Sustainability Insights | Research

How Changing Workforce Dynamics May Affect U.S. Companies

August 1, 2023

The way companies respond to material workforce challenges in their sectors may influence operational and financial performance and their perceived attractiveness as employers.

This research report does not comment on current or future credit ratings or credit rating methodologies. It reflects research conducted by, and contributions from, S&P Global Ratings' sustainable finance, sustainability research, and credit rating analysts.

This report does not constitute a rating action.

Authors

Sustainable Finance

Michael Ferguson
New York
michael.ferguson
@spglobal.com

Sustainability Research

Bruce Thomson
New York
bruce.thomson
@spglobal.com

Corporate Ratings

Tulip Lim
New York
tulip.lim
@spglobal.com

Infrastructure Ratings

Stephen Scovotti
New York
stephen.scovotti
@spglobal.com

Contributors

Annia Mayerstein
Mexico City

Nicole Delz Lynch
New York

S&P Global
Ratings

This research examines four key corporate workforce dynamics that emerged or intensified since the onset of the COVID-19 pandemic in the U.S.: voluntary employee exits, skills mismatches, demographic shifts, and working from home. The authors (hereafter, "we") explore how these trends, and depending on their importance (or materiality) to a sector, how they could affect operations, influence decision-making, and potentially impact the future financial performance of companies in the sector. We do so in part based on the experience of our sustainable finance team meeting with management teams in connection with over 200 ESG Evaluations, as well as our ongoing work in credit analysis.

Case studies in the health care services, oil and gas, and midstream energy sectors illustrate our findings. While some of these findings are likely to be unique to certain sectors, others might be more universally applicable.

Key Takeaways

- Changing relationships between workers and employers in the U.S. and a sharp increase in voluntary employee turnover have resulted in a tight labor market. In some sectors it has been particularly difficult to attract and retain workers with specialized skills.
- Demographic shifts in the workplace accelerated during the first years of the pandemic, with younger people now making up a far more substantial portion of the U.S. workforce.
- Reimagining the workforce culture and employee experience remains a challenge for management teams in some sectors, mainly due to technological disruption and staff attitudes toward hybrid work.
- Sectoral characteristics influence how and the extent to which workforce issues could affect company operational and financial performance.
- Financial impacts of this workforce transformation have remained muted so far, though leaders in certain sectors are preparing for significant change.

Chart 1

Key workforce dynamics

Source: S&P Global Ratings.

Four Key Dynamics Shaping U.S. Workforce Trends

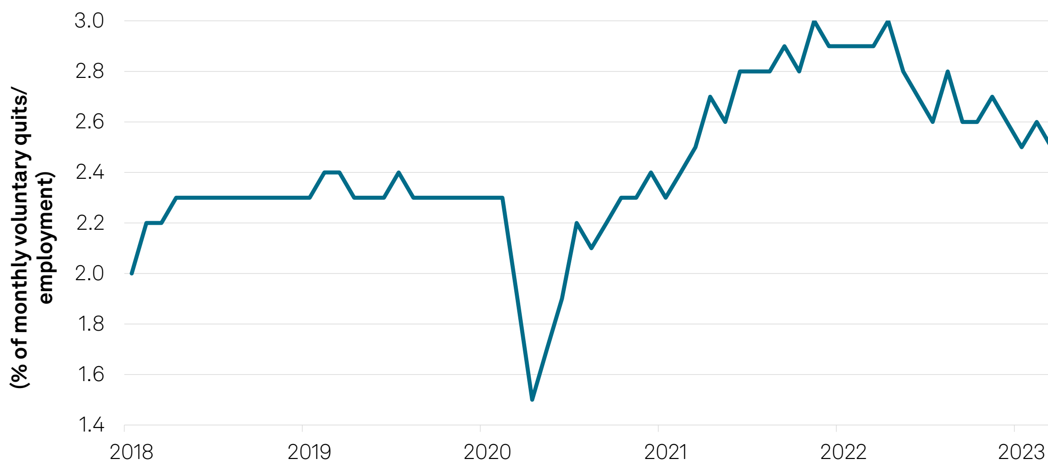
For many companies in the U.S., attracting and retaining the talent they need has become increasingly challenging. This has an impact on sustaining operations, ensuring future competitiveness, and controlling labor costs. Based on the latest data of the U.S. Bureau of Labor Statistics and findings of key studies listed in this report, we highlight below four key dynamics. Some of these dynamics may be temporary, but each is impacting how executives think about their workforces.

1. Workers are more willing to leave their jobs

A sharp increase in voluntary turnover, first arising in the latter half of 2020, has compounded the challenges of a persistently tight labor market. According to a report from the World Economic Forum, employees across sectors left or changed jobs in record numbers during this period. The report also found companies of all sizes have had significant difficulty filling open positions. In the U.S., quit rates, which reflect the number of workers who voluntarily leave their jobs during a month, increased by 31% to 3.0% of total employment in November 2021 (see chart 2). The figure was up from 2.3% immediately before the pandemic in February 2020. Even though quit rates have moderated somewhat in 2023, they remain above their pre-pandemic levels.

Chart 2

U.S. worker quit rates remain elevated since their 2021 peaks



Source: U.S. Bureau of Labor Statistics; S&P Global Ratings.

A 2022 McKinsey & Co. report on workforce decision-making during the pandemic found that 40% of workers planned to leave their jobs. Salary remains a leading factor in a worker's decision to find new opportunities. Inflation, however, can exacerbate the urgency. Approximately 48% of workers in the study were more likely to switch from their current jobs due to inflation, the chance to earn higher wages, or to move to less expensive areas. And willingness to move across sectors to find those new opportunities has increased. In other words, companies are no longer competing only with their direct peers for talent.

There are also factors beyond compensation increasingly influencing worker decisions to leave their jobs. The 2022 McKinsey & Co. study further found that workplace flexibility, meaningfulness of work, and adequacy of health and wellbeing support are increasingly influencing employment decisions. A 2022 study from the Pew Research Center, a think tank,

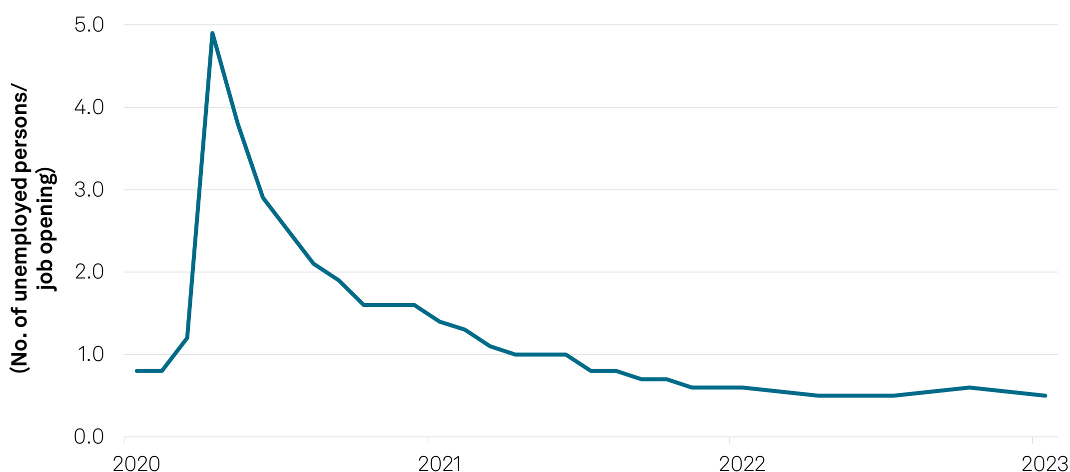
supports these findings. It points to non-salary factors related to work-life balance and health as heavy influences on decisions to leave jobs.

Meanwhile, the U.S. Bureau of Labor Statistics has found that since the pandemic began, the labor force of the U.S. has been left about 4 million employees short of its earlier trajectory. Millions of Americans exited the workforce during the pandemic, and many did not return. They mainly did so to retire early or provide long-term care for family. This has created a shortage of potential employees, with consequences ranging from higher wage requirements to diminished operational efficiency. And looking only at those fully exiting the workforce may understate the problem. The McKinsey study found that 29% of employees who resigned were not planning to resume full-time employment elsewhere.

Moreover, we believe government programs and legislation established in response to the pandemic are likely to further contribute to overall labor demand. The U.S. Inflation Reduction Act (2022) and Infrastructure Investment and Jobs Act (2021) have combined to add nearly $2 trillion worth of infrastructure stimulus. The Congressional Budget Office estimates the Inflation Reduction Act will lead to 900,000 job openings per year over the next decade. For instance, workers will be needed to build infrastructure and reinvigorate the U.S. manufacturing sector, especially in targeted sectors, such as green hydrogen, battery storage, and electric vehicles.

Chart 3

The number of unemployed per job opening remains low in the U.S.



On a seasonally adjusted basis. Source: U.S. Bureau of Labor Statistics; S&P Global Ratings.

2. Skills mismatches are a rising concern

The increasing incidence of skills mismatches compounds the impact of a tight labor market. Even before the pandemic, digitalization and automation were changing the skillsets potential employers required. Research in 2020 by the Federal Reserve Bank of Boston, for instance, found skills mismatches in the U.S. labor market rose following the Great Recession. Another report, from the World Economic Forum, released just before the pandemic, estimated that, by 2022, 42% of core skills required for existing jobs would change due to technological transformation. The pandemic, however, likely accelerated this trend. A 2020 McKinsey study on COVID-19's impact on how companies use technology, for instance, found that 37% of businesses reported "increasing use of advanced technologies in operations."

Technology-led transformations have, in some cases, left long-term employees less well suited for jobs in their own organizations. And even as the labor market normalizes, competition for talent is likely to remain high in sectors requiring new, highly specialized, or technical skills. As explored in greater depth below, the energy sector, in which many companies are transitioning to renewable generation, provides a good example. Designing, building, and installing renewable energy or green hydrogen technologies require different skills from those needed for coal-fired or nuclear facilities.

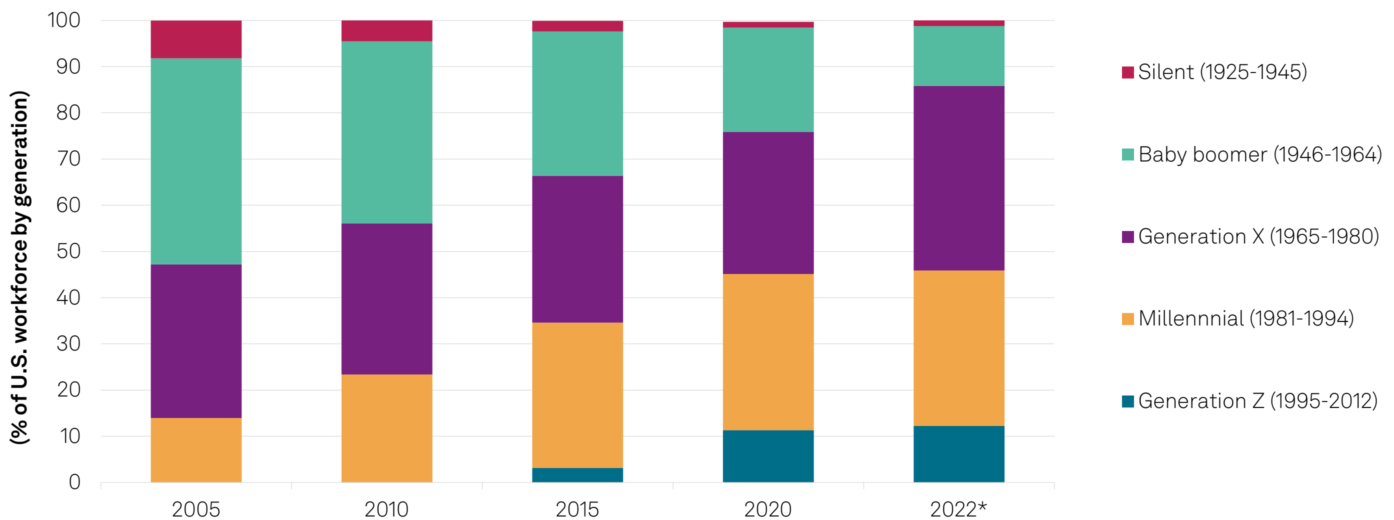
In its "Future of Jobs Report 2023," the World Economic Forum points to the adoption of technology as one of the two key drivers of labor market transformation for industry and employment. The report found that 44% of companies surveyed expected workers' skills to be disrupted in the coming five years, up from 35% in 2016. It also predicts that the greatest disruptions will be "in administrative roles and in traditional security, factory, and commerce roles." And we believe that, in sectors more heavily reliant on organized labor, adapting to new skills demands could be particularly disruptive to labor relations.

3. Workforce demographic shifts have accelerated

Based on the most recent data available from the U.S. Bureau of Labor Statistics (see chart 4), we observe a decline in the age of the average U.S. worker since 2005. This trend could have been accelerated since COVID-19. A disproportionate number of those exiting the workforce in higher numbers during the pandemic were older than 50. The share of baby boomers (born 1964 or earlier) in the workforce fell faster between 2020 and 2022 (9.7 percentage points) than in the five years between 2015 and 2020 (8.6 percentage points). And in return, U.S. workplaces are increasingly populated by millennials (born between 1981 and 1996), and members of Generation Z (Gen Z; born after 1996). These two demographic groups comprised 46% of the U.S. workforce in 2022 (see chart 4) versus less than 35% in 2015.

Chart 4

Baby boomers now make up a smaller proportion of the U.S. workforce



*Most recent data available. Source: U.S. Bureau of Labor Statistics; S&P Global Ratings.

Employee expectations, priorities, and preferences are shifting as the workforce gets younger. This is especially noticeable for Gen Z employees. A Deloitte study of over 1,500 Gen Z workers

found that such staff were particularly willing to prioritize factors such as work-life balance, flexibility, and organizational values.

Younger generations are also, typically, more open to leaving their jobs than previous generations, including to become self-employed. According to U.S. Census Bureau data, nearly 5.4 million people submitted applications to start new businesses in 2021, up by 53% from 2019. And research from WP Engine and The Center for Generational Kinetics found that 62% of Gen Z survey respondents have or plan to start their own businesses, more than any other generation.

4. Workers remain reluctant to return to the office

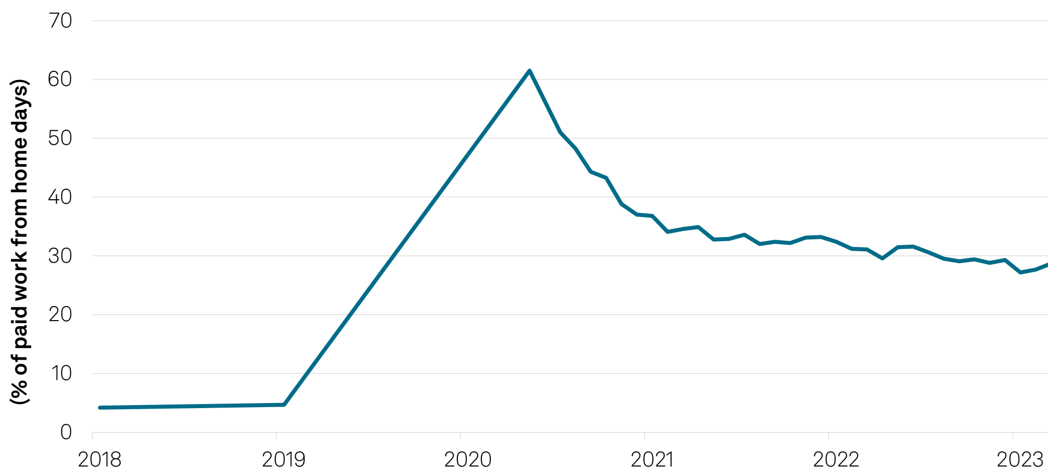
A vigorous debate has emerged over going to the office and the degree of flexibility that can be afforded employees to improve the work-life balance without sacrificing product quality or company culture.

Relatedly, there is an increased focus on employee experience, with research from The Conference Board estimating that lack of employee engagement costs up to $550 billion per year in the U.S. due to higher turnover and lower productivity.

According to research from the National Bureau of Economic Research, in 2023, slightly below 30% of paid working days in the U.S. remain remote (see chart 5). Having a larger share of remote workers makes companies less dependent on corporate real estate, thereby reducing the cost of office space. This may also help businesses access new employment pools outside their regions. In the same research, the Bureau states that about 30% of executives believe remote working could help shrink the size of companies' real estate footprints. However, this is not without risk. It would likely be difficult and potentially costly to reverse course if future workforce expectations imply an increasing need for physical office space.

Chart 5

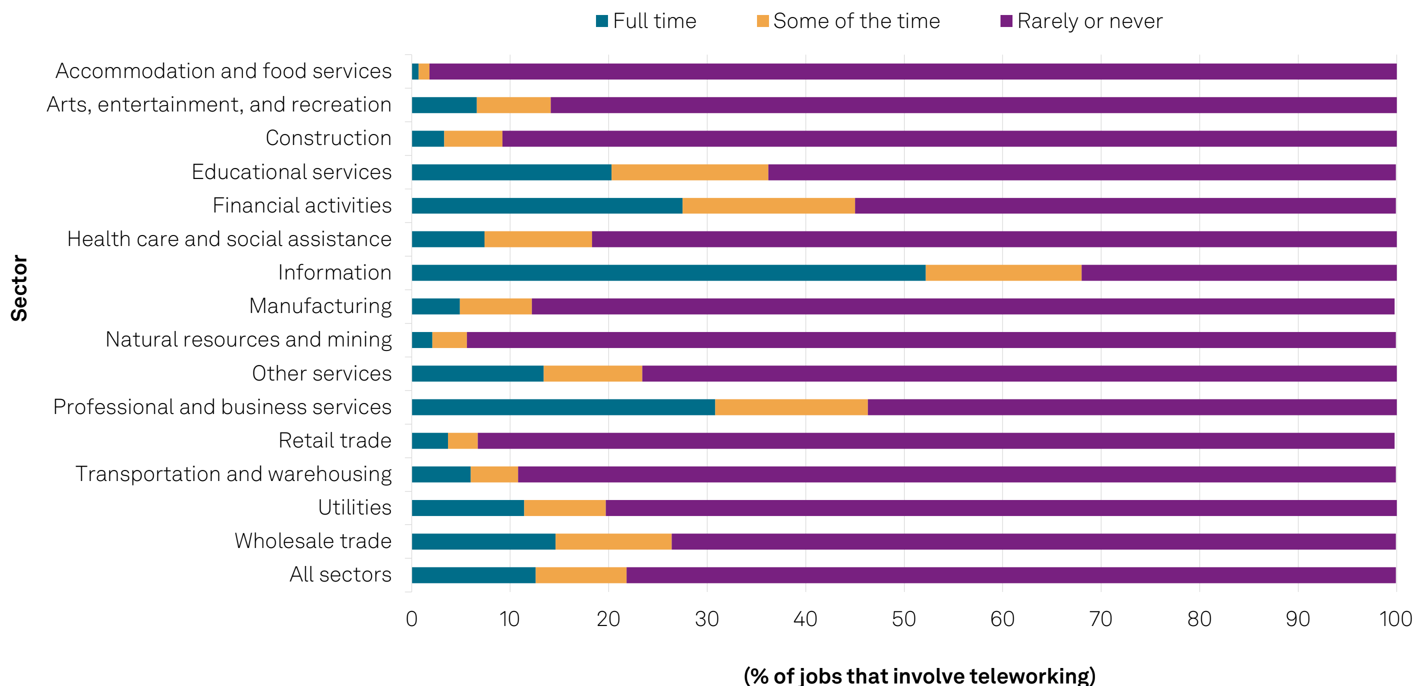
The number of U.S. employees working from home remains higher than before the pandemic



Source: Survey of Working Arrangements and Attitudes, National Bureau of Economic Research; S&P Global Ratings.

Chart 6

The percentage of jobs that involve teleworking varies significantly by sector in the U.S.



Source: U.S. Bureau of Labor Statistics; S&P Global Ratings.

How Companies Have Responded To These Trends

Many corporate management teams are focused on workforce-related challenges their companies face, why they persist, how they affect operations, and the steps that can be implemented in response. They emphasize in some cases that retaining and developing appropriately skilled workers is a pressing issue that is difficult to resolve. That the labor market remains highly competitive exacerbates this issue.

S&P Global Ratings' credit analysts and sustainable finance analysts speak to management teams across a wide range of sectors about the key credit issues their companies are facing or anticipate in the future. These meetings can often involve discussions about managing workforce challenges emanating from the pandemic, if these are relevant for the sector.

The pandemic, and the workforce dynamics that have emerged from it, have changed how organizations engage with employees. Companies S&P Global Ratings has evaluated in the U.S. have opened new communication channels with their employees to better understand and respond to new needs and expectations (see below on key stakeholder groups for engagement). According to research by Gallup Inc., which cuts across sectors, the share of engaged employees (considered by Gallup to be those "thriving at work") in the U.S. and Canada declined to 31% in 2022 from 33% in 2021. According to the research, unlike in other jurisdictions, these figures didn't differ sharply by gender, age, or position.

In the same report though, Gallup said some of the companies it studied were able to double their engagement through their organizational culture, embracing flexible and hybrid work, and maintaining strong connections between managers and employees. Several management teams with whom we discussed this topic in the context of ESG Evaluation work are now attempting to

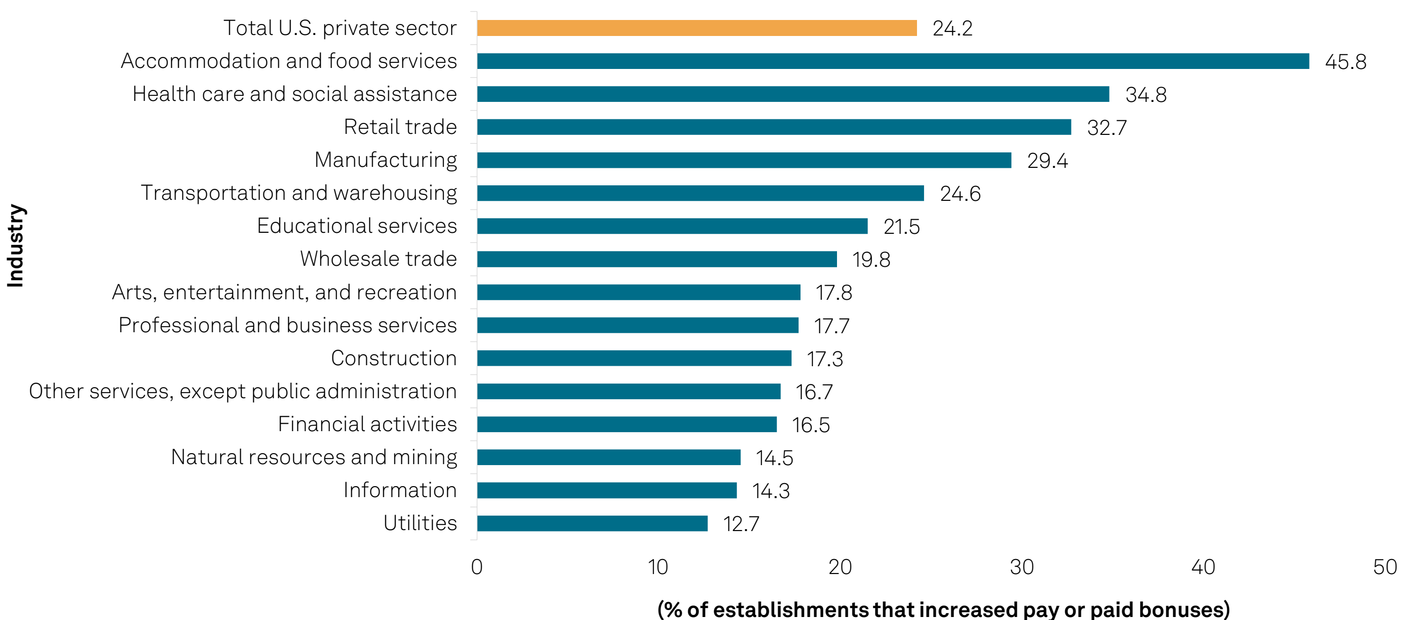
provide more guidance to employees about strategic direction, and reassure staff about their contributions to that, although results on engagement are mixed. Additionally, to meet increased demand for specialized skills, management teams may respond by strengthening recruitment activities and implementing targeted training and skills development programs.

Company responses to new workforce dynamics have been, in many cases, to enhance compensation through pay rises, bonuses, and other financial incentives. According to data from the U.S. Bureau of Labor Statistics' Business Response to the Coronavirus Pandemic Survey, about 24% of U.S. companies provided wage support through direct increases, wage premiums, or bonuses by Sept. 30, 2020. This was especially the case in the most affected sectors (see chart 7).

Some companies also remain concerned that a failure to effectively manage the transition to new work arrangements could undermine productivity and the continuity of operations. If they are to succeed in addressing the changing dynamics, they may be increasingly reliant on their digital tools. The changing dynamics could appeal to younger employees who tend to be more tech savvy and feel less need to be in an office. Creating effective virtual cultures might also mean that, for some roles, employers can hire from a broader geographic range, potentially helping to overcome skills gaps.

Chart 7

Many U.S. companies increased financial benefits for staff during the pandemic



Source: Business Response Survey to the Coronavirus Pandemic, U.S. Bureau of Labor Statistics; S&P Global Ratings.

In line with the nonfinancial workforce expectations outlined above, many organizations are also enhancing nonwage benefits. These now amount to about 30% of total compensation in the U.S., according to the Bureau of Labor Statistics. In a 2022 study from the American Psychological Association, 71% of survey respondents reported that they believe their employer is more concerned about their mental health than in the past. And employers are demonstrating this concern by introducing new benefits related to mental health, including programs allowing employees time off to recharge or for other personal reasons, more workplace and schedule flexibility, and strengthened employee resource groups.

Key Stakeholder Groups For Workforce Engagement

We have identified various stakeholder groups that some companies have found helpful to engage with on workforce issues:

Labor unions: With approximately 14 million members across the U.S., labor unions can advocate for better wages and working conditions, as they did during the pandemic. They can also offer upskilling to help members adapt to the labor market's changing needs.

Employee resource groups: Engagement with employee resource groups can help staff express their views on issues such as the work environment, benefits, compensation, and work-life balance.

Customers: Customers can quickly notice the impact of increased worker turnover. This may be because of worsening customer service or responsiveness. In highly competitive industries, workforce turnover can reduce profitability if the customer experience deteriorates.

Communities: For companies seeking to attract local talent, building goodwill within local communities through open communication and contributions to the public good can be essential.

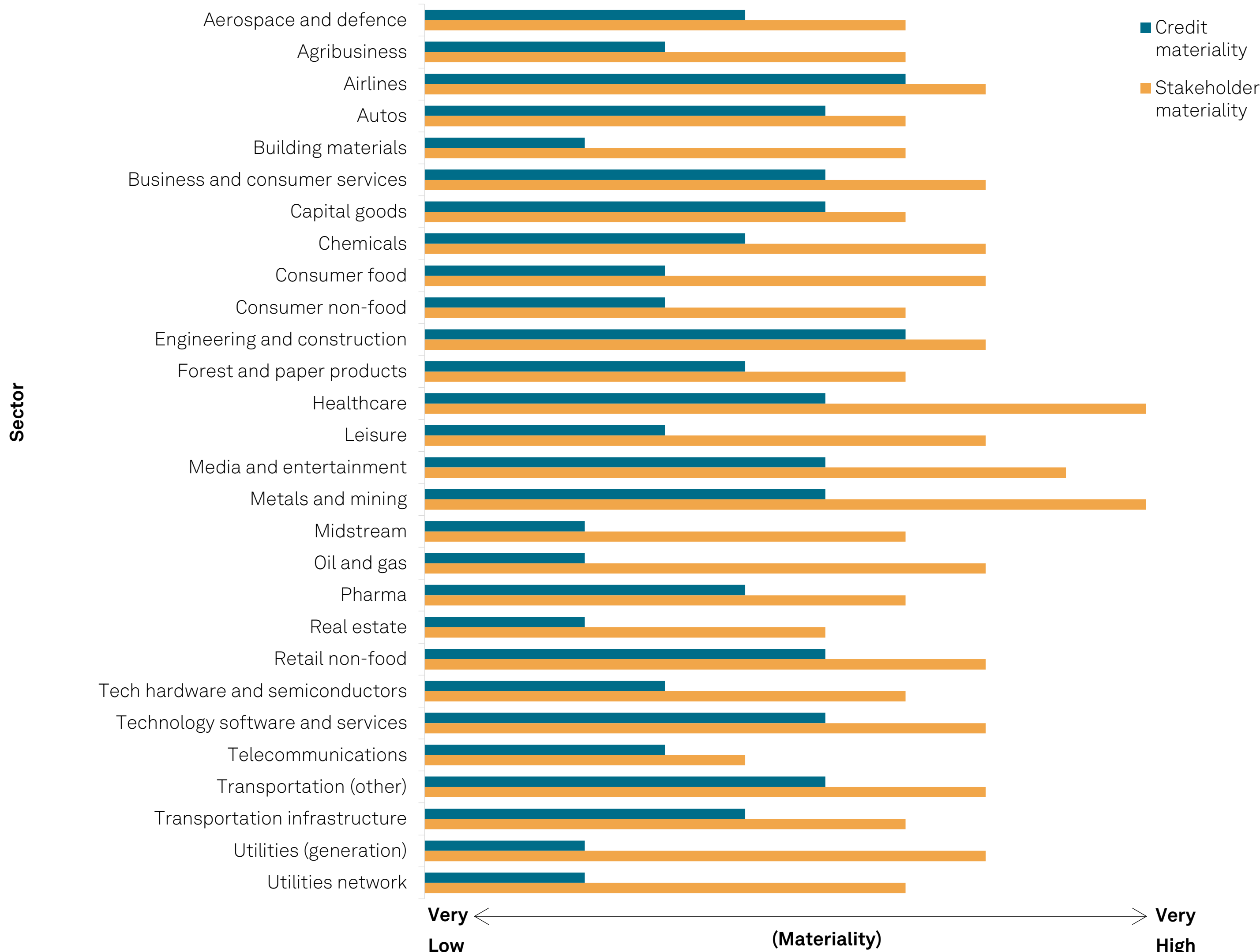
Workforce Dynamics And Financial Performance

Sector traits are key to the financial impact of employment practices

We view employee practices as describing a range of issues associated with an entity's ability to hire, retain, and manage relations with an engaged, productive, and diverse workforce. Our research on ESG Materiality Maps show the importance at a point in time of employment practices relative to other ESG factors at the sector level (see chart 8).

Chart 8

Our global view of the relative materiality of employment practices varies by sector



Source: S&P Global Ratings

Employment practices have not frequently impacted specific companies' credit ratings. However, when analyzing these sectors, we find there are a few aspects of employment practices and changing workforce patterns that can be material for sectoral credit quality:

1. **Specialized skills:** Sectors that require specialized technical skills or unique educational credentials to ensure market competitiveness have a higher degree of exposure to turnover or higher labor costs. These more highly skilled employees may be harder to find, especially if jobs require them to be there in-person. Shortages of such staff could lead to higher employment costs. This could also lead to higher training and development costs, and the inability to retain such employees could create challenges, including quality control deficiencies and productivity losses.

2. **Labor intensity:** Labor-intensive sectors can also be exposed to changing workforce dynamics. If labor constitutes a significant chunk of operating costs, then the effects of increased wages, either from market forces or higher legal minimum wages, which have become more common in the U.S., could reduce profit margins. Added to this, if sectors

are highly unionized, engagement with these unions could be more costly, especially in periods of labor shortage. In labor-intensive sectors, diminished pools of permanent employees could also lead to greater use of contract employees.

3. **Use of contract labor:** Sectors that routinely employ significant numbers of contract laborers, or who may choose to do so in light of tighter labor supplies, could also face challenges. Contract labor rates could rise alongside wages for permanent employees, while increased reliance on contract labor could introduce higher safety risks, customer service concerns, or risks of operational disruption, especially where contract labor is also in short supply. Companies may be able to manage this risk, but it may require more managerial oversight than for permanent employees, and some of these risks can be amplified if operating across borders, in places where labor standards may be lower.
4. **Structural transformation:** Sectors that undergo structural change may also experience changes in employment practices. An example of this could be if in the future, the energy transition creates structural shifts in certain industries and in the skills profile of key employees in those industries. Companies in these sectors could be facing skills mismatches, with those skills required for its old operating model diverging from those they will need in the future. It could also entail a need for more specialized work or significant and costly investments in training to upskill the existing workforce.
5. **Relevance to the customer experience**: Labor shortages in roles that are customer - facing can also be disruptive. Some sectors rely heavily on individuals in such roles. Lower customer engagement, driven by worsened customer experience, can contribute to diminished reputation, lost revenue, and potentially weaker competitive positions against peers.

Insights from health care, oil and gas, and midstream energy

Our analysis illustrates how the workforce dynamics explored in this report could affect the performance of companies in some sectors of the economy in different ways.

Health care: Labor intensity and specialization up the financial impact of workforce challenges

Hiring and retaining staff remains difficult in the U.S. health care services sector, which is relatively labor intensive and relies on skilled medical professionals. Employees in the sector were deeply affected during the COVID-19 pandemic. Higher patient numbers exacerbated the shortage of skilled staff that health care providers were already experiencing. The physical, emotional, and mental demands of a multiyear pandemic have weighed on health care professionals and caused significant attrition.

In an attempt to manage the impact, health care services providers bolstered wages or resorted to temporary, high-cost contract labor as employee ranks declined. The sector also adopted innovative techniques, such as relying less on doctors and more on physicians' assistants and nurse practitioners. The related costs reduced profit margins for some health care providers, while contract labor rates climbed alongside the demand for employees, and affected revenue growth. This was because some health care companies did not have the staff to meet demand.

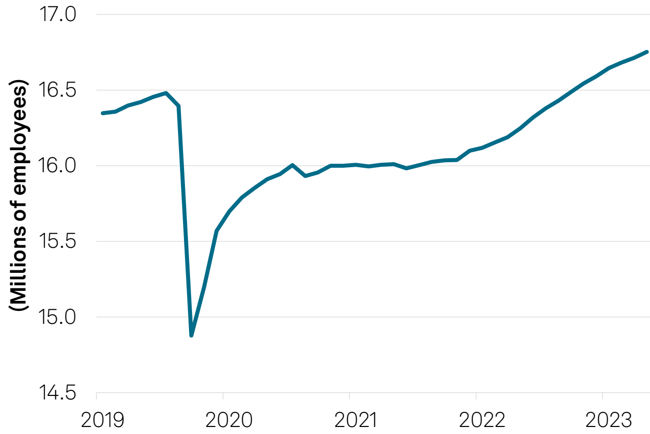
We believe health care labor costs may have peaked, based on data from the U.S. Bureau of Labor Statistics and commentary from hospital executives in recent quarterly earnings announcements. Overall, health care employment has returned to and even exceeded pre-pandemic levels, though figures for nursing and residential care facilities are still lower (see Chart 9). Nevertheless, costs remain elevated and the labor market remains tight. This is a major long-

term challenge for health care providers, which have a large labor component in their cost bases. Employing and retaining nurses remain top concerns for health care managers.

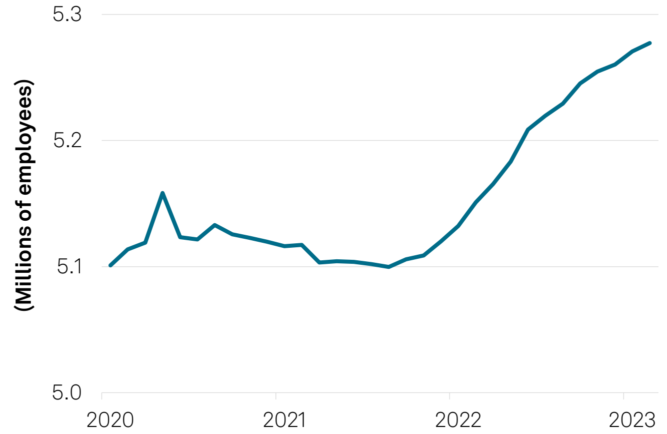
Chart 9

Recovery in U.S. health care staffing is yet to reach the nursing and residential care facilities sub-sector

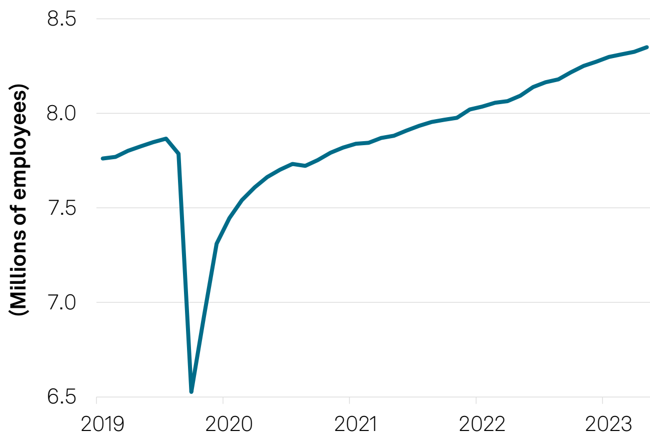
Health care sector



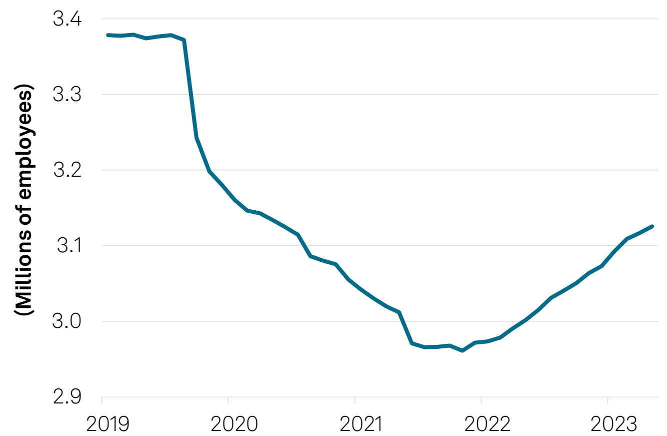
Hospital sub-sector



Ambulatory health care sub-sector



Nursing and residential care facilities sub-sector



Seasonally adjusted. Source: U.S. Bureau Of Labor Statistics; S&P Global Ratings.

Oil and gas and midstream energy: Structural change implies a future need for new skills

Workforce disruptions triggered by the pandemic have been limited in the oil and gas and midstream energy sectors. Combined, these sectors are key to the energy infrastructure workforce, and both are undergoing structural transformation. Within the midstream sector, U.S. fossil fuel infrastructure continues to be built to accommodate foreign and domestic energy needs. Over the long term, however, the skillsets required to work in this sector will change somewhat as the economy becomes less dependent on fossil fuels. Consequently, companies in this sector may invest more heavily in retraining, likely in conjunction with organized labor groups.

They will also need new talent to operate cutting-edge technologies and engage with stakeholders that can help support the transition. Proactive companies in these sectors will benefit from having more resilient workforces, but they will also have to manage the associated costs.

Recent legislative developments in the U.S., meanwhile, are likely to lead to further evolution in the infrastructure labor market. The passage of the Infrastructure Investment and Jobs Act in 2021 and the U.S. Inflation Reduction Act in 2022 will accelerate demand for infrastructure projects and for people to work on them. A report by the Blue Green Alliance and the Political Economy Research Institute from the University of Massachusetts estimates the Inflation Reduction Act will create over 9 million clean energy and climate-related jobs over the next decade; the Congressional Budget Office estimates this figure at around 900,000 per year as well. So far, according to the Clean Energy Boom Report by Climate Power, the Act has created 101,036 jobs since it was enacted in August 2022. These jobs--for workers such as electricians, mechanics, builders, and technicians--come from over 90 new clean energy projects. Many of these are union jobs.

The energy transition is going to require significant investments in personnel, in an already constrained labor market. We expect this will cause the cost of labor for infrastructure projects to rise significantly. This could potentially pressure margins for some of these projects, especially those whose revenue is fixed by contract.

Looking Ahead

This research has highlighted shifting demographics as a trend that would disrupt how U.S. companies operate. The pandemic accelerated this trend and gave rise to new workforce dynamics with which companies are contending. Whether companies are affected, as well as in what way and how much, could depend on how effectively and proactively their management identifies and responds to changing workforce dynamics. Indeed, the ability to do so could be instrumental to how sectors take shape in the future, and which companies come to lead them.

Related Research

- How good human capital management creates competitive advantage, July 7, 2023
- U.S. Broadband Expansion: Bridging Access Gaps, April. 6, 2023
- U.S. Health Care Staffing Companies Benefit From Growing Labor Imbalances, Aug. 25, 2022
- Where Are The Workers? Three Explanations Point To An Answer, Nov. 4, 2021

External Research

- The Great Resignation is (slowly) losing steam, World Economic Forum, Nov. 16, 2022
- State of the Global Workplace: 2023 Report, Gallup Inc., 2023
- To emerge stronger from the COVID-19 crisis, companies should start reskilling their workforces now, McKinsey & Co., May. 7, 2020
- The Great Attrition is making hiring harder. Are you searching the right talent pools? McKinsey & Co., July. 13, 2022
- Global competition for a limited pool of technology workers is heating up, International Monetary Fund, March 2019
- Why Working From Home Will Stick, National Bureau of Economic Research, April, 2023
- How COVID-19 has pushed companies over the technology tipping point - and transformed business forever, McKinsey & Co., Oct. 5, 2020
- Understanding Generation Z in the workplace, Deloitte, Aug. 30, 2019
- Digitalization and structural labour market problems: The case of Germany, International Labor Office, September 2016
- Generation Influence: Reaching Gen Z in the New Digital Paradigm, WP Engine, Dec. 9, 2022
- Majority of workers who quit a job in 2021 cite low pay, no opportunities for advancement, feeling disrespected, Pew Research Center, March 9, 2022
- No Longer Qualified? Changes in the Supply and Demand for Skills within Occupations, Federal Reserve Bank Of Boston, May 28, 2020
- How COVID-19 has pushed companies over the technology tipping point—and transformed business forever, McKinsey & Co., Oct. 5, 2020
- U.S. Employee Engagement Needs a Rebound in 2023, Gallup, January 2023
- Future Of Jobs Report 2023, World Economic Forum, May 2023
- Clean Energy Boom Report, Climate Power, March 2023
- DNA of Engagement: How Organizations Can Align Engagement and Inclusion to Enhance Employee Experience, The Conference Board, June 2020
- Workers appreciate and seek mental health support in the workplace, American Psychological Association, July 2022

Editor

Richard Smart

Digital Designer

Jack Karonika

Copyright 2023 © by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&Ps opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.spglobal.com/ratings (free of charge) and www.ratingsdirect.com (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.spglobal.com/ratings/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.