

Charting Your Finance Career Path: A Study of the Entry-Level Job Market

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Executive Summary:

This is a summary of the findings of a comprehensive market research on entry-level finance job postings in three sub-fields: Investment Banking, Corporate Finance, and Portfolio Management. This study aims to shed light on the dynamic and multifaceted landscape of finance jobs, providing a holistic view of current trends, demands, and skill requirements that shape the early stages of a finance professional's career.

Key findings:

- **Skill Demands:** Based on skill analysis, entry-level finance positions call for diverse skill sets ranging from computer and technology, planning and reporting, analytic and quantitative, and accounting skills to transferable skills including interpersonal and communication, emphasizing the importance of gaining both hard and soft skills when entering the market. Particularly, the demand for technological proficiency in these roles outperforms other fundamental requirements like banking and accounting, predicting the industry's shift to more technological reliance.
- **Geographic Insights:** While traditional financial hubs in the East and Midwest are still dominant in job opportunities, many Western states, apart from California, also present significant employment prospects including Washington, Arizona, and Colorado. In general, this widespread distribution underscores the nationwide demand for finance expertise.
- **Industry Focus:** Going beyond traditional sectors like Banking, Financial Services, or Insurance, the significance of financial positions can be seen among diverse industries from IT Services and IT Consulting and Staffing and Recruiting to Manufacturing and Healthcare. Moreover, four key finance roles usually targeted in these businesses are Analysts, Associates, Planning and Management, and Advisors.
- **Salary Trends:** Although wages for entry-level positions in this field vary among locations and industries, their annual base salaries fall within \$40,000-\$80,000. This figure can also exceed \$100,000 for particular positions, suggesting a competitive compensation package and promising opportunities to rise in the field.

Part A - Quantitative Research

I. The Data Set

1. Data Source

From February 29th to March 29th, 2024, entry-level finance job postings in three sub-fields Investment Banking, Corporate Finance, and Portfolio Management were scraped from two popular recruiting websites (Linkedin and Indeed). In particular, there are a total of 6,953 jobs (*Figure 1*) in which the proportion of jobs on LinkedIn accounts for two-thirds of the total figure.

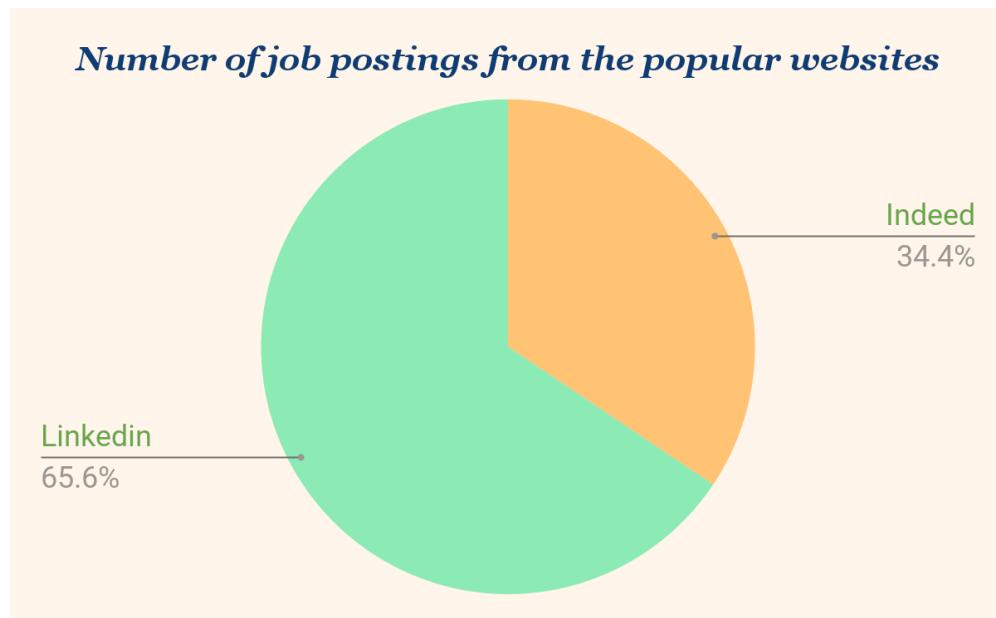


Figure 1. Number of job postings scraped from LinkedIn and Indeed

2. Geographical Analysis

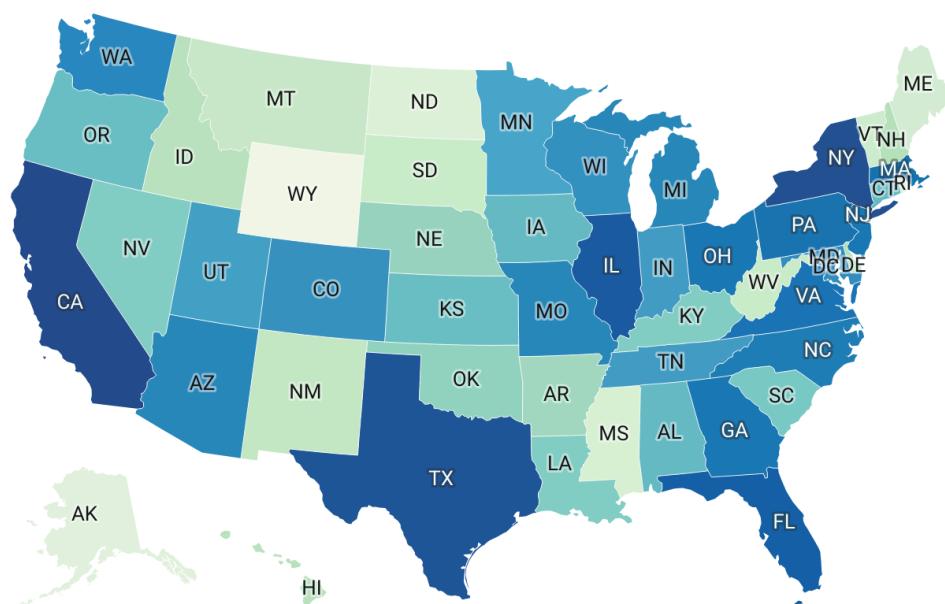
According to *Figure 3*, the number of finance jobs varies among different US states, especially in the North East, the South East, and the East North Central of the Midwest, where more opportunities can be found compared to the remaining regions. Moreover, states with high population density including California, Texas, New York, Illinois, and Florida record significant proportions.

Number of job postings in the US (Copy)

This choropleth map indicates the number of entry-level finance jobs on LinkedIn and Indeed among 50 states and Washington D.C.

Number of jobs

8 690



Created with Datawrapper

Figure 2. Number of entry-level jobs across the United States

Looking closer at the top 12 major metropolitan areas in the country with the highest finance entry-level job postings, it is apparent that many financial hubs including New York, Chicago, and Dallas hire more financial positions. As can be seen from *Figure 4*, New York outperformed other cities in entry-level positions, boasting 418 jobs which doubled the figure in Chicago and proving its strengths in the world's financial industry. Around 100-200 jobs are scrapped in the remaining cities, except for Chicago. More interestingly, Charlotte, a city in North Carolina, has proved its potential to become a top financial center which is home to some of the largest banks and credit unions including Bank of America, Yadkin Bank, and Founders Federal Credit Union.

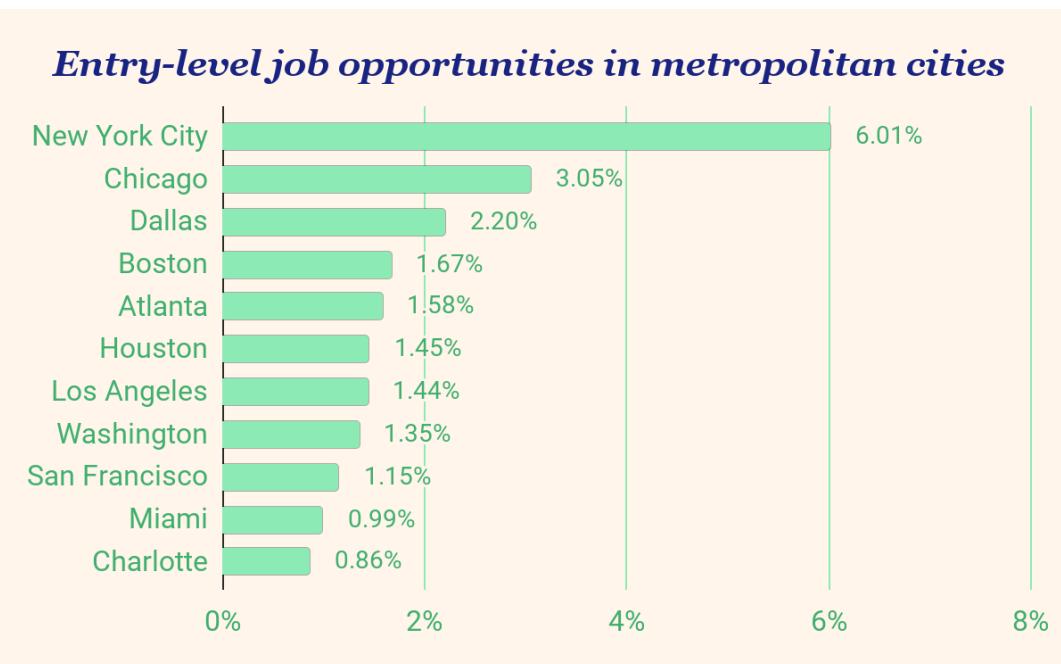


Figure 3. Number of entry-level jobs across the metropolitan cities

Moreover, from *Figure 4*, 50% of the total jobs required an on-site working model while telework is also preferred among many companies with approximately 30.4% distribution among all jobs with the working model listed, signifying a trend that employers are increasingly embracing a hybrid working model with 2-4 days in the office that promote a more flexible schedule and working environment for their employees, especially in the current evolving industry with technological advancement where meetings and collaborations can be conducted online.

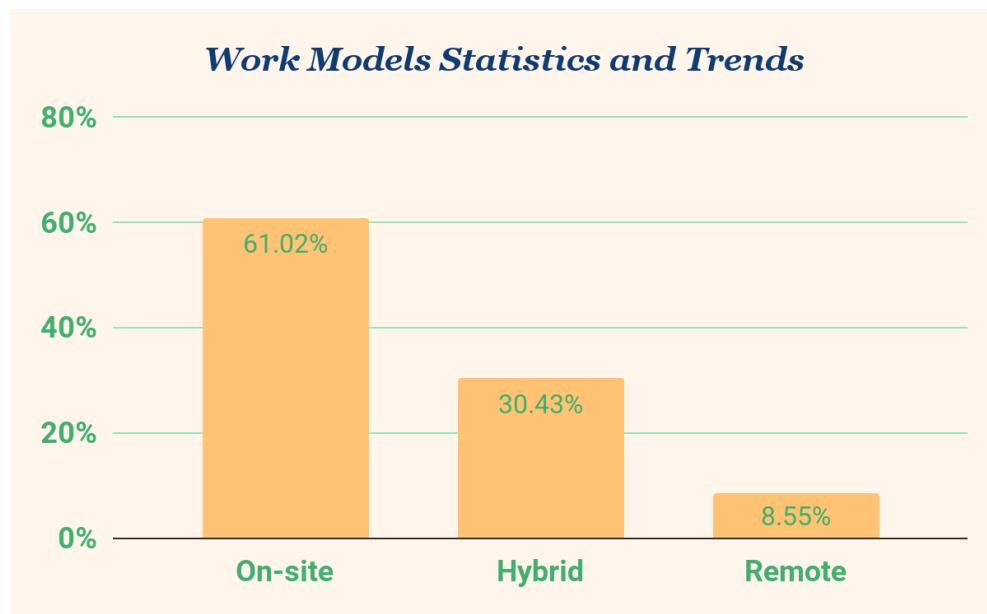


Figure 4. Distribution of jobs by work model

3. Industry Analysis

According to our findings, financial positions are in demand across a wide range of industries, around 20, each of which emphasizes the value of finance in driving business growth and success. Figure 5 indicates the distribution of top industries in the total job posting dataset while there are other industries with low occurrences including investment, construction & building, accounting, law & legal services, food & beverages, logistics and transportation, and hospitality and tourism.

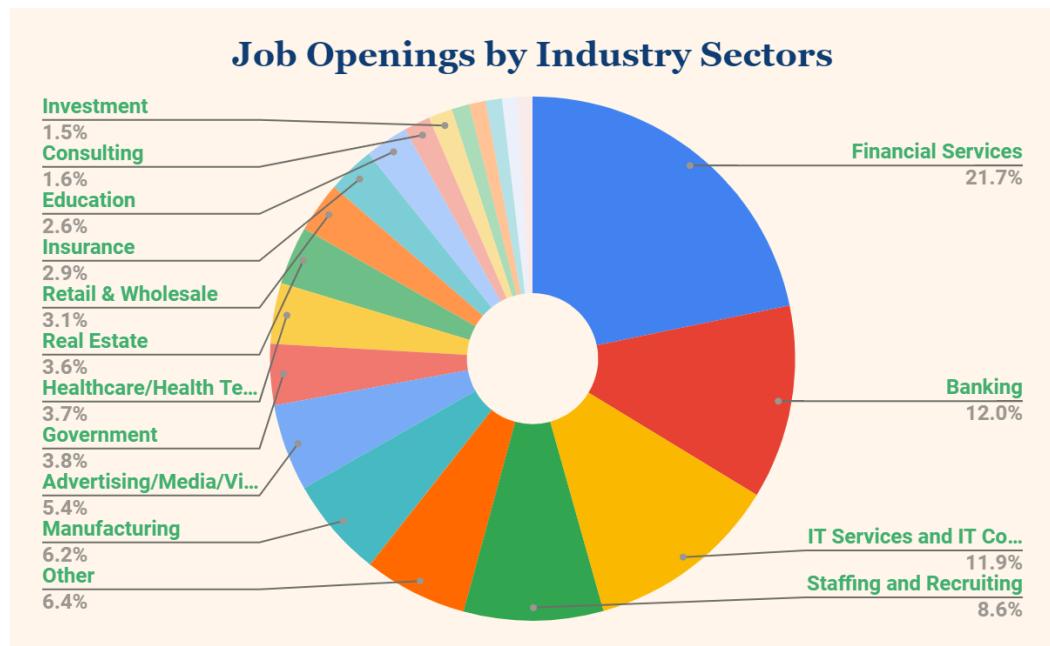


Figure 5. Breakdown of entry-level jobs by industry

Delving deeper into industries, each region seems to have outstanding strengths and specialization, for example:

- In the South, healthcare, retail & wholesale, education, and real estate are the dominant industries with a relatively large number of available jobs.
- In the Northeast, New York and Boston stand out with the highest number of jobs in the Financial Services, Banking, and Investment industries.
- In the Midwest, there are many companies in Food and Beverages, Advertising, Media, and Entertainment, and Financial Services.
- In the West, apart from the popularity of the IT Services and IT Consulting industry, California also demonstrates diverse representation across various fields, including Government, manufacturing, Staffing and Recruiting, and so on.

II. Trends in Job Titles

Upon conducting a frequency analysis of all job titles, some keywords are usually attached to entry-level finance positions. In particular, titles with “Analyst” account for 45% of the total number of job postings in which the top highest frequencies are “Financial Analyst” with 482 records, “Budget Analyst” with 110 records, “Credit Analyst” with 61 records, and “Investment Analyst” with 50 records; signifying the heavy focus on analysis tasks when working financial data to spot trends and assess risks. Moreover, terms such as “Associate”, “Management”, “Investment”, “Wealth”, and “Portfolio” are frequently featured due to our main focus on three sub-fields mentioned at the beginning. Other popular roles in these subfields include “Programmatic Associate”, “Relationship Banker”, “Financial Advisor” or “Financial Services Professional”.

III. Trends in Required Skills

In the "Trend in Skills Required" section of our report, we aim to illustrate the changing landscape of skills demanded in entry-level finance positions. We have organized the skills into distinct skill groups for clarity and efficiency of analysis. Our approach involves presenting data alongside graphical representations to offer a comprehensive view of skill frequency across these groups.

Graphs will visually depict the frequency of skills within each skill group over the designated period. By analyzing these trends, we can identify which skill groups are consistently in demand and which ones may be experiencing fluctuations. This insight can be invaluable for both job seekers and educators, guiding where to focus skill development efforts to align with current industry demands.

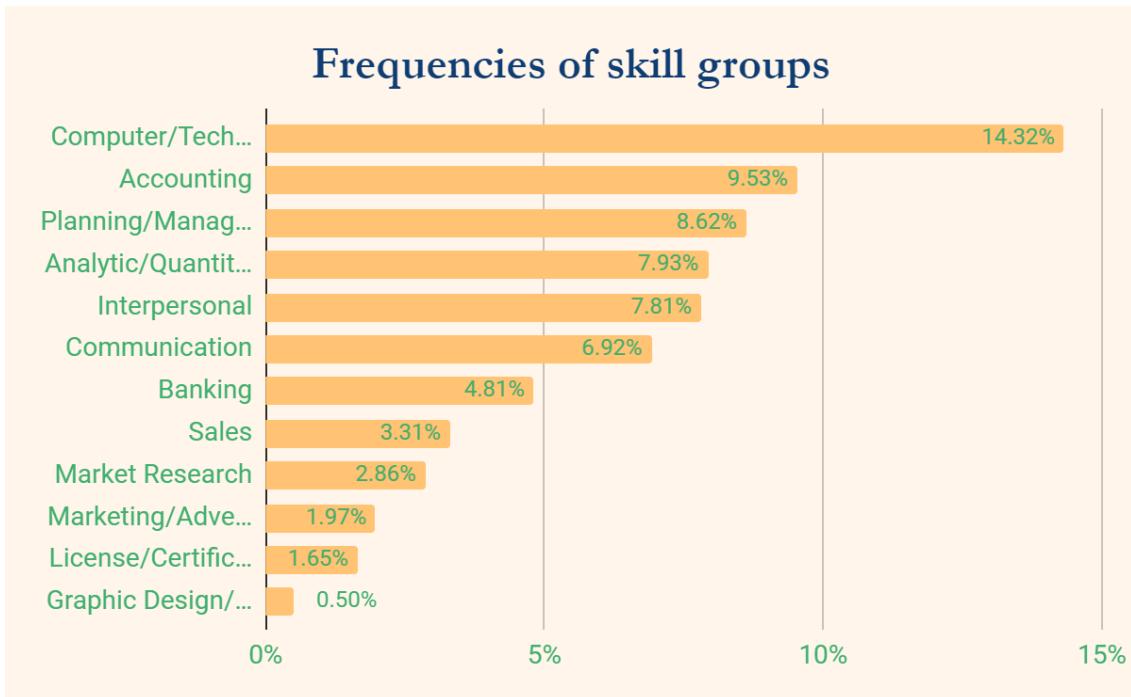


Figure 6. Frequency of skill groups

1. Soft skills

In the realm of finance, soft skills play a pivotal role in fostering effective collaboration, client relationships, and problem-solving. Among these, communication and interpersonal skills emerge as indispensable assets. Effective communication is vital not only for conveying complex financial information clearly but also for building trust and rapport with clients and colleagues alike. Strong interpersonal skills enable finance professionals to navigate diverse working environments, negotiate deals, and resolve conflicts diplomatically. Additionally, adaptability and resilience are key traits that contribute to success in the dynamic and fast-paced landscape of finance. These skills empower individuals to thrive amidst uncertainty, swiftly adapt to changing market conditions, and approach challenges with confidence. While hard skills are undoubtedly essential in the finance sector, it is the cultivation of these soft skills that truly distinguishes outstanding finance professionals and facilitates their long-term success in the field.

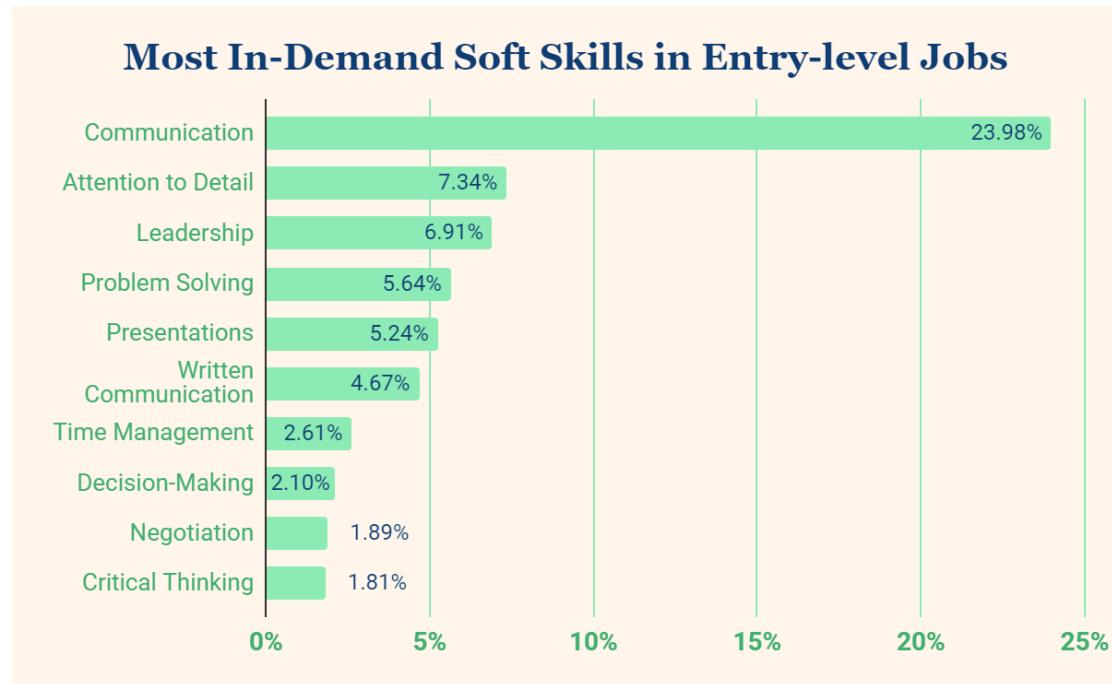


Figure 7. Top ten soft skills mentioned in the entry-level job descriptions

2. Hard skills

In the domain of finance, hard skills represent the technical competencies that underpin data-driven decision-making and proficient financial management. Among these, proficiency in computer technology stands paramount, facilitating adept utilization of financial software and technological tools essential for intricate calculations and data management. Additionally, a comprehensive understanding of accounting principles is imperative, encompassing the ability to interpret financial statements, execute budgetary analyses, and ensure accurate transactional records.

Moreover, expertise in banking operations remains indispensable, necessitating a thorough comprehension of banking regulations, financial products, and transactional processes within financial institutions. Analytical and quantitative skills form the bedrock of financial proficiency, enabling professionals to interpret complex data sets, discern market trends, and formulate strategic financial projections. Likewise, adeptness in market research methodologies equips individuals with the acumen to discern consumer behavior patterns, identify market opportunities, and evaluate competitive landscapes effectively.

These hard skills collectively serve as the foundational pillars of financial acumen, enabling practitioners to navigate intricate financial landscapes with precision and efficacy. Mastery of these competencies is integral for fostering success within the dynamic and evolving realm of finance, where analytical rigor

and informed decision-making are paramount for achieving organizational objectives.

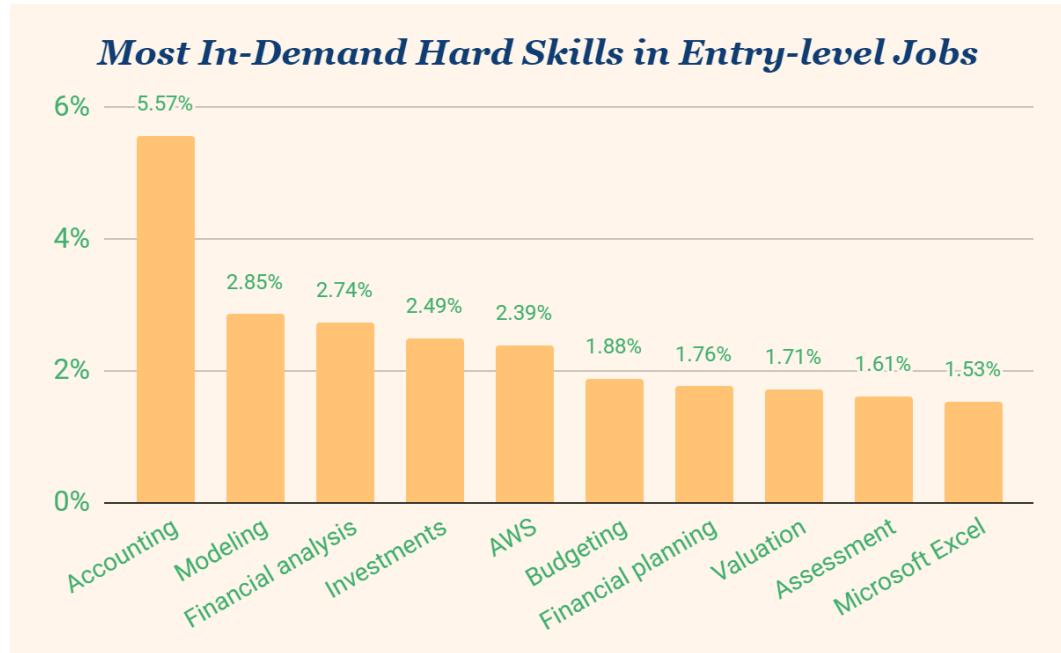


Figure 8. Most in-demand hard skills mentioned in entry-level job descriptions

3. Licenses and Credentials

In the realm of finance, there exists a myriad of licenses and credentials that professionals can pursue to enhance their expertise and credibility within the field. However, it is noteworthy that for the majority of entry-level finance positions, formal credentials or licenses are not explicitly required. Our analysis reveals that employers tend to prioritize practical experience, demonstrated skills, and aptitudes, such as communication and analytical abilities, over formal qualifications.

While certain specialized roles within finance, such as financial analysis or investment banking, may prefer candidates with specific certifications or licenses, the overarching emphasis within entry-level finance positions lies on foundational skills and capabilities. It is important to recognize that while possessing relevant certifications can undoubtedly augment one's credentials and marketability, they are not typically mandatory for entry-level roles in finance. Instead, employers often place greater emphasis on attributes such as adaptability, problem-solving skills, and a strong work ethic when assessing candidates for entry-level finance positions.

Below, we present a compilation of the most commonly pursued licenses and credentials within the field of finance, along with their respective descriptions. These credentials are recognized as valuable assets for professionals seeking to

augment their expertise and credibility within the industry. While not mandatory for entry-level positions, these certifications can significantly enhance one's marketability and proficiency in specialized areas of finance. The attainment of these licenses and credentials often reflects a commitment to ongoing professional development and a dedication to excellence within the field of finance. However, we discovered that licenses account for 1.23% of all the skills mentioned in the job descriptions.

1	CFA	0.24%
2	Series 7	0.23%
3	CPA	0.22%
4	Series 6	0.19%
5	Certified Financial Planner	0.12%
6	Series 63	0.10%
7	Series 65	0.07%
8	Series 66	0.06%

Figure 9. The importance of popular licenses/certifications in entry-level jobs

CFA (Chartered Financial Analyst): The CFA designation is a globally recognized certification awarded by the CFA Institute. It signifies expertise in investment management and financial analysis, covering areas such as portfolio management, ethical and professional standards, and quantitative methods.

Series 7: The Series 7 license, administered by the Financial Industry Regulatory Authority (FINRA), qualifies individuals to work as general securities representatives. It authorizes professionals to sell a broad range of securities products, including stocks, bonds, mutual funds, and options.

CPA (Certified Public Accountant): The CPA credential is granted by state boards of accountancy and signifies proficiency in accounting principles and practices. CPAs are authorized to provide a range of accounting services, including auditing, tax preparation, and financial consulting.

Series 6: The Series 6 license, regulated by FINRA, enables individuals to sell mutual funds, variable annuities, and insurance products. It is commonly pursued by professionals working in roles focused on retail investment sales.

CFP (Certified Financial Planner): The CFP designation is awarded by the Certified Financial Planner Board of Standards. It demonstrates expertise in comprehensive financial planning, encompassing areas such as retirement planning, estate planning, investment management, and insurance.

Series 63: The Series 63 license, also regulated by FINRA, qualifies individuals to act as securities agents within a specific state. It covers state securities regulations and is typically required for professionals selling securities products within a particular state jurisdiction.

Series 65: The Series 65 license is designed for individuals who wish to become investment adviser representatives. Administered by FINRA, it focuses on investment advisory services, including portfolio management, financial planning, and regulatory compliance.

Series 66: The Series 66 license combines the content of the Series 63 and Series 65 exams. It qualifies individuals to work as both securities agents and investment adviser representatives, allowing them to sell securities products and provide investment advice.

CAIA (Chartered Alternative Investment Analyst): The CAIA designation is awarded by the Chartered Alternative Investment Analyst Association. It signifies expertise in alternative investments, such as hedge funds, private equity, real assets, and structured products.

CPA (Certified Public Accountant): The CPA credential is a prestigious certification awarded to individuals who have demonstrated proficiency in accounting principles and practices. CPAs are authorized to provide a wide range of accounting services, including auditing, tax preparation, and financial consulting.

IV. Compensation

In this research, there are more than 2800 job postings listing compensation, and it was observed that a significant portion of these postings reported compensation figures in either hourly wage or annual salary formats. To ensure uniformity and facilitate clearer analysis, all salary types were systematically converted into annual salary equivalents. Then we divided annual salaries into several ranges:

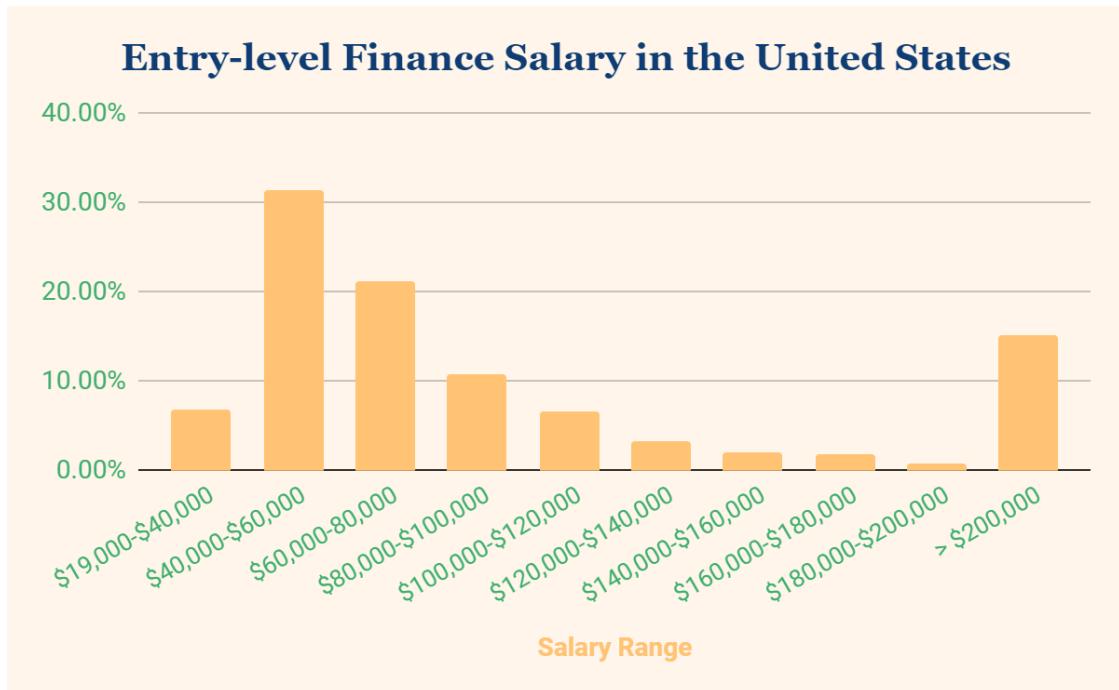


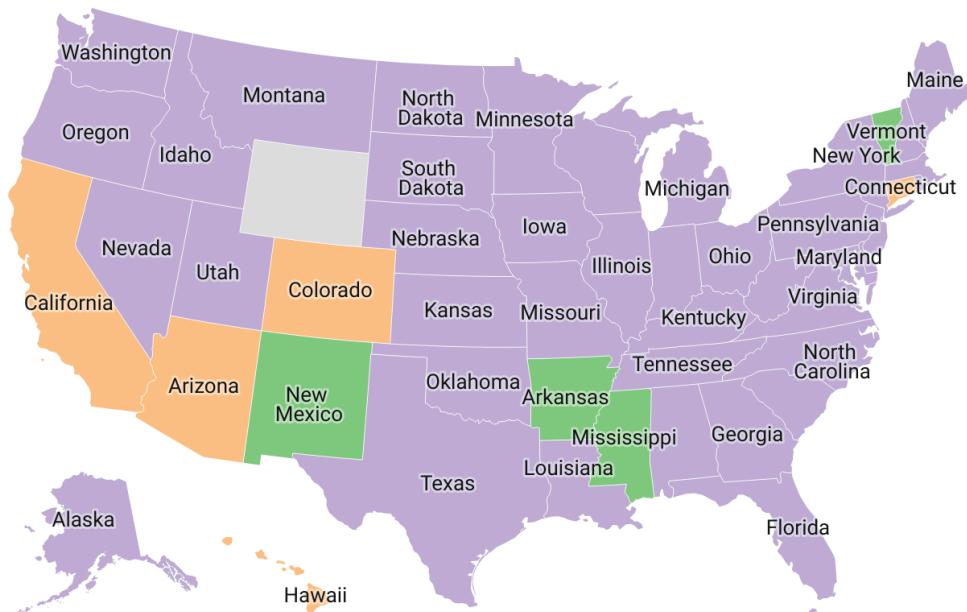
Figure 10. Comparison of salary ranges in finance in the United States

Annual salaries for entry-level positions in finance typically fall within the range of \$19,000 to \$200,000, with the average salary falling between \$40,000 and \$60,000. A substantial portion of salaries within the finance sector align with this range. It's worth noting that finance entry-level jobs offer competitive salaries compared to other industries such as Marketing, Technology, and Healthcare. While Computer Science positions boast a higher average annual salary of \$103,000, finance entry-level roles generally provide higher salaries when compared to Marketing (average salary of \$48,437) and Healthcare (average salary of \$43,467) sectors.

Salaries range from state to state, but the frequent salary range for 40 states is \$40,000-\$60,000 and there are four states (Arkansas, Mississippi, New Mexico, and Vermont) where the frequent salary range is \$19,000-40,000 (*Figure 11*).

Salary distribution (below and above average) among states

\$19,000-\$40,000 \$40,000-\$60,000 \$60,000-80,000



Created with Datawrapper

Figure 11. Distribution of salary ranges among U.S. states

We have also determined the TOP 10 states with annual wages greater than \$80,000 in *Figure 12*. Due to the high demand for finance positions with potential career development, New York and California offer the most generous compensation packages that account for nearly 28% and 20% of the total jobs with annual wages greater than \$140,000. Moreover, Texas and New Jersey ranked third and fourth in jobs with a yearly salary range of \$80,000-\$140,000.



Figure 12. TOP 10 states with annual salary greater than \$80,000

When it comes to metropolitan cities in these states, most high-salary finance jobs in the \$80,000-\$140,000 range can be found in New York City for New York, Los Angeles for California, Miami for Florida, Chicago for Illinois, and Boston for Massachusetts (Figure 13). However, with a higher range that is above \$140,000, Washington and Boston are dominant cities, boasting nearly 40% and 20% of the proportions in their states.

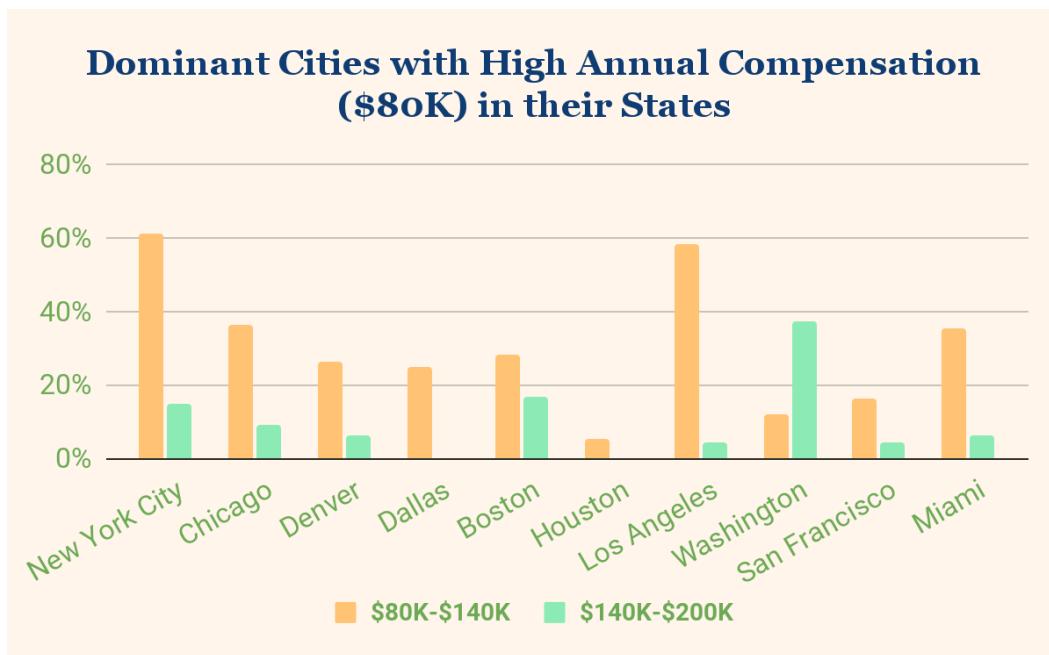


Figure 13. Comparison of annual salaries in metropolitan cities and their states

Part B - Qualitative Research

As part of our market research on entry-level finance jobs, we conducted interviews with eight alumni who are currently working (or retired) in the finance industry. For our research purposes, we divided Finance into three subfields: Investment Banking, Portfolio Management, and Corporate Finance.

I. Market trends

In entry-level finance positions, job titles vary based on the employing company and the specific duties involved. While many roles include the term "Analyst," the responsibilities associated with each position can differ significantly. Here is the breakdown of the entry-level position names by each subfield:

Investment Banking: IB Analyst, Investment Solution Analyst

Portfolio Management: Operations Analyst, Equity Analyst, Fixed Income Analyst, Trading Analyst, Operations Specialist

Corporate Finance: Financial Analyst in FP&A, Financial Analyst in Accounting, Operations Financial Analyst

In entry-level roles within Portfolio Management, individuals undertake various tasks critical to effective investment management. This includes analyzing market trends and pricing to inform investment decisions, assessing portfolio performance against benchmarks, identifying suitable securities for investment, managing portfolio composition and cash levels, and preparing reports and presentations to communicate findings and recommendations. These tasks require strong analytical skills and a solid understanding of financial markets, contributing to the achievement of investment objectives and portfolio success.

In corporate finance, the primary focus lies on financial planning and financial analysis. Financial planning involves creating and implementing strategies to manage the company's finances effectively. This includes forecasting future financial needs, developing budgets, and identifying sources of funding to support business operations and growth initiatives. Financial analysis, on the other hand, entails evaluating the company's financial performance, profitability, and risk exposure. This involves analyzing financial statements, assessing investment opportunities, and making recommendations to optimize financial outcomes. Both financial planning and financial analysis are integral to supporting strategic decision-making and ensuring the financial health and stability of the organization.

Professionals working in Portfolio Management noted a prevailing trend towards increased quantification within the finance industry. They observed a growing emphasis on technical skills, indicating a shift towards roles that require proficiency in quantitative

analysis and data-driven decision-making. Conversely, those engaged in corporate finance highlighted a convergence between finance and business intelligence domains. They remarked on the integration of finance functions with data visualization tools, signaling a broader trend toward leveraging data analytics for strategic insights and decision support. These insights underscore a dynamic landscape within the finance industry, characterized by evolving skill requirements and the integration of technology-driven solutions to enhance financial analysis and decision-making processes.

II. Skills and credentials

In Finance, both soft and hard skills are important. Technical skills such as proficiency in mathematics, statistics, coding languages like Python or R, and data analysis techniques are indispensable for performing complex financial analyses, modeling, and deriving actionable insights from data. Similarly, a strong grasp of accounting principles and proficiency in data visualization tools like Power BI enhance financial reporting and communication of insights.

Complementing these hard skills are essential soft skills such as effective communication, time management, critical thinking, and leadership. Clear communication is crucial for articulating financial concepts and building rapport with stakeholders, while effective time management ensures tasks are completed efficiently and deadlines are met. Critical thinking enables professionals to evaluate financial scenarios, identify risks and opportunities, and make strategic decisions, while leadership skills foster collaboration, innovation, and team success within finance organizations.

Alumni professionals in the finance sector underscored the importance of pursuing certifications and credentials to enhance both skills and marketability when seeking entry-level positions. While acknowledging that recruiters value the knowledge gained from certification courses over the mere possession of certificates, they emphasized the significance of showcasing a strong interest in finance through certification pursuits. Additionally, they advocated for pursuing esteemed designations such as the Chartered Financial Analyst (CFA) and Certified Financial Planner (CFP), citing their ability to facilitate career advancement from entry-level roles to higher positions within the industry. By investing in certification courses and prestigious designations, aspiring finance professionals demonstrate their commitment to professional development and readiness to excel in the competitive landscape of finance.

III. Key takeaways

- The field is becoming more quantitative and analytical
- Networking is very important when landing the first jobs
- It is important to do an internship in finance during college
- Individuals should always be learning something new even when they land a job.

- Subscribe to financial news articles
- Participate in conferences and join finance communities
- Work on soft skills
- Take designations

Part C - Limitations

Despite insight results that can be drawn from the database, we also face challenges in the data-cleaning process as even using targeted keywords like “Financial Analyst”, “Financial Associate” or “Investment Banking”, the search engine in LinkedIn and Indeed do not always return exactly matching jobs, leading to unrelated jobs and required skills in our initial database. In terms of salary, as the majority of companies provide a range for annual, monthly, and hourly salaries, instead of an exact number, we decided to compute the average of each range and transform them into annual salaries. Despite the improvement in our dataset’s cohesion, there is a lack of information on hourly wage distribution for entry-level job postings. The same problem can be seen in the working model as around 34% of records are missing this information. When it comes to conducting qualitative data, the distribution of alumni that we could connect in the three sub-fields is skewed. In particular, while only one alumnus is working in Investment, four of them have experience in Portfolio Management.

Part D - Implications

I. Implications for students pursuing a finance career

For students aspiring to enter the finance sector, our discussions with alumni professionals highlight several key implications. Firstly, prioritizing skill development in both hard and soft areas relevant to finance, such as quantitative analysis, communication, and critical thinking, is crucial. Secondly, considering certification courses can deepen understanding and demonstrate commitment to professional growth. While certifications may not carry significant weight, the knowledge gained is invaluable. Thirdly, strategic pursuit of esteemed designations like Chartered Financial Analyst (CFA) and Certified Financial Planner (CFP) can enhance credibility and career prospects. Additionally, demonstrating a genuine interest in finance through extracurricular activities and seeking out networking and mentoring opportunities can set students apart and provide valuable insights and connections within the industry. By actively engaging in these strategies, students can position themselves for success in pursuing a career in finance.

II. Implications for career advisors and mentors

For career advisors and mentors, research results underscore the importance of providing tailored guidance and support to students pursuing careers in finance. It's crucial for advisors to remain informed about industry trends and developments, and to emphasize

the value of skill development, certification courses, and strategic pursuit of prestigious designations like the Chartered Financial Analyst (CFA) and Certified Financial Planner (CFP). Encouraging students to actively engage in networking opportunities, seek internships, and establish mentorship relationships within the finance sector can greatly enhance their career prospects. By offering personalized advice and facilitating connections within the industry, advisors and mentors can empower students to make informed decisions and navigate their career paths successfully in finance.

III. Implications for instructors

For instructors, our research results highlight the importance of integrating real-world applications and practical skills into finance curricula. Instructors need to adapt teaching methodologies to align with industry trends, emphasizing hands-on experience, case studies, and simulations to prepare students for the dynamic nature of finance roles. Incorporating opportunities for students to pursue certification courses and engage in experiential learning projects can also enhance their readiness for entry into the finance workforce. Additionally, fostering a supportive learning environment that encourages critical thinking, collaboration, and continuous professional development can empower students to thrive in their finance careers. By embracing these implications, instructors can play a pivotal role in equipping students with the knowledge, skills, and confidence needed to succeed in the ever-evolving field of finance.

Appendix A: Skill group definitions

1. **Accounting skills** refer to the ability to manage financial transactions accurately and ethically, analyze financial data, and generate financial reports
Examples: financial planning and modeling, budget management, financial forecasting, balance sheet review, and cash flow statements.
2. **Analytic/Quantitative skills** involve the use or manipulation of numbers to drive critical reasoning and the ability to visualize, articulate, and solve complex problems and make decisions based on analysis of available information.
Examples: financial analysis, risk assessment, data analysis, data management and visualization, statistical modeling, and statistical inference.
3. **Banking skills** refer to the competencies and abilities needed to work in the banking industry that encompass a range of technical knowledge, interpersonal capabilities, and practical expertise required to perform various tasks within a banking environment.
Examples: credit risk management, investment decisions, retail banking, credit underwriting, investment capital, and banking operations
4. **Communication skills** in the finance industry include the ability to convey complex information, accurately, and persuasively to diverse audiences, including clients, stakeholders, and regulatory bodies.
Examples: report writing, constructive feedback, stakeholder engagement, vendor negotiation, corporate communications, and data presentation.
5. **Computer/Technology skills** are the proficiency in utilizing various software, tools, and technological platforms to perform financial tasks efficiently, analyze data, manage transactions, and enhance decision-making processes. These skills are essential for staying competitive in the current evolving financial markets.
Examples: R, Microsoft Excel, SQL, GAAP, Python, computer literacy, database management, software troubleshooting, and data structures.
6. **Graphic Design/Visual skills** in financial sectors revolve around creating visually appealing and informative materials that effectively communicate financial information, concepts, and messages to various audiences. These skills play a crucial role in enhancing presentations, reports, and financial documents to make them more engaging and understandable.
Examples: presentation design, visualization software, user experience (UX), document layout and formatting, and data visualization.

7. **Interpersonal skills** are essential for not only fostering effective collaboration, resolving conflicts, and building relationships with clients, stakeholders, and other professionals but also enhancing adaptability and resilience in fast-paced working environments.

Examples: problem-solving, attention to detail, critical thinking, organizational skills, leadership development, emotional intelligence, and decisiveness.
8. **License/Certification** in the finance industry is an official credential obtained by individuals or financial institutions that signifies their proficiency in, competence, and compliance with regulatory requirements in specific areas.

Examples: CPA (Certified Public Accountant), CFA (Chartered Financial Analyst), Series 7 license (General Securities Representative), and Series 63 licenses (Uniform Securities Agent State Law Examination).
9. **Market Research skills** involve gathering, analyzing, and interpreting data related to financial markets, securities, investment opportunities, and consumer behavior to understand market dynamics, trends, and competitive landscapes, allowing better-informed decisions and recommendations.

Examples: market analysis, industry research, competitive analysis, qualitative research, secondary research, and market intelligence.
10. **Marketing/Advertising skills** refer to the development and execution of strategic marketing and advertising campaigns to promote financial products, services, and brands, attract new clients, and retain existing customers.

Examples: content creation, brand awareness, digital storytelling, and newsletters.
11. **Planning/Management/Reporting skills** encompass the planning, organization, coordination, and reporting of financial activities, resources, and outcomes to achieve organizational objectives.

Examples: portfolio management, asset allocation, ad hoc reporting, vendor management, resource planning, and process improvement.
12. **Sales skills** include promoting and selling financial products, services, and solutions to clients, customers, or investors, to meet revenue targets, expanding market share, and achieving business objectives.

Examples: product knowledge, Business-to-Business (B2B), cross-selling, sales promotion, customer service, and sales operations.
13. Other skills may include additional skills that are specific to certain finance roles or industries. These skills can vary widely depending on the company's requirements and specialization.

Appendix B: Industry definition

To streamline the data visualization and data analysis process, we reclassify 193 specializations from nearly 3,700 companies into 22 general industries.

- 1. Accounting (No available sub-fields)**
- 2. Advertising/Media/Video Production/Design/Entertainment**

Advertising Services	Design	Entertainments Providers	Media Production	Online Audio and Video Media
Animation and Post-production	Design Services	Marketing Services	Movies, Videos, and Sound	Online Media
Broadcast Media Production and Distribution	Entertainment	Media	Music	Recreational Facilities

3. Armed Forces/ Security

Armed Forces	Public Safety	Security and Investigations
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4. Banking

Banking	Investment Banking
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5. Construction/Building

Building Finishing Contractors	Building Materials	Construction	Nonresidential Building Construction
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6. Consulting

Business Consulting and Services	Consulting Services
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7. Education

Child Day Care Services	E-Learning Providers	Education Administration Programs
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Education Management	Higher Education	Primary and Secondary Education
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8. Financial Services

Financial Services	Venture Capital and Private Equity Principles
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9. Food & Beverages

Food & Beverages	Food & Beverage Services
Food Production	Restaurants

10. Government

Government Administration	Government Administration	Government Relations Services
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11. Healthcare/ Health Technology

Biotechnology Research	Health, Wellness & Fitness	Health, Wellness & Fitness
Hospital and Healthcare	Medical Device	Medical Practices
Medical Technology	Mental Health Care	Wellness and Fitness Services

12. Hospitality and Tourism

Events Services	Hospitality	Travel Arrangements
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13. Insurance

Insurance	Insurance Agencies and Brokerages
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14. Investment

Investment Advice	Investment Management
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15. IT Services and IT Consulting/ Technology/ Internet

Outsourcing and Offshoring Consulting	Computer and Network Security	Computer Games	Computer Networking Products	Information Services
Information Technology & Services	Internet Marketplace Platforms	Internet Publishing	IT Services and IT Consulting	IT System Data Services
Outsourcing/Offshoring	Semiconductors	Technology, Information, and Internet	Technology, Information, and Media	Telecommunications
Data Security Software Products	Software Development			

16. Law & Legal Services

Law Enforcement	Law Practice	Legal Services
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17. Logistic/Transportation

Freight and Package Transportation	Logistics and Transportation	Rail Transportation	Transportation, Logistics, Supply Chain and Storage
Transportation/Trucking/Railroad	Truck Transportation	Urban Transit Services	

18. Manufacturing

Industrial Machinery Manufacturing	Agricultural Chemical Manufacturing	Agriculture, Construction, Mining Machinery Manufacturing	Appliances, Electrical, and Electronics Manufacturing	Automation Machinery Manufacturing
Aviation and Aerospace Component Manufacturing	Chemical Manufacturing	Computer Hardware Manufacturing	Computers and Electronics Manufacturing	Defense and Space Manufacturing

Electrical Equipment Manufacturing	Food and Beverage Manufacturing	Furniture and Home Furnishings Manufacturing	Machinery Manufacturing	Manufacturing
Medical Equipment Manufacturing	Motor Vehicle Manufacturing	Packaging and Containers Manufacturing	Paper & Forest Products	Paper and Forest Product Manufacturing
Personal Care Product Manufacturing	Pharmaceutical Manufacturing	Plastics Manufacturing	Renewable Energy Equipment Manufacturing	Renewable Energy Semiconductor Manufacturing
Semiconductor Manufacturing	Sporting Goods Manufacturing	Textile Manufacturing		

19. Real Estate

Commercial Real Estate	Leasing Non-residential Real Estate	Leasing Residential Real Estate	Real Estate
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20. Retail & Wholesale

Apparel & Fashion	Retail	Retail Apparel and Fashion	Retail Luxury Goods and Jewelry	Retail Motor Vehicles
Retail Office Equipment	Wholesale	Wholesale Building Materials	Wholesale Footwear	

21. Staffing and Recruiting (no available sub-industries)

22. Other

Administrative and Support Services	Agriculture	Dairy	Farming	Security Systems Services
Automotive	Airlines and	Aviation &	Defense &	Capital Markets

	Aviation	Aerospace	Space	
Consumer Goods	Consumer Services	Electric Power Generation	Electric Power Transmission , Control, and Distribution	Renewable Energy Power Generation
Services for Renewable Energy	Solar Electric Power Generation	Renewables & Environment	Civil Engineering	Engineering Services
Environmental Services	Facilities Services	Utilities	Gambling Facilities and Casinos	Furniture
Human Resources	Human Resources Services	Market Research	Research	Research Services
Mining	Oil and Gas	Architecture and Planning	Executive Search Services	Historical Sites
International Affairs	Libraries	Mobile Gaming Apps	Museums, Historical Sites, and Zoos	Photography
Political Organizations	Professional Services	Public Pension	Public Policy Offices	Public Relations and Communications Services
Religious Institutions	Vehicle Repair and Maintenance	Veterinary Services	Rental Services	Book and Periodical Publishing
Periodical Publishing	Printing Services	Civic and Social Organizations	Individual and Family Services	Non-profit
Non-profit Organizations	Philanthropic Fundraising	Professional Training and	Skiing Facilities	Spectator Sports

	Services	Coaching		
Sports Teams and Clubs	International Trade and Development	Trading		

Bibliography

- Kurzeja, Paul. "The History of Banking in Charlotte", *the Charlotte Museum of History*.
<https://charlottemuseum.org/learn/articles/the-history-of-banking-in-charlotte/#:~:text=Charlotte%27s%20earliest%20financial%20boom%20started,50%20mines%20were%20in%20operation>.
- Powell, Scott. "Top Finance Certifications," Corporate Finance Institute, December 8, 2023,
<https://corporatefinanceinstitute.com/resources/career/top-finance-certifications-list/>.
- Wang, Joanie. "Top 8 biggest financial cities in the U.S.", *Expensify*, October 10, 2023.
<https://use.expensify.com/blog/biggest-financial-cities>.
- "Computer Science Starting Salary." Indeed. Accessed April 14, 2024.
www.indeed.com/career-advice/pay-salary/computer-science-starting-salary.
- "Entry-Level Financial Analyst Salaries." Indeed. Accessed April 14, 2024.
www.indeed.com/career/advice/entry-level-financial-analyst/salaries
- "Entry-Level Jobs in Healthcare." Indeed. Accessed April 14, 2024.
www.indeed.com/career-advice/finding-a-job/entry-level-jobs-healthcare.
- "Entry-Level Marketing Salaries." Indeed. Accessed April 14, 2024.
www.indeed.com/career/advice/entry-level-marketing/salaries.
- "Qualification Exams," FINRA.org, n.d.,
<https://www.finra.org/registration-exams-ce/qualification-exams>.
- "Finance Certifications: Advancing Your Finance Career." Indeed. Accessed April 14, 2024.
www.indeed.com/career-advice/career-development/finance-certifications.