

US Banks

BofA 2024 Financial Services Conference takeaways: What did we learn?

Industry Overview

Perceived risks, limited visibility on growth weighing

Our investor discussions on the sidelines of the BofA Securities 2024 Financial Services conference (attended by approx. 125 corporates and 300 institutional investors) suggests tempered sentiment due to cyclical concerns (CRE, deposit pricing) tied to higher for longer interest rates. In particular, we observed limited enthusiasm towards investing in regional banks given lack of visibility on the medium-term growth outlook. These concerns are driving investors towards non-banks or mega-cap banks that are seen as better positioned to benefit from US economic strength. **Takeaways from our management meetings, panel discussions start on page 2.**

Management updates highlight EPS resiliency

Common themes we heard from bank mgmt. teams: relative NII resiliency despite potential for fewer rate cuts; unchanged credit outlook as consumer normalizes, office CRE stressed, multifamily holding up; potential problems seen as transitory/manageable vs. the secular slump in office CRE. Capital markets off to a good start, while loan demand muted. Basel End Game proposal widely expected to be watered down, capital return could pick-up post June stress test results. Supervisory actions rising, \$80bn+ in assets seen as line in the sand for higher regulatory requirements.

Thematic panels: CRE, regulations, A.I.

CRE: Lower rates needed to bring relief. Office CRE most depressed, Sunbelt multifamily facing headwinds, but supply dynamics should ease in 2026. **Regulatory:** Panelists were surprisingly optimistic on the prospects for a pick-up in bank M&A. But clean bill of health needed from regulators to improve likelihood of deal approval. Legal challenges to rulemaking to rise (watch late card fees). Elections in focus as personnel equals policy. **Tech:** A.I. usage picking up (back office, cyber/fraud risks). Hallucinations and regulatory backdrops to slow adoption. Banks moving to protect their data as they look to utilize it for their own SLMs (small language models).

Our view: rate relief needed

Cooler inflation data that eliminates even the slightest potential that the Fed will need to hike interest rates next (instead of cutting) should serve as a catalyst to turn investor sentiment. Investor perception of potential risks is important, given that the investment thesis on bank stocks is based on valuation multiple re-rating on the back of EPS stabilization (not on +ve EPS revisions). Higher for longer rates likely to sustain mega-cap bank outperformance over regionals given the perceived superior EPS defensibility.

Stocks where we see risk/reward as attractive

JPMorgan remains a big beneficiary of higher for longer rates. Self-help potential should keep investor interest in Citigroup, Wells Fargo, BNY Mellon. Goldman Sachs/Morgan Stanley setting up for improved EPS on the back of investment banking rebound, trading resiliency, regulatory relief. Among regionals at the conference, we highlight Buy-rated: US Bancorp, Truist, Fifth Third, KeyCorp, East West, Cullen Frost, Synovus, Western Alliance, FNB Corp, First Bancorp.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Refer to important disclosures on page 25 to 28. Analyst Certification on page 22. Price Objective Basis/Risk on page 19.

12663487

Timestamp: 26 February 2024 06:29AM EST

26 February 2024

Equity
United States
Banks

Ebrahim H. Poonawala
Research Analyst
BofAS
+1 646 743 0490
ebrahim.poonawala@bofa.com

Brandon Berman
Research Analyst
BofAS
+1 646 855 3933
brandon.berman@bofa.com

Christian Panebianco
Research Analyst
BofAS
+1 646 855 3912
christian.panebianco@bofa.com

Isiah Austin
Research Analyst
BofAS
+1 646 855 0472
isiah.austin@bofa.com

Gabriel Angelini
Research Analyst
BofAS
+1 646 855 3081
gabriel.angelini@bofa.com

Acronyms

CRE: commercial real estate

NII: net interest income

AI: Artificial intelligence

Company specific takeaways

JPMorgan Chase & Co. (JPM, \$530bn market cap)

Group meetings: Head of Investor Relations Mikael Grubb and Investor Relations

Jonathan Summitt

- **Strong loan growth in Card to continue:** Reiterated expectations for Card growth of high-single/low-single digits in 2024, a continuation from healthy growth exhibited in 2023 (+14%), driven by balances returning to pre-pandemic levels and account growth. Ex-Card, loan growth will likely remain muted in 2024. Anecdotally, middle-market corporates have become less confident near-term, thereby leading to slower pace of investment and lower levels of utilization (similar to what we heard from peers during the conference).
- **Deposit dynamics predominant NII headwind:** The \$2bn in incremental NII from growth in Card not expected to fully offset factors driving continued deposit re-pricing, including: mix shift; attrition from QT; and lower interest rates. Although NII should see a minor benefit from fewer rate cuts (mgmt. outlook assumed six cuts in 2024), the impact from deposit migration is hard to quantify/handicap. For example, retail deposit mix-shift could accelerate in a higher-for-longer rate backdrop. Meanwhile, landscape for commercial deposits remains competitive. That said, avg. CD duration has shortened for new production.
- **Multifamily portfolio, including rent-regulated portion, performing well:** As credit concerns expand beyond office-CRE to encompass multifamily, mgmt. reminded investors of the bank's conservative underwriting of multifamily loans (9% of total). JPM's multifamily portfolio is predominantly concentrated in Southern California, although they also have some exposure to NYC rent-regulated market. According to cross-sectional review of NY loan market conducted by using third-party data, credit metrics look "healthy" (JPM portfolio looks stronger vs. peers). Mgmt. feels comfortable with the current level of reserves on the portfolio (built in a cushion as of late on the office portfolio to account for lower LTVs).
- **Relevant research:** [JPM: 2024 Year Ahead: An elephant with the agility of a tiger](#) / [JPM: Meets high bar](#)

Morgan Stanley (MS, \$141.5bn market cap)

Presenter: Head of Wealth Management Jed Finn

- **Revving up the growth engine:** Head of Wealth Management (WM) Jed Finn outlined mgmt's strategy to achieve 30% pre-tax margins through two key areas of focus – "path to advice" and "scaled & differentiated platform." While a disproportionate amount of investor attention is spent on near term margin outlook, we believe the key test for mgmt. over the medium term will be whether it can deliver superior net new asset (NNA) and revenue growth in less conducive macro-backdrops and despite an intensely competitive operating landscape.
- **Focus area #1 Path to Advice:** Underpinned by adding client relationships (18.2mn in 2023 vs. 2.5mn in 2019), growing NNA (\$282bn vs. \$98bn), and migrating clients to fee-based accounts (fee-based flows \$109bn vs. \$65bn). Multiple avenues to capture new clients through same store advisors, net recruiting, new stock plan wins, expanded equity award populations, new retirement wins, non-qualified deferred comp wins, new self-directed investors, and institutional consulting acquisitions. MS continued to win share last year vs. peers with NNA growth 6.7% of assets vs. ~2.2% peer avg. 50% of \$3.1tn WM client assets fee-based in advisor led. Mgmt. sees potential to drive this higher.
- **Focus area #2 Scaled & Differentiated Platform:** Benefit of scale from being one of the largest full-service WM platforms. Investment bankers execute the IPO,

client becomes a public equity admin client in the workplace businesses, advisor covers the founders and individual employees, and financial wellness programs to support company employees. Platform has a wide range of capabilities across alternatives, private markets, checking, lending, intellectual capital, tax efficient models, investment management, and capital markets. Mgmt. prioritizing investing in an integrated firm, building out banking & lending, and leveraging AI (exclusive partnership with OpenAI). More room to run with household penetration ~16% of \$147bn WM loans. Integrated data platform allows mgmt. to track advisor success.

- **Assistance from macro could turb charge growth:** Muted capital markets, elevated client cash, and higher loan paydowns have served as headwinds. Capital markets is a big driver of NNA with conversion from private to public company an important catalyst. 2022-2023 avg. IPO volumes \$14bn vs. \$120bn 2020-2021 avg. Cash on sidelines waiting to be redeployed with 22% of advisor-led assets in cash and cash equivalents vs. 18% through the cycle. High rate backdrop leading to more paydowns and fewer draws which impacts NNA and net interest income (NII).
- **Franchise superiority to drive outperformance:** While pressured EPS and a premium valuation have served as an overhang on the stock, we see Morgan Stanley as indexed to the right macro themes. This combined with strong execution (mgmt. not distracted), regulatory relief and some macro assistance should reignite EPS growth and drive stock outperformance. Reiterate Buy.
- **Relevant research:** [MS: 2024 Year Ahead: Great expectations](#) / [MS: CEO Ted Pick sets a realistic bar](#)

Goldman Sachs (GS, \$131.8bn market cap)

Group meeting: Co-Head of Global Banking & Markets Ashok Varadhan

- **Improving EPS and strategic visibility:** We hosted Goldman Sachs veteran (started 1998), Ashok Varadhan Co-Head of Global Banking & Markets, for an investor meeting during the conference. Varadhan highlighted management's laser focus on improving ROE durability while continuing to gain client wallet share. Although significant uncertainty remains among investors around the resiliency of trading revenues, Varadhan highlighted the ~40% increase in US household net worth vs. pre-pandemic levels (S&P up ~50%), suggesting to us that 2019 may no longer be the right reference point absent a major decline in asset prices. Product mix to influence trading YoY; continued growth opportunity in financing.
- **Deep bench:** Another challenge for investors we have spoken to has been in assessing the steady stream of headlines tied to senior level departures. Varadhan, who we found to be very candid in his assessments, downplayed the risk of talent drain, pointing to top market share across the markets business as a testament to Goldman's standing as it comes to client relationships, product/technology capabilities and retaining top talent.
- **Regulatory changes:** Echoing commentary from senior leadership at other banks (and a regulatory panel that we hosted during the conference), management anticipates material changes to the Basel III Endgame proposal. Higher capital charges on an "as-proposed" basis would have the effect of driving pricing higher or reduce the use of certain products.
- **Secular themes: Electronification of FICC trading:** unlikely that banks will see the same disruption, pricing pressures as experienced in equities given the lack of homogeneity in fixed income products and how these are traded by institutional vs. retail investors. **Private credit:** an opportunity, not seen as a source of systemic risk (unlike CDOs during the GFC) given lower levels of leverage, less correlation across the underlying assets, stress testing regime to assess GFC like risks and



funding diversity (asset owners with more holding power) that diminishes risk of forced sales.

- **Risk/reward attractive:** In the near term we think the stock is likely to trade on investor expectations around investment banking (IB) rebound, markets activity (both appear to have started out well YTD based on what we have heard from peers during the past few days). However, the longer-term opportunity will be driven by improving EPS and strategic visibility, in our opinion. We see risk/reward as attractive given our expectations for relative resiliency in trading revenues, potential for a pick-up in IB (from near trough levels in 2023) that should last well beyond 2024 and improving regulatory clarity.
- **Relevant research:** [GS: 2024 Year Ahead: Back to basics](#) / [GS: Refocused and Ready to Go](#)

Citigroup Inc. (C, \$106.9bn market cap)

Presenter: CFO Mark Mason

- **Stock outperformance should continue:** CFO Mark Mason came across as confident that mgmt. is on track to delivering on F24 guidance and achieving medium term targets. Our sense is that mgmt. has flex on expenses as it looks to achieve a 10%+ ROTCE target. Potential for a pick-up in 2H24 buybacks realistic post 2024 stress test results, clarity on Basel End Game. According to management, Banamex IPO plans proceeding as planned and should be received well if the recent optimism around the Mexican economy persists into 2025. We continue to see Citigroup shares as offering an attractive risk/reward at 0.6x P/TBV on the back of increasing potential for self-help (expense/capital levers), improving visibility around its underlying businesses and revenue resiliency from later/fewer rate-cuts. Maintain Buy.
- **Higher-for-longer rates “generally better”:** FY24 NII (ex. Markets) should hold up better vs. current outlook (“modestly lower”) amid reduction in rate cut expectations. (Note: futures currently imply 4 cuts vs. 6 at 12/31). Mgmt. cited reinvestment of maturing securities and continued loan growth (outlook assumes mid-single digit growth) as tailwinds that would be partially offset by continued increases in international deposit betas (catching-up) and drag from consumer exits.
- **Fee momentum continuing:** Expressed confidence in +4-5% medium-term revenue growth target, citing continued momentum within Services, client acquisition, and rebound in Investment Banking (IB) wallet. Within Services (Securities Services, TTS) opportunities to increase client penetration. Expect to grow share, particularly in DCM and M&A (announcements stronger YTD but closings slow). Acknowledged the tough YoY comps for the Markets business (potential for further Argentina peso devaluation).
- **Expense flex exists:** Mgmt. reiterated FY24 expense outlook (\$53.5-53.8bn, includes \$700mn-\$1bn in severance). Expect expenses stable QoQ (ex. FDIC assessment) in 1Q24, implying \$14.3bn (vs. cons. \$13.9bn). Acknowledged importance of being transparent on drivers if expenses run higher vs. expectations. For example, volume-related expenses represent 10-12% of revenue. Discussed levers available if revenue environment weaker, including a portion of investments that can be tempered and optimization of transformation costs. Meanwhile, recently completed org. simplification should accelerate elimination of stranded costs with majority of stranded costs expected to be out of run-rate over the medium-term.
- **Card losses in-check:** Reiterated expectations for Branded Cards NCLs between 3.50-4.00% and Retail Services NCL between 5.75-6.25% in 2024. That said, mgmt. expects losses to normalize in 2025. Loss rates are now back to pre-pandemic

levels, driven by customers in the lower FICO bands. Noted loss rates exaggerated by lower acquisition balances despite gross charge-offs being consistent with historical trends.

- **Relevant research:** [C: 2024 Year Ahead: Rubber meets the road](#) / [C: Let bygones be bygones](#)

U.S. Bancorp (USB, \$64.4bn market cap)

Presenters: Senior Executive Vice President and CFO, John Stern, Vice Chair, Consumer and Business Banking, Timothy Welsh

- **Leveraging scale and technology:** We hosted US Bancorp-USB CFO John Stern and Vice Chair, Consumer and Business Banking Tim Welsh (26yr McKinsey veteran, joined USB in 2017) for a fireside chat where the overall messaging emphasized the tailwinds to come as the Union Bank acquisition continues to be integrated. Strong digital offerings for both consumer and small business clients should prove useful as banks deliberate on deposit gathering strategies in a world where quantitative tightening (QT) continues to remove deposits from the banking system. USB is poised to deliver another year of strong returns given strong execution, deal related synergies in an operating backdrop that is less conducive to profitability.
- **Remain conservative on capital deployment:** USB built 150bp of CET1 capital during 2023 after digesting the Union Bank acquisition to end the year at a 9.9% common equity tier 1 (CET1) ratio. Organic capital generation 20-25bp/qtr. Mgmt. sees no pressure in needing to optimize the balance sheet, however optimizing capital allocation remains an ongoing exercise.
- Expect capital generation in 1Q24 to be slightly lower (by 10bp) given impact from CECL phase-in. Mr. Stern indicated stress test scenarios relatively similar YoY. USB could see benefit from inclusion of Union Bank expense synergies (\$900mn, fully included in run-rate) to estimated PPNR. While currently not buying shares, the finalization of proposed regulations could see share buybacks introduced to the capital deployment ladder. Relevant research: [US Banks: Stress test scenario only half the story 15 February 2024](#).
- **Defensible NII outlook:** Net interest income (NII) outlook unchanged at \$4.0-4.1bn/\$16.6bn for 1Q24/FY24. Mgmt. indicated immaterial impact to FY24 NII guidance whether market sees anywhere from 0-6 cuts (vs. 4 cuts assumed in outlook). NII should see tailwinds from repricing of fixed-rate assets (50% of loans fixed-rate plus \$3bn/qtr of securities portfolio reinvestment picking up 250-300bp of yield). While non-interest-bearing (NIB) deposits fell meaningfully in 4Q (-8% QoQ), mgmt. expects a slowing mix-shift as commercial accounts reach their optimal operating levels.
- **Union Bank synergies a long-term tailwind:** Mgmt. remains confident in benefits to be derived from integration of Union Bank, noting opportunity of expanding in the California market (standalone would be 5th largest economy in the world). Ability to bring USB's world class analytics capabilities to Union Bank should help improve client penetration (20% of depositors also held a payment relationship at Union vs. 40% at legacy USB). Scale of USB franchise and opportunity from disruption in California banking market to prove beneficial to returns long-term.
- **Digital capabilities + ease of use a winning combo:** Mr. Welsh highlighted to blend digital capabilities with the ease of use to increase customer adoption and client acquisition. Tech capabilities at the bank, such as CoBrowse, Talech, Bento have the potential to differentiate USB relative to its regional bank peers. Convenient tech one of many reasons 4Q23 consumer deposits saw a 12% YoY increase.



The PNC Financial Services Group, Inc. (PNC, \$58.1bn market cap)

Presenter: Executive Vice President and CFO, Robert Reilly

- **Short term NII pressure, but FY25 guide unchanged:** 1Q24 NII guide negatively revised to down 3-5% QoQ (vs. down 2-3% prior), reflects weaker than expected loan growth (likely to be down 1% vs. stable prior). Mgmt. confident in FY24 guidance holding at down 4-5% YoY (vs \$13.9bn in 2023). Slower loan growth a result of lower than anticipated line utilization (consistent with what we heard from a few peers at the conference).
- **Deposit trends stabilizing:** Deposits appear to be behaving slightly better than anticipated. PNC believes pricing competition is in its later stages, with only slight drifts upward in deposit costs expected in 2024. While QT (quantitative tightening) and ON RRP (overnight reverse repurchase) continue to sap deposits from the banking system, NIB (non-interest-bearing) mix expected to stay around mid-20%. Mgmt. doesn't anticipate a material impact to outlook from less or more rate cuts (currently assuming 3 cuts).
- **Continued capital flexibility, mgmt. evaluating deployment opportunities:** Common equity tier 1 (CET1) ratio at 9.9% as of 4Q23. Mgmt. noted that the bank did not have the same need for optimization of risk-weighted assets (RWA) that peers saw, allowing opportunities to grow inorganically (purchased \$9bn of funded loans from the FDIC as part of the Signature Bank auction). As PNC continues to accrete meaningful amounts of capital, likely that other portfolio purchases may occur as mgmt. continues to evaluate compelling acquisition opportunities.
- **Visa sale to boost capital:** Capital flexibility set to strengthen as 50% of Visa Class B position (100% worth ~\$1.5bn) set to be monetized by late 1Q24, early 2Q24, with remaining stake to be monetized over a time period allowed by SEC (unknown as of now). Share repurchases to continue at a muted level (~100mn in 4Q23) although clarity on proposed regulations could be catalyst for faster buybacks.
- **Open for M&A:** Mr. Reilly reiterated mgmt's interest in pursuing bank M&A given the rising burden posed by the unrelenting need for tech investments, regulatory de-tailoring and post last March, the heightened sensitivity among corporates in how they banked their uninsured deposits. Mgmt. touted the smooth integration of the BBVA Compass franchise as evidence for its strength in integrating deals. Larger deals preferred, but mgmt. will be looking at all opportunities that are attractive from the perspective of enhancing shareholder returns and franchise value.
- Based on a separate panel discussion that we hosted during the conference discussing outlook for bank M&A, we believe that there is likely a small group of larger regional banks where regulators feel comfortable with deal-making. However, we note that the Department of Justice under the Biden administration remains a key stumbling block for larger M&A on the back of the Biden Executive Order.
- **CRE progressing as expected:** Commercial real estate (CRE) at 11% of total loans as of 4Q23, office CRE at 2.5%. Office portfolio well reserved for at 8.7% of loans, with multi-tenant office (mgmt. highlights this as key area of stress) at 13%. While losses will come in the office book (25% criticized in multi-tenant book, will see continued migration to non-performing and some to being charge-offs), things will take time to play out as ~40% of office loans mature by YE24, ~50% of multi-tenant office. Outside of office CRE, mgmt. does not expect meaningful loss content in multifamily. While some investors focus heavily on overbuilt areas of the U.S. (Sunbelt states), mgmt. notes that that most of the multifamily portfolio is spread out with no geographic concentrations, lack of high-rise multifamily in the book.

- **Capital markets off to good start, should assist PPNR throughout 2024:** Following weaker capital markets revenues through the first nine months of 2023, PNC saw a healthy recovery in 4Q23. Harris Williams (largest component of capital markets business) undergoing transformation as business is recalibrated for higher interest rate environment. Mgmt. reiterated guidance for capital markets growth of 20% YoY in 2024, with 4Q23 as a good run-rate going forward.
- **Branch strategy aimed at growing scale/market share:** PNC recently announced a \$1bn plan to add and revamp branches across the U.S. Consistent with commentary on the importance of scale, PNC is building on early success in their Southwest expansion markets by adding branches to Dallas, Houston, Austin, Denver. Goal to grow deposit market share to high-single-digits. Renovation centered around upgrading tech stack and improving product offerings at older branches.
- **Management change focused on boosting franchise connectivity:** Earlier this month, PNC promoted Michael Lyons (53) to the role of President (from Head of Commercial and Investment Banking-C&IB prior) underscoring a strategy of simplification where Mr. Lyons will oversee the C&IB, asset management, retail segments, as well as have the regional presidents report into him. Mr. Lyons joined PNC in 2011 and has played a key role in the acquisitions of RBC's US retail bank "Centura" and more recently Compass Bank from BBVA.

Truist Financial (TFC, \$47bn market cap)

Presenter: CFO Mike Maguire

- **A simpler Truist, positioned to play offense:** CFO Mike Maguire discussed the significant balance sheet and strategic optionality offered by the announced sale of its remaining stake in the insurance business (TIH; expected close 2Q24). Additionally, discussed mgmt's focus on executing on its growth and efficiency strategies on the back of the re-org announced last year (led to headcount reduction, exiting smaller non-core businesses). Following these strategic actions, Truist should emerge as a simpler investment story, where disciplined execution combined with a high growth footprint across the US Southeast and ample capital/liquidity has positioned the bank to deliver superior EPS growth and profitability. At 1.2x P/TBV (pro-forma for the sale), 5.9% dividend yield, sub-11x P/E (in-line with super-regional peers).
- **Improved capital position:** Capital generation from the sale of TIH (+230bp to CET1 under current rules or +255bp on Basel Endgame fully phased-in), improves capital and liquidity profile, and affords TFC the opportunity to pursue market share. Strategic actions have provided room to pursue loan growth while introducing share repurchases to the capital deployment hierarchy. We believe that investors should look beyond the lack of immediate EPS accretion from the TIH sale (expected to be neutral to EPS) and focus on the flexibility to defend EPS near-term, and upside potential as mgmt. optimizes the balance sheet.
- **Back on the front foot:** The excess capital positioning also allows mgmt. to provide a more growth-oriented message to its bankers, morale boosting. This after the bank and employees have endured a relatively challenging period for the bank on the back of the SunTrust/BB&T merger. While mgmt. expects C&I demand to remain muted, TFC positioned to capture share if/when sentiment turns and activity levels pick-up (possibly once rate-cuts begin).
- **NII largely intact:** Mgmt. indicated fewer rate cuts (vs. 5 cuts embedded in outlook) shouldn't have material impact on FY24 net interest income (NII). NII should benefit from fixed asset repricing dynamics, including \$2-3bn/qtr in securities cash flows, rolling off at 2-2.5% yield. That said, Mr. Maguire noted



higher-for-longer could represent a headwind. Have seen deposit remixing slow but expect deposit betas continuing to drift higher in early-2024, driven by retail. Meanwhile, noninterest bearing deposits (28% of total) unlikely to drift materially lower. When Fed cuts rates, mgmt. expects reverse deposit betas to exhibit a similar pace to that on the way up (48% cycle-to-date), including the lag effect.

- **Increased focus on other fee businesses:** With the loss of fee contribution from TIH, mgmt.'s concentration of fees as a % of revenue falls to the high-20%s. Improving penetration in wealth management, payments a key opportunity. Investment banking another opportunity to lean into relationships, commercial clients could prove a gateway for increased wallet share. Continued investments (talent, products + scale) to drive growth, improve profitability.

The Bank of New York Mellon Corporation (BK, \$42.3bn market cap)

Presenter: President and CEO Robin Vince

- **Methodically executing towards improved productivity:** CEO Robin Vince discussed mgmt.'s focus on driving positive operating leverage, investment spend towards growth/higher margin businesses, significant capital flexibility, while highlighting the differentiation in its deposit base vs. trust bank peers. Confident on net interest income (NII) outlook despite a range of potential interest rate backdrops. Methodical execution combined with a strong core franchise should continue to deliver upside surprises, in our opinion.
- **Highlights NII defensibility:** Mgmt. prepared for a range of interest rate backdrops, with focus on delivering on FY24 NII guide (-10% YoY). Deposit diversification a positive with 50%+ non-Asset Servicing related. Corporate Trust, Treasury Services, and Clearance and Collateral Management all unique vs peers to generate deposits. BK has centralized deposit/liquidity management under its Global Liquidity Solutions group (= subject matter experts) that is in charge of deploying client deposit liquidity in the most efficient manner.
- **Platforming, de-siloing a multi-year tailwind:** Ample opportunity to drive revenue with differentiated products/services such as Pershing (\$2.5trn on platform), Wove, trading. Mgmt. focused on making steady progress on de-siloing the bank. Global Liquidity Solutions an example of the potential sustainable tailwinds from consistent execution. As an example, a siloed organization led to eight call centers that can be consolidated into one. Standardizing sales practices and more holistic targets creating a better cross-sell culture.
- **Capital return 100%+:** Mgmt. highlighted the potential for healthy capital return given strong capital generation and a capital light business model. Top priority, ex. dividend payout, remains investing in the franchise which will take precedence over buybacks. However, expects capital payout ratio of 100%+ for FY24. High bar on M&A but would consider if accelerates achievement of strategic objectives.
- **Cultural shift to drive innovation:** Relatively new mgmt. team (several external hires under current CEO) and an analyst program driving a cultural shift towards innovation. Attracting talent by doing interesting, impactful work (such as a new A.I. hub). A.I. can help develop better solutions for clients. The history and the scale of the franchise seen as attracting talent to the bank.

Fifth Third Bank (FITB, \$22.8bn market cap)

Group meetings: CFO Bryan Preston, Chief Credit Officer Greg Schroeck,

Investor Relations Matt Curoe

- **Prepared for worse macro-outcomes:** CFO Bryan Preston and Chief Credit Officer Greg Schroeck sounded confident in Fifth Third's ability to navigate a range of macro-economic outcomes. We believe the Street is under-appreciating superior

execution and strategy that has positioned the bank to deliver above average through cycle ROTCE and EPS growth. The bank should be a beneficiary given fading concerns tied to AOCI risk, below average exposure to areas seen as most vulnerable to experiencing credit stress (such as CRE), resilient returns, and a well-regarded mgmt. team.

- **Managing to neutral, NII/NIM growth regardless of rates:** Focused on disciplined deposit pricing with sales head having to approve every pricing exception. Deposit environment remains competitive but able to come off top rates in retail in most markets of ~50bp. \$30bn in indexed deposits. Testing ability to cut rates (ranges 50bp, 25bp, 1bp); don't see significant difference in flows once beyond certain level and can continue to cut. Reducing securities duration, reinvesting in floating rate treasuries (last purchase ~550bp). If QT less of a headwind, will deploy cash into loans if economy strong; if loan demand tepid, will recapture additional margin.
- **Installer network important for Dividend (solar panel lending):** Installer network essential to platform success to make sure that the end users' solar panels are installed correctly and deliver the expected savings. Likened to working with good auto dealers. Acquired Dividend with over 330 installer network and trimmed it down to ~120. Solar market currently a newer market underpinned by government support. Mgmt. expects consolidation in the space, boiling down to fewer/larger/national players.
- **Low exposure to (CRE) sensitive areas:** As we heard from many mgmt. teams, not all office created equal. Majority of office exposure (just over 1%) is Class A. Non-owner occupied CRE <10% of total loans. Underwriting CRE to <60% LTV, 90% have recourse. FITB has progressed beyond underwriting inexperienced borrowers pre-GFC and now have relationships with primer operators. Low exposure to leveraged lending (~2% of total loans). Consumer exposure prime with FICO in 750s. Mgmt. was disciplined with tightening the credit box starting mid-2022. Allowance at 2.12% includes expected credit normalization.
- **Basel III Endgame likely to be watered down:** Consensus expectations is that Basel III Endgame proposal will likely change to less burdensome. Some components penalize products that are needed for the economy, such as high LTV mortgages extended to new doctors who have good earnings trajectory. Operational risk component most burdensome (~7% increase in RWA) but credit risk a benefit. If rule is finalized as proposed and the economy remains constructive, mgmt. feels share repurchases could resume 2H24. Cost of crossing \$100bn in assets onerous; banks need to be in \$140-150bn asset range for the scale to be beneficial.

Huntington Bancshares Inc. (HBAN, \$18.6bn market cap)

Group meetings: President of Commercial Bank Scott Kleinman and Head of Investor Relations Tim Sedabres

- **Granular down-rate deposit beta plan:** Expecting to be disciplined managing betas with interest rate cuts, with detailed plans in place for commercial deposits. Not planning to experiment with cuts ahead of any Fed moves. Managing the back book but higher for longer a headwind. As we have heard from other mgmt. teams, a consumer deposit pricing likely to have less flex on the way down (given the smaller increase on the way up vs. commercial/wealth). Deposit environment challenging with rates higher and less liquidity but expectations for cuts have helped. The vast majority of commercial deposits are negotiated vs. indexed. Consumer deposits 52% of total, Commercial 24%, Business Banking 13%, Wealth 6%, Vehicle Finance 1%, Other 4%.
- **Capital markets momentum building:** Capital Markets & Advisory one of the focus areas for mgmt. (including Payments & Cash Management and Wealth &



Asset Management, ~63% of total noninterest income). Rate cuts and private equity activity would help but think YoY will be materially better. Bullpen for the business in the Carolinas with recent expansion.

- **Unique areas to drive growth:** Line utilizations are not expanding as clients are optimistic but cautious (same as peers). Auto production has been stable and remained prime/super prime. Mgmt. is looking to grow this business rather than optimize or drive balances lower. RV is relatively predictable. Expansion into Carolinas a great opportunity where the bank already has tremendous traction and brand recognition. M&A related disruptions an opportunity to gain market share and acquire talent. New verticals Healthcare ABL (high growth industry with strong deposit levels) and Native American Financial Services (reiterated plan to grow loans and deposits 1:1) accretive to growth without having to stretch the credit box.
- **Focus on building capital:** Share repurchases not a priority until adjusted CET1 in 9-10% target operating range (4Q23 8.58% adjusted, 10.25% reported). Mgmt. has previously highlighted capital priorities of 1) fund organic growth, 2) dividend, 3) buybacks/other and that over time share repurchases are a very important to the valuation creation model for the bank.
- **Confident on credit quality:** CRE loans 10.2% of total loans. Expecting to continue to shrink the portfolio. Office portfolio 1.5% of total loans, predominately suburban and multi-tenant. The bank deals with Tier 1 operators. Not in NYC rent control. Mgmt. proactive in downgrading and feels appropriately reserved (~10% ACL reserves for office).

Regions Financial (RF, \$16.8bn market cap)

Presenters: Senior Executive Vice President and CFO, David Turner, Senior Executive Vice President and Head of Corporate Banking, Ronald Smith, and Executive Vice President and Treasurer, Deron Smithy

- **NII profile poised for growth well into 2025:** FY24 guide of \$4.7-\$4.8bn remains relatively unchanged regardless of number of rate-cuts in the year (outlook assumed 4 starting in 2Q), as well as outlook for exiting 2024 with 3.60% NIM. Our take was that any potential securities portfolio restructuring likely to provide NII defensibility in the event where core is weaker. RF expects to see a bottoming in NII/NIM in 2Q before growing in 2H24, into 2025.
- Mgmt. sees 200bp of yield improvement on \$12-14bn of asset churn per year (\$4bn of which are securities), which should begin to overtake the continued increase in deposit costs throughout the year. Through the use of shorter duration CDs should be able to be repriced multiple times a year, with 5 month CDs offering around 5% vs. 12 months around 4%. The deposit franchise remains a strength, given large share in the markets they operate in (70% of markets the bank serves does not have a significant presence of the money center banks). Downward betas expected to average 35%, NIB mix expected to fall marginally (~100bp) from the 32% in 4Q23.
- **Capital flexibility a differentiator vs. peers:** Common equity tier 1 (CET1) ratio at 10.2% as of 4Q23, executed \$252mn of repurchases in 4Q23. Mgmt. evaluating multiple options for deployment of excess capital, including modest repositioning of the securities book (duration of 4.5yrs, yielding 2.47%). Excess capital position (mgmt. sees 9.25-9.75% as ideal operating range for the bank) opens way for non-bank acquisitions (most recently in Capital Markets space) when available, continued share buybacks. Mgmt. also looking for opportunities to purchase mortgage servicing rights (similar to the transaction done in 3Q for \$6.2bn of residential mortgages). Given uncertainty around finalization of Basel III Endgame rules, mgmt. sees it as prudent to manage well above their anticipated operating capital range as AOCI inclusion seems inevitable (CET1 8.2% including AOCI at YE23), while ensuring that CET1 capital does not drift above the higher end of its target range.

- **CRE manageable:** CRE 14% of total loans at YE23 (9%/5% investor/owner-occupied), office CRE represents 1.5% of total. While mgmt. expects charge-offs to come from the office CRE portfolio (4.3% reserves as of 4Q23, \$60mn vs \$1.5bn portfolio), demographic trends (in-migration of both businesses and people) are expected to benefit their Sunbelt portfolio. Office properties tend to be suburban vs. urban, and with around 100 names in the portfolio, each loan receives rigorous evaluation. On the other hand, multifamily continues to perform well given in-migration should mitigate the excess supply found in the markets Regions serves. While RF also reserves against the multifamily book, mgmt. remains encouraged with what they see in the portfolio.
- **PPNR story straightforward:** Mgmt. expects to see a stronger 1Q for capital markets revenue given the delayed closing of certain transactions in 4Q that got pushed into 1Q24. Outlook to maintain the \$60-80mn run-rate per quarter, however if rate cuts fail to materialize, could be a challenge for finishing the year as real estate capital markets assumes large part of the business line.
- Expectation for mortgage fees to rebound in 2024. Regions remains in the market for mortgage servicing rights acquisitions. While outlook for interchange fees remains stable, Mr. Turner noted that if the Durbin Amendment changes to debit fees goes through, the bank could expect to see a \$50mn headwind to those fees assuming an effective date of July 1.
- On expense, mgmt. reiterated expectations of \$4.1bn, flat YoY (excluding \$135mn of elevated fraud charges in 2023), down on an absolute basis. 1Q to be high-water mark for expenses, as merit increases, payroll tax, additional incentive fees will elevate absolute level. Expenses should fall throughout 2024. Expect to see some severance in 1Q24 as mgmt. rationalizes personnel levels, real estate needs.
- **Strategy intact, big fish in small ponds:** Branch strategy a huge part of Regions story, with the brick-and-mortar locations serving as the primary driver for checking account openings. Mgmt. acknowledges the overall shift towards digital banking, but centers around personal relationships and direct conversations (averaging 3,000 contacts per week) in order to capture clients and get in-depth look into the financial health of its clients. Strategy has served well overall as RF has experienced a below peer average deposit beta (39% vs. mid-to-high 40s peers).

KeyCorp (KEY, \$13.3bn market cap)

Presenter: Chairman and CEO Chris Gorman

- **Returning to offense mode:** Chairman and CEO Chris Gorman sounded relatively upbeat as KEY gradually moves from having to play defense last year (RWA optimization, cost cuts) to offense. Fewer rate cuts a positive, below average commercial real estate (CRE) exposure and improving balance sheet positioning (L/D ratio 78%; CET1 capital building) also helpful. Net interest income (NII) outlook (10%+ YoY 4Q24) reiterated. While significant macro uncertainties persist, we view risk/reward as attractive for investors looking to add exposure to regional banks.
- **Focus on targeted scale:** Mgmt. focused on targeted scale within select markets/verticals. Continues to lean-in on its West Coast markets with better demographics, market share opportunities. Mass affluent consumer seen as another area of opportunity. Sees negatives of crossing regulatory thresholds (such as \$250bn or \$700bn in assets) which would increase regulatory burden and still not solve for scale relative to the global systemically important banks (GSIB) banks.
- **NII resiliency despite 0-6 rate-cuts:** KEY positioned to hit its NII guidance despite a wide range of outcomes on Fed rate-cuts (zero to six). Goal is to run with a relatively neutral balance sheet. RWA optimization actions to remain a drag on loan growth 1H24 with a pick-up in 2H24 underpinning the flat YoY loan growth guidance for FY24.



- **CRE exposure contained:** Non-owner occupied CRE 13% of loans; office CRE 0.7%; 3.1% in reserves held against non-owner occupied CRE; 2% against multifamily, 6% against office. Leverage loans less than 2%. KEY does not assume rent increases when underwriting multifamily loans; 60% loan-to-value at origination. CMBS servicing provides a unique lens with mgmt. observing downtick in migration of office loans into special servicing, multifamily rising.
- **Originate to sell model an advantage:** Mgmt. had been focused on de-risking the business post-GFC. The underwrite to distribute model has allowed the bank to maintain client relationships but with only 18-20% of assets retained on balance sheet. While there remains a healthy debate on the potential for private credit to step-in and gain lending market share, the potential for banks to partner with private credit could allow for retention of client relationships whereby the bank could offer non-lending banking services.
- **IB recovery could drive upside surprise:** Underearning from suppressed activity levels in M&A and syndication but pipelines strong with good start to 2024. Opportunity for stronger than expected investment banking (IB) activity to drive upside surprise to 5%+ YoY fee growth guidance. Emphasized the retention of key bankers and that recent cost cutting actions should not lead to revenue attrition.

East West Bancorp, Incorporated (EWBC, \$10.2bn market cap)

Presenter: CFO Chris Del-Moral Niles

- **Tracking to FY24 guide:** Mgmt. provided updates to 1Q24 guidance, indicating that loan growth would come in slower than previously anticipated (reiterates FY24 guide for EOP loans +3-5% YoY) and for \$1bn+ of deposit growth 1Q24. EWBC raised guidance for FY24 tax rate to 23-24% (vs modest increase) to be offset by lower expenses tied to the amortization of tax credit investments. Despite slower loan growth, FY24 net interest income (NII) guide feels achievable (-4 to 6% YoY). In an environment with fewer than expected rate cuts (guidance assumes 6) EWBC should perform relatively better (expect to lose \$1.5mn/month in NII for every 25bp cut).
- **Focus on high quality growth:** East West continues to focus on high quality growth in the aftermath of the failure of several California-based peers last year. While prospective clients (tech, media) have sought financing and other products from the bank, mgmt. noted that the bank's ability to organically generate loan and deposit growth from its core customer base has made it possible to turn down less attractive banking opportunities. Instead, the bank has focused on growing market share through targeted hirings of industry experts in focus areas, including the recent hiring of a media banker from a competitor undergoing some restructuring.
- **Targeted branch expansion:** East West has a higher productivity per branch employee (\$17mn avg. deposit per employee vs \$8mn peers) and has therefore not relied on rapid branch expansion to drive deposit gathering. This has, however, skewed the bank's customer base toward commercial clients (~50% of deposits) who tend to be more rate sensitive (potentially less sticky). East West sees the value of growing consumer deposits, especially in a higher for longer environment, and mgmt. could consider selectively adding branches in markets with similar demographics to its home market in southern California.
- **Buybacks a more active tool vs. history:** East West has a fortress capital position (CET1 13.3% YE23) that provides the bank with significant optionality and safety heading into a slower growth backdrop. Mgmt. has demonstrated a desire to opportunistically repurchase shares (1.2mn QTD 1Q24) in periods of market dislocation and we forecast the bank will continue to repurchase (2mn for FY24 but would not rule out that this ends up higher depending on the market environment).

Mgmt. seems keen on not hoarding even more capital, which combined with strong internal capital generation and tempered loan growth should drive continued buybacks, in our opinion. Bank M&A not a near term priority, but East West has historically demonstrated its ability to be opportunistic when it comes to deal-making.

Cullen/Frost Bankers Inc (CFR, \$6.9bn market cap)

Group meetings: Chairman and CEO Phillip Green, EVP & CFO Jerry Salinas

- **Organic growth strategy paying dividends:** Cullen Frost continues to execute on its organic growth strategy (adding branches Houston / Dallas / Austin) as it seeks to grow market share across Texas. Frost already enjoys the fourth largest market share for deposits in the Lone Star state (5th in Austin, 7th in Dallas and Houston), and has seen early success growing both consumer and commercial deposits within its expansion markets. We note that number 4 share state-wide comes despite relatively small share in the state's largest markets (Dallas \$410bn, Houston \$320bn). New branches have achieved profitability within 2 years after opening.
- **Will grow outside of Texas, but no M&A:** While Frost is currently focused on expansion in Texas, the bank will not stop growing if it eventually runs out of attractive expansion options within the state. Expansion outside of Texas is unlikely in the short-term, as management has already identified additional sub-markets in Houston, Dallas, and elsewhere that may be appropriate for expansion.
- **Expense run-rate to reflect growth focus:** Following two-consecutive years of double-digit expense growth, mgmt. does not anticipate that double-digit expense growth will continue. Run-rate expenses could be in the mid-to-high single digits as the bank seeks to open 10+ branches per year and attract top talent from competitor banks (vs 18 avg under recent expansion).
- **Credit quality:** Despite the relatively higher exposure to investor-owned office loans (5% of total), mgmt. noted that the portfolio exhibits high credit quality (70% class A, 1.5x weighted-average DSCR as of 12/31/23). Just 18% of investor-office loans mature FY24 (12%/11% FY25/26), with more than 40% maturing in 2028 or beyond. As of YE23, CFR's CRE ACL ratio was ~1.4% of total CRE loans, despite a de-minimis 5-year average CRE NCO rate.
- **NII in a higher-for-longer environment:** Frost should benefit from a higher-for-longer environment (asset sensitive balance sheet), as the bank will have ~\$3bn of securities (11% of total) roll-off this year (~\$1bn at a 1% coupon), with ~\$1.5bn coming off in the first quarter. Once the Fed begins to cut the bank will likely see floating rate loans reprice (~60% of total YE23) with relatively less room to cut on the funding side (40% deposit beta as of 4Q23, vs ~60% peer median).

Western Alliance Bancorp (WAL, \$6.4bn market cap)

Group meetings: CEO Ken Vecchione

- **Compliance build starts early:** Western Alliance had already begun to prepare the necessary infrastructure to be a \$100bn bank before the recent troubles at regional bank peers. Where the bank might normally build infrastructure as it grows, mgmt. indicated that it has already begun building out the compliance and controls infrastructure of a \$100bn+ asset bank (vs. ~\$70bn currently). While it is difficult to handicap regulatory actions, we believe that mgmt's proactive approach to building balance sheet liquidity, growing capital and investing towards risk infrastructure mitigate the risk of a major negative surprise as it comes to satisfying (constantly evolving) regulatory expectations.
- **Rate-cut expectations aligned with the market:** Management's FY24 guidance (NII +5-10% vs 4Q23 annzd. run-rate of \$2.4bn) assumed four rate cuts in the second half of the year. Since the fourth quarter earnings call, street expectations



have aligned with management's guide. Fewer rate cuts could potentially weigh on NII when accounting for impact on ECR deposits.

- **On track to achieving HQLA goal in 2Q24:** WAL has so far seen another quarter of strong deposit growth (\$3bn+ QTD 1Q24) and as a result we believe that the bank could reach its goal of completing HQLA build (\$3bn+ 1H24) before the end of the second quarter. Mgmt. unlikely to step on the loan growth accelerator until it has reduced the L/D ratio into the mid-80s. While we expect loan growth at WAL to reset lower vs. recent history prior to the pandemic, rate-cuts (plus end of QT) that ease the environment for deposit growth combined with improving macro visibility (driving an uptick in borrower demand) should lead to an acceleration 2H24 vs. 1H24.

Synovus Financial Corp. (SNV, \$5.4bn market cap)

Presenters: Chairman, CEO, and President Kevin Blair and Executive Vice

President and CFO Jamie Gregory

- **Outlook unchanged:** CEO Kevin Blair reiterated FY24 guidance for net interest margin (NIM) to expand to ~3.20% by 4Q24 (assumes no rate cuts), 0-3% loan growth, 2-6% deposit growth, and CET1 capital of 10-10.5%. Synovus continues to see strong loan demand among commercial clients, 25% of whom believe that the economy will expand over the next 12 months (vs 20% anticipating a slowdown). Mr. Blair views commercial real estate (CRE) as presenting a growth headwind for the bank as opposed to driving material credit losses. NIM expansion will come largely from fixed-rate asset repricing (4% spread on new loan origination yield vs deposit cost, 4Q23).
- **Capital return optionality:** Synovus has significant flexibility to return capital to shareholders after reaching capital (CET1) levels of ~10.2% YE23. M&A likely off the table in the short term, and mgmt. noted that the bank will instead prioritize returning capital to shareholders through buybacks (\$300mn in authorization). With loan growth expected to be relatively weak, Synovus will have ample opportunity to repurchase shares while maintaining a CET1 capital level between 10 and 10.5%. In a backdrop of rising regulatory scrutiny, we believe that senior leadership's experience at category IV banks should provide confidence in the bank's ability to adapt to the fast evolving regulator expectations.
- **NII trajectory:** Fixed-rate asset repricing that would lift NIM to ~3.20% 4Q24 (assuming 0 rate cuts; +20bp/yr through 2025/26). Further NII lift will come as the bank seeks to allow brokered deposits (12% of total at YE23) to roll off. These brokered deposits will be replaced by growth in core interest-bearing accounts. As a result, mgmt. expects that deposits costs will likely peak in 1Q24 and then flatline. While Synovus has not been as active as some peers in reducing deposit costs prior to a Fed cut, our meetings suggest that the bank will look to rapidly cut deposit costs while maintaining customer relationships once the Fed begins to ease.
- **Credit stable:** Synovus is not yet observing systematic credit stress. In particular, mgmt. called out that they are not seeing outsized stress in their CRE portfolio. While the bank has observed idiosyncratic issues in its commercial (C&I) portfolio (restaurant, commercial air, hotel) it is focused on working with borrowers and prefers to extend the term of a loan when prudent.

New York Community Bancorp (NYCB, \$3.3bn market cap)

Group meetings: Executive Chairman Sandro DiNello

- **Leadership structure watched:** The structure of the senior leadership team at New York Community remains a focus for investors. While management's recent 8-K update explicitly noted that Executive Chairman Sandro DiNello will be in charge of day-to-day operations, investors remain uncertain on additional changes based on our conversations. While there are several unknowns (credit, capital, EPS power),

we also believe that investors likely need visibility on the future decision-making structure at the bank before gaining comfort that mgmt. can successfully navigate the bank out of its current situation.

- **Reserve build likely to continue:** Mgmt. reiterated confidence in the strength of the reserve at 12/31. Our meetings suggest that mgmt. will likely wait until it finishes a loan-by-loan review of the portfolio before providing the clarity investors need that there are no further lumpy reserve builds forthcoming. While the bank is unlikely to change how it defines criticized loans, management may take a more conservative view towards identify and addressing criticized loans.
- **Capital build a top priority:** Management has expressed that achieving a higher capital ratio (CET1) of 10%+ is a top priority, and will not rule out strategic actions (portfolio sales, capital raise) until it feels confident that the core earnings power of the bank is sufficient to meet that target.
- **Big-league experience needed:** Having transitioned to a new regular (OCC) in December of 2023, mgmt. highlighted the need to have a leadership team with experience dealing with the toughest bank regulators. Hiring of a new Chief Risk Officer (CRO) could serve as a first step to providing the Street with increased comfort that reserve actions taken during 4Q23 reflect the potential stress expected within its CRE book, assuming that the incoming executive expresses comfort when the bank reports 1Q24 results in late April.
- **Investors waiting for guidance updates:** Management remains unwilling to rule out options to shore-up the bank until it gains greater clarity on the credit quality and earnings power of the franchise. Our conversations suggest that management will have completed this process by the first quarter earnings call and should be able to provide investors with a clearer path forward at that time. Investors likely to look for clarity on timing and magnitude of possible portfolio exits, potential for capital raise, outlook for credit losses and the need for continued reserve build.

Panel takeaways

Outlook for CRE

Panelists: Doug Linde (President, Boston Properties), Mark Berry (Managing Director, REIT Credit Ratings, Kroll Bond Rating Agency), Mark O’Grady (Managing Director, Global Real Estate Services, Bank of America)

- **Office CRE market stressed:** Office CRE while clearly under stress nation-wide, the exposure tends to be more nuanced than the market may appreciate, with differences in occupancy rates and desires to return to office being based upon multiple factors, including geography and type of tenants. Our speakers note that issues may be more acute in San Francisco vs. Manhattan given the more lax return-to-office policies in the tech sector vs. the growing calls for the return of workers in the financial services sector.
- While a post-COVID world has undoubtedly caused disruption in the market, Mr. Linde believes that an economic recovery can cause a reversal in demand albeit at a slower pace as companies rationalize their real estate needs. Fundamental shifts in types of office spaces have occurred – employers now have to think about creating an office that employees want to be in vs. an office that employees have to be in, favoring more upscale and improved properties as opposed to older properties with less amenities. Mr. O’Grady points to a methodology called DROP (distance, retention, occupants, policy) for factors determining the need for offices for businesses.
- **Multifamily resilient:** Multifamily CRE poised to continue its strength despite investor fears given lack of supply nationally and construction activity stalling in recent months. Mr. Berry noted that markets such as Austin/Raleigh have seen



heavy amounts of new supply come on recently, causing downward pressure on rents by as much as 10% post-concessions. However, the medium term outlook is positive as multifamily properties are resilient in nature, able to see vacancy come down by reducing rents (Class A multifamily properties have already engaged in this practice). While softer rent growth is not a great thing for multifamily properties, it reduces NOI (net operating income) by far less than office properties, hence the difference in expectations for loss content between the two property types. Mr. Berry expects that the outlook for rent growth should start to look more constructive by the end of 2024 and beyond.

- **Near-term outlook for construction lending dismal:** Mr. Berry notes that construction lending has been shut down across all property types, positive for CRE types such as multifamily and industrial that are witnessing increased supply. Our speakers noted that given the lack of interest from clients for newer office buildings, it is unlikely that enough capital would be put into a project that would entice construction lenders to extend a loan. We note that banks have dramatically shrunk their construction lending exposure (and tightened underwriting standards) since incurring great losses during the Great Financial Crisis, which should limit the loss potential stemming from troubled construction loans.
- **CRE in need of re-capitalization, lending appetite:** Mr. Linde notes that with borrowing costs nearing 8%+ vs. 3.5-4.5% a few years ago, models valuing current real estate properties need to be recalibrated to reflect a new rate environment. Transactions have been muted and are likely to remain at low levels as loans are out of balance and need a re-equitization. However, traditional partners such as life Cos or banks are unwilling to raise exposure to office loans and commercial real estate broadly, causing more borrowers to be pushed to the shadow banking system. Our speakers note that there has been a pick-up in workout conversations.

Regulatory Outlook: Light at the end of the tunnel

Panelists: Mitchell Eitel (Partner, Sullivan & Cromwell, LLP), Richard K. Kim (Partner, Wachtell, Lipton, Rosen & Katz), Rob Nichols (President & CEO, American Bankers Association)

- **Regulatory environment cyclical but this climate different:** Bank failures increased scrutiny with many regulators aiming to avoid similar mistakes that is informing much harsher supervisory behavior. Administration personnel setting the tone of regulation so, with changes in administrations, every 10 years financial regulation tends to get rewritten. The Trump administration was less stringent on enforcement and supervisory activity, but banks were still operating in a relatively tough environment. The first half of the current administration did not see a major shift until recently as it took time for Biden appointees to get into their seats, which has led to a significant pick-up in rule-making and regulator actions.
- **Basel III Endgame backlash significant, widespread:** Most commenters reacted negatively to the Fed's proposal, with over 97% of comment letters either opposing it and calling for a re-proposal, or expressing substantial concerns with the proposal or its critical aspects. Opposition comes from a diverse array of domestic and international interests. A significant majority of elected officials, both Democratic and Republican, joined comment letters expressing opposition to or serious concerns with the proposal. Certain areas of the proposal are relatively easy to change, such as the operational risk piece. We have also heard from banks during the conference that the proposed requirement for higher risk weightings for certain mortgages are opposed by a wide range of organizations that aren't always aligned (NAACP, banking industry groups, etc.).
- **Basel III Endgame timeline could be pushed back:** Though the Fed is still likely aiming for year-end 2024 for a final rule, there is a very real possibility that it could be delayed to 2025. The Fed is going through the updated quantitative impact, but

banking community is skeptical on how in-depth it will be. If the changes to the rule are material enough, it warrants a re-proposal and new comment period, but our speakers see this as unlikely. Our speakers noted that regulators may be motivated by the upcoming elections, more specifically, the Congressional Review Act. This allows any rulemaking by an independent agency to be subject to reversal within a certain time period (from June in this case) by a majority vote in the House and Senate, signed by the President. Due to this, the current regime may try to push a lot of rulemaking between now and 2Q24.

- **Select bank M&A likely despite overhangs:** The regulatory environment has been a headwind for bank M&A, but the main hurdle has been mark-to-market accounting. The length of time for regulatory approval also a headwind given the risk of franchise attrition. Rate cuts and diminishing level of MTM losses should alleviate some of the headwind, but regulatory environment will remain an overhang. Speakers noted pent-up demand for dealmaking, not ruling out the possibility that we could see some activity over the coming months. There may be banks that are in the penalty box (seen their ratings downgraded), unable to do deals due to the regulatory environment (similar to post-GFC).
- **Different regulators approach bank M&A differently:** The crisis in March drove regulators to take a more active role in supervising the banks to avoid any further issues. The Department of Justice takes a different approach to deals than the Fed or OCC, which may lead to deals being blocked. Mgmt. teams can generally avoid major hurdles if there aren't any antitrust issues. Our speakers see the antitrust argument against bank deals as weak compared to other concerns but the DoJ is looking at geographical and product concentrations during deals. The market is unlikely to see a GSIB M&A (or M&A that creates new GSIBs) in the near future.
- **Other rules in the regulatory pipeline:** While Basel III Endgame deservedly gets a lot of attention, there are numerous regulations on the table. Our speakers noted that a final rule from the CFPB on late credit card fees will likely be released soon and likely to face legal challenges from industry group. In the summer, our speakers are expecting the overdraft fee rule. Awaiting Durbin-Marshall bill targeting credit card interchange fee regime. Our speakers also noted that changes to FDIC insurance not on the table as it would require legislative action; not a priority unless a number of banks fail. There would also likely be a lot of negative components for banks and mgmt. attached to any rules that expand deposit insurance.

Bank Infrastructure / Platforms

Panelists: B Capital, Instabase, Fin Capital, Truv, QED Investments

- **Core replacement difficult:** Our discussion with panelists suggested that bank infrastructure investment is a catch 22: banks' current infrastructure is complex and unwieldy, therefore banks want to replace their core infrastructure, however because the infrastructure is complex and unwieldy banks are unable to replace these systems. Due to the complex nature of core systems replacement, banks have tended toward replacing systems piecemeal (often in one operating segment or line of business at a time) rather than replacing system for the entire bank in one fell swoop.
- **Scale matters:** Interestingly, our panelists noted that large banks, despite their complexity, have an advantage over small banks when it comes to infrastructure investment. Whereas large banks can afford to be on the bleeding edge of tech investment, smaller banks tend to be "fast followers". Part of this difficulty comes from the long-dated contracts banks have typically signed with legacy infrastructure providers; as a result, banks face a difficult choice between trying to build in-house solutions on top of existing infrastructure, or doing a "rip-and-replace" as core infrastructure contracts come up for renewal.



Investing in Tech to Create Shareholder Value

Panelists: AgentiQ, Cornerstone Advisors, Mendon Capital Advisors, Nymbus, Panacea Financial

- **Improved customer experience:** We learned from our panelists that banks are primarily investing in new software solutions as an avenue to improved customer experience. In particular, banks are interested in software solutions for chat bots and product applications- two oft-cited pain points for banks' customers. Unlike core system infrastructure, software focused on customer experience is more easily accessible for small banks because it can be added on top of a bank's existing tech stack.
- **Reduced cost base:** According to our panelists, banks are also investing in new software as an avenue to structurally reduce their expense base. While GenAI (generative) will likely revolutionize productivity across the economy, our panelists noted that other forms of artificial intelligence trained to identify fraudulent transactions or process written documents can reduce manpower hours spent on simple, repetitive tasks. This would allow banks to either reallocate resources toward client-facing roles or structurally reduce their cost base.

AI in Financials: What the Future Holds

Panelists: BigID, Blumberg Capital, Boldstart Ventures, GTM Capital, NextEquity

Partners

- **Hallucinations require a solution:** While banks may be investing in software to revitalize their core infrastructure and improve their customers' experience, banks are far more hesitant to deploy generative AI (artificial intelligence) solutions. According to our panelsits, this is a result of banks' concern for GenAI's tendency to "hallucinate." If banks deploy GenAI in customer-facing applications, they need confidence that the AI will not provide customers with inaccurate or misleading information. Therefore, companies focused on providing GenAI solutions to banks are laser-focused on reducing the hallucination rate produced by their models.
- **Data privacy critical:** A second, equally important challenge for banks considering GenAI solutions is the requirement to protect customers' information. This trend toward hoarding and protecting data for training AI models will require AI providers to ensure that training their model on a bank's data will not result in that data being leaked or otherwise disseminated to third party sources. Until these challenges are solved in a cost-effective manner, we believe it will be difficult for banks to deploy GenAI models at scale.

Exhibit 1: Companies mentioned

Companies mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
BK	BK US	BNY Mellon	US\$ 55.64	C-1-7
C	C US	Citigroup	US\$ 55.93	B-1-7
CFR	CFR US	Cullen/Frost	US\$ 107.35	B-1-7
EWBC	EWBC US	East-West	US\$ 72.36	B-1-7
FITB	FITB US	Fifth Third Bank	US\$ 33.52	B-1-7
FBP	FBP US	First Bancorp PR	US\$ 16.55	B-1-7
FNB	FNB US	FNB Corp	US\$ 13.38	B-1-7
GS	GS US	Goldman Sachs	US\$ 391.05	B-1-7
HBAN	HBAN US	Huntington	US\$ 12.86	B-2-7
JPM	JPM US	JP Morgan Chase	US\$ 183.99	B-1-7
KEY	KEY US	KeyCorp	US\$ 14.26	C-1-8
MS	MS US	Morgan Stanley	US\$ 86.55	B-1-7
NYCB	NYCB US	New York Community	US\$ 4.52	B-2-8
RF	RF US	Regions Financial	US\$ 18.28	B-2-7
SNV	SNV US	Synovus	US\$ 37.09	C-1-7
PNC	PNC US	The PNC Financial	US\$ 146.12	B-2-7
TFC	TFC US	Truist Financial	US\$ 35.24	B-1-7
USB	USB US	U.S. Bancorp	US\$ 41.36	B-1-7
WAL	WAL US	Western Alliance	US\$ 58.73	C-1-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk**Citigroup Inc. (C)**

Our \$65 PO is based on a 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 9.5x/0.8x multiples respectively, vs. large-cap peers (13.2x/1.6x) due to the bank's lower return metrics.

Downside risks to our PO are execution risk tied to mgmt's franchise transformation efforts, an economic downturn or a macro-economic shock, increased costs tied to the regulatory consent orders, regulatory changes. Faster pace of share buybacks, better than expected operating leverage.

Cullen/Frost Bankers Inc (CFR)

Our \$119 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 16.0x/2.4x multiples respectively, in-line with the bank's 5 year pre-pandemic medians of 15.7x/2.3x.

Downside risks to our PO are: worse than expected credit losses, greater than expected net interest margin compression, and slower than expected economic growth. Upside risks to our PO are: credit resilience, better than expected margin performance, and stronger than expected economic growth.

East West Bancorp, Incorporated (EWBC)

Our \$82 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 11.6x/1.5x multiples respectively, below the bank's 5 year pre pandemic median of 14.3x/2.4x given heightened uncertainty surrounding EPS/ROTCE outlooks, owing to the macro backdrop.

Downside risks to our PO are: worse than expected credit losses, greater than expected net interest margin compression, and slower than expected economic growth. Upside risks to our PO are: credit resilience, better than expected margin performance, and stronger than expected economic growth.

Fifth Third Bank (FITB)

Our \$40 PO is based on a 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 13.5x/2.0x multiples, respectively, above the bank's 5 year pre pandemic median of 12.0x/1.4x given favorable EPS/ROTCE outlooks.

Downside risks to our PO: slower-than-guided loan growth on weaker economic activity, and/or a deterioration in credit quality.

Upside risks to our PO are a better-than-expected improvement in the macro environment, stronger-than-anticipated balance sheet growth, and/or better expense management.

First Bancorp Puerto Rico (FBP)

Our \$19.50 PO is based on applying a 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 13x/1.8x multiples respectively, in-line/above the bank's 5 year pre-pandemic median of 13.9x/0.8x due to a higher return profile.

Downside risks to our price objective are a worse-than-expected restructuring of PR government debt and a deterioration in the Puerto Rican economy that could hurt the ongoing credit and earnings recovery at FBP. Upside risks to our price objective are a much stronger economic improvement in Puerto Rico, deployment of excess capital into share purchase agreement and a better-than-expected improvement in asset quality trends at FBP.

FNB Corporation of Pennsylvania (FNB)

Our \$16 PO is based on a 50%/50% weighting between our 2024e EPS and 2024e tangible book value (TBV). We assigned 10.5x/1.6x multiples, respectively, improved capital levels and above-average ROTCE profile.

Upside risk: stronger than expected balance sheet growth, quicker return to profitability, and greater NIM expansion relative to peers. Downside risk: higher than expected expense growth, accelerated credit migration, and slower balance sheet growth.

Goldman Sachs (GS)

Our \$412 PO is based on a 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 13.5x/1.4x multiples, respectively, above the bank's 5 year pre pandemic median of 10.6x/1.2x given lower credit risk into a potential recession. Downside risks to our PO: weaker economy/capital markets, macro or geo-political issues, competition, structural pressures, tougher global regulation, and litigation. Upside risks: stronger capital markets activity.

Huntington Bancshares Inc. (HBAN)

Our \$14 PO is based on a 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 13.5x/1.5x multiples, respectively, in-line with/below the bank's 5 year pre pandemic median of 12.5x/1.8x given heightened uncertainty surrounding EPS/ROTCE outlooks, owing to the macro backdrop. Downside risks to our PO: higher for longer interest rate environment increasing deposit costs, greater than expected expenses. Upside risks: better than expected PPNR growth.

JPMorgan Chase & Co. (JPM)

Our \$188 PO is based on a 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 12.9x/1.9x multiples, respectively, in-line with/above 5Y pre-pandemic average (11.8x/1.7x, respectively) due to the bank's best-in-class revenue generation and better EPS defensibility.

Downside risks to our price objective are macro risks, such as slower-than-expected rate increases, additional regulatory requirements, and scrutiny of the financials industry.

Upside risks are better-than-expected credit quality (i.e., lower loan losses) and better interest rate defensibility

KeyCorp (KEY)

Our \$16 PO is based on a 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 15.0x/1.5x multiples, respectively, above the bank's 5 year pre pandemic median of 11.9x/1.4x given expected tailwinds from asset repricing, owing to the macro backdrop. Downside risks to our PO: higher for longer interest rate environment increasing deposit costs, greater than expected expenses, inability to maximize balance sheet efficiency, and the announcement of expensive deals. Upside risks: lower than expected credit losses and better than expected PPNR growth.

Morgan Stanley (MS)

Our \$100 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 19.5x/1.8x multiples respectively, above the bank's 5 year pre pandemic median of 11.7x/1.3x given an improved (stickier) revenue mix driven by its wealth and asset management segments.

Risks to the upside is stronger wealth/asset management trends and capital markets activity and higher rates. Risks to the downside are a weak economy/capital markets, increased macro issues, tougher regulation, and litigation.

New York Community Bancorp (NYCB)

Our \$5.0 PO is based on a 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 5.0x/0.5x multiples, respectively, below the bank's 5 year pre pandemic median of 15.1x/1.7x given heightened uncertainty surrounding EPS/ROTCE outlooks, owing to the macro backdrop. Upside risks to our price objective are: better than expected growth, faster than expected decline in market interest rates that would provide relief in funding costs and to its CRE borrowers, and better than expected deal synergies. Downside risks to our price objective are: worse than expected credit losses, higher deposit costs, severe downturn in the NYC economy and the NYC commercial real estate market.

Regions Financial (RF)

Our \$19 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 12.0x/1.4x multiples respectively, below the bank's 5 year pre pandemic median of 12.3x/1.5x given heightened uncertainty surrounding EPS/ROTCE outlooks, owing to the macro backdrop.

Downside risks to our PO: higher than expected credit losses, greater than expected revenue pressure, regulatory changes that would impact growth/profitability, greater than anticipated operating losses due to check fraud.

Synovus Financial Corp. (SNV)

Our \$40 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 12.0x/1.1x multiples respectively, below the bank's 5 year pre pandemic median of 16.0x/1.5x given heightened uncertainty surrounding EPS/ROTCE outlooks, owing to the macro backdrop.

Downside risks: worse than expected margin compression, greater than expected deterioration in credit quality. Upside risks: better than expected margin performance, credit quality resilience.

The Bank of New York Mellon Corporation (BK)

Our \$64 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 13.8x/2.0x multiples respectively, in-line/below the bank's 5 year pre pandemic median of 13.4x/3.1x given heightened uncertainty surrounding EPS/ROTCE



outlooks, owing to uncertainty surrounding the outlook for interest rates and equity/bond prices.

Risk to the upside is stronger equity/bond markets. Risks to the downside are a severe selloff in equity/bond markets that could put downward pressure on fee growth and M&A that could temper capital return.

The PNC Financial Services Group, Inc. (PNC)

Our \$165 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 13.3x/1.7x multiples respectively, above the bank's 5 year pre pandemic median of 13.1x/1.7x given reduced uncertainty surrounding EPS/ROTCE outlooks, owing to the improving macro backdrop.

Downside risks to our PO: higher than expected credit losses, greater than expected revenue pressure, regulatory changes that would impact growth/profitability, an acquisition that is not well received by the markets.

Truist Financial (TFC)

Our \$45 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 13.5x/1.8x multiples respectively, in-line with the bank's 5 year pre pandemic median of 13.2x/2.2x given reduced uncertainty surrounding EPS/ROTCE outlooks, owing to the macro backdrop.

Downside risks to our PO: higher than expected credit losses, greater than expected revenue pressure, regulatory changes that would impact growth/profitability, execution risk tied to STI/BBT merger of equals that completed in December 2019.

U.S. Bancorp (USB)

Our \$49 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 13.0x/2.2x multiples respectively, below the bank's 5 year pre pandemic median of 13.3x/2.5x given heightened uncertainty surrounding EPS/ROTCE outlooks, owing to the macro backdrop.

Downside risks to our PO: higher than expected credit losses, greater than expected revenue pressure, regulatory changes that would impact growth/profitability, not fully realizing synergies expected with the acquisition of Union Bank.

Western Alliance Bancorp (WAL)

Our \$82 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 12.5x/1.3x multiples respectively, below the bank's 5 year pre pandemic median of 14.8x/2.8x given heightened uncertainty surrounding EPS/ROTCE outlooks, owing to the macro backdrop.

Downside risks to our PO are: worse than expected credit losses, greater than expected net interest margin compression, and slower than expected economic growth. Upside risks to our PO are: credit resilience, better than expected margin performance, and stronger than expected economic growth.

Analyst Certification

We, Ebrahim H. Poonawala and Brandon Berman, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Special Disclosures

BofA Securities is currently acting as a financial advisor to Guardian Capital Group LTD, in connection with its proposed acquisition of Sterling Capital Management, which was announced on February 2, 2024.

BofA Securities is currently acting as financial advisor to Stone Point Capital LLC and Clayton Dubilier & Rice LLC as part of an investor group's proposed acquisition of Truist Financial Corp's remaining stake in Truist Insurance Holdings Inc, which was announced on February 20, 2024.

North America - Banks Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Ares Capital Corporation	ARCC	ARCC US	Derek Hewett
	Ares Commercial Real Estate Corporation	ACRE	ACRE US	Derek Hewett
	Bank of Montreal	BMO	BMO US	Ebrahim H. Poonawala
	Bank of Montreal	YBMO	BMO CN	Ebrahim H. Poonawala
	Barings BDC Inc	BBDC	BBDC US	Derek Hewett
	Blackstone Mortgage Trust Inc	BXMT	BXMT US	Derek Hewett
	Blue Owl Capital Corporation	OBDC	OBDC US	Derek Hewett
	Carlyle Secured Lending Inc	CGBD	CGBD US	Derek Hewett
	Citigroup Inc.	C	C US	Ebrahim H. Poonawala
	Compass Diversified Holdings	CODI	CODI US	Derek Hewett
	Crescent Capital BDC	CCAP	CCAP US	Derek Hewett
	Cullen/Frost Bankers Inc	CFR	CFR US	Ebrahim H. Poonawala
	East West Bancorp, Incorporated	EWBC	EWBC US	Ebrahim H. Poonawala
	Fifth Third Bank	FITB	FITB US	Ebrahim H. Poonawala
	First Bancorp Puerto Rico	FBP	FBP US	Brandon Berman
	First Horizon Corporation	FHN	FHN US	Ebrahim H. Poonawala
	FNB Corporation of Pennsylvania	FNB	FNB US	Brandon Berman
	Goldman Sachs	GS	GS US	Ebrahim H. Poonawala
	JPMorgan Chase & Co.	JPM	JPM US	Ebrahim H. Poonawala
	KeyCorp	KEY	KEY US	Ebrahim H. Poonawala
	M&T Bank	MTB	MTB US	Ebrahim H. Poonawala
	Morgan Stanley	MS	MS US	Ebrahim H. Poonawala
	New Mountain Finance Corporation	NMFC	NMFC US	Derek Hewett
	Northern Trust Corporation	NTRS	NTRS US	Ebrahim H. Poonawala
	Nuveen Churchill Direct Lending	NCDL	NCDL US	Derek Hewett
	Royal Bank of Canada	RY	RY US	Ebrahim H. Poonawala
	Royal Bank of Canada	YRY	RY CN	Ebrahim H. Poonawala
	Safehold, Inc	SAFE	SAFE US	Derek Hewett
	Sixth Street Specialty Lending, Inc	TSIX	TSIX US	Derek Hewett
	Starwood Property Trust	STWD	STWD US	Derek Hewett
	Synovus Financial Corp.	SNV	SNV US	Ebrahim H. Poonawala
	The Bank of New York Mellon Corporation	BK	BK US	Ebrahim H. Poonawala
	Truist Financial	TFC	TFC US	Ebrahim H. Poonawala
	U.S. Bancorp	USB	USB US	Ebrahim H. Poonawala
	Webster Financial Corp.	WBS	WBS US	Brandon Berman
	Wells Fargo & Company	WFC	WFC US	Ebrahim H. Poonawala
	Western Alliance Bancorp	WAL	WAL US	Ebrahim H. Poonawala
NEUTRAL				
	AGNC Investment Corp	AGNC	AGNC US	Derek Hewett
	Ally Financial	ALLY	ALLY US	Brandon Berman
	Annaly Capital Management	NLY	NLY US	Derek Hewett
	Apollo Commercial Real Estate Finance	ARI	ARI US	Derek Hewett
	Associated Banc-Corp	ASB	ASB US	Brandon Berman
	Bain Capital Specialty Finance, Inc.	BCSF	BCSF US	Derek Hewett
	Bank of Nova Scotia	YBNS	BNS CN	Ebrahim H. Poonawala
	Bank of Nova Scotia	BNS	BNS US	Ebrahim H. Poonawala
	Blackstone Secured Lending Fund	BXSL	BXSL US	Derek Hewett
	BrightSpire Capital Inc.	BRSP	BRSP US	Derek Hewett
	Canadian Imperial Bank of Commerce	CM	CM US	Ebrahim H. Poonawala
	Canadian Imperial Bank of Commerce	YCM	CM CN	Ebrahim H. Poonawala
	Citizens Financial Group	CFG	CFG US	Ebrahim H. Poonawala
	Comerica Incorporated	CMA	CMA US	Brandon Berman
	Commerce Bancshares Inc.	CBSH	CBSH US	Brandon Berman
	Goldman Sachs BDC, Inc.	GSBD	GSBD US	Derek Hewett
	Golub Capital BDC, Inc.	GBDC	GBDC US	Derek Hewett
	Huntington Bancshares Inc.	HBAN	HBAN US	Ebrahim H. Poonawala
	Ladder Capital Corp	LADR	LADR US	Derek Hewett
	New York Community Bancorp	NYCB	NYCB US	Ebrahim H. Poonawala
	Palmer Square Capital BDC	PSBD	PSBD US	Derek Hewett
	PennyMac Mortgage Investment Trust	PMT	PMT US	Derek Hewett
	Popular Inc	BPOP	BPOP US	Brandon Berman
	Regions Financial	RF	RF US	Ebrahim H. Poonawala
	The PNC Financial Services Group, Inc.	PNC	PNC US	Ebrahim H. Poonawala

North America - Banks Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Toronto-Dominion Bank	TD	TD US	Ebrahim H. Poonawala
	Toronto-Dominion Bank	YTD	TD CN	Ebrahim H. Poonawala
	TPG RE Finance Trust, Inc.	TRTX	TRTX US	Derek Hewett

UNDERPERFORM

	Bank of Hawaii Corp.	BOH	BOH US	Brandon Berman
	First Hawaiian Inc.	FHB	FHB US	Brandon Berman
	Guild Holdings Company	GHLN	GHLN US	Derek Hewett
	Invesco Mortgage Capital, Inc.	IVR	IVR US	Derek Hewett
	loanDepot Inc	LDI	LDI US	Derek Hewett
	MidCap Financial Investment Co	MFIC	MFIC US	Derek Hewett
	Prosperity Bancshares Inc	PB	PB US	Ebrahim H. Poonawala
	State Street Corporation	STT	STT US	Ebrahim H. Poonawala
	Texas Capital Bancshares Inc.	TCBI	TCBI US	Brandon Berman
	Zions Bancorp	ZION	ZION US	Brandon Berman

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Banks Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	100	49.75%	Buy	84	84.00%
Hold	54	26.87%	Hold	41	75.93%
Sell	47	23.38%	Sell	35	74.47%

Equity Investment Rating Distribution: Financial Services Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21.38%	Sell	35	56.45%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the [Price Charts website](#), or call 1-800-MERRILL to have them mailed.

BofA or one of its affiliates acts as a market maker for the equity securities recommended in the report: BNY Mellon, Citigroup, Cullen/Frost, East-West, Fifth Third Bank, First Bancorp PR, FNB Corp, Goldman Sachs, Huntington, JP Morgan Chase, KeyCorp, Morgan Stanley, New York Community, Regions Financial, Synovus, The PNC Financial, Truist Financial, U.S. Bancorp, Western Alliance.

BofA or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Huntington Banc, PNC, Truist Financial.



The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Bank of New York Mel, Citigroup, East-West, Fifth Third, First Bancorp PR, FNB Corp, Goldman Sachs, Huntington Banc, JP Morgan Chase, KeyCorp, Morgan Stanley, New York Community B, PNC, Regions Bank, Synovus, Truist Financial, U.S. Bancorp, Western Alliance.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Bank of New York Mel, Citigroup, Cullen/Frost Bankers, East-West, Fifth Third, First Bancorp PR, FNB Corp, Goldman Sachs, Huntington Banc, JP Morgan Chase, KeyCorp, Morgan Stanley, New York Community B, PNC, Regions Bank, Synovus, Truist Financial, U.S. Bancorp, Western Alliance.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Bank of New York Mel, Citigroup, Cullen/Frost Bankers, East-West, Fifth Third, First Bancorp PR, Goldman Sachs, Huntington Banc, JP Morgan Chase, KeyCorp, Morgan Stanley, New York Community B, PNC, Regions Bank, Synovus, Truist Financial, U.S. Bancorp, Western Alliance.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Bank of New York Mel, Citigroup, East-West, Fifth Third, First Bancorp PR, FNB Corp, Goldman Sachs, Huntington Banc, JP Morgan Chase, KeyCorp, Morgan Stanley, New York Community B, PNC, Regions Bank, Synovus, Truist Financial, U.S. Bancorp, Western Alliance.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Bank of New York Mel, Citigroup, Fifth Third, Goldman Sachs, Huntington Banc, JP Morgan Chase, KeyCorp, Morgan Stanley, New York Community B, PNC, Regions Bank, Synovus, Truist Financial, U.S. Bancorp, Western Alliance.

BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: Citigroup, Cullen/Frost Bankers, Fifth Third, FNB Corp, Goldman Sachs, Huntington Banc, JP Morgan Chase, KeyCorp, Morgan Stanley, New York Community B, PNC, Regions Bank, Truist Financial, U.S. Bancorp.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: BNY Mellon, Citigroup, Cullen/Frost, East-West, Fifth Third Bank, First Bancorp PR, FNB Corp, Goldman Sachs, Huntington, JP Morgan Chase, KeyCorp, Morgan Stanley, New York Community, Regions Financial, Synovus, The PNC Financial, Truist Financial, U.S. Bancorp, Western Alliance.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Bank of New York Mel, Citigroup, Cullen/Frost Bankers, East-West, Fifth Third, First Bancorp PR, FNB Corp, Goldman Sachs, Huntington Banc, JP Morgan Chase, KeyCorp, Morgan Stanley, New York Community B, PNC, Regions Bank, Synovus, Truist Financial, U.S. Bancorp, Western Alliance.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofam.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFS); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is

authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBL. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at [BofA ESGMeter methodology](#). ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQDatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS or any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to

seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.