

Research on the Development of Core Professional Women in the Canadian Labor Market Based on Experimental Analysis

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ABSTRACT: The 2019 outbreak of the new crown pneumonia outbreak in Canada has led to higher levels of unemployment in Canada, with women being affected to a greater extent than men. This paper analyzes three different economic variables of women's employment based on the primary data of Statistics Canada from July 2018 to July 2021 to create estimates through the trend of a line graph. Also, in the paper, the future direction of women's unemployment rate is inferred from its changes by observing, comparing, and calculating the employment rate, unemployment rate, and labor force participation rate. The results show that the labor force participation rate recovers earlier than the other two economic variables, generally remaining 83.5% and never falling below 83%. Based on previous data and chart analysis, it is clear that the unemployment rate has partially recovered, but given the recent rebound, it is difficult to say whether it will fully recover in the future.

Keywords: Gender inequality, Female workers, Canadian Labor Market, Forecast

1. INTRODUCTION

1.1 Research Background and Motivation

In the earlier recessions in Canadian history, the unemployment rate of women appeared to be less affected than men's during economic downturns; and the labor force participation rate was not changed much during recessions for both genders. However, Statistic Canada suggests that

women are more affected by the COVID pandemic. Under policies such as lockdown, the services sector, which represented 91% of the Canadian female employment according to the World Bank, faced the most difficulty due to job inflexibility and higher exposure to other coworkers and customers at the workplace. On the other hand, school and daycare closure also leads to an increase in stay-at-home parenting, which further increases the responsibilities of mothers. Johnston et al. claimed in their research that though both mothers and fathers have relatively increased their time spent on childcare by 37%, in absolute terms, women are still allocating 2.5 times more hours per week to child care obligations than men [1]. In the meantime, the study by Rosenbaum et al. reported a more considerable proportional decrease in the average working hours in the household for women with young kids [2]. Therefore, mothers are indeed taking more responsibility in caregiving, and they are more likely to give up working when they have young children back home.

Through the existing research of the unemployed female rate in the Canadian labor market influenced by COVID-19, gaps in this field about the later recovery of the female workforce did not fill. They considered that the epidemic's impact on women's lives is multifaceted, such as domestic violence, mental health, and unbalanced parenting responsibilities at home. This study aims to fill the existing gaps in studies of female workers, but more importantly, to analyze and estimate the future recovery of the core working-age female, including working mothers.

1.2 Literature Review

Scholars choose to extend their research from the following aspects about women and employment during the COVID-19. Firstly, the severe problems of gender inequality, this kind of disparities reflect not only in the average employment earnings but also in the uneven allocation of domestic labor. Moreover, some scholars believe that women are one of the main of economic recovery; they indeed have the potential of leader and innovator, which will transfer into a vigorous power when facing the challenges of COVID-19. Albanesi and Kim illustrated that due to the influence of lockdown under the pandemic, lack of access to reliable child care and in-person schooling options has led to a substantial and persistent drop in employment and labor force participation for women, who are typically less affected by recessions than men [3]. Almeida and Shrestha specifically mentioned the impact of the epidemic on women's mental health, which makes them more vulnerable and more vulnerable to adverse effects. Women who are pregnant, post-partum, miscarriage, or have experienced intimate partner violence are at exceptionally high risk of mental health problems during the pandemic [4]. Chunni Zhang and Jie Zhou point out that in China, some occupations in which women accounted for a higher proportion, like the wholesale and retail industries, accommodation and catering industries, were hit hard. The demand for employment in these industries dropped more than in the same period of the previous year [5]. Dang and Viet Nguyen promote a similar study about gender inequality during the COVID-19. This article mentioned former; they point out that women are more likely to lose their job than men permanently, and they expect their labor income to fall more in the future than men do [6].

Regan M. Johnston, Anwar Mohammed, and Clifton van der Linden illustrated exacerbated gender inequality in Canada's childcare obligations during the COVID-19. They rely on a public opinion study that involves weekly surveys to analyze the gendered differences in child care responsibilities before and during the pandemic. They conclude that there is an urgent need for gender-targeted policy measures to address the setbacks to gender equality that have resulted

from earlier policy interventions related to COVID-19. Malik and many other researchers pay their attention to the increasing gender gap and disparities among the pandemic of COVID-19 in many different aspects. They admit that women continue to suffer from multidimensional inequality and gender-based violence, more so in times of crisis [7]. Zoe Rosenbaum, Liz Betsis, and Behnoush Amery focus on the how exactly the influence of the COVID-19 pandemic on the employment, paid hours, and employment recovery among women. They contrast the recent regular recessions' impact on women and the unique sector impact of COVID-19 on women.

In conclusion, they find out that this pandemic differs mainly from the past recession in which men suffered the largest share of job losses, the majority of those who lost them have been women. Even for the rest of them who kept their jobs, the average work hour dropped precipitously due to their responsibilities for their families. Qian and Fuller mainly analyze the gender employment gap among parents of young children, their first stage study, like others. Theirs who focus on this topic find that mothers' employment has been more strongly affected by the pandemic than fathers in Canada. They propose that this harder hit on mothers' employment may explain part of the growing gender employment gap among parents of young children [8]. Sobotka concludes that the unusual recession and gender disparities during the COVID-19 are global phenomena. It does not just happen in Canada and Australia. It happened all around the world. Some scholars point out that the US and China labor markets also run into this plight [9]. Wade, Prime, and other researchers also highlight the disparities of stress male and female caregivers suffered during the COVID-19. Female caregivers reported higher COVID stress/disruption, more ACEs, and more significant distress, anxiety, and post-traumatic stress symptoms than male caregivers [10].

These studies and researches manifest that during the pandemic of COVID-19, women are more susceptible to employment than men, which differs from the regular recession that happened under the background of the global financial crisis. These researches mainly focus on illustrating this abnormal phenomenon with statistical data. However, they do not stretch out to discover the future tendency of this recession. Will they recover to the same level before the pandemic, or will women's employment still be a downturn? In this article, we try to analyze the recovery and recent bound of the unemployment rate by establishing quantitative research and providing estimations based on primary data reported by Statistic Canada.

1.3 Research Contents and Framework

Depending on the studies and researches about gender disparity and inequality among the core working-age labor force under the background of the covid-19 pandemic, we choose Canada as subject, using the employment rate of females age 25-54, the population of full-time and part-time employed female workers age 25-54 as supplementary data, to predict the future recovery tendency on the unemployment rate and the employment of women under the normalization of the COVID-19.

Through the existing research of unemployed female rate in Canadian labor market influenced by COVID-19, gaps in this field about the later recovery of the female workforce did not fill. This study aims to fill these gaps and analyze the future recovery of the female workforce. In conclusion, the unemployment rate has partially recovered, but considering the recent rebound, and it is hard to tell whether it will fully recover in the future. Women getting more influenced after the epidemic could be various, such as lockdown policy, school and daycare closure, and

duty of being a housewife. Therefore, due to the job inflexibility as well as experiencing pressure and productivity reduction due to greater responsibility in childcare; last but not least, the challenge of re-entering the labor market after long time leisure. According to data analyses in the text part, the gender gap in unemployment rate for core-work age workers in the three years, the implementation of lockdown has a significant initial impact on the female unemployment rate. Still, there is no long-lasting cross-gender effect on the unemployment rate for workers in this age group. This effect should continue to improve in the future to expect a full recovery. The first part is the introduction. The second part is theoretical and empirical analysis. The third part is based on the theoretical and practical research with further discussion, and the fourth part is the conclusion.

2. METHODOLOGY

2.1 Data Source

The data sources mentioned in this paper are collected from Statistic Canada’s labor force characteristics table; the sample data is selected from July 2018 to July 2021.

2.2 Data Analysis

2.2.1 Employment rate

Since July 2018, the employment rate of core working-age Canadian females has been remaining at a reasonably stable proportion and the overall change from July 2018 to February 2021, which was a month before the lockdown, was less than one percent (from 78.8% to 79.7%). Since the female employment rate was severely affected by the national level lockdown as soon as it was introduced in March, corresponding data in February will estimate the stage of recovery of this measure.

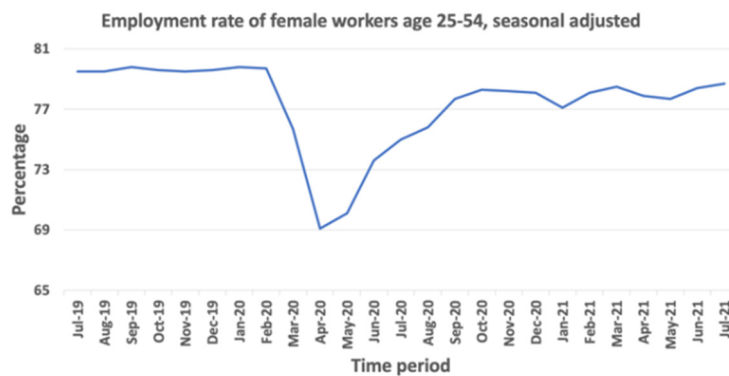


Figure 1. Core working-age female employment rate, July 2019 to July 2021

It is concluded from Figure 1 that, after its initial cliff-like drop, the employment rate of core age group female workers has been steadily increased after April 2020, though it experienced another two dips in January and May this year, the employment rate appears to be an increasing

pattern. The population data for full-time and part-time employment is also observed for more in-depth analysis.

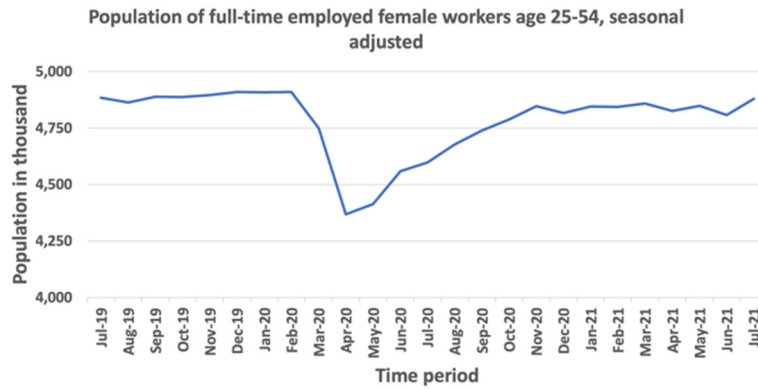


Figure 2. Full time employed core working-age female population in thousand, July 2019 to July 2021

From Figure 2, an overall constantly increasing trend is found. Before the pandemic hit, there was sustained growth in the number of full-time employed core working-age females, and the data from April 2020 and later also indicates that there is no long-term adverse effect on the population of full-time employment.

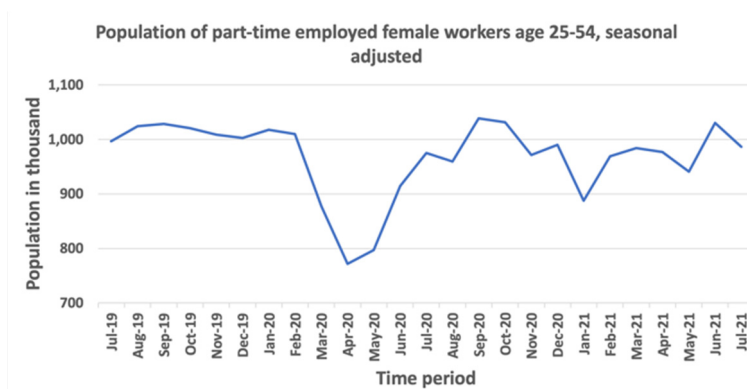


Figure 3. Part-time employed core working-age female population in thousand, July 2019 to July 2021

However, part-time employment, shown in Figure 3, is less stable. Comparing the range of the variation before and after the lockdown, it is evident that the waves post lockdown tend to be durable than before, and the movement continues until recently and will keep fluctuating in the future, which implies that unlike the market of full-time employment, number of people participated in part-time jobs is more affected by this policy, and the consequence remains not optimistic.

2.2.2 Unemployment rate

In Figure 4, similar to the pattern of employment rate before the pandemic had hit the country, the unemployment rate of core working-age females also did not change much before the stay-at-home policy was first introduced. The unemployment rate was severely affected at the beginning of the lockdown but soon started its recovery after May 2020 after reaching its peak (11.8%). Despite the waves around January and April 2021, the unemployment rate is overall decreasing. However, it has recently increased to 6% in July 2021, which is higher than the data in the previous month (5.8%).

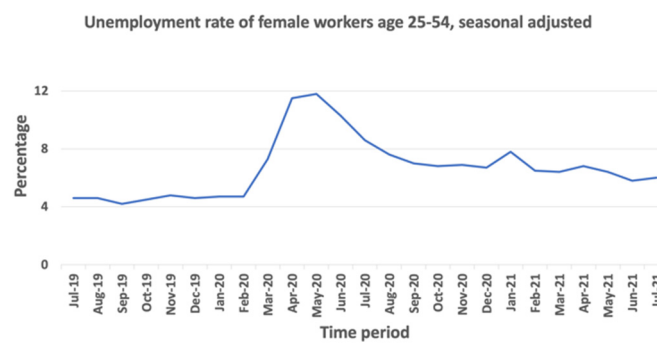


Figure 4. The unemployment rate of core working-age females, July 2019 to July 2021

2.2.3 Labor force participation rate

Referring to the proportion of employed workers over the total population in the labor force, the participation rate shown in Figure 5 summarizes the participation rate of the labor force fluctuates of core working-age females from July 2019 to July 2021. The curve has been relatively constant for the past few years until February 2020. consistent with the variation in employment rate and unemployment rate, the participation rate of female workers aged 25 to 54 is also primarily affected by the lockdown.

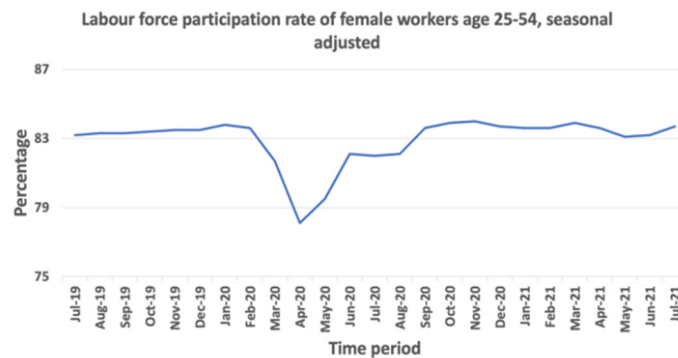


Figure 5. The participation rate of core working-age females, July 2019 to July 2021

2.2.4 Gender difference in the unemployment rate

Due to the lockdown, the research has shown further analysis of the gendered impact during the pandemic, the gender gap in the unemployment rate is also evaluated based on the primary data source, and the results are illustrated in Figure 6.

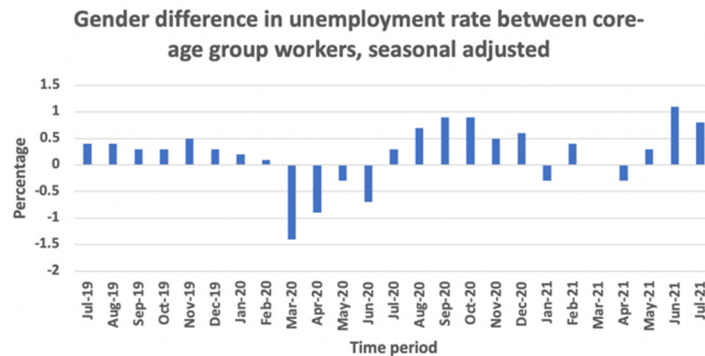


Figure 6. gender difference (male minus female) in the unemployment rate of core-age group workers, July 2019 to July 2021

Before March 2020, the unemployment rate of core working-age males was higher or at least equivalent to their female peers. By comparing the difference in the unemployment rate by gender, it is evident that the variation in the unemployment gender gap becomes generally larger after the lockdown than in the prior period. Also, the economic downturn after the lockdown has resulted in the negative gender difference in the unemployment rate from March 2020 to June 2020. Though the difference became positive again in July last year, the fluctuation does not vanish according to the data; the more significant positive difference indicates that the unemployment rate of core working-age males is increased more than the females' compared to pre-lockdown level.

3. RESULT AND DISCUSSION

Based on the previous graphical analysis, the employment rate of female Canadian workers aged 25 to 54 is partially recovered. In detail, the increase in the full-time employed population after the initial drop successfully offset the variation of the part-time employment, resulting in a partial recovery in the overall employment rate of core working-age female workers. After comparing 79.7% in February 2020 and the latest available data, which is 78.7%, the employment rate has been almost fully recovered as of July 2021 and is expected to go back to the pre-pandemic level shortly considering the constant increasing trend. On the contrary, though the unemployment rate as of the latest available data is lower compared to last year's, the recent rebound from 5.8% in June 2021 to 6% in July 2021 suggests that as of now, the unemployment rate is partially recovered yet leaves the future recovery condition undetermined.

Moreover, unlike the other two economic variables, the labor force participation rate of core working-age females has already been fully recovered according to the data. At first, it was partially recovered and remained at approximately 82% during summer 2020 for three months. Further recovery began in October 2020, where the participation rate was equivalent to the data in February 2020, the pre-lockdown level. After the initial full recovery, the participation rate of core working-age females continued to vary, but it is considered stable since it generally stays around 83.5% and never goes below 83%. The latest data in July 2021 (83.7%) indicates that the labor force participation rate of Canadian female workers aged 25 to 54 is fully recovered.

In the meantime, the gender gap in the unemployment rate between core working-age male and female workers is also being evaluated in the research. By calculating the gender difference using men's minus women's unemployment rate, the result implies that the implementation of lockdown has a more considerable initial impact on the female unemployment rate. Still, there is no long-lasting cross-gender effect on the unemployment rate for workers in this age group. Women performed better than men during previous recessions, but this is not the case. In the epidemic's early stages, women's unemployment rate increased significantly more than men's.

In the previous recession, men were more likely to lose their jobs. Due to men dominating industries such as manufacturing and construction, which usually bear the brunt of the recession. For example, during the last financial crisis, the highest level of male unemployment in the United States appeared in 2009 (11.1%), and the women's unemployment rate peaked at 9.0% in 2010. This research also reflects that with the improvement of the national disposable income level, the tertiary industry, such as service consumption, accounts for a growing proportion in the overall economy. Furthermore, women workers have a significant advantage in these areas. Of the six most hit industries during the COVID-19 recession, 44 million people worldwide (excluding China) lost their jobs, including about 31 million women and only 13 million men. The gap is partly due to a higher proportion of women working in "hardest hit" industries by the pandemic, such as retail, leisure and reception, education, and health.

In Europe, women account for about 67% of the staff in clothing stores, 75% of gift shops and souvenir shops, and 62% in retail florist employees. Female employees represent 56% of staff in the accommodation and catering services. Women dominate in beauty salons, nail salons, and personal care services, but restrictions and social distancing policies essentially prohibit these services. Women account for 77 percent of jobs that require close personal contacts, such as food preparation, health care support, and personal services. However, employees in these industries were heavily cut off due to the pandemic, and many women lost their jobs. In a typical recession, married women previously unemployed will find jobs to compensate for their husband's lost income.

Nevertheless, that is unlikely to happen now because the women-dominated industry has no plans to hire employees or cut jobs. The result is that household income and consumption will fall more during this recession than in the average recession. Even in male-dominated industries, a higher percentage of women are unemployed than men. For example, in the early stages of the pandemic, women accounted for three-quarters of retail unemployment, even if they were in half of the industry's workforce. Women account for 46% of all professional and commercial services employees, with unemployed women reaching 56%. This phenomenon is mainly due to the usually small proportion of women in middle-to-senior positions, so women may become

the first to be removed at a critical juncture because women are less likely to be promoted to protected positions.

4. CONCLUSION

In conclusion, the unemployment rate for men of core working age is higher than or at least equal to women of the same period. By comparing the differences in unemployment rates between different genders, it is clear that the change in the gender gap in unemployment is generally more significant after the lockdown than in the previous period. In addition, the post-lockdown economic downturn resulted in a negative gender gap in the unemployment rate. Although the spread was positive again last year, volatility did not disappear from the data; the more considerable positive difference suggests that the unemployment rate for men of core working age has increased more than its pre-lockdown level. In the early stages of the COVID-19 lockdown policy, female unemployment did have a more significant impact than males. Women get more influenced after the epidemic could be various, such as school close, daycare closure, and duty of being a housewife. Therefore, due to the job inflexibility as well as experiencing pressure and productivity reduction due to greater responsibility in childcare; last but not least, the challenge of re-entering the labor market after long time leisure. Specifically, after an initial decline, an increase in full-time employment has successfully offset changes in part-time jobs, leading to a partial recovery in the overall employment rate of women of core working age. However, while the latest figures show the unemployment rate is lower than last year, there was another slight fluctuation between June 2021 and July 2021. According to the data, after the initial full recovery, the labor force participation rate of Female workers aged 25-54 in Canada continued to fluctuate but remained stable overall. It follows that the labor force participation rate of female core age workers has recovered compared to pre-pandemic levels. According to data analyses in the text part, the gender gap in unemployment rate for core-work age workers in the three years, the implementation of lockdown has a significant initial impact on the female unemployment rate. Still, there is no long-lasting cross-gender effect on the unemployment rate for workers in this age group. This effect should continue to improve in the future so that it is reasonable to expect a full recovery in the future. Therefore, while unemployment has now partially recovered, the future recovery remains uncertain.

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