency across our core asset servicing business; invest in middle office, ETFs, alternatives, and data solutions to capture growth.
Fusion: A unified data experience across our clients’ investment journey

Fusion by J.P.Morgan

Fusion provides data management, reporting and analytics solutions across the investment lifecycle, enabling institutional clients to generate investment and operational alpha.
We maintain 16% ROE outlook with approximately 25% more capital

Adjusted ROE (2019 – Outlook)

Adjusted ROE is a non-GAAP financial measure. Refer to page 44 for a reconciliation of reported results to these non-GAAP financial measures.

Drivers
- Increased market share
- Elevated capital markets activity
- Higher asset valuations
- Investment-led expense growth

Potential Headwinds / Tailwinds
- Increase market share
- Normalization in Markets and IB wallets
- Inflationary pressure on expense
- Higher capital allocation

Capital ($B)

2019
- Volume/Revenue Related
- Rates
- Expense
- Capital, Credit Costs, Tax

2021
- Volume/Revenue Related
- Rates
- Expense
- Capital, Credit Costs, Tax

Outlook
- ~16%

1 Adjusted ROE is a non-GAAP financial measure. Refer to page 44 for a reconciliation of reported results to these non-GAAP financial measures.
Topics for discussion

1. CIB Overview
   - Financial overview
   - Positioning for growth

2. Markets
   - Industry-leading global franchise
   - Client-centricity driving our leadership position
   - Scale and competitiveness in electronic markets

3. Payments
   - Overview and unique value proposition
   - Strong financial performance
   - Strategic focus areas to drive growth

4. Closing Remarks
We continue to grow by being complete and delivering client excellence

We remain the leading global Markets franchise…

- $27.4B Revenue (↑ 48% vs FY17)
- 12.2% Market Share (↑ 160bps vs FY17)

…with sustained growth

Multi-asset counterparty

- Client distribution by # of products traded:
  - ≥ 6 products: 39%
  - 4-5 products: 38%
  - ≤ 3 products: 23%

Global expertise

- Leading market share across regions
  - Americas #1
  - EMEA #1
  - APAC #1

Omnichannel connectivity

- Revenue CAGR (2017-2021):
  - Voice: 8%
  - Electronic: 11%

End-to-end service provider

- Pre-Trade
- Trade
- Post-Trade

Source: Coalition Greenwich FY21 Competitor Analytics. Share reflects JPMorgan Chase’s share of Industry Product Pool (for footnoted information, refer to page 45).

Research ranking reflects J.P. Morgan’s position in the Institutional Investor 2021 Survey.

Products: Cash Equities, Equity Derivatives, FX, Commodities, Credit, Rates, Structured Products, etc.

1 Source: Coalition Greenwich Client Analytics. Represents top 1,000 institutional clients in Markets.
Our #1 position today is stronger than ever, as we captured opportunities and closed gaps

We remain the market leader…

… by improving product and client market share…

… and closing gaps in key focus areas

Source: Coalition Greenwich Competitor Analytics. Indicates product rank and share across all clients. For footnoted information, refer to page 45.

1. Industry Global Markets Product Pool. FICC and Equities share of total industry product pool.
2. Source: Coalition Greenwich Institutional Client Analytics. Share of Institutional clients calculated as the wallet of 1,414 clients in 2017 and 1,738 clients in 2021.
3. Source: Coalition Greenwich Corporate Client Analytics. Share of Corporate clients is calculated as the wallet of 2,000 clients in 2017 and 1H21 across FICC products.
There is further growth from deepening client relationships and capturing secular trends

We are investing to continue deepening relationships across our client base…

… and are uniquely positioned to capture secular trends

Source: Coalition Greenwich Analytics
1 Industry wallet as of 2021 - Calculated off 1,738 institutional clients in 2021 and 2,000 corporate clients as of 1H21 across FICC products (Annualized).
2 Source: Coalition Greenwich Institutional Client Analytics. “Large Institutional Clients” is a JPM-only categorization defined based on share of wallet, product, penetration and revenue metrics; Wallet is based on 1,414 clients in 2017 and 1,738 clients in 2021.
3 Traditional assets includes Actives (ex-Alts), Passives and Money Market Funds.
We continuously optimize our capital footprint to deliver growth and strong returns.

Even with a higher capital base...

- Disciplined deployment of capital across clients and across products
- Dynamic allocation to capture opportunities
- From 2017 to 2021, a few examples of where we allocated growth capital:
  1) SPG – Loan origination, financing
  2) Commodities – Physical gas, renewables
  3) Equities – Prime balances to close gaps

...we expect to earn above our cost of capital

2022 ROE (%)

- Marginal ROE
- Fully loaded ROE

We are complete across products, and clients reward us for it

- We provide lower ROE products in response to client demand...
- ...and are rewarded with business in higher ROE products

~90% Institutional Client Wallet

...is from clients who participate in both lower & higher ROE businesses

Source: Coalition Greenwich Analytics.
1 Source: Coalition Greenwich Institutional Client Analytics. Share of institutional clients calculated as the wallet of 1,414 clients in 2017 and 1,738 clients in 2021.
2 Revenue multiplier represents average from 2017 to 2021.
We are investing to lead in newer market structures and electronic protocols

Foundational capabilities to enhance competitiveness

- **Infrastructure Scalability**
  - Process more volumes with stability
  - Improved latency, speed and elasticity
  - Cost efficiencies from shared platforms

- **Workflow Automation**
  - Improve algos with structured datasets
  - Extend reach and facilitate STP
  - Central risk management & internalization

- **Organization Agility**
  - Data-driven decisioning
  - Lower time-to-market for algorithms
  - Interdisciplinary & flat desk structure

- **Market Structure**
  - Participation on third-party venues
  - Standard APIs for direct connectivity
  - Investments & partnerships

**Cash Equities Revenue**

- Low touch trading revenue CAGR

- 2017
- 2021

- ~12%

**FICC Platform Rankings**

*Top 3 rankings as a % of total rankings on leading venues¹*

- 2017
- 2021

- **FX**
  - 100%

- **Commodities**
  - 100%

- **Rates**
  - 100%

- **Credit**
  - 100%

**Credit e-Trading Approach**

- Integrated systematic trading strategies

Source: Coalition Greenwich Competitor Analytics. For footnoted information, refer to page 45.

¹ References select products that JPM offers liquidity in; FX & Commodities rankings are the average of monthly ranks provided by platforms; Rates & Credit rankings are the annual rankings provided by the platforms.
We have a track-record of being disciplined with expenses

### Historical revenue & expense CAGR

**2017-21 CAGR (ex. Income neutral)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>+9.3%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>2018</td>
<td>+9.3%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>2019</td>
<td>+9.3%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>2020</td>
<td>+9.3%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>2021</td>
<td>+9.3%</td>
<td>+3.6%</td>
</tr>
</tbody>
</table>

### Expense breakdown

**Total Expense (ex. Income neutral)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume / Revenue Related</th>
<th>Investments</th>
<th>Structural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>+7.2%</td>
<td>+1.4%</td>
<td>+5.7%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>2018</td>
<td>+7.2%</td>
<td>+1.4%</td>
<td>+5.7%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>2019</td>
<td>+7.2%</td>
<td>+1.4%</td>
<td>+5.7%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>2020</td>
<td>+7.2%</td>
<td>+1.4%</td>
<td>+5.7%</td>
<td>+3.6%</td>
</tr>
<tr>
<td>2021</td>
<td>+7.2%</td>
<td>+1.4%</td>
<td>+5.7%</td>
<td>+3.6%</td>
</tr>
</tbody>
</table>

1 Expense reflects fully loaded excluding legal and income neutral.
Our strategy sets us up for continued success

1. Deepen relationships across client base

2. Capture secular growth with large institutional clients and in private alternative assets

3. Dynamically deploy capital to optimize returns

4. Innovate and lead, as market structure evolves and electronification continues

5. Manage expenses with discipline
### Topics for discussion

<table>
<thead>
<tr>
<th></th>
<th>CIB Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Financial overview</td>
</tr>
<tr>
<td></td>
<td>Positioning for growth</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Industry-leading global franchise</td>
</tr>
<tr>
<td></td>
<td>Client-centricity driving our leadership position</td>
</tr>
<tr>
<td></td>
<td>Scale and competitiveness in electronic markets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Overview and unique value proposition</td>
</tr>
<tr>
<td></td>
<td>Strong financial performance</td>
</tr>
<tr>
<td></td>
<td>Strategic focus areas to drive growth</td>
</tr>
</tbody>
</table>

|   | Closing Remarks |
### Key 2021 firm-wide metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$9.9B</td>
</tr>
<tr>
<td>NII / NIR split</td>
<td>~50/50</td>
</tr>
<tr>
<td>Clients (excl. SMB)</td>
<td>29k</td>
</tr>
<tr>
<td>Average deposits</td>
<td>$800B</td>
</tr>
<tr>
<td>PTI</td>
<td>$3.4B</td>
</tr>
</tbody>
</table>

#### Client segments

- **Corporates** (50% of revenue)
- **Financial Institutions** (35% of revenue)
- **E-commerce / Marketplaces** (11% of revenue)
- **SMB Merchant Services** (4% of revenue)

#### Business segments

- **Treasury Services (TS)** (84% of revenue)
- **Merchant Services (MS)** (12% of revenue)
- **Trade** (4% of revenue)

#### LOBs

- **Corporate & Investment Bank** (60% of revenue)
- **Commercial Banking and Consumer & Community Banking** (40% of revenue)

---

1. 2021 revenue and PTI includes CB and CCB and excludes gains on equity investments of $0.4B and Credit Portfolio Group.
2. Excludes ~350k active SMB merchant accounts across the franchise.

---

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We aspire to occupy a unique place in the payments industry

**Scale**
- **Banks**
  - Safety, scale, resilience, deep focus on regulation
  - Direct access to payment networks (e.g., bank and card networks)

**Innovation**
- **Fintechs**
  - Focus on customer experience, flexibility to continuously evolve, speed to market
  - Reliance on others (banks) for access to payment networks

**Durable Differentiation**
- Massive scale and operational excellence around the world
- Leadership across existing and emerging payment methods – opportunities for closed-loop / “on-us” efficiencies
- End-to-end solutions, integrating curated 3rd-parties for completeness and speed to market
- Part of broad J.P. Morgan-wide relationships

**Bank Treasury Services offerings**
- Liquidity
- FX
- Working Capital
- Payment Disbursement

**Fintech Merchant Services offerings**
- Easy onboarding
- Payment Acceptance
- Payment Disbursement (through banks)
- Value-added services

**End-to-end platform solutions**
- Simple, flexible, omnichannel connectivity
- Contextual value-added services
- JPMorgan + Curated 3rd Parties
- Working Capital
- Payment Acceptance
- Liquidity
- FX
- Payment Disbursement
- Trust & Safety

Broad, multi-product relationships: Investment Banking, Commercial Banking, Markets, Retail Banking
We gained scale and market share in Treasury Services, offsetting deposit margin compression.

### Firmwide Revenue 2017 - 2021 ($B)

- **2017**
  - Liquidity: 9.1
  - Payments: 2.7
  - Trade: 0.8
  - Merchant Services (Incl. NA SMB): 0.0
  - Deposit Margin: 2.8

- **2021**
  - 10.3

- **Leadership positions & growth**
  - TS global market share: 5.4% → 7.2% → #1
  - Payments txn avg. value/day: $7T → $10T → #1
  - Lockbox market share: 18.4% → 24.3% → #1
  - US Real Time Payments volumes: 140mm → #1
  - Net Promoter Score: 34 → 57 → #1
  - Digital Banking (J.P. Morgan Access®): #1
  - SCF market share: 5.6% → 10.0% → #3
  - US merchant acquiring txn/year: 23B → 37B → #1
  - US merchant transaction value: $1.2T → $1.7T → #1
  - Payments Processing Accuracy: >99.99999999%

---

1. 2017 revenue adjusted down by $0.1B for MS accounting re-class. Includes CB and CCB, excludes Credit Portfolio Group.
2. Deposit margin represents impact from rates net of treasury actions. 
3. 2021 revenue includes CB and CCB and excludes Credit Portfolio Group.
5. EY Cash Management Ranking Report.
7. Annual settled sales.
8. Nilson issue 1127 and 1215 including Visa/Mastercard, pin and other credit volumes.
9. Total payment errors divided by total transactions processed.
We invested heavily in the business, but overall expense growth will decline going forward.

Firmwide Expense outlook

- **New Products:**
  - Treasury Services capabilities best in class
  - Continued investment in key areas of focus (e.g., Merchant Services, InstaMed, VW Pay)

- **New Platforms:**
  - No expense growth as platforms near completion; expense will decline over time

- **Modernization:**
  - Continued modernization at current spend levels
Our Payments business is enabled by a clear design of our technology stack.
Many of our new, cloud-native, tech platforms are nearing completion and generate revenue

<table>
<thead>
<tr>
<th>Major platforms: Progress and target completion (incl. decommissioning)</th>
<th>Platform spend outlook(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Graphite Express</strong>&lt;br&gt;(Global Real Time Payments)</td>
<td>&lt;br&gt;2019</td>
</tr>
<tr>
<td><strong>Graphite Simplified</strong>&lt;br&gt;(High Value/Low Value payments)</td>
<td>&lt;br&gt;2017</td>
</tr>
<tr>
<td><strong>GLASS</strong>&lt;br&gt;(Liquidity)</td>
<td>&lt;br&gt;2017</td>
</tr>
<tr>
<td><strong>Helix</strong>&lt;br&gt;(Merchant Processing)</td>
<td>&lt;br&gt;2019</td>
</tr>
</tbody>
</table>

**Graphite Express**<br>(Global Real Time Payments)<br>✓ Cumulative investments (2019-22): $90mm<br>- Enabled in 45 countries today, 54 by 2022<br>- Expected ~$40mm 2022 revenue (75\(^2\) market share of US Real Time Payment volume)

**GLASS**<br>(Global Liquidity Platform)<br>✓ Cumulative investment (2019-22): $115mm<br>- Won 177 out of 208 complex competitive Liquidity deals globally in 2021<br>- Includes 61 of 71 Virtual Account Management (VAM) deals<br>- ~$150mm\(^3\) annual value<br>- Enabled innovative use-cases (Embedded Banking, JPM Coin)

✓ Reusable components across platforms enable faster development
✓ We continue to maintain and support our legacy platforms which will adequately meet our client and innovation needs until full decommissioning

\(^1\) Against 2022 forecast.
\(^2\) As of 1Q 2022.
\(^3\) Includes estimated impact from higher rates.
We see growth opportunities across our customer segments with concrete KPIs to track progress

<table>
<thead>
<tr>
<th>Focus areas</th>
<th>Key targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Extend leadership with Financial Institutions and continue to bring efficiencies and innovation to Correspondent Banking</td>
<td>■ 25% ➔ 30% SWIFT market share&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>■ Continue to increase market share with Corporates on the back of best-in-class TS and FX product suite, as well as structured trade capabilities (e.g., SCF)</td>
<td>■ 7.2% ➔ 10% TS market share&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>■ Deliver scalable and innovative industry-specific integrated solutions</td>
<td>■ 10% ➔ 20% SCF market share&lt;sup&gt;3&lt;/sup&gt;</td>
</tr>
<tr>
<td>■ Roll-out and scale end-to-end E-commerce capabilities to empower growth of digitally native clients as well as business transformation of established Corporates</td>
<td>■ 8%&lt;sup&gt;4&lt;/sup&gt; ➔ Grow to 10%&lt;sup&gt;5&lt;/sup&gt; TS fee revenue annual growth</td>
</tr>
<tr>
<td>■ Invest in smart next-gen point-of-sale experiences and contextual, curated value-added services to help drive growth with SMB clients</td>
<td>■ ~0%&lt;sup&gt;4&lt;/sup&gt; ➔ Grow to 15%&lt;sup&gt;5&lt;/sup&gt; MS revenue annual growth</td>
</tr>
</tbody>
</table>

<sup>1</sup>2021 SWIFT market share for USD MT103s and MT202s.
<sup>2</sup>Coalition Greenwich Competitor Analytics. Reflects Global Firmwide Treasury Services business (CIB and CB). For footnoted information, refer to slide 45.
<sup>3</sup>SCF represents Supply Chain Financing. Share represents J.P. Morgan share of Coalition Index Banks for CIB only.
<sup>4</sup>2017 – 2021 CAGR.
<sup>5</sup>Target growth rates go out no further than 2025.
We are rolling out unique vertically-aligned solutions with acquisitions and strategic investments to accelerate our roadmap.

Industry ecosystems we serve

**Healthcare**
- Patient
  - Insurance premium
  - Claims payment
  - Bill payment
- Provider
- Payer

**Connected Cars**
- EV Charging
- Toll & parking
- Insurance
- Parts and accessories
- Lease payments
- Fuel payments

We are deepening our capabilities through acquisitions and strategic investments:

- **InstaMed**
  - Momentum over 3 years
  - 90% Revenue growth
  - 43% to 59% U.S. healthcare providers on the InstaMed Network

- **Volkswagen Pay**
  - Joint venture with Volkswagen Financial Services
  - Deal closed in April 2022
We are the only provider to offer end-to-end solutions to E-commerce marketplaces & sellers

### Client needs

<table>
<thead>
<tr>
<th>Buyers</th>
<th>Existing capabilities</th>
<th>Major investments in development (over next 2 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accept payments (Acquiring)</td>
<td>Traditional payment methods, Pay by Bank (Europe), ChaseNet</td>
<td>All methods of payment and financing in the US and Europe (e.g., Wallets, BNPL, Pay by Bank, Crypto)</td>
</tr>
<tr>
<td>Developer / Merchant Experience</td>
<td>Fast APIs, Bill Payments Tokenization</td>
<td>POS and Omnichannel (tap on phone, smart devices)</td>
</tr>
<tr>
<td>Financing</td>
<td>Securitization/SPV options</td>
<td>No-code, configurable toolkit</td>
</tr>
<tr>
<td>Manage liquidity &amp; FX</td>
<td>Best in class suite of liquidity, account and FX solutions – physical, notional, virtual and DLT</td>
<td>Hosted Pay Page: Xpress Checkout</td>
</tr>
<tr>
<td>Wallets</td>
<td>Full suite of “3rd party money” accounts</td>
<td>Merchant Working Capital</td>
</tr>
<tr>
<td>Pay-outs</td>
<td>RTP, pay to card and wallet Payouts in 160 countries &amp; 120+ currencies</td>
<td>Embedded Banking – see next page</td>
</tr>
<tr>
<td>Value-added services (with CCB)</td>
<td>Account validation Customer Insights &amp; Offers (Acquiring &amp; Issuing data)</td>
<td>Invoicing, Payroll, Accounting and other value-added services</td>
</tr>
</tbody>
</table>

### Major investments in development (over next 2 years)

- All methods of payment and financing in the US and Europe (e.g., Wallets, BNPL, Pay by Bank, Crypto)
- POS and Omnichannel (tap on phone, smart devices)
- No-code, configurable toolkit
- Hosted Pay Page: Xpress Checkout
- Merchant Working Capital
- Embedded Banking – see next page
- Invoicing, Payroll, Accounting and other value-added services
- Near real-time cross-border payments

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Deliver end-to-end E-commerce capabilities
Example of our new product development: Embedded Banking

We re-configured existing "widgets" to launch quickly...  
...and deliver a seamless digital user experience...  
...that brings value to sellers and marketplaces

**Sellers**  
...Enabling businesses to bank where they sell
- Instant digital onboarding
- Same-day settlement & real time payouts
- One bank account to use across marketplaces
- Embedded in marketplace experience

**Marketplaces**  
...Integrating banking services for platform partners
- New offering to deepen seller relationships
- Additional services can be added over time (e.g., Merchant Working Capital, accounting software)
- New revenue potential outside own marketplace

---

Digital KYC / Onboarding
Payment Acceptance
Merchant Acquiring
Wallets
Sub-ledgering Micro-service
Payment Disbursement
Graphite
Account Services
GLASS

Development partner
J.P.Morgan x FreshBooks
Longer-term opportunity: We see significant upside from serving European SMBs & Marketplaces

**Delivery model flow diagram**

- **Purchasing Card**
  - Rewards = Processing fees waived
- **Sellers**
  - Real-time settlement
  - Local Bank account
- **Delivery Channels**
  - Goods
  - Delivery
- **Buyers**
  - Payment
  - Wallets for each participant
    - Multiple methods of payment, financing & payout
- **Goods**

**Capabilities needed to address the market**

- **Omnichannel** payment methods – in person, in wallet and online, including Tap on Phone
- **Pan-European localized payments options and bank accounts** (across all EU, UK and EE)
- **Onboarding, KYC capabilities** for businesses and individuals

**Viva Wallet capabilities**

Subject to regulatory approvals and actual implementation will not occur until closing
We believe there is a $5B revenue opportunity

Firmwide Revenue ($B)

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate Impact</th>
<th>TS</th>
<th>MS</th>
<th>Trade</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td></td>
<td>10%</td>
<td>15%</td>
<td>15%</td>
<td>~15</td>
</tr>
</tbody>
</table>

Target annual revenue growth:
- 10% fee revenue
- 15%
- 15%

Target average annual revenue growth:
- >10%

Target average annual PTI growth:
- >20%

Potential Tailwinds / Headwinds

↑ Onyx
↑ European expansion
↑ Faster growth in MS
↑ Acquisitions / investments at attractive multiples
↓ Pace and evolution of rates and inflation
↓ Deposit attrition from Quantitative Tightening
↓ Geopolitics
↓ Recession

1. 2021 Revenue includes CB and CCB and excludes gains on equity investments of $0.4B and Credit Portfolio Group.
2. Impact of rates net of treasury actions and inclusive of deposit attrition / migration.
3. Target growth rates go out no further than 2025.
Longer-term opportunity: We are strategically investing in Onyx to deliver industry-leading capabilities & future proof our business – all at a modest cost

**Today**

- **Liink by J.P. Morgan**
  - Network for information exchange to remove frictions of Payments
  - Peer-to-peer blockchain-based network
  - Faster, cheaper, and safer payments via multiple apps

- **Coin Systems**
  - Network for efficiently moving money 24/7
  - JPM Coin
  - Programmable Money
  - Partior

- **Onyx Digital Assets**
  - Network for value and assets exchange
  - Partnering

**Metrics**

- **Message Volume on Liink**
  - ~35k (2020) ➔ ~35mm (2021)

- **Payments using DLT**
  - $0 (2020) ➔ ~$6B (2021)

- **Notional Value Exchanged**
  - $0 (2020) ➔ ~$230B (2021)

**Partnering with leading companies to build the platforms of the future**

- Ant Financial, Siemens, Partior (DBS, Temasek, SCB), Deutsche Bank, Consensys, Goldman Sachs
VIDEO: ONYX
Closing thoughts…

1. Double-digit growth and high operating leverage

2. Consistent market share gains expected to continue, with growth in Merchant Services

3. Proven ability to execute complex technology modernization and development

4. Unique E-commerce platform solutions already live with additional capabilities rolling out over next 2 years

5. Future proof with Onyx for digital assets and payments
Topics for discussion

1. CIB Overview
   - Financial overview
   - Positioning for growth

2. Markets
   - Industry-leading global franchise
   - Client-centricity driving our leadership position
   - Scale and competitiveness in electronic markets

3. Payments
   - Overview and unique value proposition
   - Strong financial performance
   - Strategic focus areas to drive growth

4. Closing Remarks
We remain confident in the resilience of our business and are constantly optimizing our model with a focus on maintaining our leadership position.

1. **Maintaining day-to-day discipline**
   - Dynamic financial management including risk, credit, capital, liquidity, expense management and investments
   - Holistic focus on client experience and ease of doing business
   - Continued resilience in the face of disruption risks to our business

2. **Optimizing our current model**
   - Closing addressable gaps in our wallet
   - Accelerating organic growth
   - Attracting and retaining our talent

3. **Transforming for the future**
   - Modernizing our core technology to enable elastic scale and faster innovation
   - Advancing strategic platforms for more integrated delivery of the Firm and better experience for our clients
   - Investing in new and emerging tech to develop future-proof solutions

**ROE Outlook ~16%**
Notes on non-GAAP financial measures

1. The CIB provides certain non-GAAP financial measures. These measures should be viewed in addition to, and not as a substitute for, the CIB’s reported results.

Adjusted ROE on page 2 is calculated as net income after preferred stock costs excluding credit reserve releases divided by average equity. Credit reserve releases net of tax were $(602)\text{mm}$ and $(1,483)\text{mm}$ for 2011 and 2021, respectively. CIB average equity was $47B and $83B for 2011 and 2021, respectively.

The non-GAAP financial measures on pages 5 and 16 exclude the impact of legal expense. Adjusted ROE on page 16 is calculated as net income after preferred stock costs excluding the impact of legal expense divided by average equity. CIB average equity was $80B and $83B for 2019 and 2021, respectively. The table below provides a reconciliation of reported results to these non-GAAP financial measures.

Reconciliation of reported to adjusted results excluding the impact of legal expense

<table>
<thead>
<tr>
<th>CIB</th>
<th>Year ended December 31,</th>
<th>2019</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in millions, except where otherwise noted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Revenue Reported/ Adjusted</td>
<td>$39,265</td>
<td>$51,749</td>
<td></td>
</tr>
<tr>
<td>(2) Expense Reported</td>
<td>$22,444</td>
<td>$25,325</td>
<td></td>
</tr>
<tr>
<td>Adjustments: Legal Expenses</td>
<td>$(381)</td>
<td>$(252)</td>
<td></td>
</tr>
<tr>
<td>Adjusted</td>
<td>$22,063</td>
<td>$25,074</td>
<td></td>
</tr>
<tr>
<td>(3) Net Income Reported</td>
<td>$11,954</td>
<td>$21,134</td>
<td></td>
</tr>
<tr>
<td>Adjustments: Legal Expenses</td>
<td>347</td>
<td>224</td>
<td></td>
</tr>
<tr>
<td>Adjusted</td>
<td>$12,302</td>
<td>$21,358</td>
<td></td>
</tr>
<tr>
<td>(4) ROE Reported</td>
<td>14%</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Adjusted</td>
<td>14%</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

2. Financials are as reported unless noted otherwise. In the first quarter of 2020, the Merchant Services business was realigned from CCB to CIB. Financials from 2017 onward were revised to conform with the current presentation.
Notes on market share and rankings

1. Source: Coalition Greenwich Competitor Analytics based on JPMorgan Chase’s internal business structure and revenues. Excludes the impact of Archegos in 2021 for select firms.

   Historical Coalition competitor revenues and industry wallet have been rebased to ensure consistent taxonomy and accounting/structural adjustments.

   Market Share reflects share of the overall industry product pool.

   Rank reflects JPMorgan’s rank amongst Coalition Index Banks as follows:

   - Markets (BAC, BARC, BNPP, CITI, CS, DB, GS, HSBC, JPM, MS, SG and UBS)
   - Treasury Services & SCF (BAC, BNPP, CITI, DB, HSBC, JPM, SG, SCB and WFC)
   - Securities Services (BAC, BNPP, BNY, CITI, DB, HSBC, JPM, NT, SCB, SS, and SG)

2. Source: Dealogic as of January 3, 2022 for GIB, ECM, DCM, and M&A rank analysis and market share. ECM excludes shelf deals. DCM includes all Bonds, Loans, and other debt (i.e., Securitizations and Frequent Borrowers), excluding money market, short-term debt.

3. CIB industry wallets and growth from FY11-21 are for GIB, Markets (Equities / FICC), Firmwide Payments (Treasury Services and Trade) and Securities Services (including Escrow, Corp Trust, Clearing & Settlement), which may differ from J.P. Morgan’s comparable businesses.

4. The 24 businesses include CIB, Banking (GIB + Treasury Services + Trade Finance), GIB, M&A, ECM, DCM, Treasury Services, Trade Finance, Securities Services, Markets, FICC, G10 Rates, G10 FX, EM Macro, Commodities, Credit, SPG, Public Finance, G10 Financing, Equities, Cash Equities, Equity Derivatives, Prime Brokerage, F&O.

5. EMEA and APAC do not include Public Finance.

6. Market share gains are rounded to the nearest 10bps.