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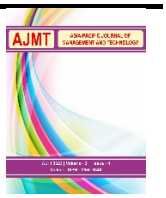

Original Article

Distributional Impacts of Recessions: The COVID-19 Epidemic Recession and the Global Financial Crisis

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Abstract

This study helps us understand the similarities and differences between the distributional impacts of the COVID-19 pandemic and the Global Financial Crisis by breaking them down into four categories: (i) worker characteristics; (ii) job characteristics; and (iii) flexible/work-from-home jobs and essential jobs, which were exempt from government-mandated shutdowns during this recession. In the past, recessions have hurt younger and less educated workers more, but the Pandemic Recession hit women and people of Hispanic heritage especially hard. Jobs that require a certain amount of adaptability, social interaction, and a need seem to be less affected by changes in the economy. The non-cyclical character of this employment has historically been caused by the rising share of skilled people in highly adaptable occupations. When the Pandemic Crisis hit, however, it was the flexible and crucial occupations that were hit most, rather than the social service sector. Both recessions have had a significant distributional effect, since low-income people have been hit more than high-income ones. Finally, in contrast to the Great Crisis of 2008–2009, many people who lost their jobs during the COVID-19 recession were only out of work temporarily.

Keywords: *Labor Market Dynamics; Current Population Survey; COVID-19 Pandemic; Gross Worker Flows; Distributional Impact*

Introduction

There is a significant impact of the SARS-CoV-2 coronavirus on the American labour market. COVID-19 has caused a global recession, affecting the world economy and resulting in long-term damage (Bhowmik, 2021). BLS data for April 2020 show that the unemployment rate in the United States increased to 14.7 percent from 3.5 percent in the preceding month. During the same period, the employment rate as a percentage of the population fell from 61.1% to 51.3%. The government shutdown and other socially isolating tactics had varying impacts on various occupations. On the one hand, the government allowed "essential" companies like hospitals, water utilities, and food shops to stay open. However, "social employment" in the hotel and leisure industries was banned due to the policy of social distance since it required direct engagement with others. Furthermore, although certain workers, such as those at food shops, may begin telecommuting, others could not.

It is the purpose of this paper to do two things: (a) analyse the consequences of the current pandemic recession on the labour market and (b) compare those effects to those of the global financial crisis of 2008–2009. This article focuses on three distinct aspects of employment: "essential" jobs, which were

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not affected by government-mandated shutdowns during the recent pandemic recession; "social" jobs, in which consumer goods necessitate interactions between people; and "teleworkable" jobs, in which employees have the option of performing their duties from the comfort of their own homes. The Appendix illustrates the distributional consequences of the labour market for workers of different ages, genders, races, and educational backgrounds.

Review of Literature:

According to data from the U.S. Current Population Survey, important and flexible professions have been less severely affected by the current pandemic recession than social occupations. Even amid the economic collapse of 2008, these three occupations fared better than others (or cyclical). In addition, many people who have flexible work schedules are professionals or college graduates who have traditionally been less vulnerable to economic downturns. This helped make flexible occupations more resistant and anticyclical to the aggregate shocks that hit the economy during the Global Financial Crisis.

The research found that when employees were divided into white, black, Asian, Hispanic, and female categories, Hispanic and female workers fared worse than their male counterparts during the present recession (Bai, 2022). Workers with lower levels of education and those in their prime working years have fared badly in both recessions. Remarkably, the results do not show that older employees, who are at a greater risk of death from covid-19, are more negatively affected in terms of employment loss.

Job chances have been unevenly affected by the current pandemic recession and the worldwide financial crisis (Shibata, 2020). It was far more likely that low-income workers would lose their employment than high-income workers. This disproportionate effect of workplace separation rates was substantially more widespread during the Pandemic Recession. This result validates the research of others who relied on administrative payroll data and holds true even after accounting for worker characteristics in addition to profession, industry, and state fixed effects.

This study opens up data that shows there were changes between the 2 recessions in the compositions of long-term and short-term employment losses. It is found that during the Financial Crisis, a significant portion of newly unemployed people got permanent job loss, on the other hand, during the COVID-19 pandemic recession, a significant portion experienced temporary job loss. This finding supports that, on the business side, the COVID-19 problem may have a limited impact and that workers may be able to prevent losses in human capital (Atolia, Papageorgiou & Turnovsky, 2021).

The contributions of this paper to the existing literature include: (1) a comparison of the current recession to the Global Financial Crisis, showing that flexible jobs have been less affected than other jobs, primarily because they have a high proportion of skilled workers; and (2) an emphasis on the importance of considering occupation and industry by showing significant heterogeneity within occupation industry pairs in terms of their flexibility.

Results and Discussion

Data

It is assumed to use the Current Population Poll, a nationally representative survey for the United States, covering the years 2007 through April 2020. The CPS provides numeric severities across high-frequency datasets, which have been used to track the coronavirus's effect on childbirth. Information on workers' labour, industry, profession, and demographics may be gleaned from the CPS, providing new insight into the implications of the coronavirus on the workforce.

Current Population Survey (CPS) conducts monthly interviews with roughly 60K homes and 100K to150k people. After 4 months of interviews in a row, households are rotated out for the following eight months, and then 4 more months of interviews are conducted with them. With the use of this framework,

researchers may monitor a worker's participation in labor behaviors for 8 months out of every 16. Individuals in the sample are questioned about their wages twice during the survey, and this information is used to classify workers into various pay quantiles.

For the bulk of the research, the CPS's cross-sectional characteristics have been used; however, utilization of the survey's longitudinal characteristics has been looked at to see how the recent Pandemic recession has changed the distribution. Using a CPS data set spanning 13 months, matching people over the course of 5 months has been used for the aforementioned technique. People are matched during the course of the year based on information such as their household identifiers, personal identifiers, age ranges, racial backgrounds, and gender. An individual may age a full year in only two months. About 90% of the potential sample may be matched using this method over the course of four consecutive months. It is possible that longitudinal data will not always agree with total cross-sectional statistics, even if over 60% of the eligible sample can be followed for 5 surveys each month, spanning a3-m13 months to d13 months. This is because of factors such as simple attrition and coding mistakes. It is possible to increase the weights by dividing the original survey sample by the size of the matched sample. In the event that the attrition rate during matching is completely random and unconnected to any identifying factors, then this hypothesis has been accepted. However, attrition is not always predictable. To guarantee that the matched sample accurately reflects the demographics of the original survey, rescaling has been done for the sample weights of the people involved by multiplying them by the inverse of the matching probability based on the individual's demographics and labour force status. A logit model has been estimated and calculated based on prediction matching probability for several demographics, including age, race, education, and occupation. Next, the expected probabilities are inverted and multiplied by the starting weights. This contributes to a partial solution for the problem brought on by non-random attrition. For the sake of this paper's overarching definition of prime-age workers, studies have been restricted to those between the ages of 21 and 70. And of course, the armed forces are not included.

Over the course of the pandemic recession, overall employment and hours decreased

An overview of the total decline in employment in the United States during the first few months of the Pandemic recession is shown below. Figure 1 shows the general trend in the employment rate from January to April of 2020 for people aged 21 to 70. The first set of data follows those who report being employed, whereas the second set excludes those who report being employed but were absent from work during the survey week. The data reveals that the employment-to-population ratio for people of this age in the United States fell by around 9 percentage points throughout this time period. The decline was 12 percentage points higher when those who were away from work were not included as employed. Statistics on the average number of hours worked by those aged 21 to 70 with a favourable work history up through April, 2020 are shown in Figure 1. Those that were able to keep their employment put in almost 3.3% less hours than previously.

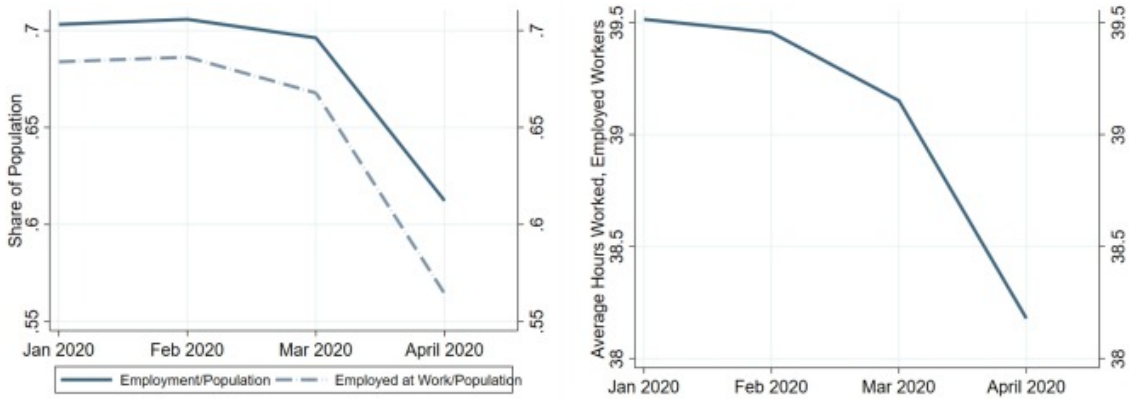

Figure 1: Average hours worked & total employment both fall

The combined time spent on both extensive and rigorous margin adjustments fell by 17% between January and April of 2020. Eighty percent of the decrease in total hours, or 13.8%, can be attributed to the extensive margin, while twenty percent, or 3.4%, may be attributed to the intense margin.

The unemployment rate for people aged 21 to 70 is shown in Figure 2 together with trends for that tenure. Once more, 2 metrics of unemployment have been computed. First, counting is based on unemployed people who are not working but are actively seeking employment. This is how unemployment was originally measured. For the 2nd metric, people who claims to be employed yet missed time from their job were counted as unemployed. Between January and April'20, the unemployment rate for workers aged 21 to 70 climbed by 9%. On the other hand, the unemployment rate, which counts people who claim to be working but were not at work, climbed by 13% from 6% to 19% over the same period.

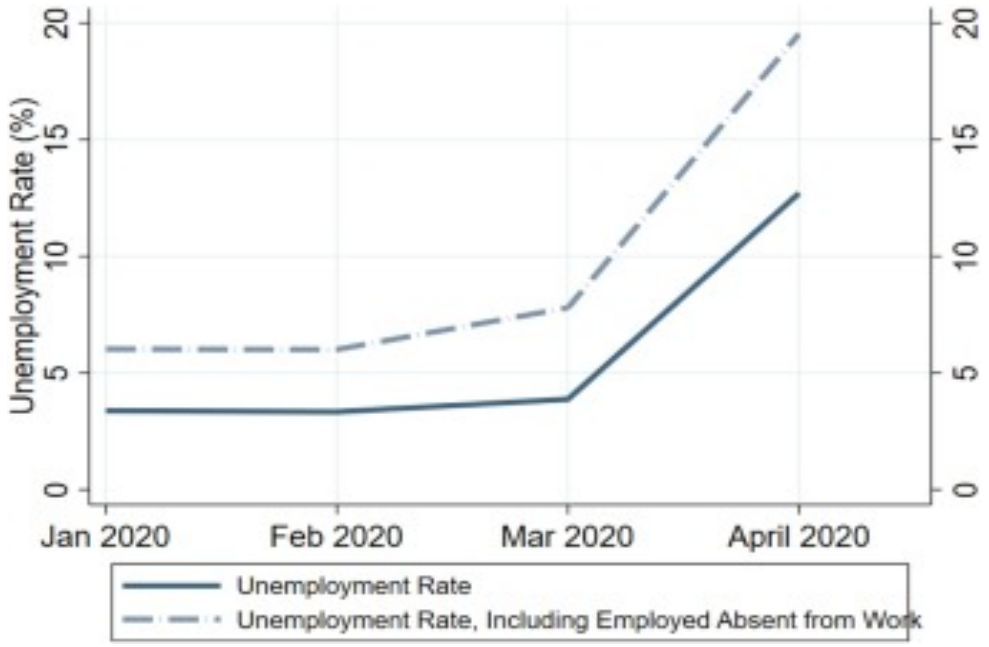

Figure 2: "Rate of Unemployment"

Financial crisis repercussions relative to those of the recession as a whole, broken down by sector and occupation

1. Occupation

Here, a first examination is done on how both the unemployment rate and the length of a normal workweek have evolved over time. Unemployment is given greater weight than employment since only individuals who are employed or jobless (but not those who are not actively seeking work) disclose their occupation and industry. Figure 3 displays the rates of unemployment and the average logarithmic hours worked by occupation from 2007–2009 and from 2019–April 2020, respectively. Although their employment was less threatened by the Global Financial Crisis, service sector employees nonetheless felt the brunt of the downturn. When compared to the last recession, the present one has had a more pronounced effect on the sales, office and administrative support workforce. While employment was assumed, average hours worked throughout the two recessions followed similar patterns. Employees in management, business, and financial jobs have been less affected than those in other occupations during the current recession and the Global Financial Crisis.

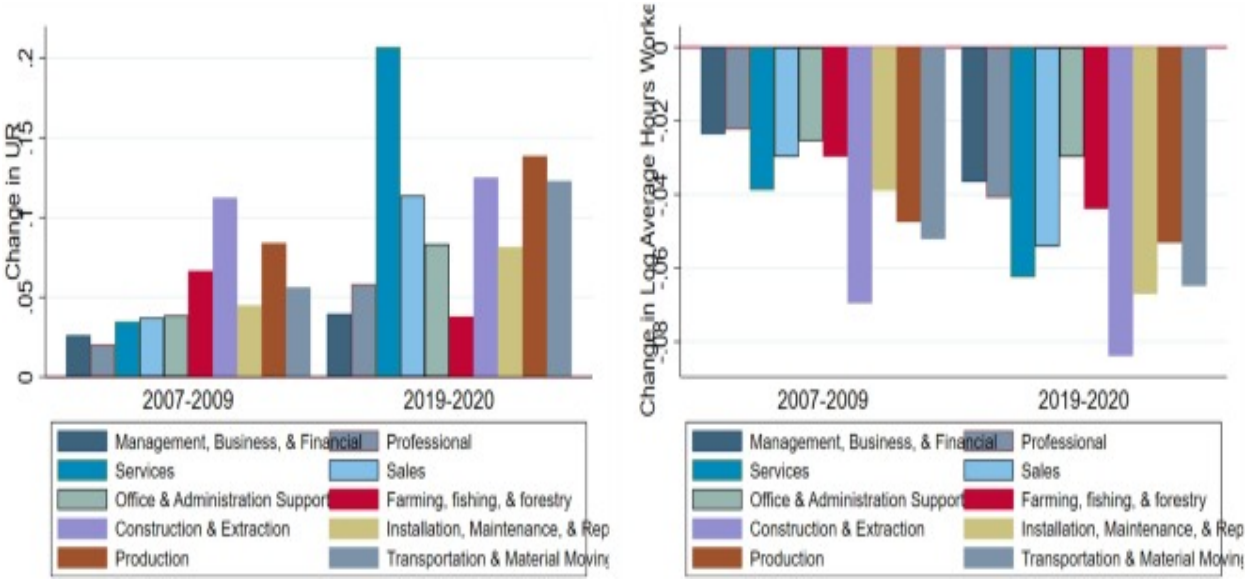

Figure 3: Changes in hours worked and unemployment rate by occupation from April 2019 to 2020

- **1.1 Telework-friendly professions**

Workers who are able to avoid the crowds during the present crisis by performing their duties at home may fare better than those who must report to the office every day. Work is classified as either flexible or not flexible. Figure 4 displays the variations in the jobless rate between flexible and non-flexible occupations. Workers with more adaptable schedules tend to feel less of a pinch during economic downturns, but the current downturn has been worse for those without such options. Figure 4 shows a rather close relationship between the rate of change in the log of employment and the rate of change in the aggregate population. However, the average number of hours spent by workers in flexible occupations has decreased as well.

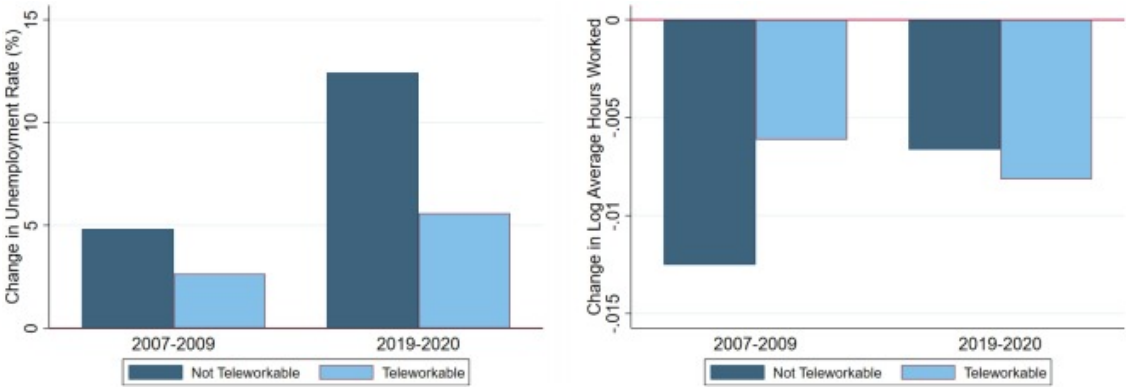

Figure 4: Change in the unemployment rate and the typical workweek from 2007-2009 and 2019-2020, according to flexibility in workplace

- **2. Industry**

Figure 5 shows the average hours worked and changes in the unemployment rate between the Pandemic Recession and the Global Financial Crisis. The unemployment rate has increased more quickly during the present recession than it did during the previous recession in almost all areas except agriculture, construction, and the financial industry. The unemployment rate has increased significantly, especially for those employed in the leisure and hospitality industries. The typical number of hours worked by these employees has likewise decreased.

Asia-Pacific J.Mgmt. Tech. Volume 3(4) 41-56

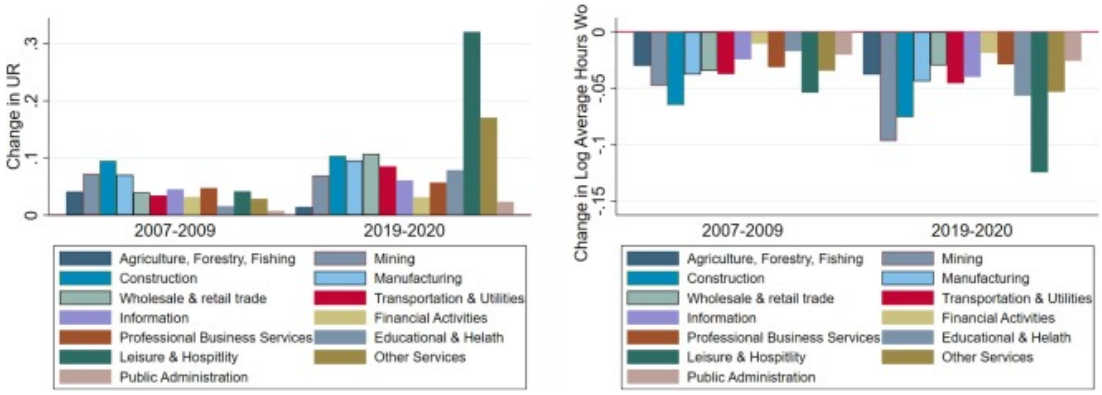

Figure 5: Changes in the unemployment rate and the typical workweek from 2007 to 2009 and from 2019 to April 2020, by the industry

➢ 2.1. Social Industry

The economy is divided into social and non-social sectors based on the nature of the industries involved. Sectors are deemed social if consumers need to interact with others to get the full experience of their offerings. It's not social to be cooped up all day with other people, but it is social to share a finished product. The social good made by restaurants is of direct benefit to society, in contrast to the consumption goods produced by industry. Some industries may be more difficult to classify than others. Retail and the financial industry are two examples. Since most banking transactions take place online or over the phone, it is perceived as a non-social sector, despite the fact that establishing an account does require face-to-face interaction with a branch manager. Since consumers need to speak with a salesperson in person before making a purchase, retail is categorized as a "social sector." Even if the growth of online shopping has made brick-and-mortar stores less socially significant than they were fifteen years ago, it is still considered that retail is an important economic sector. Some highly specialized industries are sociable whereas others aren't, even when discussing a large number of them. Examples of social finance services include automobile rental services and establishments that rent out a broad variety of consumer items. Professions such as those of veterinarians, security guards, and building maintenance specialists all serve a valuable societal purpose (except cleaning during construction). Social manufacturing includes businesses that sell to the general population, such as bakeries.

Figure 6 shows how the social and consumer (non-social) industries affected the unemployment rate and average number of hours worked between the Global Financial Crisis and the current pandemic recession. Between 2007 and 2009, the social sector had a little increase in its unemployment rate. In contrast, the current pandemic has resulted in a dramatic rise in the unemployment rate for social occupations, which is now nearly twice as high as that for non-social professions. The hours worked by those in the social sector have also fallen significantly.

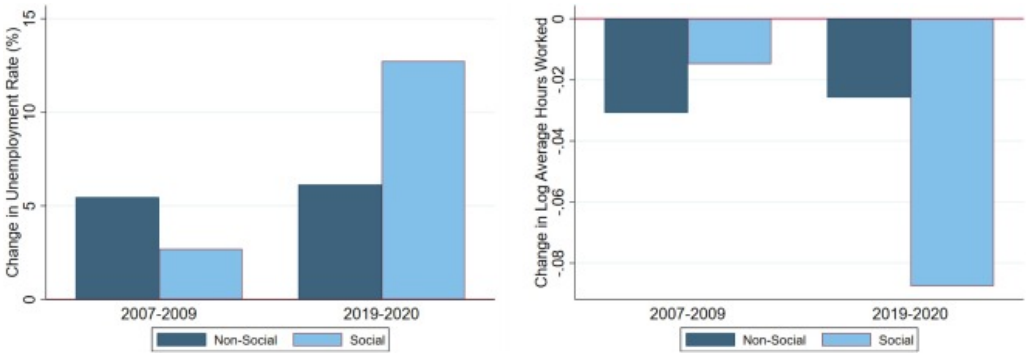

Figure 6: Comparison of 2007-2009 and 2019-April 2020 Jobless Rate and Average Hours Worked in Social and Non-Social Industries

➢ 2.2. Essential Industry

During the current pandemic crisis, the government has allowed key industries to keep running while regulating other industries. Grocery stores, water utilities and healthcare institutions are among these.

Figure 7 illustrates differences between non-essential and essential industries' average workweeks and unemployment rates during the 2008–2009 global financial crisis and ongoing pandemic crisis. It's interesting to note that throughout the Global Financial Crisis, the key industries saw less unemployment. However, the non-essential industries have experienced significantly more drastic shifts in the unemployment rate and the typical number of hours worked during the present crisis.

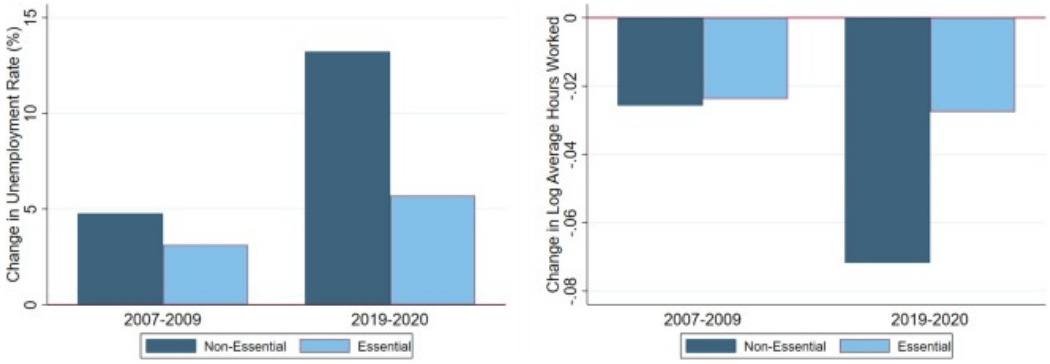

Figure 7: Changes in the unemployment rate and average hours worked by essential and non-essential industries from 2007-2009

➢ 3. The significance of considering flexible, social, and essential jobs

The preceding paragraphs illustrated broad trends in changes to unemployment rates and the typical workweek throughout the course of the two recessions. By demonstrating significant variation even within flexible jobs, this section highlights the significance of considering both occupation and industry.

Table 1 displays the employment percentages for flexible, social, and necessary jobs by major occupational groups as well as the percentage of highly skilled workers (those with a bachelor's degree or more). 6 Even at the highest level of professions, it demonstrates a substantial amount of variability. Workers in management, financial, and professional industries, for example, usually employ a greater percentage of people in flexible jobs and a greater percentage of people with bachelor's degrees or more. Professional and allied jobs, however, have a higher likelihood of being social than management, financial, and professional ones. Transport and material moving jobs, as well as construction and extraction jobs, cannot be teleworked. However, compared to jobs in transportation and material movement, mining and building work are less socially significant and not necessary.

Table 1: Share Employment by broad occupational classification in flexible, social, & necessary jobs

Types of occupation	**Proportion of employment with**			
	Flexible	**Essential**	**Social**	**High skill**
	(1)	**(2)**	**(3)**	**(4)**
Financial, Business, Management jobs	0.83	0.44	0.29	0.60
Professional and related jobs	0.63	0.43	0.67	0.73
Service jobs	0.05	0.38	0.89	0.17
Sales and Related jobs	0.21	0.37	0.63	0.34
Office and Administrative jobs	0.53	0.56	0.47	0.27

Asia-Pacific J.Mgmt. Tech. Volume 3(4) 41-56

Types of occupation	Proportion of employment with			
	Flexible	Essential	Social	High skill
	(1)	(2)	(3)	(4)
Farming, Forestry, and Fishing jobs	0.00	0.96	0.03	0.12
Construction and Extraction jobs	0.00	0.09	0.03	0.09
Installation and maintenance jobs	0.01	0.54	0.45	0.10
Production related jobs	0.00	0.59	0.14	0.11
Transportation related jobs	0.00	0.69	0.59	0.12

Table 2 displays, by major industry, the percentage of college-educated people holding positions that are both socially significant and highly adaptable. Services in the areas of education and healthcare, as well as those in the tourism and hospitality industries, all contribute significantly to society, but only education and healthcare can be considered basic. In the same way that leisure and hospitality are less likely to be adaptable than educational and medical services, these two industries tend to be less unionized. It's worth noting that there are more people with bachelor's degrees working in the education and health service industries than in the tourism and hospitality industries. Forestry, fishing, hunting, and building are all considered non-social occupations, although the former two are given greater weight.

Table 2: Employment proportion in flexible, social and necessary jobs according to broad industrial classification

Types of Industries	Proportion of Employment			
	Flexible	Essential	Social	High skill
	(1)	(2)	(3)	(4)
Agriculture, Forestry, Fishing	0.08	1.00	0.00	0.21
Mining Sector	0.28	0.84	0.00	0.26
Construction Sector	0.20	0.00	0.00	0.16
Manufacturing Sector	0.30	0.64	0.01	0.30
Wholesale & Retail Sector	0.20	0.40	0.78	0.26
Transportation & Utility Sector	0.23	0.82	0.57	0.23
Information Sector	0.59	0.59	0.00	0.56
Financial Sector	0.70	0.70	0.03	0.54
Professional & Business Services	0.65	0.32	0.14	0.56
Educational & Health Services	0.51	0.54	1.00	0.56
Leisure & Hospitality Sector	0.14	0.00	1.00	0.24
Other Services Sector	0.31	0.27	0.73	0.29
Public Administration Sector	0.47	.	.	0.52

Figure 8 displays the shifts in unemployment rates by broad occupational category and broad industrial category between the global financial crisis and the current slump. The Great Depression and the COVID-19 Pandemic Recession are shown in this chart by the vertical and horizontal lines, respectively, while the average changes in the unemployment rate throughout these times are shown by the diagonal. Pinpoint is made on occupations and sectors in the Northeast that saw above-average rises in joblessness during both recessions. The South-East region is home to jobs and sectors that fared worse than average during the Great Financial Crisis (GFC) but better than normal during the COVID-19 crisis. The Southwest region details the industries and occupations that were hit less hard than average by the two recessions. As a final note, the Northwest region highlights sectors and occupations that were hit more by the COVID-19 recession than they were by the GFC. The average relative link between changes in unemployment rates across different occupations during the two recessions is depicted by the fitted line. It is seen that the recession is having less of an impact on occupations that allow for greater flexibility than the last one did. Employees in management and the professions have fared better during the current economic downturn than they did during the last one. Jobs in the leisure and hospitality industries, in particular, have been hit harder by the present recession than those in other sectors.

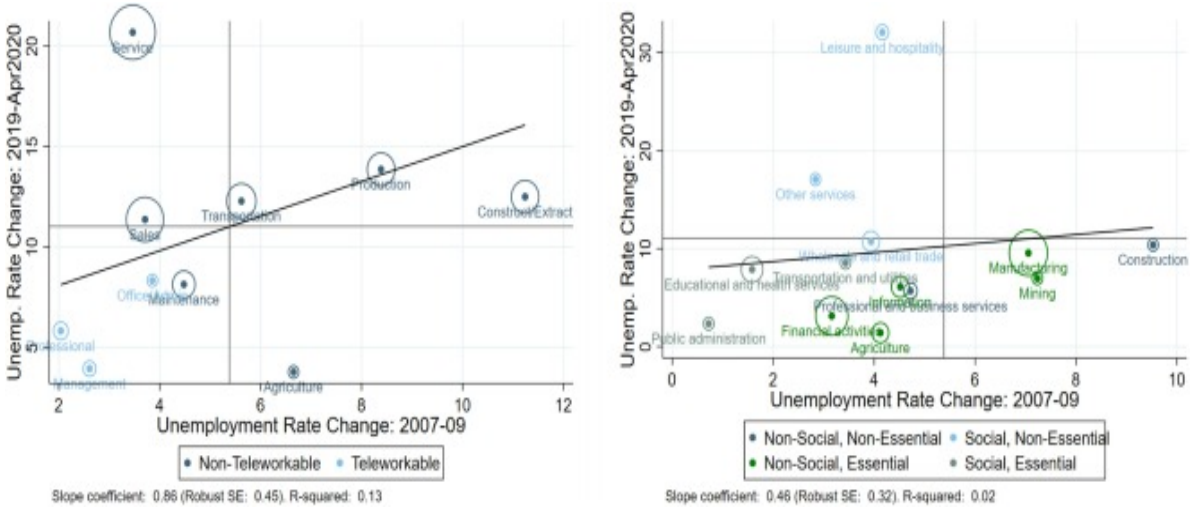

Figure 8: Changes in the unemployment by industry and occupation between April 2019 and April 2020 from 2007 to 2009

In Table 3, it is seen what proportion of the workforce is comprised of women and experts in various fields. The number of skilled professionals is 40% higher in 2019 than it was in 2007. Second, between 2007 and 2019, all three categories of jobs had a rise in their combined employment share. Increases of 2 percent have been seen in the number of people employed in social services. Third, it has been found that the percentage of college-educated people working in flexible employment is higher than the national average. Contrarily, the average educational level of those working in important and social occupations is quite close to the national average. In conclusion, women are more likely to work in socially and economically accommodating occupations, which may contribute to explaining the precipitous drop in female employment during the current Pandemic crisis (Notteboom, Pallis & Rodrigue, 2021).

Asia-Pacific J.Mgmt. Tech. Volume 3(4) 41-56

Table 3: Percentage of trained, skilled lady workers and professions that can be performed remotely

Year	Share of total employment					
Empty Cell	**Employment**		**Women**		**High skill**	
Empty Cell	**2007**	**2019**	**2007**	**2019**	**2007**	**2019**
Overall average			0.476	0.480	0.333	0.400
Teleworkable	0.384	0.393	0.583	0.559	0.555	0.633
Essential	0.465	0.475	0.494	0.497	0.324	0.395
Social	0.509	0.529	0.592	0.596	0.342	0.398

Fig. 9 is a Venn diagram showing the overlap between the labour markets for social, critical, and mobile occupations. It's clear that there's a lot of grey area in the world of work. To provide just one example, 68.4 (=34.8%/50.9%) (69.7%) of all social occupations (which account for 50.9% (52.9%) of all jobs in 2007 (2019)) are likewise considered to be mobile and important positions (2019). Only 16.1% of jobs are considered "social," meaning they are neither temporary nor critical. The jobs depicted in this Venn diagram share a lot of similarities.

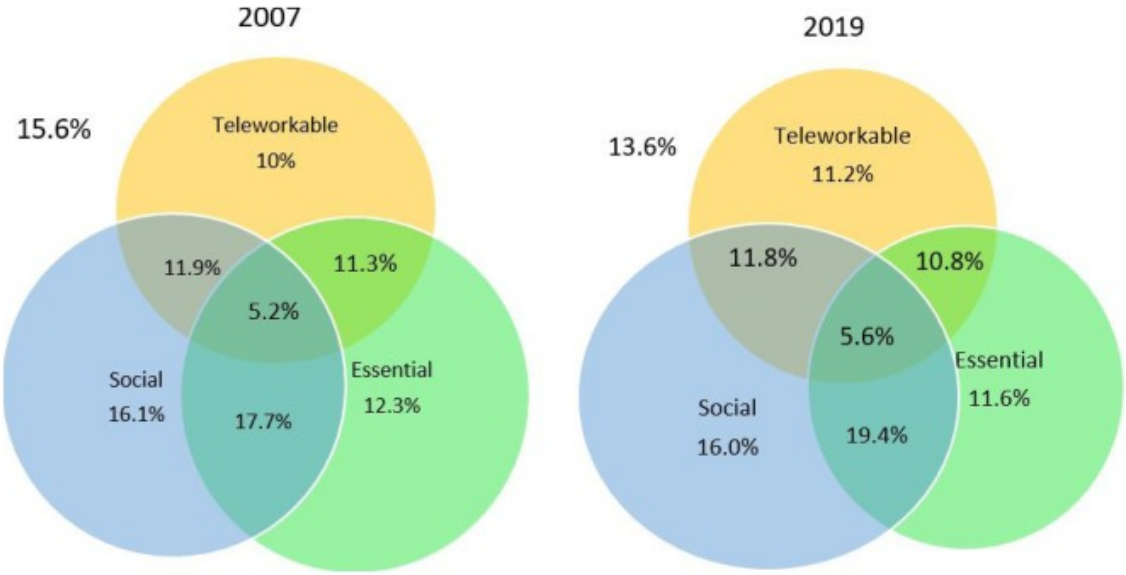

Figure 9: Venn diagram showing the overlap between the labour markets for social, critical, and mobile occupations

Empirical comparison of the effects of the pandemic recession on the job market and the global financial crisis

In the previous sections, a particular emphasis was placed on their flexibility, sociability, and need, which also revealed variations in unemployment and the average number of hours worked across various jobs and industries. In this part, it is formally examined whether the fall in employment during the present recession has followed a pattern that is significantly different from that during the prior recession. The empirical criteria are as follows:

$$\Delta(Y_{\mathrm{it}} - Y_t) = \alpha_{\mathrm{tw}}\,\mathrm{Occ}_{\mathrm{TW}} + \alpha_s\,\mathrm{Ind}_S + \alpha_e\,\mathrm{Ind}_E + \gamma X_{\mathrm{it}} + \mathrm{Pandemic} \quad (1)$$
$$* \left(\beta_{\mathrm{tw}}\,\mathrm{Occ}_{\mathrm{TW}} + \beta_s\,\mathrm{Ind}_S + \beta_e\,\mathrm{Ind}_E + \Gamma_p X_{\mathrm{it}}\right) + \epsilon_{\mathrm{it}}$$

It is crucial to stress that the regression results reported in the next section should be regarded with caution due to the potential biases brought about by increasing non-response rates and misclassifications in 2020. CPS response rates dropped by more than 10 percentage points below the monthly average in March when the Bureau of Labor Statistics discontinued collecting in-person data on March 20, 2020. Rates of non-response may not be completely at random but instead be substantially linked to individuals' previous occupations. Due to the higher non-response rate in the CPS, it is difficult to discern the direction of any possible biases.

According to the BLS, some workers were improperly counted as employed while being absent from work during the course of the reference week. These workers should have been counted as temporarily laid off. Since this is the case, it's possible that the employment rate is lower than what's being reported and the unemployment rate is actually greater than what's being shown (Kerstin *et al.,* 2021). The incidence of misclassifications may be higher in some sectors, say, social occupations, due to the increased chance that they are temporary layoffs, in which case the real job loss or unemployment in that sector may be worse than the regression predicts. Therefore, the following findings require cautious interpretation**.**

Resultant Effects of the CARE Act. Estimates of COVID-19's purely economic influence on the jobless rate may have been biased by the fact that government initiatives may have had a bigger impact on unemployment rates for employees in certain industries than in others (Almeida *et al.,* 2021). For instance, in reaction to the covid crisis, the federal government established the "CARES" Act, resulting in many jobless persons receiving benefits that were more than their previous wages. Workers in the social services sector, for example, may have been particularly influenced by the unemployment insurance payments provided by the "CARES" Act because of the high replacement rates in that sector. A higher unemployment rate and higher rates of people leaving their jobs may have been the result of these factors in Section 6 industries. As a result, the study estimated the effect of covid 19 on the increase in the unemployment rate or the job separation rate, which may be a good proxy for the economic and policy implications (Brada, Gajewski & Kutan, 2021).

You may see EQ's regression outcomes in Table 4. (1). Columns (1) through (4) show regressions using the pandemic dummy, the social industry dummy, the key industry dummy, and the flexible occupation dummy, without any demographic variables (3). The standard errors that are shown are accurate estimates. Column displays data from employment that fit the criteria of being both flexible and essential, as well as socially beneficial (4). To begin, it has been noted that all occupations that are characterized as "flexible," "social," or "essential" were less affected than their counterparts during the Financial Crisis, as shown by large and positive coefficients. Work that can be done from anywhere was less affected by the pandemic than other types of work, although both were nevertheless hard hit. But social service employment has been hit worse than average.

Table 4: Results of regression: modification of log employment

Types of Dummies	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Flexible Occ.	0.064**			0.048***	−0.016	−0.024

Asia-Pacific J.Mgmt. Tech. Volume 3(4) 41-56

Types of Dummies	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Empty Cell	(0.029)			(0.018)	(0.013)	(0.016)
Social Ind.		0.061***		0.119***	0.115***	0.088***
Empty Cell		(0.020)		(0.019)	(0.019)	(0.016)
Essential Ind.			0.067*	0.049***	0.052***	0.041**
Empty Cell			(0.035)	(0.018)	(0.018)	(0.016)
Teleworkable × Pandemic	0.080***			0.133***	0.102***	0.099***
Empty Cell	(0.019)			(0.031)	(0.034)	(0.036)
Social × Pandemic		−0.123**		−0.218***	−0.230***	−0.132***
Empty Cell		(0.060)		(0.064)	(0.064)	(0.039)
Essential × Pandemic			0.041*	0.107***	0.093***	0.123***
Empty Cell			(0.024)	(0.038)	(0.034)	(0.041)
Skill					0.185***	0.184***
Empty Cell					(0.037)	(0.035)
Skill × Pandemic					0.035	−0.013
Empty Cell					(0.051)	(0.065)
Men						−0.005
Empty Cell						(0.031)
Men × Pandemic						0.113
Empty Cell						(0.086)
Education Control	N	N	N	N	Y	Y
Demographic Controls	N	N	N	N	N	Y
Observations	700	700	700	700	700	700
R-squared	0.085	0.055	0.058	0.272	0.319	0.379

The proficiency level of a company's workforce is significantly correlated with the availability of jobs that allow for some degree of flexibility. Flexible occupations were less affected than other types during the Global Financial Crisis and the Pandemic because there were no controlling variables (Table 4, Columns 1–4). Adjustment has been made for the number of college graduates in the workforce, however, it is found that flexible work arrangements had an effect comparable to that of their predecessors during the Great Recession. Flexible jobs were more vulnerable to negative aggregate shocks during the GFC because of the makeup of their skilled workforce. However, as compared to their competitors, employers that allow for some degree of flexibility have fared better throughout the recent Pandemic recession, even when the distribution of competent people is taken into account (Bonifacio *et al*., 2022). However, it is unclear from the labor force survey data whether the recession-proof nature of flexible jobs is attributable to the fact that they require fewer hours per week of work or to the fact that their employees tend to have higher levels of education and thus be less likely to become unemployed.

More social jobs than critical jobs have been hurt by the pandemic, and the current pandemic is having a bigger effect on social jobs than the Global Financial Crisis did on critical jobs. This is true irrespective of any assumptions about the population's demographic make-up (Column 6). In addition, as seen in the sixth column, there is no difference in job loss between men and women after demographic parameters such as race, age, and education are included at the level of the occupation industry (Razzu, 2021). A more nuanced look at the data reveals a different pattern of job loss than what is depicted in Figure 10, where a simplistic comparison of the overall employment loss suggests that women were more badly impacted by the Pandemic than men.

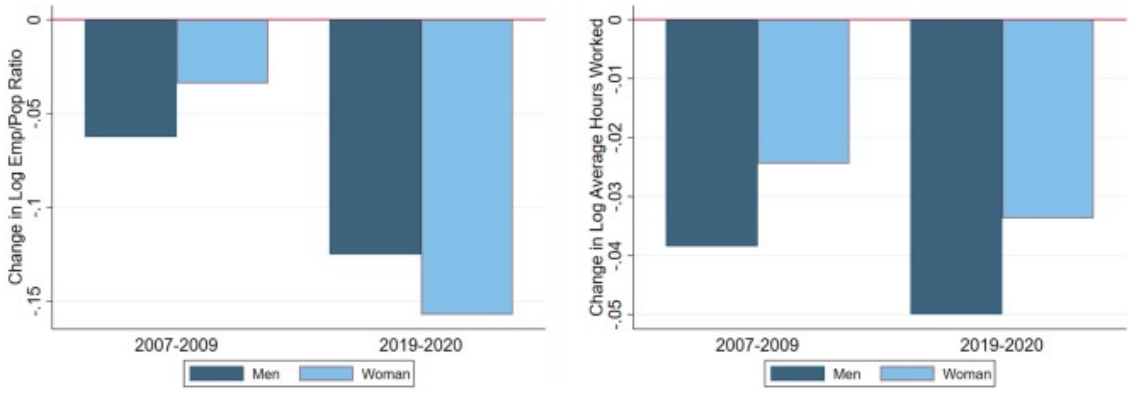

Figure 10: Intensive / Extensive sex-based margin from 2007 to 2009 & from 2019 to April 2020

Impact of the pandemic recession and the global financial crisis on individual-level distribution

Numerous studies have shown that the most disadvantaged and low-income population is suffering the most from this pandemic recession in terms of health and wealth. The distribution and worldwide financial crisis and their effects on employment are discussed here.

Here, CPS's panel dimension has been used for. A comparison has been made between the risk of a job separation occurring each month between February and April 2020 and that of the global financial crisis in 2008 and 2009. Using the earnings of the departing rotation groups, information has been collected on wages between 9 and 11 months before the observation month, and then the population has been split into four quantiles based on those wages. 11 Then, tabs were kept on the yearly rates of change all through the Pandemic recession and the worldwide financial crisis. A job separation occurs when an individual goes from working in month *t*-1 to being out of work or retiring in month. It is done because the results suggest that many persons who have lost their jobs are not actively seeking new employment and may, as a result, be classified as being outside the labor force (Almeida *et al*., 2021).

Results are fairly reliable; however, restriction of the sample has been made for the March-April 2020 transition and to shift from work to unemployment.

Conclusion

The current global financial crisis and pandemic recession have given us a chance to look at the many ways that employment, the unemployment rate, and hours worked have changed in a wide range of businesses. Three broad classes of occupational features have been zeroed in: There are three types of employment, the first being "vital," the second being "social," and the third being "flexible." Equal pay for equal work was another area of emphasis for us.

In this article, it is shown that while the economic downturn has had a significant impact on service sector jobs, it has had a less significant impact on critical and flexible service sector positions. According to the reports provided by the Financial Crisis (2008) it has been demonstrated that it had less impact on the three employment categories than was previously believed (or were less cyclical). In addition, many people who are able to negotiate their own work hours are professionals or college graduates, who have historically been less affected by economic downturns. The workforce has shown itself to be resilient in the face of the global economic crisis thanks to its capacity to quickly adjust to new circumstances.

There is evidence from this study to suggest that Hispanics and women in particular have been struck harder than males by the present economic crisis. Those with less education and younger workers have historically fared worse during economic downturns of both sorts than their more seasoned and educated counterparts.

The current Pandemic recession and the Global Financial Crisis have done significant harm to the distribution of employment possibilities. Lower-income people have been hit more by the job market collapse than higher-income people have. During the current Pandemic recession, the asymmetry in the impact of employment separation rates is readily apparent.

It is shown that during the COVID-19 recession that followed the Global Financial Crisis, the vast majority of job losses were classified as temporary layoffs.

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Conflict of Interest:

The authors have no conflict of interest.

References

Almeida, V., Barrios, S., Christl, M., De Poli, S., Tumino, A., & van der Wielen, W. (2021). The impact of COVID-19 on households income in the EU. *The Journal of Economic Inequality*, *19*(3), 413-431. https://doi.org/10.1007/s10888-021-09485-8

Atolia, M., Papageorgiou, C., & Turnovsky, S. J. (2021). Re-opening after the lockdown: Long-run aggregate and distributional consequences of COVID-19. *Journal of Mathematical Economics*, *93*, 102481. https://doi.org/10.1016/j.jmateco.2021.102481

Bai, Y. (2022). *Distributional Impact of COVID-19 Pandemic on Household Employment and Education* (No. THESIS). University of Chicago. https://doi.org/10.6082/uchicago.4093

Bhowmik, D. (2021). COVID-19: recession, poverty and inequality and redistribution. *International Journal on Recent Trends in Business and Tourism (IJRTBT)*, *5*(1), 11-21. https://doi.org/10.31674/ijrtbt.2021.v05i01.003

Bonifacio, V., Brandao-Marques, L., Budina, N., Csonto, B., Fratto, C., Engler, P., ... & Poirson, H. (2022, October). Distributional effects of monetary policy. In *Economic Challenges for Europe After the Pandemic: Proceedings of the XXXII Villa Mondragone International Economic Seminar, Rome, Italy, 2021* (pp. 187-232). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-10302-5_9

Brada, J. C., Gajewski, P., & Kutan, A. M. (2021). Economic resiliency and recovery, lessons from the financial crisis for the COVID-19 pandemic: A regional perspective from Central and Eastern Europe. *International Review of Financial Analysis*, *74*, 101658. https://doi.org/10.1016/j.irfa.2021.101658

Kerstin, B., Peichl, A., Popp, M., Jürgen, W., & Timo, W. (2021). Distributional effects of macroeconomic shocks in real-time. *Journal of Economic Inequality*, *19*(3), 459-487. https://doi.org/10.1007/s10888-021-09489-4

Notteboom, T., Pallis, T., & Rodrigue, J. P. (2021). Disruptions and resilience in global container shipping and ports: the COVID-19 pandemic versus the 2008–2009 financial crisis. *Maritime Economics & Logistics*, *23*, 179-210. https://doi.org/10.1057/s41278-020-00180-5

Razzu, G. (2020). COVID-19 Pandemic and Gender Inequality in the Labour Market in the UK. https://doi.org/10.30687/978-88-6969-442-4/021

Shibata, M. I. (2020). *The Distributional Impact of Recessions: The Global Financial Crisis and the Pandemic Recession*. International Monetary Fund, 115, 105971. https://doi.org/10.1016/j.jeconbus.2020.105971