U.S. Investment Banking Industry Briefing and its Integration with Artificial Intelligence (2008-2025)

Overview

Scale and Economic Footprint: The U.S. investment banking sector represents a significant portion of the financial industry. Annual revenues reach into the hundreds of billions: in 2024, FINRA-registered broker-dealers (including investment banks) generated about $641 billion in gross revenue (up ~5.9% YoY) with pre-tax income of $75.8 billion (up 41% YoY). Core investment banking fees (from activities like M&A advisory and underwriting) have been more cyclically variable - roughly $35-40 billion per year in the mid-2010s, surging to a record ~$70 billion in the 2021 deal boom, before dipping to ~$32.5 billion in 2023 and rebounding to ~$44.8 billion in 2024. The industry's contribution to employment and GDP is substantial: it directly employs over 1.13 million U.S. workers as of 2024 and accounts for roughly 20% of the broader finance sector's GDP (For context, the U.S. securities industry value-added was around $362 billion in 2023.) Overall, the market size has expanded over the past decade despite short-term volatility, underlining the sector's large scale and economic importance.

Key Players and Market Structure: A few dominant firms ("bulge bracket" banks) lead the U.S. investment banking industry. These include JPMorgan Chase, Goldman Sachs, Bank of America (BofA Securities), Morgan Stanley, and Citigroup, all of which are among the world's largest investment banks. Together, they command a major share of deal fees. For example, JPMorgan alone recently garnered ~8% of global IB fees, with Goldman at ~6%, and the other top U.S. banks rounding out the top five This concentration means industry trends and pricing are often set by these giants. In addition, a large number of boutique and mid-sized banks plays key roles in specific niches (e.g., Lazard, Evercore, and Moelis in M&A advisory or restructuring), and U.S. arms of foreign banks (like Barclays, UBS, Deutsche Bank) remain active in certain markets. However, the lion's share of revenue and influence resides with the top U.S. banks, making the sector highly consolidated. Geography further reflects this concentration: New York City is the overwhelming hub of U.S. investment banking, home to the headquarters or major offices of all leading firms. About *70% of U.S. investment banking analysts* are based in NYC, and roughly one in every 11 jobs in the city is tied (directly or indirectly) to the finance industry. Secondary centers include San Francisco (~9% of analysts, benefiting from proximity to the tech sector), Chicago, Houston, and Los Angeles (each hosting ~3-4% of talent, often focused on regional industries such as energy in Houston). Other cities, such as Boston (especially for asset management and biotech finance), Charlotte, and Dallas, host notable operations, but Wall Street (NYC) remains dominant by a wide margin. This geographic and institutional concentration has persisted even as some support functions disperse to lower-cost locales.

Historical Trajectory (2008-2025): The period since 2008 has seen significant structural shifts in U.S. investment banking. Post 2008, the industry underwent retrenchment and reform after the financial crisis. Iconic stand-alone investment banks disappeared or merged (e.g. Bear Stearns and Lehman Brothers in 2008), and survivors faced new regulations under the Dodd-Frank Act. The Volcker Rule (2010), for instance, curtailed proprietary trading by banks, forcing a refocus on client-oriented services (M&A advisory, underwriting, market-making) instead of speculative risk-taking. Throughout the

2010s, stricter capital requirements and lower leverage became the norm, and investment banking revenues recovered gradually, By the mid-2010s, the industry stabilized on a modest growth path, fundamentally healthier and better- capitalized than the pre-2008 era.

In the late 2010s, favorable economic conditions - steady growth, low interest rates, and abundant liquidity - fueled a wave of dealmaking. U.S. M&A volumes and IPO activity surged, culminating in an unprecedented peak in 2021. That year, U.S. investment banking fees roughly doubled from pre-pandemic levels to about $70.4 billion (an all-time high) amid a frenzy of mega-mergers, record private equity buyouts, and initial public offerings. Key drivers of this boom included ultra-low financing costs and pent-up demand coming out of the brief COVID-19 recession. Indeed, after an initial pandemic shock in early 2020 (when deal-making paused), aggressive monetary/fiscal response led to a rapid market rebound by late 2020, setting the stage for 2021's record activity. However, this cyclical high was followed by an abrupt downturn in 2022-2023: as inflation spiked and the Federal Reserve hiked interest rates rapidly, the pace of deals slowed markedly.

As of 2024-2025, the industry has entered a recovery phase. With interest rates stabilizing after the rapid increases, capital markets have begun to reopen. Recent quarters saw a pickup in IPOs and advisory mandates as equity valuations improved and CEO confidence returned. By mid-2025, U.S. investment banks were reporting ~15% YoY growth in aggregate advisory and underwriting revenues amid the rebound in deal flow. Notably, private equity firms have become a key engine of activity too.

Stage (Mature Phase of Industry Life Cycle): The U.S. investment banking industry today exhibits characteristics of a mature industry, marked by high market penetration, consolidation, and incremental innovation rather than rapid growth. Several quantitative and qualitative indicators support this classification:

- **Firm Entry & Exit:** The number of firms is steadily declining. In 2018, there were 3,607 FINRA-registered broker-dealer firms, but by 2022 that count fell to 3,378, and further down to 3,298 in 2023, an ~8.6% reduction over five years. Notably, most exits were small firms: the population of small broker-dealers (≤150 representatives) shrank from 3,048 in 2021 to 3,021 in 2022, while the number of large firms actually ticked up (161 to 165 over that period). This indicates high concentration and barriers to entry: established giants are capturing more market share as smaller players exit.
- **Growth & Profitability:** Moderate, cyclical growth has replaced rapid expansion. Industry revenue growth has been positive but unspectacular - U.S. securities industry revenues (investment banking and trading) grew from about $108 billion in 2018 to $137.6 billion in 2022, a modest ~5% CAGR. Profit margins have largely stabilized in the low-teens (%). For example, the pre-tax net income of U.S. broker-dealers was ~$42-44 billion in 2018-2019 (around 11-12% margin on revenue). During the 2020-2021 boom, profits spiked - 2021 saw $91.6B pre-tax earnings (a 23% margin) amid record deal volume - but this proved cyclical. By 2022, as markets cooled, industry profits plunged over 50% back to ~$42.3B (~12% margin), essentially reverting to the long-run norm.
- **Capital Investment & Innovation:** Rather than expanding capacity, firms are investing in efficiency and incremental innovation. Traditional R&D spending in investment banking is minimal (banks do not have large research labs like a tech firm might), but there is significant

spending on technology upgrades, automation, and process improvement. In a mature phase, this strategy defends market share and margins instead of creating entirely new markets. For example, banks are deploying automation and AI tools to streamline low-value tasks (such as automating parts of financial analysis, screening for M&A targets using algorithms, or improving trading execution). These tech investments aim to cut costs and improve client service speed, reflecting an emphasis on productivity.

- **Employment & Talent Trends:** The labor market data likewise underscores maturity, with stable employment levels and cyclical adjustments rather than exponential job growth. The total workforce in the securities/investment banking industry has been roughly flat over the past several years. FINRA data show about 620,000 registered representatives (brokers, advisors, bankers) in 2022, virtually the same as in 2018 (629,000). By 2023, it was ~628k, essentially back to the starting point after a slight dip during 2019-2021. In other words, no net explosion or collapse in jobs occurred over 5+ years, reinforcing that the industry is not in an early growth phase (which would show rapid hiring) nor in a terminal decline. Instead, capacity is being maintained at a steady state.

Data (Key Datasets and APIs for Industry Analysis): Analyzing the investment banking sector and the impact of AI on its workforce relies on various data sources and tools. Below are key datasets and APIs, along with how each supports deeper insight into industry dynamics:

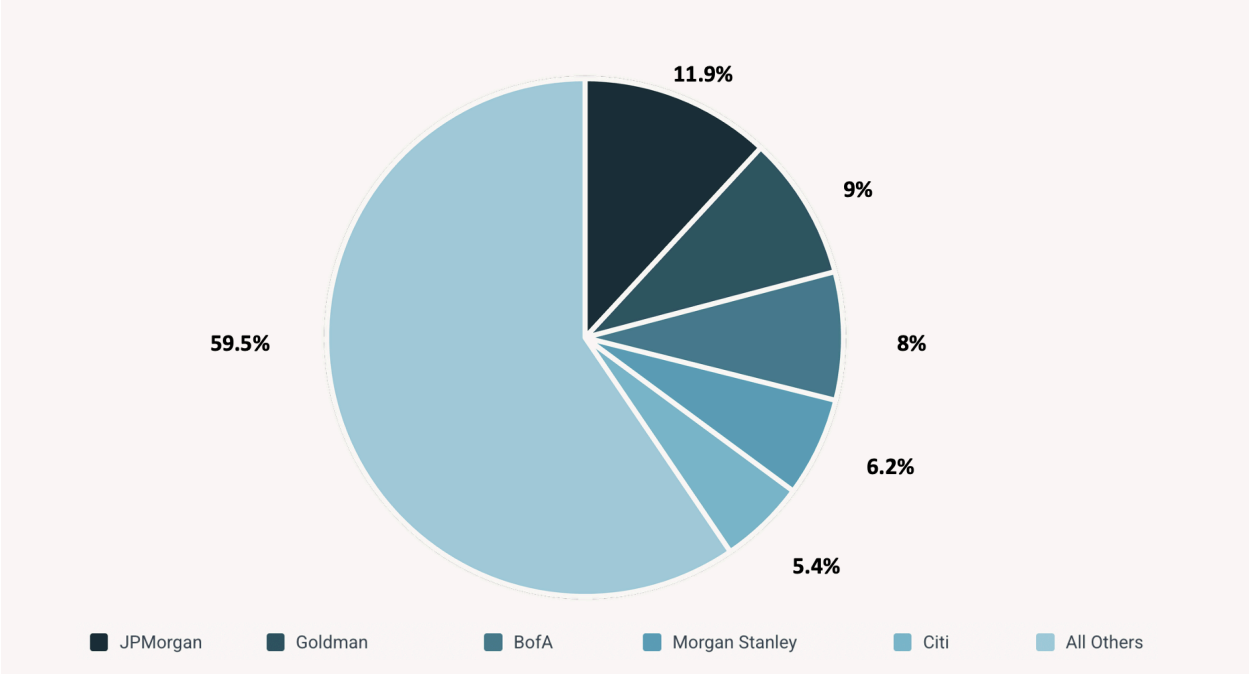
- **U.S. Bureau of Labor Statistics (BLS) - Employment and Wage Data:** The BLS provides extensive labor market data. For finance, the Current Employment Statistics (CES) and Occupational Employment and Wage Statistics (OEWS) programs offer industry-level employment totals and occupation-specific stats. For example, BLS data show the securities industry employed ~1.135 million people in 2024, a 1.6% increase from the prior year. Such data (available by NAICS code 523110 for investment banking) let analysts track workforce size, geographic distribution, and average wages over time. This is useful for spotting trends (e.g., job growth/decline post-2008 or during COVID-19) and regional patterns (e.g,. the share of finance jobs in New York vs. other states).
- **U.S. Bureau of Economic Analysis (BEA) - Industry Output and GDP Data:** The BEA tracks national accounts, including GDP by industry. Investment banking falls under NAICS 523 (securities, commodity contracts, and other financial investments). BEA reports the value-added output of this industry (its contribution to GDP) - for instance, approximately $396 billion in 2024 for the U.S. securities and investment activities. By examining BEA's data (which can be accessed via their interactive data tool or API), one can gauge the sector's size relative to the economy and growth rate over the years.
- **Federal Reserve Economic Data (FRED) - Macro-Financial Time Series:** FRED, hosted by the St. Louis Fed, is an aggregator that curates thousands of time series from sources like BLS, BEA, the Federal Reserve, etc. It provides a convenient one-stop platform to retrieve and visualize data relevant to investment banking. For example, FRED houses the employment series for NAICS 523 ("All Employees: Securities, Commodity Contracts, and Investments") and updates it monthly. It also offers interest rate series (Treasury yields, fed funds rate) and stock market indices. An analyst can use FRED to quickly plot trends - e.g. charting investment banking employment against S&P 500 index levels or M&A volume proxies to explore correlations.

- **SEC EDGAR - Company Filings and Disclosures:** The EDGAR database of the U.S. Securities and Exchange Commission is a rich source for firm-level information. All publicly traded investment banks (e.g. Goldman Sachs, Morgan Stanley) file annual 10-K and quarterly 10-Q reports, which are accessible via EDGAR's website. These filings provide detailed financial statements (revenue, profits by division, headcount), as well as qualitative discussions of business strategy and risks.
- **O*NET (Occupational Information Network) - Job Task and Skill Profiles:** ONET, maintained by the U.S. Department of Labor, is a database detailing the characteristics of hundreds of occupations. It includes the tasks performed, skills and knowledge required, and the importance of various abilities for each role. For investment banking-related roles (such as Financial Analysts, Securities Sales Agents, Financial Managers, etc.), ONET data can be used to assess how susceptible each role is to automation or AI. For example, ONET breaks down which tasks are routine versus analytical/creative, and rates the level of technologies used in the job. Researchers have used ONET variables to estimate automation risk - roles with a high percentage of repetitive tasks or data processing might be more easily automated. In an industry analysis, one could look at the skill requirements in ONET for analysts vs. traders vs. back-office clerks to see where AI might have the most impact.
- **Lightcast (Burning Glass) Job Postings Data - Real-Time Labor Market Trends:** Lightcast is a private labor analytics firm that scrapes millions of online job postings, extracting information about required skills, certifications, and technologies. This data (often available via subscription or in reports) can quantify how much AI-related skills are appearing in finance job ads, indicating how the workforce demand is shifting. In fact, the *Stanford AI Index 2025* report leveraged Lightcast data and found that by 2024, about 1.8% of all U.S. job postings required AI skills, up from 1.4% in 2023. This upward trend suggests employers (including banks) are increasingly seeking AI proficiency.
- **Crunchbase - Startup and Innovation Ecosystem Data:** Crunchbase is a comprehensive database of startups, funding rounds, investors, and acquisitions. Through its website, one can track the emergence of fintech and AI startups relevant to investment banking. This is valuable for analyzing how innovation is occurring outside the banks and how banks respond (e.g., via partnerships or acquisitions). For instance, Crunchbase can show how many AI-focused finance startups have been founded in recent years, how much venture funding they attracted, and whether big banks are among their investors or acquirers.

Data and Visualization: To assess the structural landscape of the U.S. investment banking industry, I drew on fee-based market share data from Dealogic's 2024 U.S. investment banking league tables, aggregated via ION Analytics and cited in the SIFMA 2025 Capital Markets Fact Book. These sources track investment banking revenues and fee distributions across advisory, underwriting, and capital markets services - making them an authoritative benchmark for measuring industry concentration and firm dominance. The visualization below illustrates the 2024 U.S. IB fee market share for the top five banks-JPMorgan Chase, Goldman Sachs, Bank of America, Morgan Stanley, and Citigroup - alongside the combined share of all other firms. I chose a pie chart format to clearly represent proportional control within the industry and emphasize the dominance of the largest players.

[Figure: U.S. Investment Banking Fee Market Share (2024)]: This chart shows that the top five U.S. investment banks, led by JPMorgan Chase (11.9%) and Goldman Sachs (9.0%), collectively control over 40% of total investment banking fee revenue. The remaining ~60% is split among hundreds of smaller

firms, underscoring the industry's high concentration and mature structure. This concentration gives the largest players a significant edge in adopting advanced technologies like AI, reinforcing competitive strategies, and shaping the future of the industry. Economically, this distribution confirms that the U.S. investment banking sector is highly consolidated, with a small group of firms exercising disproportionate influence over fee pricing, client access, and innovation trajectories. In the context of AI adoption, such concentration has significant implications: the largest banks are best positioned to invest heavily in automation, algorithmic analytics, and AI-driven productivity tools. Smaller firms, by contrast, may face growing pressure to specialize or consolidate further, as scale increasingly determines technological competitiveness. Thus, the chart not only visualizes industry concentration but also highlights a key structural driver of future AI-led differentiation in the Investment Banking sector.



The Impact of Artificial Intelligence on the Industry

(1) Impacts on Workers and Occupations

- **Task Restructuring for Entry-Level Roles:** AI is automating routine analyst tasks such as company screening, comparable company analysis, and pitchbook formatting. These functions - traditionally performed by junior bankers - are increasingly handled by tools that generate financial summaries, extract KPIs, or flag M&A targets. According to O*NET, these tasks rank high in repetitiveness, making them more susceptible to automation.
- **Shift in Skill Demands:** There is growing demand for analysts with skills in Python, data analytics, and AI model interpretation. Lightcast data (cited in the Stanford AI Index 2025) shows that finance job postings requiring AI-related skills increased from 1.4% in 2023 to 1.8% in 2024,

a 29% year-over-year increase. This trend suggests that technical fluency is becoming a basic requirement, not a niche specialization.

- **Reallocation Toward Advisory and Judgment-Based Roles:** While lower-level functions are increasingly automated, tasks requiring interpersonal judgment, regulatory discretion, and negotiation - such as client relationship management and strategic advisory - remain resilient. These roles are less automatable due to their reliance on context, trust, and reputation - factors that do not scale easily with algorithms (Frey & Osborne, 2017).

(2) Impacts on Firms (Competitive Dynamics, Cost Structures, Market Power)

- **Cost Efficiency Through AI-Driven Automation:** Large firms are leveraging AI to cut costs by automating repetitive workflows in valuation, due diligence, and compliance. For example, Goldman Sachs uses AI tools to streamline financial modeling, reducing analyst hours per deal. This creates a margin advantage in a mature industry where fee compression is persistent (SIFMA Capital Markets Fact Book, 2025).
- **Increasing Scale Advantages and Market Concentration:** AI adoption is capital-intensive and rewards scale, reinforcing the dominance of bulge-bracket firms. JPMorgan, for instance, has invested over $12 billion annually in technology infrastructure, including AI-driven platforms - giving it an advantage over smaller competitors (Dealogic, 2024).
- **Strategic Use of AI in M&A Origination:** AI is being used by leading firms to identify acquisition targets via predictive analytics and to optimize deal timing based on market signals. This allows banks to offer differentiated advisory services, thus increasing switching costs for corporate clients.

(3) Risks and Harms (Inequality, Dislocation, Market Failures)

- **Occupational Displacement and Stratification:** AI may hollow out middle-skill roles in financial services, intensifying job polarization. While top-tier strategy and client roles are preserved, and new tech positions are created, many support roles - especially in compliance and operations - face displacement. This echoes patterns identified by the World Economic Forum's Future of Jobs Report (2023), which predicts a net decline in financial services back-office jobs globally
- **Concentration Risk and Barriers to Entry:** AI can exacerbate industry concentration by increasing the fixed cost of staying competitive. Smaller boutique banks may lack the capital to adopt enterprise AI solutions, leading to market exit or acquisition. This may result in lower innovation diversity and greater systemic risk if top firms converge on similar AI models or infrastructure
- **Algorithmic Bias and Compliance Risk:** As AI is embedded in trading, surveillance, and hiring, the risk of algorithmic bias becomes salient. Biased training data or opaque models could lead to discriminatory client treatment or unfair candidate filtering, potentially violating regulatory standards. FINRA and the SEC have begun flagging these issues as emerging areas of concern in supervisory frameworks (SEC AI Risk Alert, 2024).

(4) Opportunities (New Firms, New Products, Productivity Gains, Future Workforce)

- **AI-Enabled Productivity Gains in Deal Execution:** AI improves deal cycles by accelerating tasks like document review, financial due diligence, and risk scoring. Natural language processing tools can extract key provisions from contracts in seconds, allowing bankers to focus on higher-order analysis. This can shorten deal cycles, enhance client responsiveness, and increase throughput without proportional headcount growth
- **Emergence of Fintech and AI Partnerships:** Large banks are acquiring or partnering with AI startups to extend capabilities in areas like alternative data, ESG analytics, and anti-money-laundering detection. Crunchbase data shows a growing number of acquisitions by bulge-bracket banks targeting AI firms focused on financial analytics and regulatory tech.
- **New Career Pathways for Technically Fluent Finance Graduates:** The hybrid role of "financial technologist" is emerging, blending domain expertise with technical skills in machine learning, data visualization, and programming. These roles are increasingly common in quantitative research, electronic trading, and AI risk oversight.

2-3 roles in the industry:

- M&A Advisory Analyst / Associate
- Capital Markets Analyst
- Equity Research Analyst

5-7 Skills:

- Financial modelling & valuation skills
- Data analytics + Python proficiency
- Industry & market research skills
- Communication & client-facing skills
- PowerPoint + visualization

What I bring:

- Strong finance foundation through internships in IB, equity research, and valuation-heavy roles
- Coursework in finance and economics
- Experience building pitchbooks and industry reports
- Experience with Bloomberg, which supports industry data analysis skills

Gaps:

- Need deeper technical fluency in Coding
- Limited direct exposure to live M&A transactions
- Financial modelling

6-12 month upskilling plan:

- Financial Modelling by the Wall Street School
- Financial Markets by Yale University - Coursera
- Investment Banking Simulation by JPMorgan Chase
- Python for Finance (Coding)
- Equity research - create stock pitches and build financial models
- Start CFA (Chartered Financial Analyst) Level 1 prep upon graduating

Reflection:

When I started this project, I honestly thought it was a basic industry overview. I felt I already understood investment banking quite well from internships, recruiting prep, and countless hours on LinkedIn and YouTube. But after I began going into the data, industry reports, and patterns from 2008-2025, I realised I had a lot narrower view than I imagined.

One surprising aspect was discovering how cyclical and unstable certain parts of the industry are. I realised that entering this industry requires more than just skill, it also requires time, resilience, and an awareness of the market patterns. Reading about the sharp decline in transaction volume after 2021, the hiring freezes, the bonus cuts, and the reliance on macro conditions. My perspective shifted from "I just need to get into a top investment bank" to "I need to understand how to adapt to cycles, position myself, and build value to do well at a top investment bank."

Another shift in my thinking came from thinking about how much of the analyst profession is being remade around technology and AI. Doing the research helped me see that AI is already embedded into operations, from screening firms to drafting outlines to collecting KPIs. I didn't anticipate the industry to have adapted this rapidly. It made me reassess what "being a strong analyst" even entails. It's no longer simply about digging through spreadsheets manually, it's about learning how to leverage skills, tools, interpret outcomes, and use technology to move faster and think clearly.

Working through this project also made me see myself differently. I used to think I had a good finance background, but I was continuously held back by my lack of coding skills or by the assumption that I didn't know enough to compete with top applicants. But when I looked at what I've actually done, two equity research internships, built technical skills with the help of student run clubs on campus, created industry reports and pitchbooks, it made me realize I have a much stronger base than I give myself credit for.

This project also made me question my work habits. I realized that I often spend too much time trying to perfect the first draft instead of letting myself explore ideas freely. When I allowed myself to free-write and reflect without judging every sentence, I noticed I was more honest and

more aware of how I actually think and learn. It reminded me that reflection is part of growth, not something separate from the technical journey.

One of the clearest changes in my mindset is how I now see the relationship between my long-term career goals and the skills I need to build. Before, I saw “coding,” “Python,” and “data analytics” as optional add-ons, good to know but not essential. Now I genuinely believe they are part of the important skills needed in finance. The industry isn’t waiting anymore; the shift has already happened. And this realization made my goals feel less distant. Instead of imagining a long, unattainable path to becoming a strong analyst, I now see a concrete 6-12 month plan with specific steps I can take.

Overall, this project gave me clarity not just about investment banking as an industry, but about myself. It made me think more deeply about why these roles matter to me, how I can grow into them, and how technology, rather than replacing me, can help me get there.