

# COVID-19 Unemployment Rate Trend Analysis

Weijia Li<sup>1, †</sup>, Zekun Wu<sup>2, \*, †</sup>, Wentao Xin<sup>3, †</sup>

<sup>1</sup>La Reina High School, Thousand Oaks City, California State, United States

<sup>2</sup>University of Rochester, New York State, United States

<sup>3</sup>Guangdong Country Garden School, Foshan City, Guangdong Province, China

\*Corresponding author. Email: [zwu44@u.rochester.edu](mailto:zwu44@u.rochester.edu)

†These authors contributed equally.

## ABSTRACT

During the outbreak of COVID-19, the global economy continued to decline, GDP continued to decline, many companies were unable to operate funds and faced bankruptcy, and economic trade shrank. The labor market in the United States has also been severely affected. The financial situation is declining. The unemployment rate has continued to rise, reaching the highest level since the Great Depression in the United States. The epidemic has restricted people's travel, and the service industry has also been affected. Public places in many cities have been closed, and companies have laid off many employees. This has led to a sharp rise in the unemployment rate, which is also one of the reasons for the economic downturn.

**Keywords:** COVID-19, The unemployment rate, Trend analysis

## 1. INTRODUCTION

Since the early days of COVID-19, more than 20 million people have been unemployed. The monthly unemployment rate continued to rise, and the employed population continued to decline. Many unemployed cannot find a new job. During COVID-19, some people are out of work. It is more difficult for people to find jobs, and some excessive production in various places has also declined. Since we cannot predict the spread of COVID-19, we mainly research four aspects: region, gender, race, education level, and different ages. During the epidemic period, customers in the business consumer market of certain states in the United States have reduced the level of unemployment faced by customers. The status of gender has led to unemployment rates between men and women and ethnic differences. The unemployment rate of different age groups, education level, and market demand lead to the unemployment rate. Overall, the economic impact of COVID-19 is severe. These effects have led to a linear increase in the unemployment rate, significantly impacting the global economy. In addition, the labor market in various regions has continued to decline. In this research, we will use qualitative analysis to find the unemployment rate in the United States. Compare each stage with graphs, mainly to analyze the impact of COVID-19 on the unemployment rate in the United States. We will examine some of the reasons for

the unemployment rate from several perspectives and analyze future development trends of the epidemic and whether the unemployment rate continues to fall [1].

The Coronavirus Disease (COVID-19) pandemic from 2019 has proven to have a negative impact on labor market indicators in almost every region, economic sector and major population group in most countries around the world. This report will discuss information on the US unemployment rate and labor force participation rates and the negative impact of COVID-19 on industries of different ages, genders, educational attainment, and regions. It presents a cross-sectional analysis of the overall unemployment rate trend pandemic. Following the first public disclosure of a novel coronavirus in Wuhan in December 2019, the earliest confirmed case of a homegrown novel coronavirus infection in the United States was identified in a tourist returning from China on 19 January 2020 and officially confirmed on 21 January [2]. Firstly, the US brought the economy to a standstill with measures such as city closures, work stoppages and quarantines in several states, essentially halting economic activity other than the production of essential goods. Secondly, trade has contracted severely, and the potential growth rate of the economy has fallen. The World Trade Organization predicts that US trade will shrink by between 13% and 32% this year, possibly more than the 2008 financial crisis due to the impact of the epidemic, while slowing economic growth will further

reduce foreign demand due to the epidemic, putting even more pressure on foreign trade companies. Thirdly, the short-term "shock" to most industries, the US wants to impact key nodes of the global supply chain [3]. The epidemic's impact on different industries in the US has had a direct impact on unemployment and labor force participation indicators. "In April 2020, the unemployment rate reached 14.8%—the highest rate observed since data collection began in 1948. In May 2021, unemployment remained higher (5.8%) than it had been in February 2020 (3.5%)" (Falk,2). "In April 2020, the unemployment rate reached 14.8%—the highest rate observed since data collection began in 1948. In May 2021, unemployment remained higher (5.8%) than it had been in February 2020 (3.5%)" (Falk,2). The stagnation of economic activity in the US, where globally integrated trade production has become an important source of economic growth, has led to a disruption in the US supply chain to the world, resulting in low demand for domestic labor markets. In previous recessions, employment in some jobs has been more affected, while the labor force in other sectors has been less affected [4]. The 2008 Wall Street crash, for example, had a greater impact on the financial sector and the real estate and insurance industries. Industry and services were less affected. However, this is not the case this time, as COVID-19 has had an almost all-encompassing negative impact on the US labor market since it was first identified in the US in March 2020 [5].

The unemployment rate in most US states peaked in April 2020. Analysis of the known data shows that business prosperity and unemployment rates are increasing in direct proportion to each other. States with high levels of business, service and entertainment sectors are the hardest hit by unemployment." The unemployment rate in most states peaked in April 2020 and has since declined. In April 2021, the states with the highest unemployment rates were Hawaii (8.5%), California (8.3%), New Mexico (8.2%), New York (8.2%), and Connecticut (8.1%). The states with the lowest unemployment rates in April 2021 were Nebraska (2.8%), New Hampshire (2.8%), South Dakota (2.8%), Utah (2.8%), and Vermont (2.9%)" (Falk 6). The state of Hawaii, the most important tourist state in the United States, has undoubtedly been the most negatively affected. The main reason for this is the direct negative impact of the outbreak on traffic and tourism. It is feared that the abandonment of travel plans due to the disease will result in a blow to Hawaii's heavily traveled rich industries and force people out of work [6]. California and New York State's well-developed tourism, services, restaurants, and businesses are among the major industries affected by the outbreak. In addition, California, and New York, as the highest employment areas in the United States, are responsible for most employment pressures in the U.S. The negative labor force impact of COVID-19 has been greatest in

California and New York, which have received the largest fluctuations in unemployment [7].

In previous recessions that have led to labor market setbacks, such as the 2008 financial crisis, male-dominated industries such as finance, manufacturing, and construction have been hit harder than other sectors. In past recessions, men were at greater risk of losing their jobs than women." her crisis has battered industry sectors in which women's employment is more concentrated—restaurants and other retail establishments, hospitality, and health care" (Karageorge 1). New York State was the subject of observation, with restaurants, many hotels, nightclubs, and other entertainment venues in New York also announcing indefinite closures, in addition to high operating costs and the high rise in unemployment caused by the heavy blow of the new crown epidemic focused mainly on serving the food service industry. Surveys show that in March 2020, the New York State restaurant industry lost nearly \$2 billion, and 250,000 people lost their jobs. Usage and example sentences: "According to the American Restaurant Association in April, about 25,000 restaurants in New York City (about 4%) have closed permanently during the New Crown epidemic, another 7% are expected to close permanently within the next 30 days, and 44% have suspended operations" (National Restaurant Association). Not only are women overrepresented in industries where unemployment is suffering, but women - especially black and Hispanic women - have very high rates of labor employment in these industries. In female-dominated industries such as education and health, women also face severe unemployment by comparison." According to an analysis by the National Women's Law Center, women hold 77 percent of jobs in education and health services. Still, they account for 83 percent of the jobs lost in those industries" (Schmidt). Fear of the virus and state government policies led to fewer people and shrinking profits in the retail and entertainment sectors [8].

Many shopping centers, restaurants, and hotels face a business crisis and have had to choose to lay off staff. Because women dominate the labor market in the retail, entertainment, restaurant, education and healthcare sectors." The unemployment rate for workers with less than a high school diploma peaked in April 2020 (21.0%), which was higher than the peak for those at all other education levels" (Falk 13). Another scenario that can be predicted is that because education is directly proportional to income, people with higher qualifications generally work in managerial and more technical jobs. Faced with measures in an epidemic environment, they are in a certain position to choose to work from home. The epidemic, therefore, poses less risk of unemployment for those with high incomes. As mentioned above, COVID-19 had the greatest impact on the commercial services, catering, entertainment, and tourism sectors. In these sectors, the majority of those employed are low-income people with low levels of education. Therefore,

the unemployment rate in the COVID-19 environment is inversely proportional to educational attainment, with the higher the educational attainment, the lower the risk of unemployment. Based on known data, it is projected that the inverse trend between educational attainment and unemployment will continue to increase from August 2021 onwards. Still, with the restaurant and entertainment industry opening up in the US states, the unemployment rate for people with low educational attainment will gradually slow down [9].

In the Setting, the gender-differentiated unemployment rates show differences in unemployment rates by age group. This is because the proportion of industries employed varies across age and gender groups, with different levels of education. Data observations usually divide the population into eligibility stages by age: sixteen to nineteen, twenty to twenty-four, twenty-five with fifty-four and fifty-five and over. Much of the population between the ages of sixteen and nineteen have only high school education, and most of them work in basic service industries as workers. The post-fifty-five age group is polarized. Those in senior managerial jobs are less exposed to the rising unemployment environment. Those in the basic services sector are at greater risk of unemployment due to a weakening workforce [10].

"Between February and April 2020, the rate for women ages 16-19 increased by 25.3 percentage points to 36.3%; in contrast, the rates for men of the same age increased by 16.2 percentage points to 28.2%. Since then, the gap between younger men and women has reversed" (Falk 11).

The observed data objectively validate the close correlation between the rise in US unemployment caused by COVID-19 and different industries. Among sixteen- to nineteen-year-olds, males are mostly engaged in personal and females in service-related jobs. Tourism and services are the main sectors affected by the unemployment rate, leading to a higher unemployment rate for females than males in the sixteen to twenty-five age range [11]. However, the gradual opening of state restaurants, hotels and shopping malls in the US after May 2021 is intended to alleviate the reality of the high unemployment rate in these sectors.

The COVID-19 epidemic first emerged in the US in late February 2020, and unemployment in the US reached its highest point in the round in early April. The rise in unemployment was further accelerated by a shortage of demand in the underlying labor market as companies opted to work from home and malls and restaurants closed. Although the US government forced the opening of some areas of the tourism and entertainment industry in May 2020 to mitigate the rise in unemployment before the epidemic was completely resolved, the current year-on-year unemployment rate is still high. However, the current year-on-year unemployment rate in the US is still high compared to 2019, before the COVID-19 epidemic.

By 2022, given the ongoing global impact of the epidemic, the high number of confirmed cases and the continued emergence of mutated strains of the virus, the epidemic will not be completely over by 2022 [12]. Therefore global trade volumes will not return to pre-epidemic levels." Working-hour losses were particularly high in Latin America and the Caribbean, Southern Europe and Southern Asia. Working-hour losses in 2020 were approximately four times greater than during the global financial crisis in 2009" (ILO 1).

In response to the current US epidemic preparedness policy choice to gradually restore the normal functioning of the social labor market in the face of the epidemic, the service and entertainment sectors revert to a normalized epidemic environment. Therefore, it is assumed that demand in the US labor market will gradually rise by 2022, with the continued opening of industries creating more demand for basic jobs and therefore further easing unemployment, especially among the lower-income groups with lower education and younger ages. As a result, the demand for the basic jobs they mainly perform will increase, and the unemployment rate will decline. However, there is a caution that the US unemployment index could quickly rebound to its pre-epidemic state in 2019. Considering the possible future trend of a rebound of the epidemic and the growth of military strength as US society gradually opens, the possibility of a second or third outbreak in the US cannot be ruled out. Given the secondary rebound in unemployment in such a scenario, this study is cautiously optimistic that the US unemployment rate will continue to decline in the future.

## 2. THE WHITE FACES A HISTORICALLY HIGH RATE OF UNEMPLOYMENT

We use race to divide people into several groups to discuss the different impacts of the pandemic. We view the graphs obtained at the U.S. Bureau of Labor Statistics to examine the gap between 4 groups-White, Black, African American, Hispanic/Latino, Asia. According to the graph, the highest point of unemployment for each group is 14.1, 16.7, 18.9 and 14.9. For white people, although the increase of the unemployment rate is not as high as that of other races, it still reaches the highest point since 1900. This means that it is even higher than the rate during the Great Depression, in which the rate is 10.0%. (Gould Elise, August 6, 2021). As for a reason, the demand for race equality plays an important role in it. Different from the Great Depression, when black workers suffered from "Last Hired, First Fired" (Sundstrom, 2017), there is less race discrimination of jobs now, which means that it may be easier for them during a hard time black to keep their jobs. However, the gap between the two races still exists. There is a comparatively large portion of black people who works in the service industry. There is only 12.1% of the black population in the US. Meanwhile, the proportion of blacks in the industry is

higher than the white. When the COVID-19 spread to the whole country, they may be more affected by the virus in

the industry. And as a result, there is still a racial gap from COVID-19's impact between the white and the black [13].

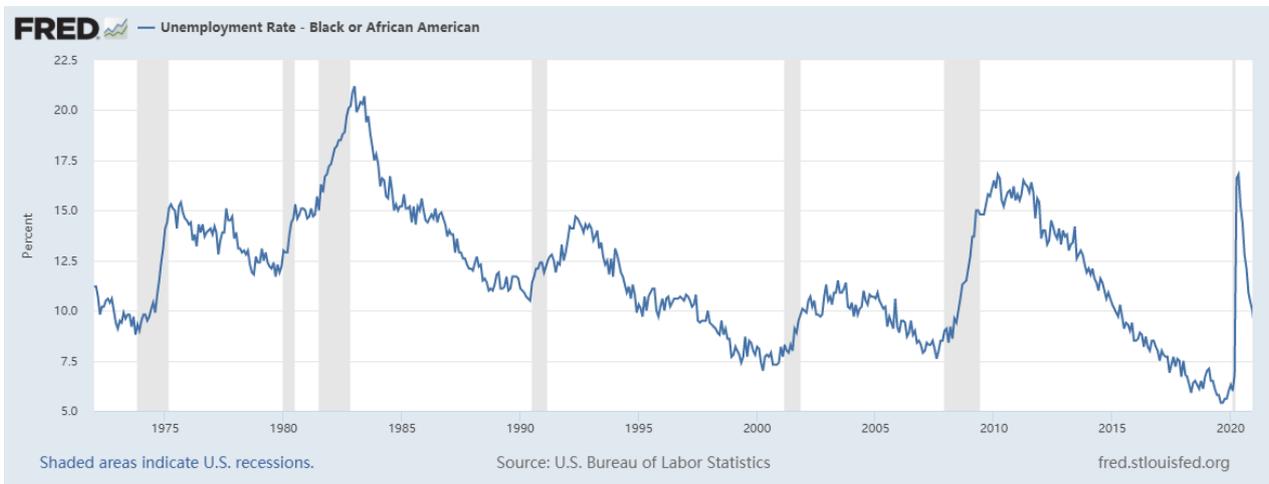
**Table 1.** The proportion of labor in different industries, divided by races

Industry	Black or African American	Asian	Hispanic or Latinx	Other
Total	12.3	6.5	17.6	63.6
Restaurants and other food services	13.2	7.5	26.8	52.5
Employment services	19.6	5.8	19.2	55.4
Miscellaneous general merchandise stores	19.1	5.2	21.1	54.6
Clothing stores	12.1	7.9	24.2	55.8
Gasoline stations	13.1	11	12.3	63.6
Nail salons and other personal care services	6.2	46.4	9.4	38
Dry-cleaning and laundry services	14	17	31.9	37.1
Traveler accommodation	18.8	9.6	30.2	41.4

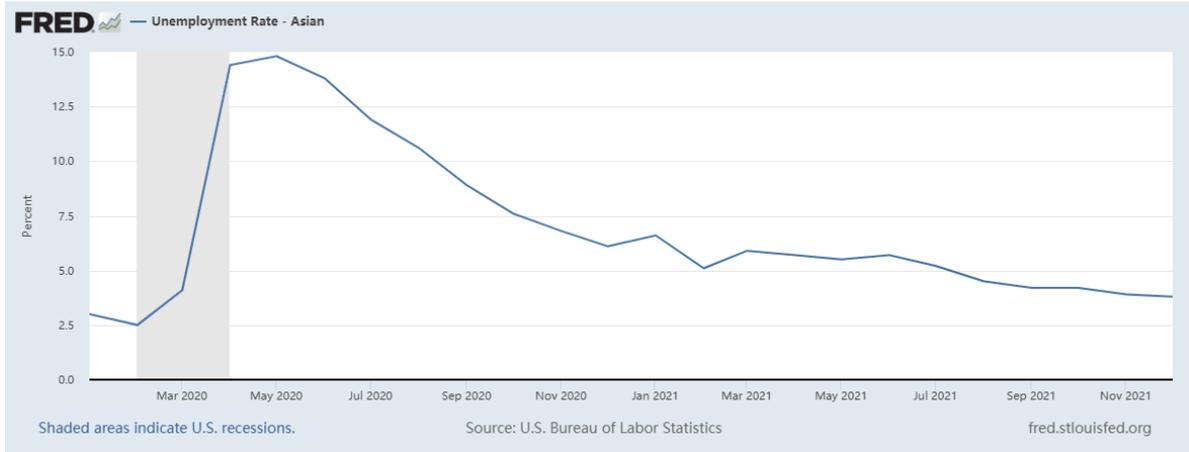


Source: U.S. Bureau of Labor Statistics, "Labor Force Statistics from the Current Population Survey: Employed persons by detailed industry, sex, race, and Hispanic or Latino ethnicity," available at <https://www.bls.gov/cps/cpsaat18.htm> (last accessed April 2020); U.S. Private Sector Job Quality Index, "Statement from the U.S. Private Sector Job Quality Index (JQI) Team on Vulnerabilities of Jobs in Certain Sectors to the Covid-19 Economic Shutdown"

**Figure 1** Unemployment rate of white people



**Figure 2** Unemployment rate of black and African



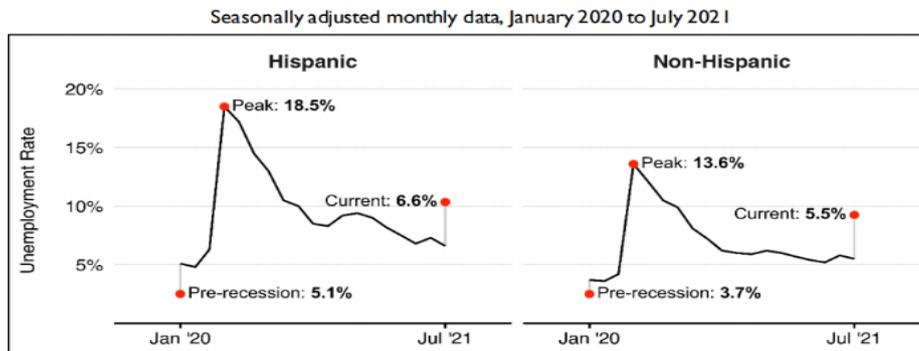
**Figure 3** Unemployment rate of Asians during COVID-19  
Sources from fred.stlouisfed.org

### 3. ASIAN WITH LONG-TERM UNEMPLOYMENT

People of other races are also affected by the diffuse of the virus in many ways. As for Asian Americans, they tend to have a longer period of unemployment. Although it seems that the unemployment rate for Asians is the lowest during the pandemic (with an unemployment rate of 14.8%), they have met some more potential problems. According to the Pew Research Center data, 46% of unemployed Asian American workers had been out of work for more than six months in the fourth quarter of 2020, when Black, White and Hispanic/Latinx is 38%, 35%, 34%. The data shows that Asian faces significantly higher long-term unemployment than the other 3 groups. As the chart above shows, about 46.4% of Nail salons and other personal care services workers are Asian. Considering the impact of many small bankrupt companies, these industries that provide low wages and many job opportunities are slowly recovering from the COVID-19. As a result, the long-term unemployment of Asians emerges

In industries such as hospitality and construction, there is even a larger portion of Hispanic workers than the black ones, which means they are more likely to suffer from unemployment than the other two. According to the US Bureau of Statistics, the percentage of total Hispanic and Latinx people in the US is 18.5%. In contrast, the percentage of Hispanic and Latinx workers in the service industry is much larger (e.g., 26.8% of restaurants and other food services). Therefore, they are the most ones who are affected by the COVID-19. Also, according to *Latinos Face Disproportionate Health and Economic Impacts From COVID-19* (By Ryan Zamarripa and Lorena Roque.), Hispanics and Latinos are 1.7 times more likely to contract COVID-19 than their non-Hispanic white counterparts, as well as 4.1 times more likely to be hospitalized from COVID-19 and 2.8 times more likely to die from COVID-19. As a result, there may be a decrease in the demand for Hispanic and Latino workers in the labor market, which may also contribute to the high unemployment rate of Hispanics. In general, Hispanic and Latino workers face a more serious problem than just "employed or not". It is about "dying after giving up or dying because of working".

### 4. HISPANIC AND LATINX WORKERS SUFFER THE MOST IN THE PANDEMIC



**Figure 4** The unemployment rate of Hispanics or Latino during COVID-19

Source: Created by CRS using data from the Bureau of Labor Statistics (BLS). Series LNU04000009 and LNU04092169 were extracted using the Labor Force Statistics data series at <https://www.bls.gov/data/>.

## 5. CONCLUSION

Since COVID-19 was first detected in the United States in March 2020, the rising number of cases caused by the epidemic in the United States has caused varying degrees of dislocation in both the US consumer and labor demand markets. This study uses cross-sectional comparisons of the US population by age, race, gender, and educational attainment to assess the epidemic's impact on their careers and predict the future of the US labor market in 2022. The study concluded that the tourism, hospitality, and entertainment sectors would suffer the most from the economic downturn caused by the current COVID-19 outbreak in the US. The reason for this is that the high contagiousness of the virus has led people to reduce their spending on entertainment. At the same time, the entertainment and catering industries were depressed, forcing a large number of employees to reduce their spending to maintain their livelihoods as they faced unemployment. This is a vicious circle of consumer distress, which is exacerbated by the depression in the consumer market caused by a reduction in personal disposable income. Among the education-graded population, the higher the level of education, the lower the risk of unemployment. This is because a depressed consumer market in the current recession entails layoffs or wage reductions. When people's incomes are reduced, they naturally consume less, and when they consume less, the consumer market becomes even more depressed. However, most jobs held by the better educated are acceptable for the work from a home model and are therefore less likely to be hit by a wave of job losses. In August 2020, the US government had to choose between prevention and control of the epidemic and opening up to the people, and eventually chose to ignore the epidemic to a certain extent and start a program to revive the economic market. Tourism, dining and entertainment in the US are starting to see a gradual increase in spending levels. The increase in people's spending levels has served two benefits; firstly, the increased spending power of the population has driven the demand for goods in the consumer market, and business in malls and restaurants has started to pick up. Secondly, the rebound in the consumer market has led to a rebound in the labor market. The demand for staff in restaurants and shopping malls further increases, driving demand in the labor market. It is, therefore, foreseeable that the US consumer market will continue to pick up in the first half of 2022, and the unemployment rate will continue to rebound and rebound. However, the US opting to open up domestic entertainment venues to boost per capita spending replies to the dynamism of the economic market. This will be accompanied by an outbreak of the disease in the US since August 2021, the highest level since August 2020. The rebound in the US epidemic is inextricably linked to the opening of entertainment venues in the consumer market. The trend in unemployment in the US in 2022 is

predicted to continue to decline but is conservatively optimistic.

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