

This is what happens when an unstoppable force meets an immovable object

US LABOR MARKET OUTLOOK

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This is what happens when an unstoppable force meets an immovable object

In the March 2023 edition of the Burning Glass Institute Labor Market Outlook, we will provide an outlook for the US economy and labor market before focusing in on the pandemic's main long-term impact.

Labor Market Outlook

2022 taught us that the demand for US workers was more unstoppable and the labor supply more immovable than we had expected. That is, on the one hand, demand for talent remained strong despite rapidly rising wages while, on the other, the lure of high pay and greater flexibility in work did little to draw workers back to the market. The result is a labor market that has remained tight, driving further upward wage and inflation pressure.

What happens next? The Fed can't do much to impact labor supply. But it can reduce the demand for workers. 2023 may be the year when this all plays out.

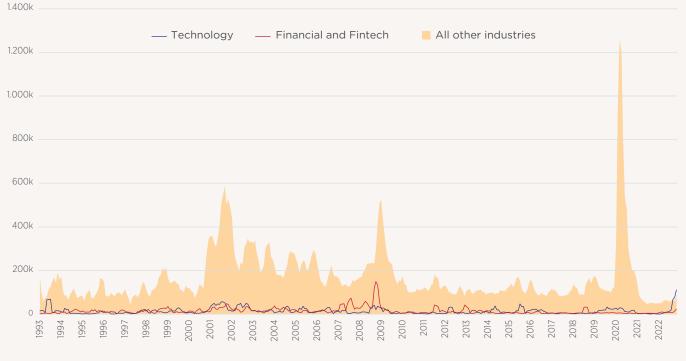
STRONG BUT MODERATING JOB GROWTH

Despite a sharp rise in interest rates over the past year, and despite constant recession chatter, job growth remains strong. The unstoppable force is still exactly that: unstoppable. Job growth remains strong overall thanks to continued rapid recovery in the demand for in-person services. Almost three years after their spring 2020 collapse, these industries have yet to regain their pre-pandemic employment trajectory. As such, they are still hiring at a pace that is well above normal, especially in health care, hotels, food services, entertainment, and personal services.

But not all industries are experiencing job growth. That is because the goods portion of the economy is already close to recession. After an historic shopping spree, consumers seem to be slowing down while businesses, nervous about the prospect of economic turbulence ahead and often facing slackening demand themselves, are holding off making investments. This has led employers in manufacturing, retail and wholesale trade, and transportation sectors to halt hiring.

In addition, housing investment plummeted in 2022, and business investment in structures have declined in recent quarters. Together the goods and structures categories currently comprise about 40% of the economy.

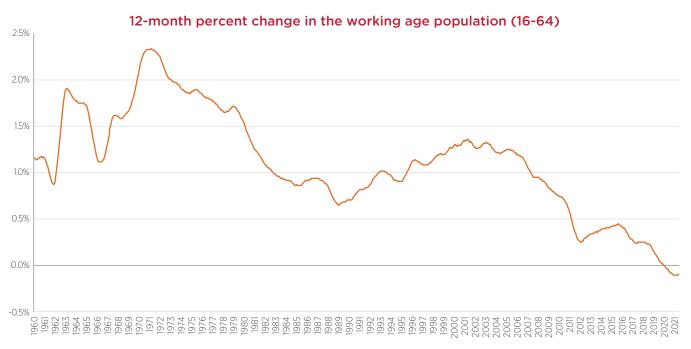
In recent months, a significant increase in layoffs – both actual and announced – has captured headlines, but in fact layoffs remain quite low from an historical perspective. The increase in layoffs is mostly, but not exclusively, from tech companies.



Job Cut Announcement Report, 3-month moving total

STAGNANT LABOR SUPPLY AND PRODUCTIVITY

And now to the immovable object: labor supply. For the first time in history, the US working age population (16-64) is no longer growing. In addition, despite surging wages in response to the most severe worker shortage in decades, the labor force participation rate has stalled.



Source: US Census and Burning Glass Institute Calculations

Source: Challenger, Gray & Christmas – Job Cut Announcement Report

In addition, absenteeism rates are surging. At any given point in 2022, there were about **a million more people** than in 2019 who had a job but were not at work – and this number is rising. Illness – largely due to COVID-19 – is one explanation, but there has also been an increase in absenteeism due to family obligations. This may be the downstream consequence of a shortage of workers in the caregiving sector. It may also be the result of workers having become used to added flexibility.



With a Job, Not at Work 12 month moving average — thousands

In addition to the stagnant number of available workers, the economy may be held back by a possible decline in workforce quality. New workers who were educated during the pandemic suffered from extensive "learning loss", reflected in declining test scores. In addition, there have been reduced levels of post-secondary education enrollment. As a result, new labor market entrants are less skilled than those joining the workforce before the pandemic.

Furthermore, surging mental health challenges may be impacting new workers' ability to sustain employment. The share of Americans aged 18-29 who reported experiencing depression symptoms once or more per week has doubled in just a decade. Between 2019 and 2021, there has also been a dramatic increase in the number of drug overdose deaths. In some states, death rates have doubled.

In sum, in the past year, the supply of labor has remained frozen while the demand for labor continues to surge. The collision of an unstoppable growth in labor demand with a stagnant labor supply has resulted in a super tight labor market.

A NEW INDICATOR POINTS TO CONTINUED TIGHTNESS

The most used measure of labor market tightness is the unemployment rate, but it is a flawed measure that sometimes fails to offer an accurate reflection of labor market tightness. A recent example was the second quarter of 2021, when the most severe labor shortages in recorded history coincided with a period of elevated unemployment. The inaccuracy of the unemployment rate as a measure of labor market tightness has continued since.

The chart below shows a composite labor market tightness index. The advantage of the index is that, although each individual indicator suffers from periods of inaccuracy due to noise or other factors, when we average across several indicators that differ in concept and source, the average error converges towards zero. The result is a smoother and more accurate indicator.

In the creation of the index, we use the following components¹:

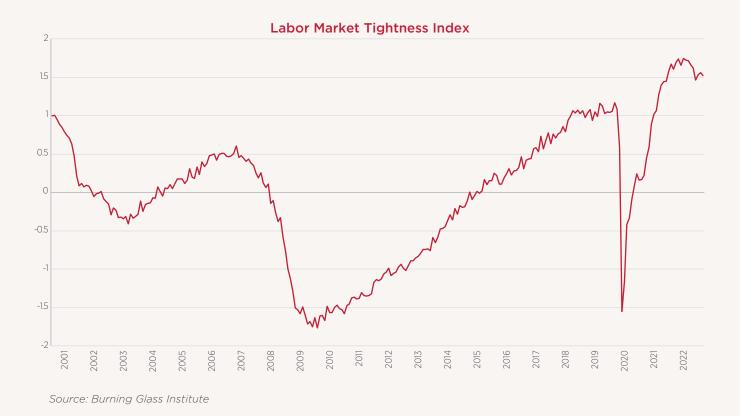
- Unemployment to employment flow ratio, from the BLS- a measure of the speed with which unemployed people find a job, which generally quickens in a tight labor market;
- Unemployment rate gap, from the BLS the gap between the actual unemployment rate and its natural rate;
- Labor market slack beyond the unemployment rate, from the BLS – the percent of all marginally attached workers plus total employed part-time for economic reasons;
- Employment to population ratio for persons aged 25-54, from the BLS – an indicator of prime working age labor force participation;

- Quits rate, from the BLS an indicator of worker confidence, which is generally high in a seller's market;
- 6. Job openings to hires ratio, from the Job
 Openings and Labor Turnover Survey
 (JOLTS) a proxy for the average time to fill a position;
- 7. Labor market differential, from The Conference Board's Consumer Confidence Survey – the gap between percent of respondents indicating that "jobs are plentiful" vs. the percent indicating that "jobs are hard to get";
- Percent of positions not able to be filled, from the National Federation of Independent Business- a measure of recruiting difficulty; and
- Percent of positions with few or no qualified applicants, from the National Federation of Independent Business – another measure of recruiting difficulty.

The index shows that the US labor market is still very tight – only slightly less tight than at its peak early in 2022. Recruiting new workers is still a long and difficult endeavor. Workers are still switching jobs at an historically high rate. And at 3.4%, the January 2023 unemployment rate is significantly lower than even a year ago and seems to be heading even further downward.

In such a tight labor market, wage growth remains far too high to make hitting the Fed's 2% inflation target even remotely possible.

¹In constructing the Labor Market Tightness Index, we normalized each indictor so that they each have mean=0 and stdev=1. We then used a simple average to aggregate to the index.



OUTLOOK FOR 2023

What happens next? With hiring in in-person services still racing ahead, overall job growth won't immediately turn negative, but a significant slowdown is likely. First, it is hard to believe that in-person service industries' hiring growth will remain strong throughout 2023. At some point soon, demand in these industries will have reached its new normal and growth will slow to a more sustainable pace.

The most likely outcome is positive but slowing job growth in the first half of 2023. With growing demand, but stagnant supply, the unemployment rate may decline further. During that span, the labor market is likely to remain very tight.

Wage growth was strong in 2021 and 2022 for two main reasons. First, overall demand for labor in the US was high relative to supply. Second, throughout that period, the economy was still adjusting to the pandemic shock. Demand for labor in certain occupations and locations was especially strong and employers were struggling to find qualified workers, leading to strong wage growth.

In 2023, the part of wage growth that is driven by pandemic adjustment will become less and less significant, but the overall demandto-supply ratio will remain elevated. With the release of the Employment Cost Index in late January, we now have evidence from multiple sources that, while wage growth is indeed slowing down a bit, it remains well above prepandemic levels.

With wage growth still strong, core inflation is likely to remain high, despite the moderation in home prices and the improving supply chains that will keep moderating inflation in the coming months.

The Fed has acknowledged that labor market conditions will be a key driver of interest rate decisions, and there is a growing recognition at the Fed that the labor market is likely to remain tight for at least the coming months. As a result, the Fed is likely to continue jacking up interest rates in the first half of 2023. Combined with an already slowing economy, the additional Fed tightening is making a 2023 recession likely, albeit far from certain.

Should the economy move into recession, layoffs, which have been historically low outside the tech sector, will become more common, and more widespread across industries. However, even if the US does experience a recession, we expect the number layoffs to be relatively modest. First, that's because a recession is likely to be mild. If a recession comes to pass, it will have been induced by the Fed's interest rate hikes, not an external shock to the economy. If the Fed suspects that a more severe recession is developing, we can expect that it will reverse course quickly and aggressively.

Second, scarred by the trauma of post-pandemic labor shortages, employers may be reluctant to stop hiring, continuing to hoard workers even as business slows. No one wants to be caught empty-handed when things pick up again.

BEYOND 2023

While the question of a recession in 2023 is an important one, an even more important topic is the impact of labor market conditions on the US economy beyond 2023. Our prediction is that economic growth will be choked over the next five years by the inability to expand our labor force. For our economy to grow, our talent base must grow – but current trends make that highly unlikely.

For example, how difficult would it be to generate 100,000 jobs per month over the next 5 years? This would amount to a total of 6 million new jobs, an annualized growth rate of 0.77 percent- historically, an extremely low job growth rate for a non-recessionary period.

To answer this question, we need to ask: where would these 6 million workers come from?

They could not come from an expansion of the working age population, because this age group is no longer expanding. They would be unlikely to come from immigration as significant immigration reform appears to be off the table in the current political climate.

Few new workers would come from a boost in the labor force participation rate. After all, despite

the most severe labor shortage in decades and the lure of a big boost in wages, the labor force participation rate barely budged in recent quarters. Policies aimed at pushing more people off the sidelines and into work also seem unlikely in the current political reality. In fact, some longterm trends impacting labor force participation, such as a decline in marriage rates, mental health conditions, and drug addiction, point towards the prospect of further deterioration. On top of that, the pandemic-induced education crisis is reducing workers' skills and willingness to work.

As a result, generating 6 million jobs in the next 5 years is unlikely. Even generating 3 million jobs will require making the labor market tighter, and we are already at a 3.4% unemployment rate.

The most likely outcome is a very tight labor market and labor market-driven inflation pressures in the coming years. The Fed is aware of this and will keep monetary policy restrictive, which will limit economic growth.

In other words, the immovable object is likely to stop, or at least slow, the unstoppable force. Brace for impact.

Looking back to look forward: How has the pandemic reshaped the labor market?

As we enter the fourth year since the onset of the pandemic, we have begun settling into a new economic reality. That gives us the clarity to distinguish between the pandemic's shortterm and long-term impacts. In this section, we describe some of the long-term impacts and their implications for the US economy and labor market.

The massive shift to remote work is the biggest legacy of COVID-19. Not all industries and occupations are significantly impacted – you can't build airplanes from home – but most office jobs are.

	Percent Primarily Working From Home - 2021
Economists and Market Researchers	67.8%
Actuaries	67.5%
Writers and Authors	64.8%
Software Developers, Applications and Systems Software	64.7%
Management Analysts	62.2%
Insurance Underwriters	60.1%
Claims Adjusters, Appraisers, Examiners, and Investigators	58.8%
Computer Hardware Engineers	57.5%
Sales Engineers	54.9%
Financial Analysts	54.8%
Database Administrators	54.7%
Computer Programmers	54.4%
Computer and Information Systems Managers	51.2%
Insurance Claims and Policy Processing Clerks	51.0%
Computer Scientists and Systems Analysts/Network systems Analysts/Web Developers	49.1%
Securities, Commodities, and Financial Services Sales Agents	46.6%
Managers in Marketing, Advertising, and Public Relations	45.6%
Budget Analysts	43.9%
Computer Support Specialists	43.8%
Credit Analysts	42.4%

Shift to remote work

Percent Primarily Working From Home - 2021

Bill and Account Collectors	38.9%
Human Resources, Training, and Labor Relations Specialists	38.7%
Lawyers, and Judges, Magistrates, and Other Judicial Workers	38.5%
Natural Science Managers	37.4%
Purchasing Managers	36.5%
Telemarketers	36.0%
Financial Managers	33.3%
Billing and Posting Clerks	33.1%
Electrical and Electronics Engineers	32.9%
Postsecondary Teachers	32.5%
Procurement Clerks	31.3%
Customer Service Representatives	29.8%
Civil Engineers	27.8%
Biological Scientists	27.4%
Psychologists	27.0%
Mechanical Engineers	25.3%
Chemical Engineers	25.1%
Social Workers	22.4%
Secretaries and Administrative Assistants	18.6%
Agricultural and Food Scientists	18.3%
Materials Engineers	16.6%
Chemists and Materials Scientists	15.2%
Secondary School Teachers	12.8%
Elementary and Middle School Teachers	12.7%
Physician Assistants	10.0%
Physicians and Surgeons	7.6%

Source: American Community Survey

The shift to remote work has widespread implications:

- **1.** Some industries have suffered a permanent decline in the number of jobs, in particular:
 - Commuter buses and rail;
 - Office-related janitorial, security and other support services;
 - Business travel, including conferences, hotels, airlines, and upscale restaurants; and
 - Dry-cleaning.
- Demand for goods and services has shifted away from city centers and toward less dense surrounding areas, in what has come to be known as the "donut effect."
- The shift to remote work has made less attractive the professional jobs that are seldom done from home, such as jobs in education, social work, and healthcare. This

can be expected to result in even more severe labor shortages in these fields, driving up pay.

- Many workers are now able to work for a wider variety of employers, as they can work remotely and live far from the hub of their employer. The wider competition for workers may permanently increase employee quit rates.
- 5. Similarly, employers are now more willing to hire workers beyond their headquarters. Based on our analysis of Lightcast job postings data, in 2015, 70% of all the job ads of West Coast tech companies were in the West Coast (i.e., California, Oregon, Washington). By 2022, that share had shrunk to 46%. Current layoffs aside, that means that America's biggest and richest companies are now competing for talent with local firms in virtually every major market.





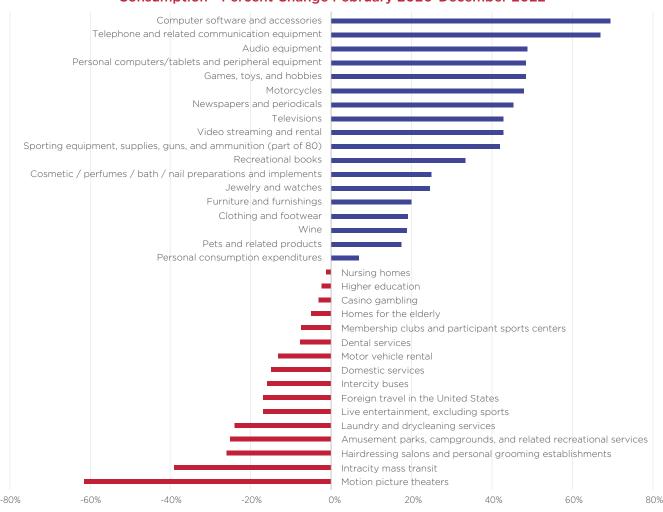
Source: Burning Glass Institute Analysis of Lightcast Data

CHANGES TO CONSUMER BEHAVIOR AND REMAINING FEARS OF COVID-19

Three years after the beginning of the pandemic, we now have a better understanding of the longterm changes in consumer spending patterns that have resulted from COVID-19. The shift to remote work, lingering fears of the virus, and new habits formed during the pandemic have impacted the long-term trajectories of consumer spending in different categories:

 There is evidence that some people, especially older consumers, still practice social distancing and 'COVID shyness'. These behaviors have led such consumers to spend less on services involving crowds of people, such as live entertainment, personal grooming, mass transportation, and some non-essential health categories. However, the US consumer is replacing spending on these services with more spending on goods, especially leisurerelated goods.

- When it comes to spending on goods, the pandemic has accelerated the shift to online shopping and home deliveries.
- From a labor market perspective, these trends mean a shift from service jobs to jobs related to producing, moving, and selling goods: manufacturing, freight transportation, home deliveries, wholesale, and retail.



Consumption - Percent Change February 2020-December 2022

Source: Bureau of Economic Analysis

NEW LABOR MARKET ENTRANTS' CRISIS

As discussed above, some long-run trends impacting labor force participation, such as a decline in marriage rates, mental health conditions, and an increase in drug addiction are all leading towards stagnation or even further decline in labor force participation among new labor market entrants. In addition, the pandemicinduced education crisis is eroding workers' skills and diminishing their willingness to work. The share of people aged 18-29 reporting depression symptoms at least weekly has doubled in the past decade. This age group, which used to suffer the lowest rates of depression, now experiences the highest. Beyond the individual pain and suffering, this trend impacts the ability of this age group to work, which is one of many reasons for the declining labor force participation rates of young adults.



Percent Reporting Being Depressed at least Weekly

Source: National Health Interview Survey

The deterioration in the mental health of young people impacts their ability to perform in the labor market. The table below shows a large increase in cognitive difficulties of the 18-29 age group over the course of the pandemic. The problem is larger among men, but women experienced a bigger decline.

Respondent has cognitive difficulties (such as remembering, concentrating, or making decisions) because of a physical, mental, or emotional condition, 18-29 y.o.

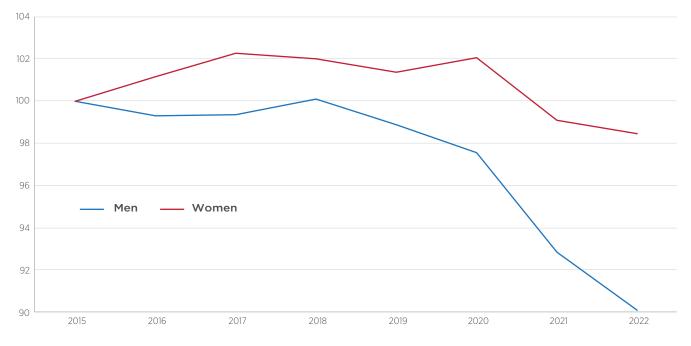
		2022	Average 2018- 2019	Difference	Percent change
Non-Hispanic Black	Male	4.2%	3.2%	1.1%	34.1%
Non-Hispanic White	Male	4.2%	3.4%	0.8%	24.7%
Non-Hispanic White	Female	4.1%	2.4%	1.7%	68.9%
Hispanic	Male	2.8%	2.6%	O.1%	5.3%
Hispanic	Female	2.5%	1.6%	0.9%	54.3%
Non-Hispanic Black	Female	2.4%	2.0%	0.4%	20.3%
Non-Hispanic Asian or Pacific Islander	Female	1.3%	1.0%	0.3%	34.2%
Non-Hispanic Asian or Pacific Islander	Male	1.3%	1.2%	0.1%	5.7%

Source: Current Population Survey

In addition, a **recent study** shows that depression early in life can leave lasting scars on labor market outcomes that bear out over decades. The study found that people who had experienced depression in young adulthood generated 24% lower annual wage incomes when they were 50 years old. "A substantial share (25-55%) occurs because depression in early adulthood disrupts human capital accumulation, by reducing work experience and by influencing selection into occupations with skill distributions that offer lower potential for wage growth".

The significant disruption to schooling over the course of the pandemic is likely to have long-term consequences. We can see this already in lower math and reading test scores and in increased school absences. In addition, the share of the 18-21 population who are enrolled in college has plunged since before the pandemic, especially among men, and doesn't show signs of recovery.





Source: Current Population Survey

What may be behind the decline in college enrollment:

- A disruption to high school instruction that has left students ill-prepared to enter college;
- The faster wage growth in jobs that don't require a BA – and especially those that are more likely to be taken by young men;
- An increase in the willingness of employers to hire workers without a college degree;
- A general decline in the perceived importance of higher education, with the percentage of Americans saying that a college education is very important down from over 70% in 2013 to below 50% today; and
- **5.** A rapid rise in college tuition.

While community college enrollments are down overall, enrollment of men in vocational programs has increased. During the pandemic, workforce training programs were particularly disrupted since much of the learning must be done in person. One would have expected that the share of labor market entrants with a vocational associate degree to decline as a result but, in fact, the share of men aged 20-24 with a vocational associate degree actually increased during the pandemic. This is a natural reaction to the severe labor shortage and rapid wage growth in blue-collar and manual services occupations.

During the pandemic, deaths from drug overdoses increased dramatically. In some states the death rates doubled in less than 3 years. There is variation across regions, with much higher rates in the East than in the West, though in some states in the West, like California and Oregon, the rates are rising particularly rapidly. In general, overdose deaths occur much more frequently among men than women.

The labor market implications of drug addiction are important. Death is the most severe outcome, but it is probably safe to assume that, for every death, there are several people suffering from drug addictions who are unable to keep a steady job or to work at all.

Deaths per 100,000 from drug overdose, age-adjusted

	12 months ending with 2019 Q1	12 months ending with 2021 Q3	Percent Change		12 months ending with 2019 Q1	12 months ending with 2021 Q3	Percent Change
West Virginia	49.6	92.3	86%	Colorado	16.4	30.2	84%
District of Columbia	37.6	61.4	63%	Wisconsin	19.1	30.2	58%
Kentucky	31.1	55.5	78%	Virginia	17.6	29.8	69%
Louisiana	24.2	54.4	125%	Nevada	21.6	29.3	36%
Tennessee	28	54	93%	Alabama	15.8	28	77%
New Mexico	26.2	50.7	94%	Illinois	20.4	27.7	36%
Ohio	36.3	48.2	33%	New York	18.1	27.6	52%
Delaware	43.1	46.7	8%	Mississippi	11.1	27.4	147%
Maryland	36.7	44.5	21%	Washington	15	26.7	78%
Maine	26.4	43.1	63%	California	13.1	25.9	98%
Pennsylvania	36	43.1	20%	Oregon	12.8	25.3	98%
Indiana	25.6	41.4	62%	Kansas	13.3	23.2	74%
Connecticut	30.6	41.2	35%	Minnesota	11.7	23.1	97%
Vermont	26.7	41.2	54%	Oklahoma	16.7	22.7	36%
South Carolina	22.1	40.3	82%	Georgia	13.3	21.8	64%
Rhode Island	32.1	39	21%	Arkansas	15.8	21.2	34%
Arizona	23.9	38	59%	Utah	20.5	21.1	3%
				Montana	12.5	19.3	54%
North Carolina	23.1	36.7	59%	Idaho	15.4	18.6	21%
Florida	22.9	36.5	59%	Wyoming	12	18.2	52%
Massachusetts	32	35.7	12%	Hawaii	15	16.7	11%
Missouri	28	35.4	26%	Texas	10.3	16.5	60%
New Jersey	32.3	31.9	-1%	North Dakota	11	16	45%
Alaska	17	30.9	82%	lowa	9.5	14.8	56%
Michigan	25.2	30.8	22%	Nebraska	8.1	11.5	42%
New Hampshire	36	30.6	-15%	South Dakota	7.3	10.9	49%

Sources: CDC

TECH GROWTH

During the pandemic years, the STEM sector not only continued its pre-pandemic pace of growth, but also experienced a permanent expansion. Importantly, most of the added STEM professionals are employed in non-STEM industries as Main Street industry is increasingly driven by data and enabled by technology.

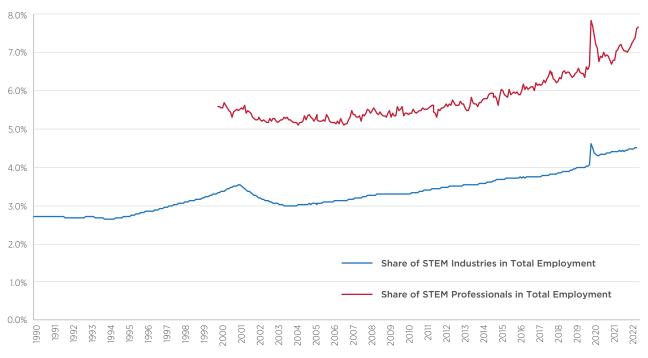
In the chart below, STEM industries include: computer and semiconductor-related manufacturing; electronic shopping; software publishing; data processing and hosting; internet publishing, broadcasting, and web search; engineering and drafting services; computer systems design; and scientific R&D services.

The rapid growth of the tech sector in recent years has led to an economic boom in Silicon

Valley and in other regions surrounding the Bay Area. The tech boom not only has increased the number of highly paid tech workers, but also has increased spending on goods and services in other industries in these areas.

In this context, the US is to the world what Silicon Valley is to the US. The growing importance of tech industries in the global economy benefits locations with more advanced tech ecosystems.

This is an important and underestimated reason for the faster economic growth in the US over the past decade relative to most other large industrialized economies, a trend that is likely to continue in the next decade – if we can muster the workforce to capitalize on this advantage.

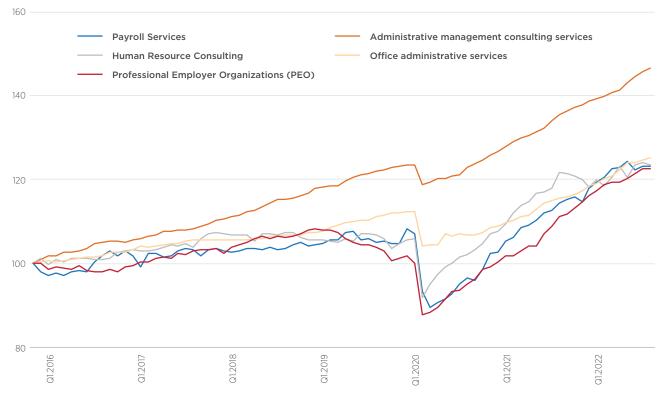


Share of STEM Professionals and Industries in Total Employment

Sources: Current Population Survey, Bureau of Labor Statistics

OUTSOURCING

Employment in industries providing administrative and HR services to employers is well above their pre-pandemic trajectory, suggesting that a new wave of outsourcing is underway. It is not clear what is driving this trend. One possibility is that this reflects a growing focus of these professional services firms on attracting and retaining talent in a market starved for workers. Another is that the pandemic, and the digital transformation to which it gave rise, contributed to the virtualization and subsequent outsourcing of these functions for many firms. That outsourcing may have led to the elimination of many internal clerical and office support related jobs.



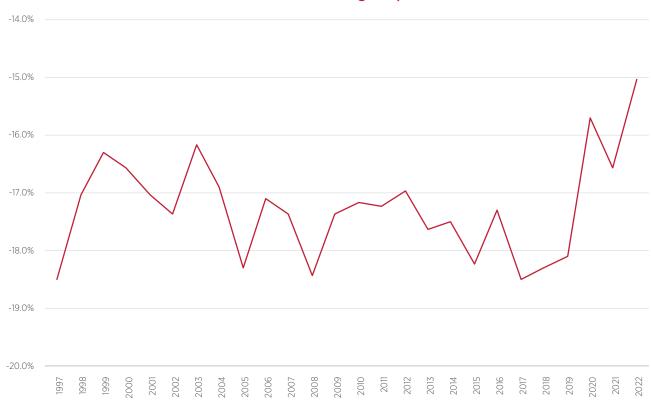
Employment, January 2016 = 100

Source: Bureau of Labor Statistics

DECLINING BLACK-WHITE INEQUALITY

To finish on a positive note, over the past 3-4 years, the gap in wages between non-Hispanic Black and White workers has been shrinking. Although the gap is still large, it has declined meaningfully. The chart below shows the gap after controlling for demographics, location and education. The shrinking of the gap was mostly due to Black workers moving to higher paying industries and occupations.

There is still much work to be done but it is reassuring to know that, from among all of the challenges wrought by the pandemic, comes real progress.



Black-White Wage Gap

Source: Burning Glass Institute

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