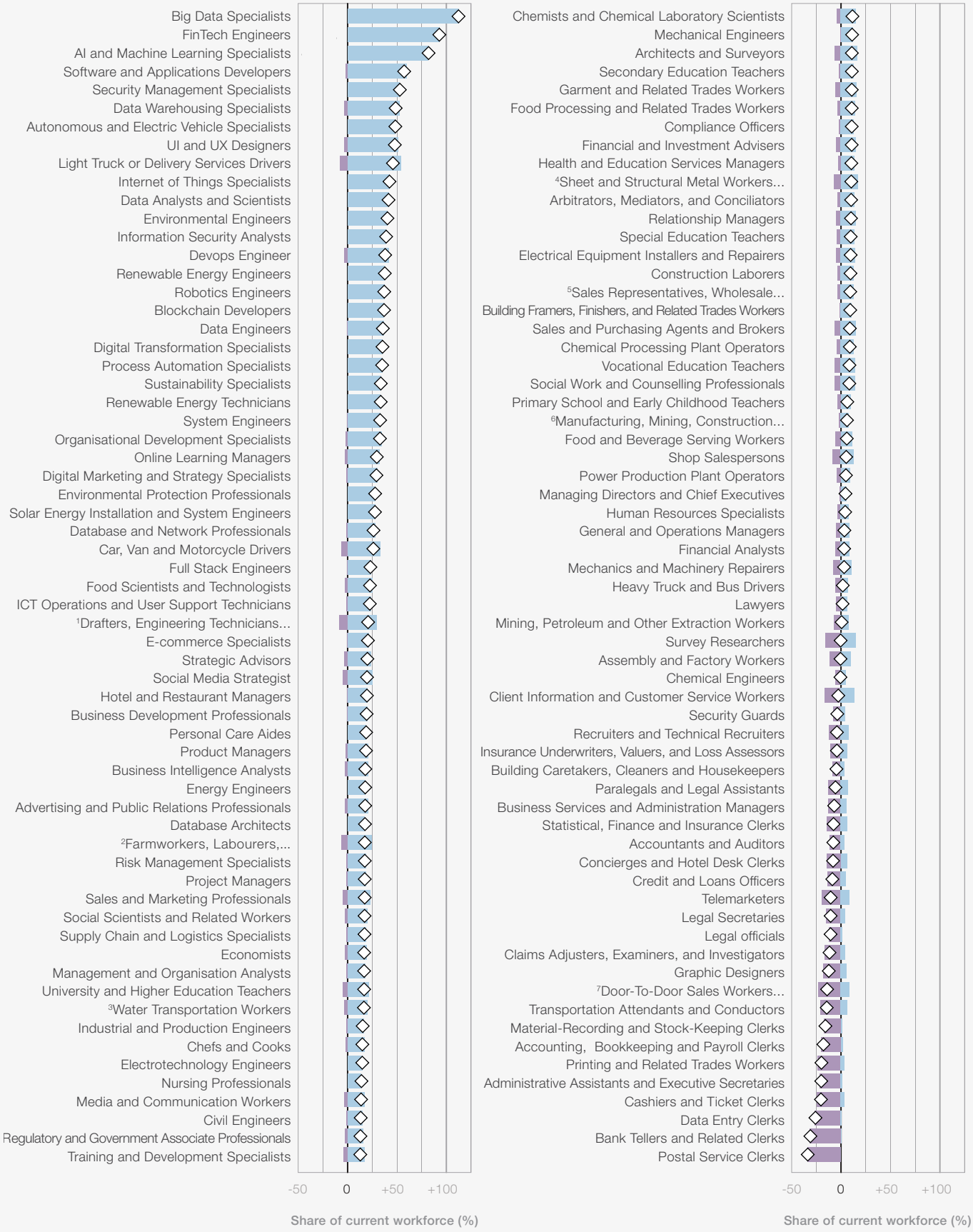
FIGURE 2.3

Job growth and decline (%), 2025-2030

Projected job creation (blue) and displacement (purple) between 2025 and 2030, as a percentage of total current employment in the corresponding job role. The projected net growth or decline for each occupation over the next five years (diamonds) is calculated by subtracting total job displacement from total job creation.



Source

World Economic Forum, Future of Jobs Survey 2024.

Note

[1]Drafters, Engineering Technicians, and Mapping Technicians; [2]Farmworkers, Labourers, and Other Agricultural Workers; [3]Water Transportation Workers, including Ship and Marine Cargo Workers, Controllers, and Technicians; [4]Sheet and Structural Metal Workers, Moulders and Welders; [5]Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products; [6]Manufacturing, Mining, Construction, and Distribution Managers; [7]Door-To-Door Sales Workers, News and Street Vendors, and Related Workers

To approximate the total impact of job growth and decline, this report combines the job outlook expectations of surveyed employers with estimates of the total number of workers in the corresponding roles, based on ILO employment data. However, the Future of Jobs data set only provides information on roles for which survey data availability meets a minimum coverage threshold, and corresponds to 1.18 billion workers in total, which is a subset of the ILO's total employment data. The conclusions derived for this subset should not be treated as comprehensive, but rather as providing insights on selected segments of the global workforce.

Figure 2.4 shows the 15 largest net growth and decline job roles in absolute numbers. The highest growth in absolute numbers of jobs is driven by roles that make up the core of many economies.

Farmworkers top the list of the largest growing job roles in the next five years and are expected to see 35 million more jobs by 2030. Green transition trends, including increased efforts and investments to reduce carbon emissions and adapt to climate change, are the driving forces behind this job growth. Broadening digital access and rising cost of living also contribute to the growth of this job role, which currently employs more than 200 million workers worldwide.

Delivery Drivers, Building Construction Workers, Salespersons and Food Processing Workers are also among the largest-growing job types in the next five years. While technology is impacting growth in almost all occupations, demographic trends and economic trends also contribute to the projected net increase in these job roles.

Care jobs, including Nursing Professionals, Social Work and Counselling Professionals, and Personal Care Aides are expected to see significant growth over the next five years, driven by demographic trends, especially aging populations. Increased focus on labour and social issues is also identified as a contributing factor.

Education-related roles such as University and Higher Education Teachers and Secondary Education Teachers are also predicted to be among the biggest job creators in absolute terms over the next five years globally. Broadening digital access and growing working-age populations are the top two contributing drivers of this job growth, while increased focus on labour and social issues is seen as an additional factor.

Additionally, Software and Applications Developers, General and Operations Managers, and Project Managers, are among the job categories driving the most net job growth.

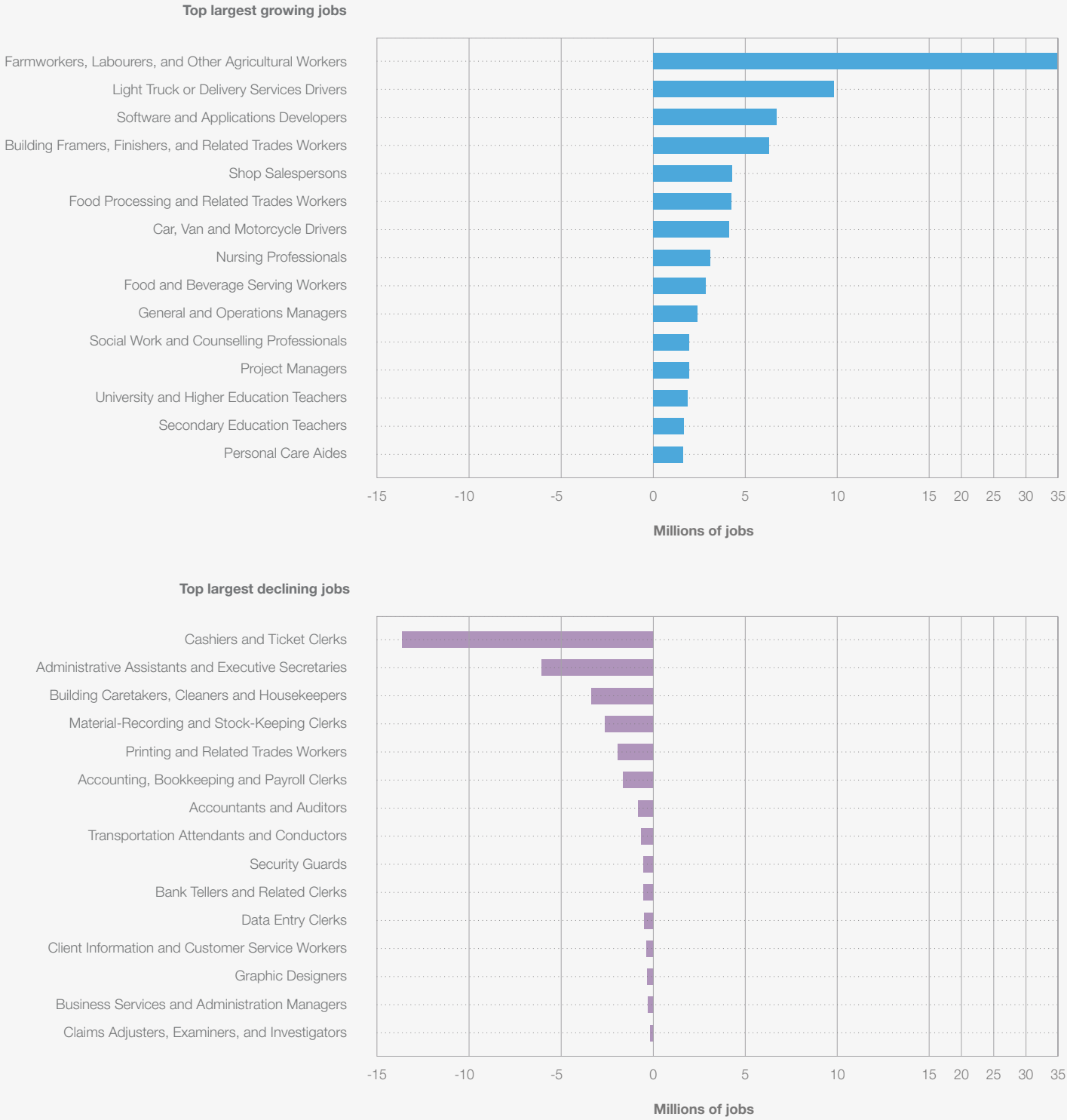
Conversely, in parallel to the fastest-declining job roles, Clerical and Secretarial Workers are among the job categories predicted to see the largest net job decline in absolute terms (Figure 2.5).

Section 2.2 further analyses the impact of each of the five identified labour-market macrotrends on growing and declining jobs. However, there is also a group of large and growing jobs that are driven by many trends in combination. This includes Building Framers, Finishers, and Related Trades Workers; Light Truck or Delivery Services Drivers; Car, Van and Motorcycle Drivers; General and Operations Managers; and Social Work and Counselling Professionals. For these jobs, it is the broad sweep of transformative forces, rather than one or two specific labour-market drivers, which is generating growth expectations.

FIGURE 2.4

Largest growing and declining jobs, 2025-2030

Top jobs, ordered by largest net job growth and decline, in absolute terms, calculated based on ILO occupation employment statistics and expected net growth reported by employers surveyed.



Source

World Economic Forum, Future of Jobs Survey 2024; International Labour Organization, ILOSTAT.

FIGURE 2.5

Job growth and decline (number of employees), 2025-2030

Projected job creation (blue) and displacement (purple) between 2025 and 2030, in absolute number of jobs, estimated by surveyed employers and calculated based on ILO occupational employment statistics. Projected net number of jobs created or displaced for each occupation over the next five years (diamonds) is calculated by subtracting total job displacement from total job creation.

Source

World Economic Forum, Future of Jobs Survey 2024; International Labour Organization, ILOSTAT.

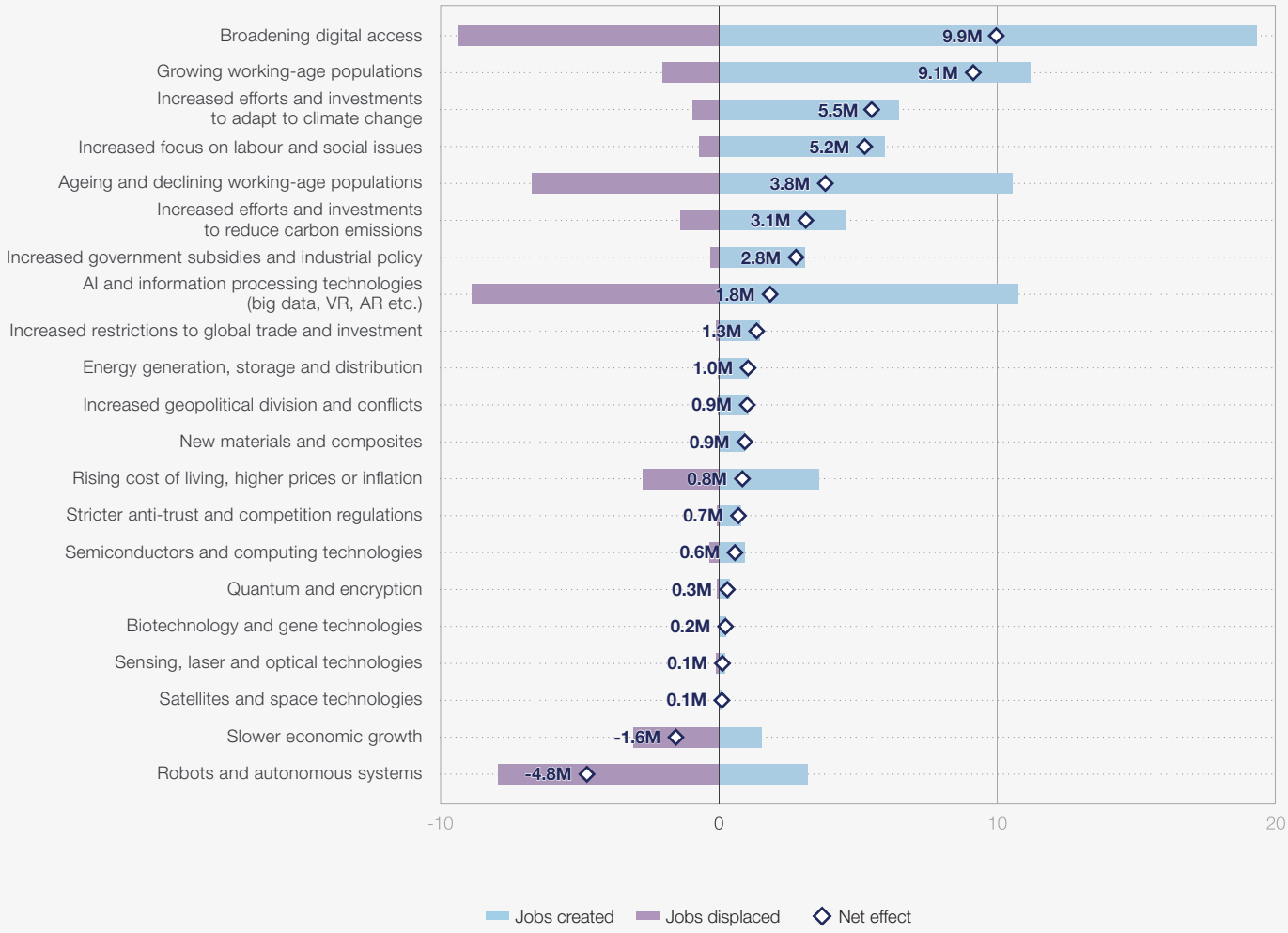
2.2 Expected impact of macrotrends on employment

The remainder of this chapter discusses how Future of Jobs Survey respondents expect each of the five macrotrends driving labour market transformation – technological change, geoeconomic fragmentation, green transition, demographic shifts and economic uncertainty – to influence job growth and decline by 2030 (see Figure 2.6).

FIGURE 2.6

Expected impact of macrotrends and technology trends on jobs, 2025-2030

Projected job creation attributed to each trend (blue) and projected job displacement attributed to each trend (purple) between 2025 and 2030, based on the job growth and decline attribution expectations of surveyed employers and ILO employment figures by occupation. The projected net number of jobs created or destroyed attributed to each trend in the next five years (diamonds) is calculated by subtracting the total number of declining jobs from the total number of growing jobs. The Appendix provides additional details and the data behind this figure.



Source

World Economic Forum, Future of Jobs Survey 2024; International Labour Organization, ILOSTAT.

Technological change

Technology is predicted to be the most divergent driver of labour-market change, with broadening digital access expected to both create and displace more jobs than any other macrotrend (19 million and 9 million, respectively). Meanwhile, trends in AI and information processing technology are expected to create 11 million jobs, while simultaneously displacing 9 million others, more than any other technology trend. Robotics and autonomous systems are expected to be the largest net job displacer, with a net decline of 5 million jobs.

These three trends – broadening digital access, advancements in AI and information processing, and robotics and autonomous systems technologies – also feature prominently as drivers of the fastest growing and declining jobs. In fact,

they are among the top drivers of growth for the 10 fastest-growing jobs: AI and information processing technologies are among the top three drivers of growth for all 10 of these jobs; whereas broadening digital access is a top three driver for nine out of these 10 (all except Autonomous and Electric Vehicle Specialists); and robotics and autonomous systems technologies for seven out of these 10 (all except Security Management Specialists, UI and UX Designers, and Light Truck or Delivery Services Drivers). In addition, of the 10 fastest- and 10 largest-declining roles, only two (Printing and Related Trades Workers, and Building Caretakers, Cleaners and Housekeepers) feature other trends among their top three drivers of job decline.

By contrast, the largest-growth jobs are influenced by a broader range of macrotrends. The three technology-based trends stand out as expected growth drivers only for light truck and delivery services drivers, software and applications developers, and nursing professionals. This projected growth in demand for nursing professionals is also driven by aging and declining working-age populations, further explored in the demographic shifts section of this chapter.

The presence of both Graphic Designers and Legal Secretaries just outside the top 10 fastest-declining job roles, a first-time prediction not seen in previous editions of the *Future of Jobs Report*, may illustrate GenAI's increasing capacity to perform knowledge work. Job decline in both roles is seen as driven by both AI and information processing technologies as well as by broadening digital access. This is a major change from the report's 2023 edition, when Graphic Designers were considered a moderately growing job and Legal Secretaries did not feature in the expected job growth/decline list.

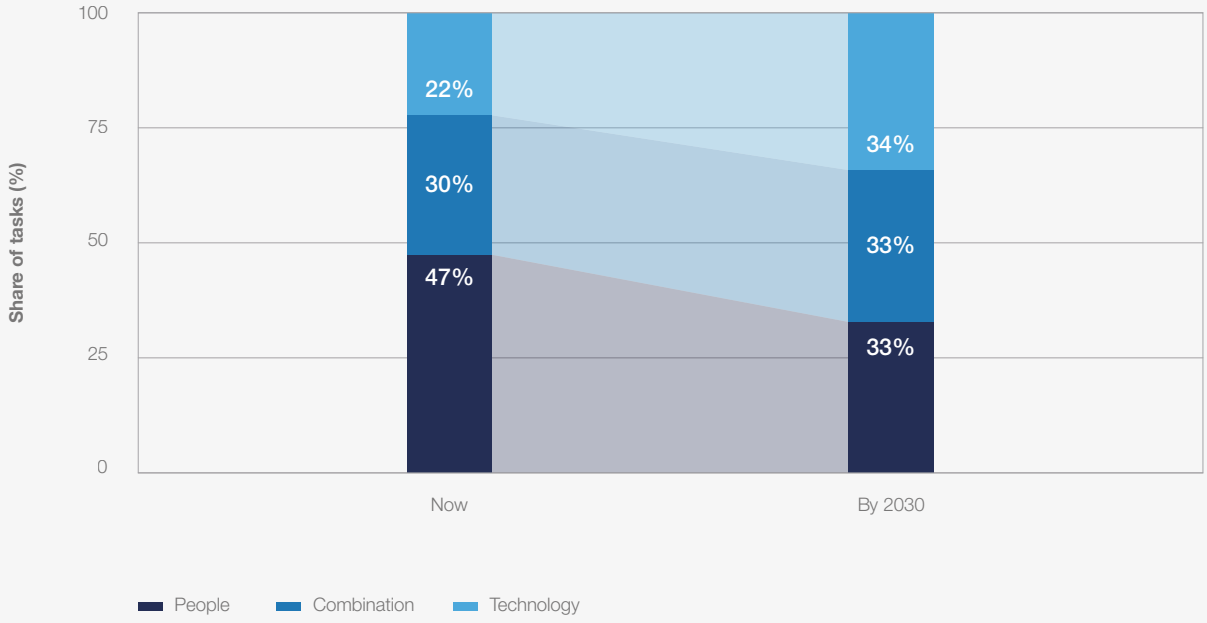
The Shifting human-machine frontier: automation versus augmentation

The interplay between humans, machines and algorithms is redefining job roles across industries. Automation is expected to drive changes in people's ways of working, with the proportional share of tasks performed solely or predominantly by humans expected to decline as technology becomes more versatile. Future of Jobs Survey respondents estimate that, today, 47% of work tasks are performed mainly by humans alone, with 22% performed mainly by technology (machines and algorithms), and 30% completed by a combination of both. By 2030, employers expect these proportions to be nearly evenly split across these three categories/approaches (Figure 2.7).

FIGURE 2.7

The shifting human-machine frontier: automation versus augmentation, 2025-2030

Share of total work tasks expected to be delivered predominantly by human workers, by technology (machines and algorithms), or by a combination of both.



Source

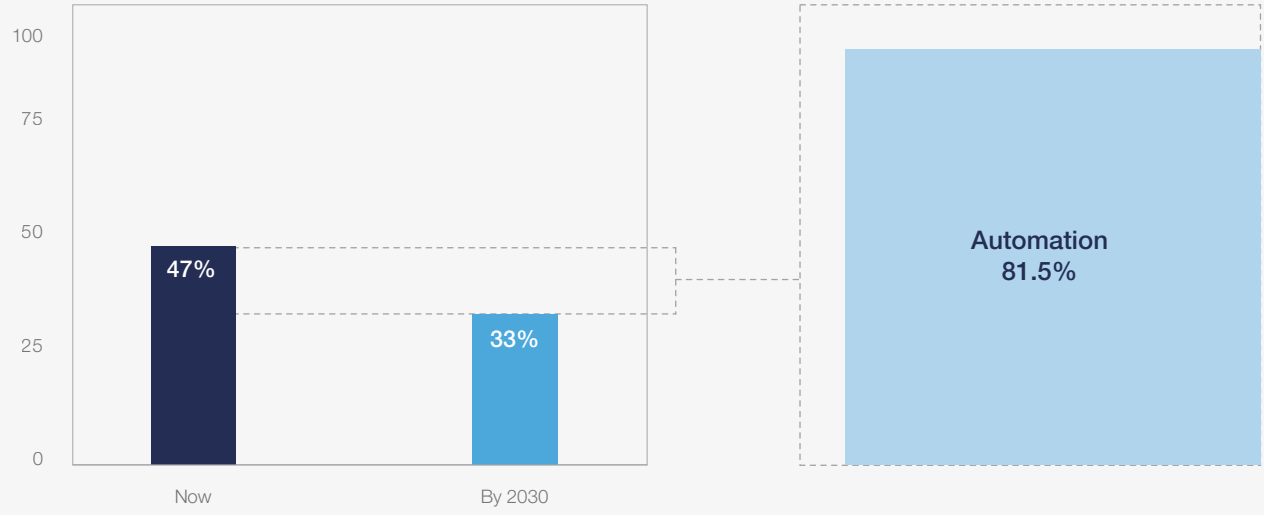
World Economic Forum, Future of Jobs Survey 2024.

Globally, the expected reduction in the proportion of work tasks performed by humans is driven primarily by increased automation. Of the nearly 15 percentage point reduction in the proportion of total work tasks delivered by humans in 2030 versus 2025, nearly 82% is attributable to advancing automation, while 19% is projected to derive from expanded human-machine collaboration (Figure 2.8).

FIGURE 2.8

Expected shift in the human share of work task delivery in total firm output driven by automation versus augmentation, 2025-2030, global average

Change in proportion of human-performed tasks attributable to increasing automation.



Source

World Economic Forum, Future of Jobs Survey 2024.

Importantly, this analysis only compares the 2025 and 2030 proportions of total task delivery attributable to human employees, technology or collaboration between the two, respectively, and does not consider the potential change in the absolute amount of work tasks (output) getting done. In other words, both machines and humans might be significantly more productive in 2030 – performing more or higher value tasks in the same or less amount of time than it would have taken them to do so in 2025 – so any concern about humans "running out of things to do" due to automation would be misplaced.

However, a potentially more complex question raised by these projections concerns the on-going share of total economic value creation participated in by human workers: If an increasing amount of a firm's total output and income is derived from advanced machines and proprietary algorithms, to what extent will human workers be able to share in this prosperity?[33] It is in this context that the relevance of the third category/approach, human-machine collaboration (or "augmentation") should be highlighted: technology could be designed and developed in a way that complements and enhances, rather than displaces, human work; and, as discussed further in the next chapter (Box 3.1), talent development, reskilling and upskilling strategies may be designed and delivered in a way to enable and optimize human-machine collaboration.[34] It is the investment decisions and policy choices made today that will shape these outcomes in the coming years.[35]

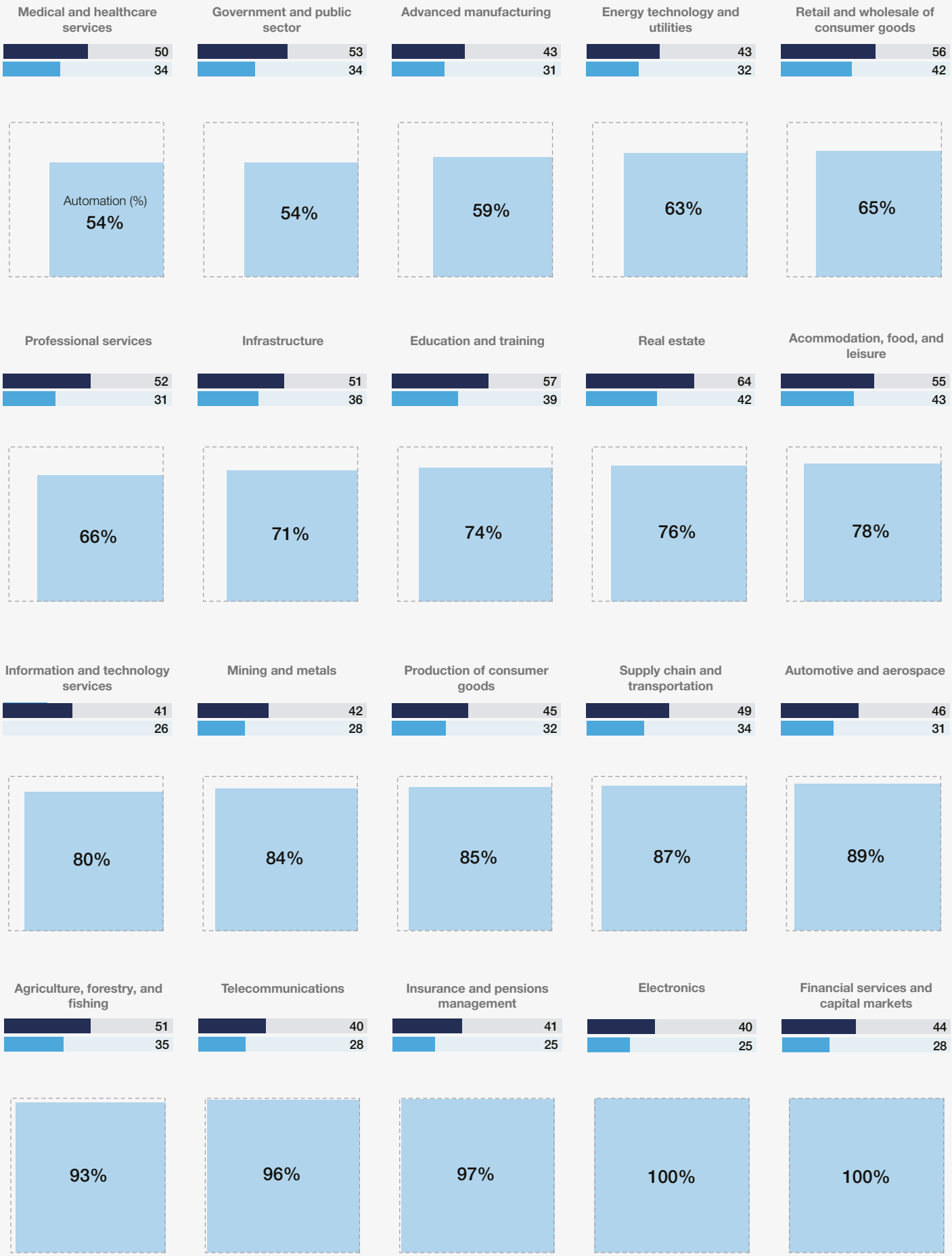
At an industry level, while all sectors are expected to see a reduction in the proportion of work tasks performed by humans alone by 2030, they differ in the share of this reduction that is projected to be attributable to automation versus augmentation and human-machine collaboration (Figure 2.9). Insurance and Pensions Management and Telecommunications are leading the automation trend – with more than 95% of human standalone task share reduction in both sectors expected to derive from deeper automation. By contrast, nearly half of the proportional reduction in work tasks done by humans alone in the Medical and Healthcare Services and Government and Public sectors are instead expected to be driven by increased augmentation and human-machine collaboration.

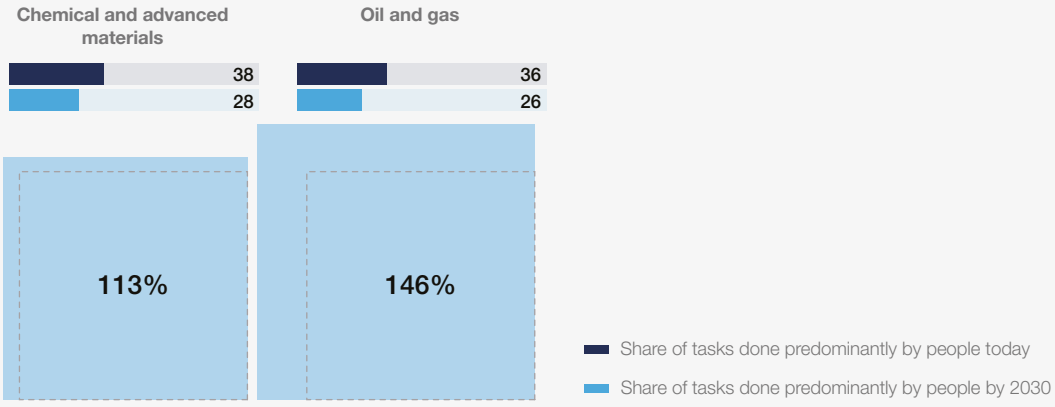
In four sectors – Oil and Gas, Chemicals and Advanced Materials, Financial Services and Capital Markets, and Electronics – automation is projected not only to reduce the proportion of total work tasks predominantly done today standalone by humans, but even to reduce the share of total work tasks currently delivered through human-machine collaboration (resulting in calculated "automation shares" of more than 100%, as depicted in Figure 2.9).

FIGURE 2.9

Expected shift in the human share of work task delivery in total firm output driven by automation versus augmentation, 2025-2030, by industry

Change in proportion of human-performed tasks attributable to increasing automation.





Source

World Economic Forum, Future of Jobs Survey 2024.

Geoeconomic fragmentation

The Future of Jobs Survey asked employers about the impacts of three key geoeconomic trends: increased government subsidies and industrial policy; increased geopolitical division and conflicts; and increased restrictions to global trade and investment. On average, respondents expect these trends to be net job creators. Although projected to be three of the four lowest net job-creating macrotrends – above only slower economic growth – these estimates still equate to 5 million net additional jobs by 2030, most prominently in logistics, security and strategy roles.

Increased government subsidies and industrial policy are expected to drive increased demand for Business Intelligence Analysts and Business Development Professionals. Increased restrictions to global trade and investment are also predicted to drive growth in these roles, as well as in Strategic Advisors and Supply Chain and Logistics specialists. Increased geopolitical division and conflicts, meanwhile, are projected to drive growth in all of the aforementioned roles, in addition to Information Security Analysts and Security Management Specialists.

The Future of Jobs Survey also asked respondents whether they expected to offshore parts of their workforce, or move operations closer to home through reshoring, nearshoring, or friendshoring. An analysis of the responses to these questions for the subset of employers who expect geoeconomic trends to affect their business provides insight into how these trends affect workforce decisions. Table 2.1 shows the share of employers who expect each geoeconomic trend to transform their business that additionally also expect to offshore or re-shore significant segments of their workforce. All three geoeconomic trends analysed appear to drive more re-shoring, with respondents who expect their business to be transformed by increasing restrictions to global trade and investment 50% more likely to plan to reshore than the global average employer. Employers who expect government subsidies and industrial policy to transform their business, however, are almost as likely to plan to offshore as they are to reshore

TABLE 2.1

Impact of geoeconomic trends on off-shoring and re-shoring

Share of employers who expect the specified trend to transform their business who plan to 'off-shore' or 're-shore' significant segments of their workforce.

	Off-shore	Re-shoring
Global Average	8.3	9.5
Increased government subsidies and industrial policy	11.2	12.4
Increased geopolitical division and conflicts	9.3	13.2
Increased restrictions to global trade and investment	8.7	14.5

Source: World Economic Forum, Future of Jobs Survey 2024.

Green transition

Climate change adaptation is expected to be the third-largest contributor to net growth in global jobs by 2030, projected to contribute an additional 5 million net jobs, while climate-change mitigation comes in 6th with an additional 3 million net jobs. Trends in energy generation, storage and distribution, meanwhile, are expected to create an additional 1 million net jobs – the second-largest technology-based contribution to net job growth (after trends in AI and information processing technology).

Expectations around climate-change adaptation and mitigation trends are pushing Environmental Engineers and Renewable Energy Engineers into the top 15 fastest-growing jobs, as well as driving growth in roles such as Sustainability Specialists and Renewable Energy Technicians. This is corroborated by evidence that "green hiring" has consistently outperformed overall labour-market hiring trends in recent years (Box 2.1).

Both green transition-related macrotrends are also expected to drive some of the largest labour-market transformation, in absolute terms, in the global economy. This includes being the largest drivers of both job growth and decline in Farmworkers, Labourers, and Other Agricultural Workers as well as being among the strongest drivers of net job growth for Building Framers, Finishers and Related Trades Workers.

BOX 2.1

Green hiring rates

In collaboration with LinkedIn

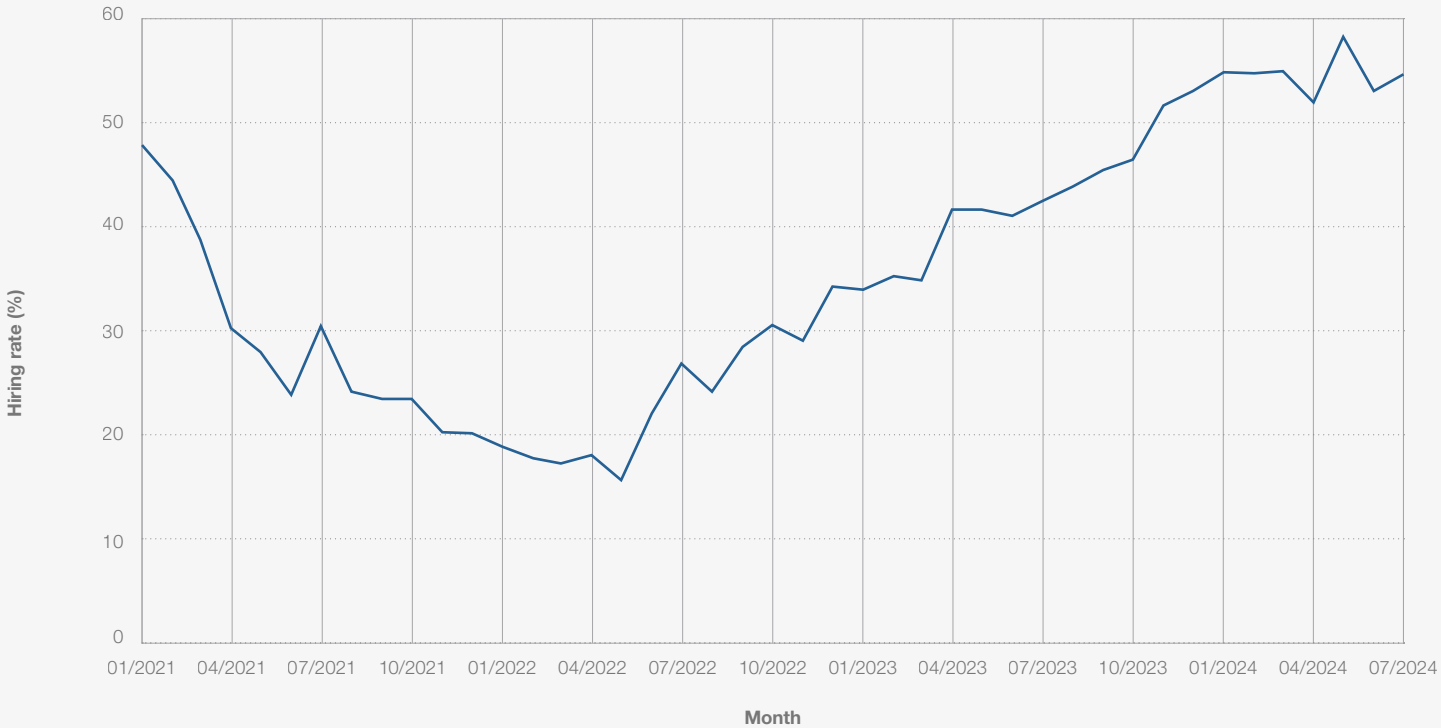
LinkedIn data, generated up to July 2024 for the *Future of Jobs Report 2025*, assesses the progression of green hiring rates compared to overall hiring rates. By comparing the share of LinkedIn members with green skills being hired with the overall hiring rate, it is possible to assess differences in employment outcomes between these two groups.

Figure B2.1 shows that LinkedIn members with green skills are being hired at a significantly higher rate than other members. Despite a dip in green hiring throughout 2021 and early 2022, green hiring has consistently outperformed the overall hiring, and this outperformance has been consistently getting larger since its low point of May 2022.

FIGURE B2.1

Green hiring rates

Outperformance in hiring rate for LinkedIn members with green skills versus all LinkedIn members, percent, January 2021 to July 2024



Source

LinkedIn analysis.