FUTURE OF SUSTAINABILITY IN INVESTMENT MANAGEMENT



LinkedIn Appendix

Methodology for Labor Market Metrics on Investment Professionals and ESG-Related Expertise

Investment professional labor market is measured from social media profiles (i.e., resumes) on LinkedIn for either an entire market or a specified metropolitan area.

After initial testing of many keywords, an agreed upon set of terms were selected that represent an investment professional role or skill. An exhaustive list of those terms is shown in the following table.

Ratios, unless explicitly stated otherwise, are based on search results that are restricted to a single industry, "Investment Management." In addition, searches are restricted to current job titles only. If an individual previously held a position being searched in investment management but his or her current job does not fit the search parameters, then they are not counted.

Group	CEO	CIO	Advisor	Analyst	PM
Titles	Chief Executive Officer	Chief Investment Officer	Investment Consultant	Performance Analyst	Portfolio Manager
			Wealth Manager	Senior Performance Analyst	Fund Manager
			Financial Advisor	Quantitative Analyst	Investment Director
			Wealth Management Advisor	Quantitative Risk Analyst	Investment Manager
			Private Banking Manager	Portfolio Analyst	
			Personal Banker	Investment Analyst	
			Personal Financial Advisor	Financial Analyst	
			Wealth Management Consultant		
			Private Wealth Advisor		
			Private Wealth Management		
			Head of Wealth Management		
			Financial Planner		
			Director Wealth Management		
Industries	Investment Management	N/A	Financial Services	Financial Services	Financial Services
			Banking	Insurance	Banking
			Investment Management	Investment Management	Investment Management
			Venture Capital and Private Equity	Banking	Venture Capital and Private Equity
			Investment Banking	Management Consulting	Investment Banking
			Management Consulting	Accounting	Management Consulting
				Research	Capital Markets
				Investment Banking	
				Venture Capital and Private Equity	
				Capital Markets	
Skills	Sustainability	Sustainability	Sustainability	Sustainability	Sustainability
	Sustainable investing	Sustainable investing	Sustainable investing	Sustainable investing	Sustainable investing
	Sustainable investment	Sustainable investment	Sustainable investment	Sustainable investment	Sustainable investment
	Socially responsible investing	Socially responsible investing	Socially responsible investing	Socially responsible investing	Socially responsible investing
	Impact investing	Impact investing	Impact investing	Impact investing	Impact investing
	Stewardship	Stewardship	Stewardship	Stewardship	Stewardship

Portfolio manager

Makes investment decisions using money other people have placed under their control. Responsible for investing a mutual, exchangetraded, or closed-end fund's assets, implementing its investment strategy, and managing the day-to-day portfolio trading. Includes executives, managers, and those holding the titles director of investments, fund manager, and investment manager but excludes chief investment officers.

Analyst

Buy- and sell-side investment research analysts, investment analysts, performance analysts, and investment strategists. Best efforts are made to include in this category related roles in investment risk analysis, securities credit risk analysis, and investment research management. Example job titles include research analyst, quantitative

analyst, investment analyst, equity analyst, portfolio analyst, fixed-income analyst, credit analyst, strategist, economist, and risk manager. The much broader financial analyst occupation is excluded from estimates.

Advisor

Includes personal financial advisors/planners and wealth managers. Example job titles include wealth manager, wealth management, wealth management advisor, wealth advisor, financial advisor, private banker, personal financial advisor, head of wealth management, private wealth advisor, private wealth management specialist, financial planner, director of wealth management, and financial advisor. For this role, financial advisors primarily focused on insurance products are excluded.

FUTURE OF SUSTAINABILITY IN INVESTMENT MANAGEMENT



LinkedIn Appendix, continued

CIO

Chief investment officer is a narrow role that is difficult to isolate outside of social media data. This role may be understated because of different terms of use in different markets.

CEO

Limited to investment management sectors only (i.e., asset owner and asset management organizations) and will include private equity venture capital, and capital market organizations, in addition to investment management firms. There is a very large number of CEOs who function as sole proprietors or manage very small investment organizations sometimes on a part-time basis. In some markets, this may constitute over 85% of those identified as a chief executive officer. We exclude these from our estimates. Also excluded are CEOs or those in other segments who may have investment management under one of their lines of business (e.g., commercial bank CEO).

Resume/Profile Considerations

We know that a certain number of online profiles are either duplicates or fake. We also know that profiles remain posted even after the individual has exited the workforce. Both factors overstate the number of investment professionals in the workforce. Counterbalancing these factors are that many investment professionals have never created a profile online and there is both an age bias and country/language bias in the penetration rates of LinkedIn usage. We hypothesize that these three factors should not significantly affect the investment management or ESG-related expertise calculations; however, they should be taken into consideration when looking at the overall investment professional workforce size and a niche and emerging investment management role, such as ESG specialist.

Please consider the following LinkedIn Talent Insights geographic coverage statistics for August 2020.

Worldwide Membership

- 690 million+ members in over 200 countries and territories
- Regional Membership:
 - North America 186m+
 - Europe 157m+
 - Asia Pacific 185m+
 - Latin America 101m+
 - Middle East and Africa: 59m+
- More than 75% of LinkedIn members are outside the United States
- LinkedIn is available in 24 languages
- More than 690m members
- More than 50m companies have a page on LinkedIn
- More than 90k schools listed (high school and college)
- 36k skills listed

N. AMER: Membership Numbers:

- Canada 17m+
- United States 169m+

APAC: Membership Numbers:

- Australia 11m+
- China 50m+
- Hong Kong 1m+
- India 66m+
- Indonesia 15m+
- Japan 2m+
- Malaysia 5m+
- New Zealand 2m+
- Philippines 8m+
- Singapore 2m+
- South Korea 2m+
- Taiwan 2m+

Job Postings

We use job postings as a measure of demand for investment professionals with ESG-related expertise. Each job post represents a unique active job search. All counts include staffing agency job posts. Staffing agencies are a much more important component of recruiting in the United Kingdom than in the United States. What cannot be seen in the data are employers hiring multiple people for the same position using a single job posting.

Our primary source for this information is data collected on thousands of public and private job boards by LinkedIn.

The number of open job posts from LinkedIn is aggregated from more than 40,000 sources globally. The data source excludes anonymous and duplicate job postings.

Ratios of job posts containing "sustainability skills" are based on skillset keywords. Ratios for the primary job groups (analyst, PM, financial advisor, CEO, and CIO) are calculated from the count of all search terms for each job group divided by the total number of job posts for that job group.

Job posts include all levels of experience.