



BW Research White Paper

A Post Coronavirus Reality for the World of Work Update

June 26, 2020

Introduction

The global Coronavirus (COVID-19) health crisis has shown the world just how connected we all are. Virtually no region has been safe from the virus, with nearly all countries having reported cases of COVID-19.¹ This pandemic underscores the stark reality that not only are we connected biologically, but also economically—a truth the world must face in the midst of a global economic recession. In the pandemic's wake, nations have seen across-the-board business closures as industries from food service and retail to education and construction continue to feel the pain of mandatory shelter-in-place measures and forced business shutdowns. As the economic aftershock of the pandemic carries on through the second quarter of 2020, the data show that not all communities are being affected equally, with ethnic and racial minorities, low-income communities, and specific industry sectors experiencing the brunt of the economic fallout.²

For the United States, the pandemic has resulted in unprecedented labor market shocks, with lingering effects that will likely continue not only throughout the remainder of 2020 but also well into 2021. To date, more than 35 million Americans have filed for unemployment.³

In response to the nationwide labor market shocks, BW Research has been tracking the depth and distribution of job losses across 16 industry clusters in the United States. An industry cluster is comprised of a group of interconnected firms in a region which can share common markets, provide similar or adjacent services, use the same technologies, and sometimes share worker skill and knowledge requirements.

The findings of these industry cluster analyses also underscore the importance of identifying the most “at-risk” workers in the United States in order to inform policymakers, employers, and educators on what next steps must be taken to ensure that communities across the nation not only recover from the COVID-19-induced economic recession, but also develop stronger and more resilient regional job markets. The findings thus far help to answer the following three questions:

1. Which Workers Were Hit Hardest?

By far, workers in the Tourism, Hospitality, and Recreation industry were hardest hit by the pandemic-induced economic recession. This sector accounts for one out of every eight jobs in the nation. From February through May, the Tourism, Hospitality, and Recreation industry cluster lost 63 percent of all jobs.

2. What Industry Clusters are Most Resilient?

Industries with the fewest job losses were those deemed as essential business as well as work that could be conducted with the use of telecommunications tools and applications. These industry clusters include Agriculture and Food; Information and Communication Technologies; and Financial and Banking, Insurance, and Real Estate.

¹ <https://www.cdc.gov/coronavirus/2019-ncov/global-covid-19/world-map.html>

² See generally: <https://www.pewresearch.org/fact-tank/2020/05/05/financial-and-health-impacts-of-covid-19-vary-widely-by-race-and-ethnicity/> and <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html>

³ This references the period from March through May and is based on a combination of Bureau of Labor Statistics and

3. Where Do We Expect to See Quick Recovery?

BW Research identified five industry clusters most likely to quickly recover job losses based on their performance following previous economic recessions, ability to conduct business while maintaining social distancing measures, recent economic performance, and initial employment impacts due to COVID-19. High recovery industry clusters include: Financial and Banking, Insurance, and Real Estate; Healthcare; Information and Communication Technologies; Public Services and Infrastructure; and Biotechnology and Biomedical Devices. It should be noted that resilience or recovery in Public Services and Infrastructure is largely dependent on political will, legislative activity, and federal spending. The other four industry clusters that are expected to see relatively quick recovery have other overarching economic trends that contribute to these clusters' resilience and stability.

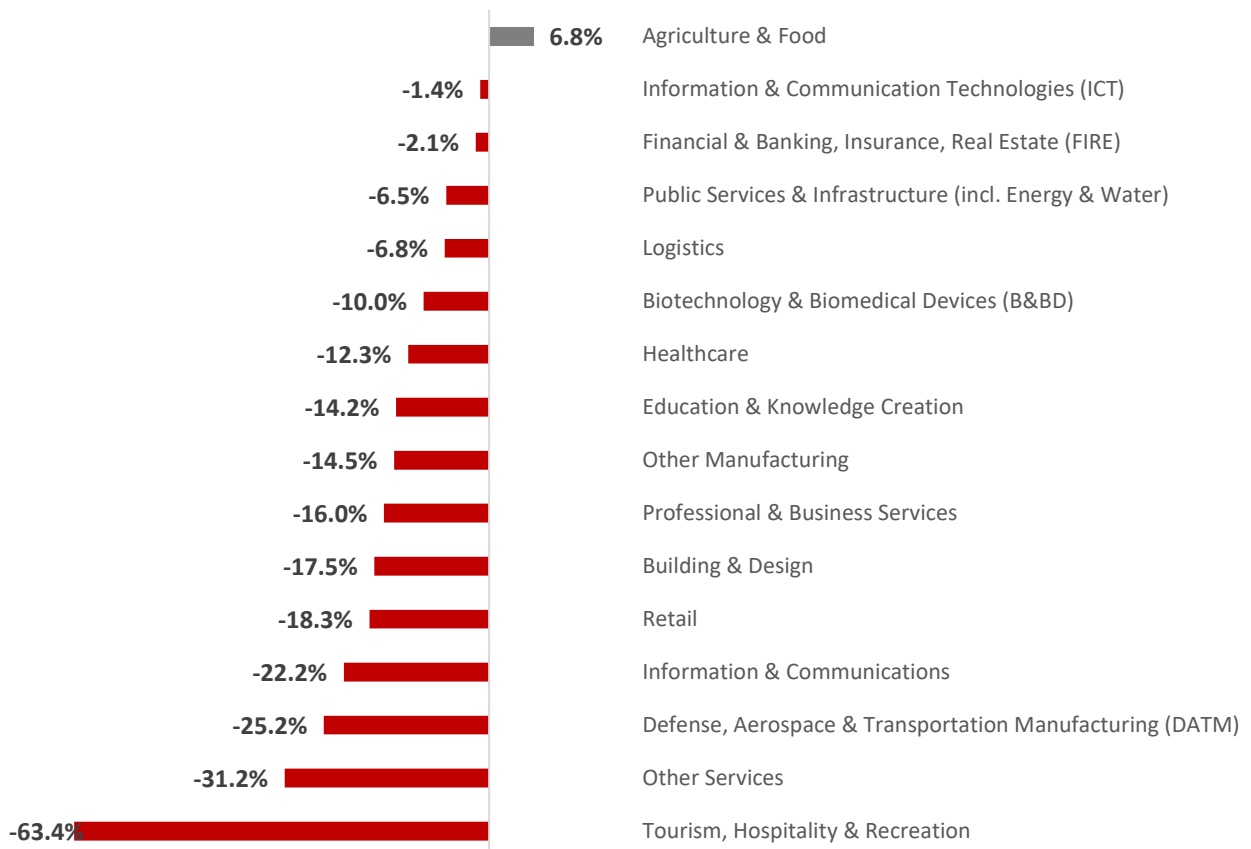
COVID-19 Industry Cluster Impacts

Since the onset of nationwide quarantine measures, nearly all sectors of the U.S. economy have shed jobs. Within the first month of the economic recession, from February through March, some industry clusters saw job gains—like Information and Communication Technologies; Logistics; Financial and Banking, Insurance, and Real Estate; and Agriculture and Food. However, by April and May, all of these sectors experienced job losses due to COVID-19 restrictions. With the exception of Agriculture and Food, these job losses wiped out all employment growth seen between February and March, resulting in a sizable overall net job decline.

Who was hit hardest?

The Tourism, Hospitality, and Recreation industry cluster was hit hardest, losing six out of every ten jobs across the nation in just two months. This industry cluster is a major employer of U.S. residents, accounting for one out of every eight jobs in 2019. With a median hourly wage of \$15.88, these workers are also less likely able to withstand the economic impacts of long-term income loss.

Figure 1. Cumulative Job Changes (From February - May 2020)

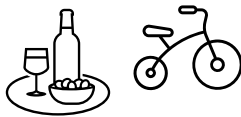


In fact, of all workers who lost jobs in the first month (March) of shelter-in-place orders and business closures, 60 percent of individuals were employed in the Tourism, Hospitality, and Recreation industry cluster. In the following month (April), Tourism, Hospitality, and Recreation workers represented 31 percent of total job losses, as other industry clusters such as Retail; Professional and Business Services; and Other Services began to shed more jobs. In May, the Tourism, Hospitality, and Recreation sector still accounted for 29 percent of total job losses for the month (see Table 1).

Cumulatively, job losses in the Tourism, Hospitality, and Recreation industry cluster account for four out of every ten jobs lost from February through the end of May. It is clear that workers in this industry cluster have disproportionately been hit the hardest by the COVID-19 pandemic.

Other Services—which includes sectors such as automotive repair and maintenance, personal care, foundations, and nonprofit organizations—shed 31 percent of jobs compared to the February baseline. Other notable employment declines were experienced in both Defense, Aerospace, and Transportation Manufacturing and Traditional Information and Communications; these industry clusters shed a respective 25 and 22 percent of jobs in two months (see Figure 1). The employment losses in Defense, Aerospace, and Transportation Manufacturing were largely driven by the suspension of automobile manufacturing, while defense-related manufacturing experienced less of a downturn.

Top 3 High Job Loss Industry Clusters



Tourism, Hospitality, & Recreation

-63.4% Job Change

38.5% of COVID-19 Job Losses
11.5% of All Jobs in 2019
3.9 Recovery Score

Includes:

Accommodation; Food Services and Drinking Places; Performing Arts and Spectator Sports; Museums



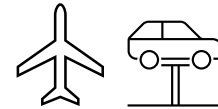
Other Services

-31.2% Job Change

8.7% of COVID-19 Job Losses
4.5% of All Jobs in 2019
2.9 Recovery Score

Includes:

Automotive Repair and Maintenance; Personal Care Services; Non-profit Organizations



Defense, Aerospace, & Transportation Manufacturing

-25.2% Job Change

1.9% of COVID-19 Job Losses
1.5% of All Jobs in 2019
2.9 Recovery Score

Includes:

Motor Vehicle Manufacturing; Aerospace Product Manufacturing; Ship and Boat Building; Supplies Wholesalers; Navigational Instruments Manufacturing

Table 1. Industry Cluster Proportion of Total Job Loss⁴

| Industry Cluster | % of All COVID-19 Job Losses, March | % of All COVID-19 Job Losses, April | % of All COVID-19 Job Losses, May | Cumulative % of All COVID-19 Job Losses |
|---|-------------------------------------|-------------------------------------|-----------------------------------|---|
| Tourism, Hospitality & Recreation | 60.2% | 31.1% | 29.3% | 38.5% |
| Retail | 8.4% | 10.6% | 10.4% | 10.1% |
| Professional & Business Services | 5.7% | 10.0% | 10.6% | 8.9% |
| Other Services | 6.7% | 9.4% | 8.8% | 8.7% |
| Healthcare | 6.7% | 8.6% | 8.5% | 8.1% |
| Education & Knowledge Creation | 7.6% | 8.0% | 8.7% | 8.0% |
| Building & Design | 4.8% | 6.9% | 7.1% | 6.4% |
| Public Services and Infrastructure (incl. Energy and Water) | 4.4% | 2.9% | 3.3% | 3.0% |
| Other Manufacturing | 2.6% | 2.8% | 2.9% | 2.7% |
| Defense, Aerospace & Transportation Manufacturing (DATM) | 0.3% | 2.5% | 2.6% | 1.9% |
| Logistics | -0.2% | 2.3% | 2.5% | 1.7% |
| Information & Communications | 0.6% | 1.6% | 1.8% | 1.4% |
| Biotechnology & Biomedical Devices (B&BD) | 0.5% | 0.8% | 0.8% | 0.7% |
| Financial & Banking, Insurance, Real Estate (FIRE) | -0.9% | 1.1% | 1.2% | 0.6% |
| Information & Communication Technologies (ICT) | -1.1% | 0.7% | 0.7% | 0.2% |
| Agriculture & Food | -6.2% | 0.7% | 0.8% | -1.0% |

⁴ A negative number indicates that these industry clusters *gained* jobs during the depicted time period.

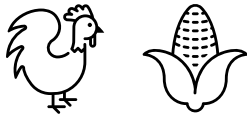
What jobs were relatively safe?

While almost no sectors of the economy were spared from the rapid job loss over the last several months, some industry clusters suffered fewer job losses by comparison. In large part, these are industries that were either deemed essential or also enjoyed the ability to conduct business-as-usual remotely, thus keeping with the social distancing measures.

Agriculture and Food witnessed a seven percent increase in jobs between February and May. While it is possible that this spike in employment is a result of the seasonal nature inherent to these industries, the food production industry was also deemed essential and thus has largely continued to maintain operations with proper protective equipment (PPE).

The Information and Communication Technologies and Financial and Banking, Insurance, and Real Estate industry clusters shed a respective one percent and two percent of jobs each. The low job loss in these sectors is due in large part to the fact that much of the work activity in these industries can be managed and completed from home and with the use of telecommunications tools and applications that enable video conferencing.

Top 3 Low Job Loss Industry Clusters



Agriculture & Food

+6.8% Job Change

No COVID-19 Job Losses
3% of All Jobs in 2019
2.2 Recovery Score

Includes:

Crop and Animal Production;
Aquaculture; Forestry and
Logging; Food Manufacturing;
Breweries; Alcoholic Beverage
Wholesalers; Veterinary
Services



Information & Communication Technologies

-1.4% Job Change

0.2% of COVID-19 Job Losses
3% of All Jobs in 2019
2.0 Recovery Score

Includes:

Computer Equipment
Manufacturing; Semiconductor
and Component Manufacturing;
Telecommunications; Data
Processing and Hosting



Financial & Banking, Insurance, and Real Estate

-2.1% Job Change

0.6% of COVID-19 Job Losses
5% of All Jobs in 2019
1.7 Recovery Score

Includes:

Banks, Financial Planning and
Investment; Insurance Carriers;
Real Estate; Rental and Leasing
Services

BW Research Recovery Outlook

What will economic recovery look like?

In large part, the nation's economic recovery will likely vary geographically. National industry cluster estimates present only an overall picture of how COVID-19 has affected American workers, but the regional realities at state, county, and city levels will likely differ based on each localities' industry cluster strengths and weaknesses.

From a national perspective, BW Research estimates that five industry clusters are more likely to recover faster than the remainder of the U.S. economy. These include:

1. Financial and Banking, Insurance, and Real Estate
2. Healthcare
3. Information and Communication Technologies
4. Public Services and Infrastructure⁵
5. Biotechnology and Biomedical Devices

Indeed, these industry clusters are those which saw relatively fewer overall job losses between February and April (see Figure 1). However, this phased recovery prediction is not based solely on recent COVID-19 job losses. While we cannot predict exactly what economic recovery will look like or on what timetable it will occur, previous economic recessions and other metrics can be used to identify the industry clusters—and therefore jobs—that tend to be more resilient in the face of economic downturns.

Using a proprietary five-point index, BW Research created a “phase recovery” score to identify which industry clusters are more likely to quickly recover job losses as shelter-in-place orders are lifted. The phase recovery score does not include a specific timetable for recovery as there are many unknown variables affecting a return to business-as-usual including vaccine development, geographic variabilities, or secondary spikes in the virus' infection rate.

The phase recovery score is weighted based on the following five data points: (1) physical distancing – the likelihood that these jobs may be conducted at a safe physical distance; (2) recovery following the dot-com recession; (3) recovery following the great recession from 2007 to 2009; (4) recent employment trends from 2018 to 2020; and, (5) initial job loss during the first two months of the COVID-19 pandemic.

The five industry clusters most likely to exhibit quick recovery accounted for only a third of total jobs in 2019 and about one half of national Gross Domestic Product (GDP). Even as the nation begins to enter into the later stages of Phase 2 in reopening, many businesses like restaurants, retail spaces, and hotels and lodging will likely remain restricted to half capacity; many businesses may not be able to return to their full level of staffing pre-COVID-19. And those workers most affected by the COVID-19-induced economic recession could be even more pressured to make ends meet once the federal unemployment stimulus runs out mid-summer of this year.

⁵ It should be noted that resilience or recovery in Public Services and Infrastructure is largely dependent on political will, legislative activity, and federal spending. The other four industry clusters that are expected to see relatively quick recovery have other overarching economic trends that contribute to these clusters' resilience and stability.

Table 2. Phase Recovery Score by Industry Cluster

| Industry Cluster | Weighted Phase Recovery Score | % of GDP, 2019 | % of Total Jobs, 2019 |
|---|-------------------------------|----------------|-----------------------|
| Financial & Banking, Insurance, Real Estate (FIRE) | 1.7057 | 12.6% | 5.4% |
| Healthcare | 1.7795 | 8.2% | 12.9% |
| Information & Communication Technologies (ICT) | 2.0085 | 7.1% | 3.1% |
| Public Services and Infrastructure (incl. Energy and Water) | 2.0283 | 16.9% | 10.3% |
| Biotechnology & Biomedical Devices | 2.036 | 3.2% | 1.4% |
| Agriculture & Food | 2.1723 | 2.5% | 2.6% |
| Professional & Business Services | 2.3557 | 8.8% | 10.0% |
| Logistics | 2.4551 | 5.7% | 4.8% |
| Building & Design | 2.5376 | 5.7% | 6.1% |
| Education & Knowledge Creation | 2.7393 | 5.8% | 10.7% |
| Other Manufacturing | 2.8506 | 4.4% | 3.7% |
| Defense, Aerospace & Transportation Manufacturing (DATM) | 2.897 | 2.4% | 1.5% |
| Other Services | 2.9048 | 2.4% | 4.5% |
| Information & Communications | 3.0852 | 2.5% | 1.1% |
| Retail | 3.4821 | 6.1% | 10.5% |
| Tourism, Hospitality & Recreation | 3.9425 | 5.7% | 11.5% |

How will COVID-19 change the world of work?

This nationwide overview of the economic impacts of COVID-19 highlights an opportunity to rethink employment in the United States and the notions of access, opportunity, and security. In these times of high economic uncertainty, we can examine the distribution of economic opportunity across both geographic and demographic lines. While the current focus is on how to quickly place Americans back into full-time jobs, a longer-term outlook is required to ensure that individuals and communities are better suited to respond and quickly recover from economic shocks in the future.

In particular, BW Research is asking the following questions:

1. What can educators do to ensure the next generation of workers is well-equipped with the skills needed for the future world of work?
2. Who is more often disproportionately impacted by economic recessions? How can we increase access, opportunity, and security for these populations?
3. What will economic recovery look like on a local and regional level based on a region's industry cluster mix?
4. How can we ensure economic mobility is available for all populations, across age, ethnicity and race, gender, geographic and income levels?
5. How do we connect with displaced workers, identify their skills and strengths, and support their transition into more sustainable careers?